

18



THE WOMEN'S MAKING



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EDITORIAL
#18

The Women's Making

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Women empowerment and gender equality are fundamental goals of sustainable development. Since 70s until now much work has been made to deal with this issue, but the gender hierarchies are remarkably resilient, and gender gap continued to be in many parts of the world. All this require not to reduce the attention on the issue. Thanks to the creation in 2011 of the UN Women the international community has supported gender-related agendas to ensure women have a voice and participate in creating a more equal and safe world. An essential objective is to make visible the commitment of women in society and culture while at the same time making clear the male prejudice underlying traditional knowledge.

It is needed to combat the difficulties that women still suffer made of Internal and external blocks like the following: the cultures that tend to undermine the confidence of women in their ability and to discourage from taking an interest in scientific, technical or entrepreneurial fields; the social pressures and gender roles that encourage women to retain the primary responsibility for the family and taking care activities as a free work; and the lack of female role models. Combining a commitment towards these needs and absolute confidence in the ability of women to make art, design, science changing the way we think about the world, this PAD #18 focus on *women's making* and offers a broad overview of the path of women in crafting and design thinking, as a repertoire of behavioral patterns, proactive attitudes, and abilities models which could be pursued, empower, or overpasses.

This extremely rich #18 is composed of four sections.

Section I proposes a general frame of women's making path. This section includes two articles by the issue editors Shujun Ban and Marinella Ferrara, and one by Vittorio Linfante. The first article, with the title 'The women's making: a historical review', is a diachronic analysis of women's journey in creative practices and their relationship with technology from the end of 18th century to the contemporary, showing cultural constraints that have been shaping the women approach, and the recent emerging of a *gender-sensitive approach* in the design field. The second one is an investigation on 'What Women Designer Want. The Female Point of View in the Fashion Creative Process'. The author Vittorio Linfante investigates through the literature and the designer example, the evolution - from a historical and methodological point of view - of the relationship between the creative process implemented by women designers and the fashion project. He argues that women designers' fashion project succeeds in giving shape to new cultural and social values. The last contribution to this section, by Shujun Ban and Marinella Ferrara titled 'Women Crafting today: a literature review', is about current crafting phenomenon characterized by a growing community of young women, that has increased in popularity firstly in the USA, then in Europe, and finally also in Asia acquiring considerable cultural, social, and commercial values. The intention of these three articles that are supported by available evidence-based literature, is to define a large picture of women's uniquely creative, crafting and design contribution in its evolution.

Section II, 'Forerunners', proposes a series of microstories that close up in the rich phenomenology of women's making

in the modern time history in different countries, for each of their specificity in design, crafts, or arts field. This section includes 7 articles. It starts with 2 articles about the Italian designers and entrepreneurs Teresina Negri (1879-1974) and Rosa Menni Giolli (1889-1975), that were active in fashion design during the 20th century. The first microstory by Roberto and Umberto de Paolis presents original research on the unprecedented Grisina, a creative mind that escaping from her family to pursue the art of ballet in Paris, to then shift from dance to fashion design and entrepreneurial activity producing lingerie and luxury swimwear, including an intense patent production at the international level. Her success story of social and economic affirmation is emblematic of the creative fervor and the emancipation in Paris where Grisina did the opportunities to combine her inventiveness with relational and entrepreneurial ability.

The microstory by Anna Mazzanti focuses on Rosa Menni Giolli and her passion for batik, which develops mixing artistic and crafts techniques in the bourgeoisie environment in Milan. During the Fascism autarchy, the craftsmanship protection policy allows her to shift her passion in entrepreneurial activity. Her story is very different from the previous one due to the environment and conditions where she developed her activities. The following article, by Ana Julia Melo Almeida and Maria Cecilia Loschiavo dos Santos, is based on archive research between German and Brazil, on Marta Erps (1902-1977), Bauhaus student and Breuer's wife. The authors analyze the activity she carried out after settled in Brazil, where she was a pioneer in science visual communication, significantly contributing to the research of biology and genetics at University of San Paulo

with her documentation and detailing (drawings, diagrams, sculptures, and photographs) of insect species study.

With the article “Gertrud Goldschmidt and Ruth Vollmer: Women in Design between Material and Mathematical Experimentations”, Virginia Marano gives a new voice to the artistic discourses of the two Jewish artists that migrated from Germany to America, due to the advent of Nazism. They courageously defended their own artistic language and empowered new forms of female and Jewish identity. Even if Gego (1912-1994) and Vollmer (1903-1982) had no direct impact one on another, they were both influenced by a European avant-garde heritage of Bauhaus and Russian Constructivism and did share the vital influencing of the new world and culture.

In the following article, Antonio Stefanelli combines the study on the famous French designer Charlotte Perriand (1903-1999) during her time in Japan, to the study on the American born in Cuba Clara Porset (1895-1981) during her time in Mexico. The two parallel stories, that develop in different places in the period of the second world war, show in common the analyze of craft products, raw materials, and local processing techniques and the work carried out by the two designers analyzing craft products, raw materials, and local processing techniques. These dialogues with the tradition, material and immaterial dimensions of local culture, taking into account people’s history and way of life to renewing anonymous popular furniture models, show a soft side of the modern style.

Last in this section, Alfonso Morone’s and Susanna Parlato’s article deal with the ceramic crafting in the Italian context, and compare the ceramic work of Clara Garesio (1938 - alive)

during the 50s and the 60s, with the traditional porcelain of Capodimonte, the craft production in Vietri, and the research carried out by the designer Roberto Mango in Naples between 1954-1955. The authors highlight the way this artist revive and innovated the traditional iconographic heritage of the ceramic art and design in the Neapolitan frame.

Section III 'About Current Practices' opens with the article 'Designing contemporary living spaces: a feminist perspective in urbanism coming from Col.lectiu Punt 6 in Barcelona', by Vera Renau. This paper focuses on how the feminist urbanism theories of this interdisciplinary cooperative of architects, sociologists, and urbanists have been implemented in Barcelona through a study case. Their theories are centered on daily life activities as well as cooperativeness and support networks based on an open, and plural approach. Their research reveals the role of women in challenge of the cities' future design.

Debora Giorgi and Tiziana Menegazzo in the article 'Identity and care in the daily life project of in changing women' present two participatory projects 'Odissee Fiorite' and 'Le cose degli altri' that involved migrants, in particular women escaping from extreme hardship situation. In both projects, the investigative tools are their objects, thanks to meanings that things including in itself, like ideals, experiences of life, cultures related to the past, present, and future. The projects highlighted the resilience of women in life planning in circumstances of change and discontinuity.

'How do women industrial designers succeed in the workplace? Getting in and getting on' by Cathy Lockhart delivers

us this critical question and provides some nuanced insights into how women navigate entrenched gender stereotypes and traditionally masculine workplace norms in the Australian design world where they still remain under-represented and rarely hold senior leadership roles. The authors carried out qualitative research on female industrial designers. The findings suggest the need for more radical approaches facilitating women recruitment, retention, and progression.

Marianne McAra and Lynn-Sayers McHattie introduce the project *Crafting Futures* and the studio-based approach to inspiring young female artisans interdisciplinary innovation in Malaysia. This approach gives opportunities for female students to learn from and collaborate with craftsmen experts – highly successful female entrepreneurs, leaders, and innovators – as inspiring female role-models.

The article ‘It Tells You What it Wants to Be. How Women Make, with Immanence, Love, Decay, and other Transgressions’ by Melanie Levick-Parkin closes this section presenting an exploration of the female making through a method that combines ethnographic, auto-ethnographic accounts and reflections informed by feminist theory and critique. The study focuses on how the conception of immanence in a making practice has implications for ontological concepts of agency.

Section IV is composed of three interviews. The first is the interview of Debora Giorgi to the French textile designer Brigitte Perkins working in Morocco. Weaving and embroidery fabrics and carpets with Moroccan women, she succeeds in restoring the transmission of this millennial knowledge to future generations, as well as modernizing the value of work,

adapting this to current markets renovating the very strong symbolic dimension through merging the dreams of yesterday and those of tomorrow.

In the following pages, Marinella Ferrara & Shujun Ban deals with the future dimension of design interviewing designer and professor Ross Steven and his ex-student, now animation designer, Nicole Horn, both living in New Zealand. The exploration of new technologies such as 3D and 4D printing multi-materials open a world of opportunities where women could succeed thanks to their divergent thinking and material and bodily very sensibility.

We believe this rich issue on The Women's Making has the precious merit to collect cases of women making from past to future, demonstrates women roles in the diverse design fields in history and contemporary era, and puts light in the future design.



A BIG PICTURE OF WOMEN'S MAKING

The Women's Making: a Historical Review

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Keywords

Women's Making, Design History, Technology, Women's Role Historical Path, Gender Sensitive Approach.

Abstract

This article proposes an analysis of the relationship between women's creative practices in the context of Western world design history. The study, based on a review of the literature, highlights the evolution of the role of women in design, considering the relationship with technology. The result is an excursus of the women maker culture growing through design from the 18th century up to the current times. During this path, despite the social constraints deeply affecting their life and work, women acquired skill and ability for the gradual achievement of a new individualism, and modernity of behavior for women. The changing role of women making culture was more incisive in the first development of consumption in the 19th century to the consumer society and the breakdown of gender barriers as a very recent history. Due to history, which has profoundly shaped the behavior of women, to date, they tend to have an artistic approach to technology. Current times are characterized by a series of positive processes and actions that reveal social radical change and the emerging of the gender sensitive design approach to pursue.

For the first time in history, women have the opportunity to play a major and visible role in a social transformation of potentially monumental proportions. The rich and extensive penetration of information technology into virtually every area of society creates enormous opportunities for women.

(Fountain, 2000, p. 3)

1. Introduction

Today's attention to women's empowerment, female making within the indie crafting practices and the opportunities that communication technology opened pushes us to analyze the women's practices to trace a historical path. Through literature, we try to accomplish this task not without difficulties. All twentieth-century modernity has put women's role in art, craft, and design on the sidelines, which is almost ignored by historians and design theorists. In Europe, this phenomenon of exclusion has been denounced by many scholars (as a key feature of the gender power relations) starting from the second wave of feminists of the late 1960s encouraging historians to seek out the women artists, architects, and designers (Rubino, 1979; Pollock & Parker, 1981; Bukley, 1986, 2020). Women's absence and marginalization from spheres of influence have been due to societal norms generally accepted by the entire society, also by women, with consequences on gender relations at home, work, and excluding them from impacting technological change and management. On this topic, Connell (2005, p. 1801) states:

Gender inequalities are embedded in a multidimensional structure of relationships between women and men, which, as the mod-

ern sociology of gender shows, operates at every level of human experience, from economic arrangements, culture and the state to interpersonal relationships and individual emotions.

Today, after a long discovering work, it is not more uncontroversial that women play significant roles in many fields.

In many areas of arts, craft, and design they are active agents in creating living spaces, kinds of everyday objects, wearable objects, and technology. Much of the actual knowledge about women's role in the past, mostly related to design in the Western world, is due to the research of historians of technology and design in the frame of the *social construction of technology* (Pinch & Bijker, 1984).

Moreover, in the last decades of the 20th century, the sociological and feminist literature on technology has been being reviewed, giving a more complex understanding of the “mutual constitutive relationship” between gender and technology (Wajcman, 2000). Authors as Judy Wajcman challenge the common assumption that technology is gender-neutral, looking at whether technology can liberate women or whether the new technologies are reinforcing sexual divisions in society, marginalization, and the perpetuation of stereotypes.

In this sense, design and designers play a fundamental role in the development of a *gender sensitive approach*.

With attention to avoiding a radical feminism-based theory, we propose a brief analysis of the relationship between women and technology in the design culture discourse in the context of the Western world. We consider the influence played by other disciplines like Women History, History of Economy (particularly women's labour history), History of sociology,

and History of Design. Without having any claim to present a systematic study of history, we are interested in highlighting the evolution of the role of women in design, considering the relationship with technology.

To correctly present our analysis, it is useful to refer to a historical frame based on the thesis of economic historians who speak of three phases of the industrial revolution – from the second half of the XVIII century up to the current times – and read, albeit briefly, the different design manifestation, theoretically and practically, in the different phases. During this path, the changing role of women making culture was more incisive in the first development of consumption in the XIX century to the consumer society and the breakdown of gender barriers as very recent history. The reconstruction of this historical path would help to understand how socioeconomic and technology achievement effects are interconnected and strictly related to design practices and expressions. The historical frame allows us to talk about design the connection among social, cultural, economic, technological transformation and the women's roles, defining continuity factors for design but also its different expression with some different focus along the whole process of design, which include the project, the fabrication, marketing & retailing, and consumption, as Renato De Fusco defined it (1985).

2. The relationship between Women and Technology Through the History of Design

Since the second half of the XVIII century of the industrial revolution (about to 1770), industrialization, market diffusion, and globalization required society to face profound changes,

that had both negative and positive impacts on women, their work, and experience. Confined within a patriarchal framework, as daughters, wives, and mothers in a farming economy, women have been in their home producing a variety of goods mainly consumed at home (food, soap, candle, yarn, cloth, etc.). The mechanization increased the women's path from home to factory constructed by industrialization from agricultural farms to the industry. This created challenges and opportunities for them.

In the XIX century, the level of technology and the organization of production and management in the factory has profoundly affected women's labour. Lower classes women constituted the hidden part of the workforce that has been produced the technologies. Young, single women's low wages played an important role in the growth of agricultural, household, textile, clothes, and shoe industries in many countries. The social constructions of femininity in a time of patriarchy determined the kind of work for women at home and the workplace, and the value attributed to them. In fabric, their role was structured in many areas as extensions of the position in the home, although this often ran counter to the rationalization of trends in industrial work. Their desire for marriage and taking care of the family, as well as the weakness, legitimized their low wages, helping to determine the workplace and relationships with employers, affecting also the relations between women and men in the working, and outside. The first effort to legitimize wage labour for women took place in the textile industry in the United States. In this sector, the work of women has been appreciated for their precision and manual detail skills.

The more relevant and impacting technologies in women's life were the mechanical loom for fabrics and the sewing machines. These innovations have had a disruptive impact on the modernization of many areas of the world, contributing first to the birth of the textile and clothing industry in England and the United States of America, then in many countries and parts of the world.

Although factory work was considered the least respectable job a woman could take outside home, acquiring a technical competence with the consequent growth of a culture of female work and economic independence have been instruments for the gradual achievement of a new individualism, and modernity of behaviour for women (Helmbold & Schofield, 1989) creating about a new class, the women factory weavers. In the USA, working in the industrial textile Hannah Wilkinson, wife of the entrepreneur Samuel Slater, was the first woman to receive a patent in 1793 for the two-ply cotton sewing thread (Thorne, 2019).

In many cases and countries where factory installation was slow or delayed, work opportunities for women were largely confined within the traditional household family economy. Textile and clothing production or craft involved women working at home. In the work in the home setting, creativity emerged with major expressions in connection to art.

Developing artistic creativity and technical perspective, happened more in bourgeoisie family where women were allowed to be engaged in activities like ceramic decorations, embroidering, textiles, and clothing making. From these activities, work activities happened to be born in sectors historically influenced by women's consumption, like fashion and home textiles with strong relationships with decorative arts.

2.1. The Arts and Crafts Movement

Women artistic expressions were embedded in the British Arts and Crafts Movement starting in the 1880s in the time of the crucial transition from applied arts to product design. Arts and Crafts Movement was a concerted socio-political stance against the Industrial Revolution, the mechanization of labour, the alienating conditions in the industrial factory. Inspired by Victorian idealism and the Utopian Socialism of William Morris, the movement greatly influenced its members' philosophies on the moral of work and ideas that the relationship between arts and crafts was a guaranty of the designer freedom. The movement fast became an international trend and acted a revival of traditional in the decorative and fine arts, highly valuating the vernacular.

Actually, the creative work of this movement, which included ceramics as well as furniture, textiles, jewellery, and metalwork, merged into elitist productions, expensive and available only for the upper social classes. Moreover, the association Arts & Craft Society, formed in 1887 in London, excluded women from the 'guilds' and the best that women could get was the benevolent tolerance from male leaders, helping their artisan father or husband. Women could contribute to the decoration of the pieces (Wolf 1989) and often only in the name of the male. Women's marginalization from spheres of influence has been due to societal norms generally accepted by the entire society, also by women, with consequences on gender relations at home, work and excluding them from impacting into technological change and management.

Different was the case of the Arts & Craft Movement in the USA (Kaplan, 1991) and in New Zealand (Calhoun, 2000) as a

major factor in changing the status of middle-class not married women affording a profession which was considered respectable and a path into the art community at large. In North America in the late nineteenth century, women could study and establish independent small studios and shop where they were free to pursue their creative interest in production as potters, metalsmiths and bookbinders: examples are the works of the ceramist Robineau Perry and Elizabeth Overbeck (Cumming, 1991, p. 101).

In most instances, however, crafts production concentrated women in a labour-intensive environment, providing a meagre income for long hours of work. In some settings, handicrafts were a means of increasing income for women, but only under certain conditions as economic help of the family, and husband collaboration since crafts are specialized activities that have limited markets and offer limited market potential, or where income is not the main objective.

Woman sensibility and technical ability of embroidering, weaving, sewing, mixing colours, painting, composing forms, choose the right materials for each piece started to be appreciated as a dominant craft sensibility, the woman's touch. With this craft's long-standing roots in women's work, it is perhaps not surprising that women were elevated as tastemakers. Their sophisticated perception of goods has been appreciated in the service sector during the first development of consumption in the XIX century and then in the XX century in many sectors.

2.2. Toward the Modernity

Across Europe, the bourgeois families have gradually accepted the possibility for non-married women to study and be en-

gaged at home in art and craft activities in sectors historically influenced by women making and consumption, like home textiles and decoration, and fashion. Crafting was often an opportunity to outlet the oppression of their domestic roles and less often to develop a passion. Women's craft sensibility and maker culture have been appreciated but underestimated in economic and entrepreneurial terms.

The First World War has acquired a central place in the birth of the *new women*. Wartime due to the absence of men, pose a challenge to the traditional role of women as homemakers in the private sphere. In all sector, women have been carried out the job. Invested with a new greater responsibility, they have gained awareness of their usefulness and their value, always carving out a margin wider independence from husbands, fathers and brothers. At the same time, the family rigid structure patriarchy based weakened.

The *Roaring Twenties* represented a promising time for the *new female* challenge of modernity in connection with the renewal of the arts and industrial expansion. While in the Bauhaus Walter Gropius renews aesthetics and qualities model to industrial manufacturing processes to propose the new ethical function *Art into Industry for mass production*, the rationalist language was developed by the students of the Bauhaus laboratories, included the textile by the female students. Elementary forms, abstract compositions, and references to primitive arts replaced the traditional repertoire of the domestic interior. The renewal coming from the cinema, theatre, and ballet pass into everyday life proposing new female attitudes. Sober and soft lines innovated fashion, freeing the female body from the 19th-century busts and heavy fabrics that mortify its

forms. In Paris, where feminism became a political movement since the 1890s women wore trousers, coloured socks, clothes soft lines that make their body move, overcoming the preconceptions about female sexuality. The first models of reference for women start to appear from this time. Among these, there were the artist and designer Sonia Delaunay (1885-1979), the American interior designer Elsie de Wolfe (1865-1950), the British Vogue management editor Dorothy Todd and the fashion editor Madge Garland, the Irish architect and furniture designer Eileen Gray (1877-1976), the French fashion designer Coco Chanel (1883-1971), the textile design Gunta Stölzl (1897-1983), Marianne Liebe Brandt (1893-1983), and Margarete Schütte-Lihotzky (1897-2000) coming from Bauhaus. All these dedicated creative and critical energy to the modernist reconfiguration of domestic spaces products for the new woman. In Italy, in the time of the autarky promoted by the Fascism (1930s-40s), national politics of artisanal processes defence encouraged female entrepreneurship, linking the experience of many *protodesigners* in the textile and fashion sector, called *artists of thread* capable of incorporating *avant-garde* trend. The enhancement of the feminine dexterity, the updating of traditions, the experimentation with 100% local fibres as well as new synthetic fibres nationally produced, and the optimism confident with ideas marked the production in support of a modern Italian 'industrious' rather than exclusively industrial handicraft. Among the many, Fede Cheti (1905-1979) founded her company of artistic fabrics in Milan in 1936. Starting to collaborate with Gio Ponti, during the II World War she patented her synthetic straw, called Lin-Lan, hand-woven by Cremonese rural craftsmen. Then shifting in the 50s toward industrial

manufacturing combining innovation in textile and design and patented the *tessuto cinese* a composition of nylon fibres. She rapidly gained international resonance exposing in Paris and New York (Lecce & Mazzanti, 2018).

The evolution of women's perception increased also trough in the service sector during the first development of consumption in the XIX century and then in the XX century. In the footwear sector, in retail sales and after in office work, the alleged tolerance of women for tedium and their nimble fingers adapted to them to the tasks to be performed.

About technologies, the sewing machine has been a strong impact on women making. Despite rigorous criticism of domestic environment technologies that was produced in a world dominated by men and used by women¹, if the sewing machine has been used under comfortable material working conditions for women, represented a powerful means to women self-expression.

After the introduction into the industry, as soon as it became cheaper, this entered homes as a tool for women to participate in the family economy, sewing clothes for themselves, the family or for selling, and a means could feel a sense of accomplishment, expressing creativity and dexterity as entrepreneurship.

1. The feminist criticism of the sewing machine includes arguments about socio-political and structural factors that generate and maintain the power structures in which women live. Many of the criticisms are addressed to the various large claims made by the burgeoning *happiness* and *better life* industries, according to which domestic life-saving devices did not actually make the family easier to manage or free women for other activities. At the contrary sewing could have been generating of exploitation of the poorly paid woman who worked at home; sewing machine has formed extra-duty housework reducing women's free time; compared to manual sewing that could be done chatting in places of interaction, the sewing machine relegated the woman to her home by favouring the isolation and reducing the possibility of interacting with others.

It happened already in the last decades of the XIX century and the second phase of the industrial revolution when many technologies entered the domestic environment radically changing activity for large numbers of women.

The diffusion history of the sewing machine is particularly interesting for the relationship between production, gender accepting and reception of technological innovations in the nineteenth-century history. The sewing machine had to be re-designed, communicated, and promoted in new ways to enter in the domestic environment, so did the household appliances or plastic items, widening the sector of the women perspective in design (Coffin, 1994). Singer company, the most famous maker of sewing machines, organized courses or other events that proposed sewing machine in the experience of interaction which succeeded in improving women's appreciation of this technology.

Even if this machine did not answer in itself women's emotional and intellectual needs for companionship and exchange of information, in an improved condition of use has become a symbol of women's aesthetics practices in many countries and cultures. Even after the diffusion of the *pret-a-porter* fashion industries, many women continued to sew for the pleasures such activity can bring such as tactile, creative, technical artistic pleasure, image control, personal expression and independence from manufacturers (Kramarae, 1988). Even in more recent times, in developing countries such as Ecuador, Iraq and Pakistan this machine has become a development strategy with the benefit of giving women resources to generate economies, and a mean of creating and transforming their clothes into forms of art and expression of politics, as in the case of the *molas* and the *cuna* women from Panama. In such path of reception and appropriation of the tech-

nology, the function of sewing machines has changed dramatically over the years and joined the activity of the hand-woven textiles field in which women have ventured.

Histories as this show that when a technology's or a technique appropriation allows a pleasurable experience of personal expression, women's interaction with it is positive and full of innovative potentiality. To be engaged in a creative activity by hand, or by the help of technology as well as providing women with a means of personal expression and link to their cultural heritage, is a source of empowerment.

2.3. Consumption and Technology Reception in the Mature Industrialization

The evolution of women's perception has been more evident in the service sector during the first development of consumption in the XIX century and then in the XX century. This was a complex history too. In the footwear sector, in retail sales and after in office work, the alleged tolerance of women for tedium and their nimble fingers adapted to them to the tasks to be performed.

The historian Alice Kessler-Harris (1982) has been exploring the complex nature and contradictions of the social conflict in an arena where class, gender, and the emerging culture of consumption all came together. Even in the service sector, the female was attributed to much less qualified, less paid, less work safe. But, again, through the work cultures developed in the workshop relationships, women started to supplant many of the restrictions socially ascribes to them. Writing about department store clerks, Susan Porter Benson (1986) who insisted on the culture of work acquired by women, described a complicat-

ed work culture that subverted the hierarchy and rules of work, infused workers with a more positive sense of themselves and their work, forming an awareness of the work.

After the Second World War, along with the second industrial revolution, a general breaking down of work barriers by women has been widening industrial production impacts on life. Women were welcomed in industrial production, related professions, department stores².

With the improvement of socio-economic conditions in many countries' women became a major seller of mass-consumer goods and users of technologies. A general craftsmanship anti-climax emerged. Due to the high level of quality and performance of industrial products in comparison to the low costs, the craft couldn't compete with industrial manufacturing due also the power played by media in the promotion of brand image and modern style of life design. As a result, craft has gradually lost consumer interest, its cultural capital, perceived value, and legitimacy.

Gradually more complex technologies and tools made their way into the household and office following a path started since the interwar years, firstly in the USA.

Appliances were a profound impact on women's life house-ware activities and were instrumental in the construction of qualities self-consciousness, private spheres as well as the

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private and public spaces³. Obviously, the class made a difference for access to new technology, with many differences between countryside and cities. In the spirit of functionalism, connected to the mechanization and rationalization of work, women had to professionalize their role as housewives. Many promotional activities were organized to teach women how to rationalize their work, make it more efficient and raise their qualities. Household technology and living standards were to women an important part of the making of the modern industrial society, named Americanization, but the new technology preserved the masculine value, not to change social relation between genders. (Landström, 1998) In general, since male engineers and designers designed appliances, this technology was conservative in their views on what home and women's place in modern society should be⁴. This was clear in the study of the design of the microwave oven in the UK (Cockburn and Ormond, 1993).

A parallel story shows that in consumerism times, once again firstly in the USA, the home becomes an important market outlet for a thousand products, and the woman becomes for the first time in history responsible for purchase for an ever-growing range of products. Enterprises and the distribution sector started posing major attention in women as consumers.

3. Electricity first made all systemically changed in the mid-class interiors. After the electric iron, the electric sewing machine was the first technology to become common, following by vacuum cleaners and then by washing machine and refrigerator.

4. For more than two centuries in the design history – as denounced by many feminist scholars as Judy Wajcman – the young, white, standard male has conformed product design. It happens in the different stages of the social process of shaping technology, (fabrication, marketing retailing, and deployed) starting with the representation of the customer, the construction and control of the consumer up to the approach by users.

This happened when the home economist and marketing expert Christine Frederick published *Selling Mrs Consumer*, a popular book that instructed manufacturers and advertisers in the art of launching products to American women. Women were welcome in advertising agencies, industry, and selling fields to service female interest accounts as the number of agencies increased⁵. Female industrial designers added the feminine touch to automotive design suggesting a broad-based demand for women's sensibilities to reach the expanding women's market (Sivulka, 2008). In the process, women contribute to stereotyping their role in society (Sivulka, 2008).

This greater outlet of female domestic work as an acquisition of modernity and technological appropriation has led to an unconditional diffusion of the consumption of the industrial product and the almost disappearance of craftsmanship in many countries and the associated loss of importance of the craftsmanship.

The women entrance in the job continued for decades, as women created jobs in designing, producing and selling for women, organized associations, and utilized networks as expressions of solidarity and support. After the USA, the focus on women consumer moved to Europe. This increased outlet of women's domestic work as a modernity acquisition, technology appropriation and has accompanied the almost disappearance of craftsmanship in many countries and the associated loss of importance of the craftsmanship.

5. Women start to work as writers, artists, merchandising experts, research workers, media analysts, administrators, models and spokespersons, graphic designer radio, and television production. Women proved effective in direct sales to the women's market.

Craft happens to reappear in the 1970s and 80s as a subversive form used both as a method of feminist expression and critique of the male-dominated art world, with artists such as Judy Chicago and Joyce Wieland. They created textile, crochet, knitting, and embroidery works attempting to unsettle the ease with which expectations of domesticity and child-rearing were imposed on many female artists (Robertson, 2011, p. 8)⁶.

3. The Female Perspective and the *Gender Sensitive Design Approach*

The entry in contemporary times has been marked by the counterculture, an anti-establishment cultural phenomenon that widely developed, and rapidly spread in the western world between the mid-60s and mid-70s.

Within this, second-wave feminism helped increase equality conditions for women in the workplace, starting a strong critique of patriarchy and male-dominated society and, consequently, began to improve personal life and professional skills, allowing generally a greater level of social emancipation and inclusion of all minorities, obviously with many differences in the various areas of the world.

6. Robertson and Parker (2010, p. 205) have been pointed the crafts as political history, as means of resistance and activism, citing crafts' important role in numerous political actions as a part of feminist activist organizing, already since the last decades of the XIX century when British suffragists appropriated women's domestic embroidery skills to militant ends.

The social perception of women, awareness of their role as well as an interest in women as customers, have evolved in most fields and manufacturing sectors⁷.

Continuing the commitment started with the development of the consumer society and global competition, the companies have reoriented their market strategies towards woman as responsible for purchasing decisions for the house is made by women⁸. This has always not happened with good results. Many product categories have been only superficially directed to women, using a different appearance as female product differentiation with more rounded shapes and constant *pink* color, and generating products or visual communication artifacts that have become the symbol of stereotypes, since today.

The advancement of the female perspective in design, named *gender sensitive approach*, has increased with the user studies in the field of digital technologies and interaction design for the development of advanced electronic products such as services for social networking and products such as mobile phones, HiFi-systems, etc.

Although in the ITC and digital technologies scenario in general, unlike past technologies, physical power, command-and-control authority system, as well as hierarchy –

7. Nonetheless, the under-representation of women in high-level positions is a pattern that still occurs in several professions, including education, science and technology, business, and urban/corporate governance. The EU Commission Equality Challenge (2014) underlines that women and ethnic minorities are marginalized in the best universities: 8% of professors, 72% of senior managers and about 80% of vice-chancellors and principals in the UK they are men. Most women still receive lower salaries and statuses. According to the latest official data, the gender pay gap in Europe is 16%. Besides, women face the so-called glass ceiling effect, the invisible but unattainable obstruction, which prevents minorities and women from climbing to the top rungs of the corporate ladder, regardless of their qualifications.

8. In the Western World countries, about 80% of the purchase decision for the house is made by women.

including gender hierarchy – have less power⁹, the first product categories related were dominated by men and did not reflect women's expectations, as regards the use and ways of interacting. These products were scarcely considered useful and attractive for women. But, the extensive penetration of information technology into virtually every area of society created enormous opportunities for women.

In the nineties, in the USA it was noted that women were the predominant users of ICT in the workplace. This fact was related to the benefits that women obtained, like the opportunities of increasing social communication, strengthen interconnections, combining them with family life, allowing greater flexibility to combine work and family, and creating independent networks. Then the Xeros, the major American IT companies, started to consider the need for women to strengthen their participation as experts, owners, and designers of information technologies.

The XeroxParc Institute for Women and Technology started a co-designing process engaging female users in the development of new IT product design. They opened a consultation process, with the result that throughout the United States between 1998 and 99 much of its technical work arose from the ideas generated in community meetings. Among them: the development of a full-size view of another room or other place, allowing distant family members to virtually connect their

9. As technology is a social construction and part of our culture, in a male-dominated society and culture, technologies have been reinforced male supremacy. About the today technologies, scholars in various fields warn us that oppressive and inequality forces are still strong in controlling technology. The goal of including more women in the economic and political control of technological change is fundamental. Enhanced capabilities for technology is one of the factors to reshape society, fighting the inequality in human development in the coming decades (UNDP, 2019).

living spaces, and a centralized timer that can integrate the schedules of an entire family. Non-technological users, especially women, have participated in brainstorming sessions on technological development. The goal was to involve and equip non-technologists, through participation in the design phase in order to exercise more effective influence on technological and product innovation and increase the probability of meeting user needs (Fountain, 2000). They have shown that women tend to hold different perspectives from men than from the perception that affects the technological needs of society. This fundamental step takes place in relation to the evolution of design that in those years began to guide, also in the USA, a user-centered approach, and then move on to a user-experience approach to push innovation by combining production innovation and social.

A similar approach was recently developed in Denmark in the sector of the interaction design and advanced electronic interactive products both wearables and for home-setting. The “Female Interaction” research links the gender dimension of interaction and user experience identifying values, motivations (feature/benefit, interactive dimension both physical and digital and multi-sensorial, aesthetics and communicative), and also barriers for women use (Schroeder, 2010)¹⁰.

The aims have been to define international guidelines to develop new product concepts, their functions and gender advantages, the user interaction with the products in partner-

10. The project was carried out by experienced product and interaction designers at design-people.dk together with specialists in production design, user-led innovation, interaction psychology and marketing.

ship with enterprises such as B&O, Danfoss (climate indoor), and GN Netcom. The project was carried out by experienced product and interaction designers at design-people.dk together with specialists in production design, user-led innovation, interaction psychology and marketing. The concept of alternative female interaction was undertaken with the following activities: co-creation with users, refinement of design and visualization, international feedback on the user market, analysis and evaluation of user tests (Schroeder, 2010).

These two research projects and many others have been contributing to understand the traits and female preferences that are generally most overlooked by male developers, pointing out that both men and women have the same qualifications for technical performance but may not perform equally because lack of the motivation. A lot of technology is designed with men in mind not offering women the benefits they seek. Although men and women share equal abilities to operate tech products it does not mean we are equally motivated to engage ourselves in technology. As highlighted in 2004 by the Consumer Electronics Association, “Only 10% of women thought consumer electronics manufacturers had them in mind when developing products.” Recognizing the importance of developing researches projects in a more inclusive way, and fragmenting the *glassceiling*, many actions has been carried out in the last decades and many are in progress to promote women empowerment, equality and social coherence.

If in the recent past research has mainly dealt with women in the role of consumers and users of products, today a fundamental role acquires the combination of women and technology not only us users but in designing focuses (Fountain 2000).

About the relationship women and technology, we can add that the literature on men's and women's identity made it clear that the biological differences of the sexes do not affect intelligence, creativity, and thinking ability (Maccoby & Jacklin, 1974; Agarwal & Kumari, 1982). As we traced to demonstrated, it was the historical cultural path, characterized by the social role constraints, that profoundly shaped the attitude and behaviour of women to respect the job and the relation with technological out of the home setting actions. Some theorists have explained this phenomenon with the idea of *dependency*. According to this view, “[Women] are not trained for freedom at all, but for its categorical opposite, dependency” (Dowling, 1981, p. 3).

Sherry Turkle (1984), in her fascinating study of the cultural and psychological world of computers and computer science, confirms that the different genders' attitudes to these fields are due to cultural values. Men and women are equally likely to use a computer in the school and office, but usage styles differ markedly. Women tend to have an *artistic approach* to technical practices, instead of master the technology overwhelmingly as males. She asserts that the women's *soft mastery* on negotiation, compromise, and give-and-take – as psychological virtues – are due to their gendered cultural development path, while the model of male behaviour stresses decisiveness and the *imposition of will*, a control on material and social world (Turkle, 1984). The gender differences are utilized by Turkle to redefine computer science and the gender categories associated with many scientific fields, rather than to reify them.

Other gender identity development scholars provided evidence of the cultural association of sciences and scientific ways of

thinking (reasoning, facts, objectivity) with males and masculinity. Men were habits to work outside the home, and always more likely to discuss and be attracted to hands-on possibilities like building, trying out ideas in the real world. Instead, feelings, values, and subjectivity are associated with female femininity and domestic spaces. Stereotypes propose masculine dominator – men have been taught to define their identity in terms of domination and control – and feminine socialization. If in history the social system functioned to suppress, control, and exclude women historically, now it is needed to combat the blockages that women still suffer during their journey into work and technology. Internal and external blocks to technology have been identified by John Hayes (1981) in his study of problem solver skills as follows: i) The culture tends to undermine the confidence of women in their ability to compete in certain creative fields, ii) The culture discourages women from taking an interest in science-related fields, iii) There are relatively few female role models in creative fields, iv) Social pressures and gender roles encourage women to retain the primary responsibility for the family (Hayes, 1981).

Even the underrepresentation of women in design professionals and technology – now considered as one of the primary social goals – is due to cultural values, stereotypes, and socialization processes that tend to undermine the confidence of women in their ability to compete in certain creative and technological fields.

This is why today many projects at the level of government promote women's empowerment to affecting technology, enterprise, and society with the ultimate goal of giving society a new impetus for all innovation.

References

- Agarwal, S. & Kumari, S. (1982). A correlational study of risk-taking and creativity with special reference to sex differences. *Indian Educational Review*, 17(3), 104–110.
- Buckley, C. (1986). Made in Patriarchy: Toward a Feminist Analysis of Women and Design. *Design Issues*, 3(2), 3-14.
- Buckley, C. (2020, Jan). Made in Patriarchy II: Researching (or Re-Searching) Women and Design. *Design Issues*, 36(1), 19-29.
- Calhoun, A. (2000). *Arts & Craft Movement in New Zealand (1870-1940). Women make their mark*. Auckland University Press.
- Cockburn, C. & Ormond, S. (1993). *Gender and Technology in the Making*. Sage.
- Coffin, J. G. (1994). Credit, Consumption, and Images of Women's Desires: Selling the Sewing Machine in Late Nineteenth-Century France. *French Historical Studies*, 18(3), 749-783
- Connell, R. W. (2005). Change Among the Gatekeepers: Men Masculinities, and Gender Equalities in the Global Arena. *Signs: Journal of Women in Culture and Society*, 30(3), 1801-1826.
- Cumming, E. (1991). Studios, Education and Industry. In E. Cumming & W. Kaplan, *The Arts and Crafts Movement* (pp. 67-106). Thames and Hudson.
- De Fusco, R. (1985). *Storia del design*. Laterza.
- Dowling, C. (1981). *The Cinderella Complex: Women's Hidden Fear of Independence*. Simon & Schuster.
- Fountain, J. E. (2000). Constructing the information society: women, information technology, and design. *Technology in Society*, 22(1), 45-62.
- Hayes, J. R. (1981). *The complete problem solver*. Franklin Institute Press.
- Helmbold, L. R. & Schofield, A. (1989). Women's Labor History, 1790-1945. *Reviews in American History*, 17(4), 501-518.
- Kaplan, W. (1991). *The Arts and Crafts Movement*. Thames and Hudson.
- Kessler-Harris, A. (1982). *Out at work: a story of women earning wages in the United States*. New York: Oxford University Press.

Kramarae, C. (1988), Talk of sewing circles and sweatshops. In C. Kramarae (Ed.), *Technology and Women's Voices Keeping in Touch* (pp. 124-135). Routledge & Kegan Paul

Landström, C. (1998). National Strategies: The Gendered Appropriation of Household Technology. In Hård, M. & Jamison, A. (Eds.), *The Intellectual Appropriation of Technology: Discourses on Modernity, 1900-1939* (pp. 163-188). MIT Press.

Lecce, C. & Mazzanti, A. (2018). Artists of the Thread between the Thirties and the Sixties, from Artistic Craftsmanship to Industry: Two Exemplary Cases Anita Pittoni and Fede Cheti. In H. Serazin, C. Franchini & E. Garda (Eds.), *Women's Creativity since the Modern Movement (1918-2018). Toward a New Perception and Reception* (pp. 718-731). ZRC SAZU.

Maccoby, E. & Jacklin, C. N. (1974). Myth, reality and shades of gray: What we know and don't know about sex differences. *Psychology Today*, 8, 109-112.

Pinch T. J. & Bijker, W. E. (1984). The Social Construction of Facts and Artefacts: or How the Sociology of Science and the Sociology of Technology might Benefit Each Other. *Social Studies Science*, 14(3), 399-441.

Pollock, G. & Parker, R. (1981). *Old Mistresses. Women, Art and Ideology*. Routledge & Kegan.

Porter Benson, S. (1986). *Counter Cultures: Saleswomen, Managers, and Customers in American Department Stores, 1890-1940*. University of Illinois Press.

Robertson, K. (2011). Textile. Crafting Community. *Textile*, 14(1), 2-13.

Rubino, L. (1979). *Le spouse del vento. La donna nelle arti e nel design degli ultimi cento anni*. Bertani Editore.

Sivulka, J. (2008). The Fabulous Fifties: Selling Mr. and Mrs. Consumer. *Advertising & Society Review*, (9), 4.

Schroeder, K. (2010). *Gender Dimensions of Product Design*. Available at: <https://pdfs.semanticscholar.org/5dbe/834ffbfd897a4b6ce-969bef139163714f024.pdf>.

Thorne, D. (2019). *Hidden in History: The Untold Stories of Women During the Industrial Revolution*. Atlantic Publishing Group.

Turkle, S. (1984), *The Second Self: Computers and the Human Spirit*. MIT Press.

Wajcman, J. (2000). Reflections on Gender and Technology Studies. *Social Study of Science*, 30(3), 447-464.

Wolf, T. L. (1989). Women Jewelers of the British Arts and Crafts Movement. *The Journal of Decorative and Propaganda Arts*, (14), 28-45.

“What Women Designer Want” The Female Point of View in the Fashion Creative Process

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Fashion, Design Processes, Branding, Social Studies, Women's Entrepreneurship.

Abstract

We Should All Be Feminists, the speech given in 2012 by Chimamanda Ngozi Adichie, became a fashionable slogan in 2017, having been printed on the T-shirts presented by Maria Grazia Chiuri in her first collection for Dior. An operation that also aimed to contribute to the redefinition of the female role within the fashion system. Even though Poiret has freed women from corsets and constrictions, it is thanks to Madame Grès, Madeleine Vionnet, Elsa Schiaparelli and Coco Chanel, that a renewed relationship between dress and woman's body has been questioned, opening the doors to the creations of Mary Quant, Krizia, Vivienne Westwood, Rei Kawakubo, Miuccia Prada, Consuelo Castiglioni and Phoebe Philo, to mention the most relevant. These figures all looked at woman's body through cuts and formal and material experimentations by using a personal vision of style and a precise creative process.

Far from being limited to gender discourse, the article intends to investigate, the evolution of the relationship between the creative process implemented by women designers and the fashion project. A dialogue that does not end in pure formal experimentation, but that succeeds in giving shape to new cultural and social values and, in defining fortunate entrepreneurial stories.

1. What Does Women Designers Want?

“The great question, which has never been answered and to which I have not been able to answer, despite my thirty years of research on the female soul, is *What does a woman want?*” (Jones, 1955, 420). This sentence, stated by Sigmund Freud, well represents the great dilemma that anguished the father of psychoanalysis over a century ago and that remains unsolved today, even when restricting the field of investigation to the relationship among fashion, creativity and the female gender; it is a question that has passed through various phases and that cyclically comes up again in an attempt to delineate a shared thought – an objective not yet fully achieved despite the several experiences and reflections carried out over the years on the role of women within the system of the cultural and creative industries (Flew, 2012, p. 85) (i.e. architecture, visual and performing arts, crafts, design, publishing, cinema, photography, art and antiques market, music, advertising, computer services and interactive entertainment software, television, radio and fashion).

Among the countless actions taken to broaden the debate on the role of women in art, creativity and design, MoMoWo (Women’s Creativity since the Modern Movement) is a cultural cooperation project, co-funded by the European Union, created by the collaboration among the Politecnico di Torino, the IADE of Lisbon, the University of Oviedo, the ZRC SAZU of Ljubljana, the University of Grenoble, the Vrije Universiteit of Amsterdam and the Slovenská technická univerzita of Bratislava; similarly, Rebelarchitette and Voices of Women (VOW) have been developed to give visibility to women in the architectural field. As for the other cultural and creative industries,

moments of reflection on the “women’s question” in the arts have increased especially in the last period, as demonstrated by the numerous conferences and exhibitions: *Pictures by Women: A History of Modern Photography* (MoMA, New York, 2011), *Designing Modern Women 1890–1990* (MoMA, New York, 2014), *W. Women in Italian Design* (La Triennale, Milan, 2019), *I Am ... Contemporary Women Artists of Africa* (National Museum of African Art, Washington, 2019), *Female Perspectives. Women of Talent and Commitment 1861–1926* (Gallerie degli Uffizi, Florence, 2019), *Women Take the Floor* (Museum of Fine Arts, Boston, 2019), *Code Breakers: Women in Games* (ACMI, Melbourne, 2017).

In the fashion world (meant here both as a manufacturing and as cultural system, hence as a producer of both artefacts and significance), the relationship between women and fashion itself has long been central. For Georg Simmel, women particularly strongly adhere to fashion because “fashion gives form to equalization and individualization, to the fascination of imitation and showiness” (Simmel, 1905, 196); for Roland Barthes, fashion offers women a double dream of identity and pleasure, perhaps an invitation to play with identities (Barthes, 1983, p. 255); more recently, Eleonora Fiorani affirms that clothes and the dressing up are a playful sign through which one person finds expression (Fiorani, 2006, p. 17). Fashion is therefore understood as a system of objects and significance, that takes on value depending on who makes, who uses and who wears the dresses; as an essential concept that sometimes defines and sometimes adapts itself to social, taste and style changes.

The continuous mutations through which fashion undergoes made the debate on the relationship between fashion itself and women’s creativity particularly fascinating yet complex. Considering once more the other cultural and creative industries, it is clear that the historical feminine/feminist issue is mainly linked to the emancipation of women and to the battles that, since the beginning of the 20th century, have contributed to the definition of gender equality in terms of rights, responsibilities, opportunities and recognition of a role within a given sector. It is a process that has allowed women to pursue careers in creative areas linked to markets that tend to have a transversal public. However, in fashion, it is a whole nother story since, within the fashion system, women are multiple subjects who play different roles at the same time: they are the designers or creative directors who act to create and produce fashion and its artefacts, they represent the agents who activate processes of choice (fashion editors, buyers, stylists and fashion journalists) and, finally, they are the customers who buy, wear and use fashion artefacts. The overlap of roles is also complicated by the fluidity of shapes, materials and types of products, which increasingly shifts from male to female and vice versa; nevertheless, this overlap of genders have contributed over the years to the liberation of women – aesthetically and socially – also thanks to hybrid, unisex or genderless styles and products.

Fashion is by its very nature an interpreter and a mirror of social changes that, as Eleonora Fiorani states, combines and sews what seems irreconcilable to us: tradition and modernity, past and future, localism and globalisation, social inadequacy and consumerism (Fiorani, 2006, p. 11).

Clothing is not only an essential medium for our daily life but also the barometer and the catalyst for social change. It is both political and cultural action by means of a form of social control manifested in the display of economic and social values, which are generated through specific aesthetic codes; it is capable of indicating “how people in different eras have perceived their positions in social structures and negotiated status boundaries” (Crane, 2000, p. 1). Thus, being this interpreter and mirror of social changes, fashion becomes the lens through which we aim to read the relationship between fashion itself, creativity, design and the female sphere.

“What Women Want” is therefore a question that cannot find a unique and common answer coming from the female and male worlds. To this purpose, it is interesting to note the different prepositions used to connect the word *fashion* with the word *woman*. A fashion *for* women? But what does *for* mean? The making of a garment answers this question since an item of clothing is made *for* someone. A fashion (created or made) *by* women? But even in this case, are we sure that there are a distinct feminine “touch” and a masculine one referring not only to fashion but also to the project in general? Also, we should not forget the large number of women involved in the production and creation of fashion.

2. Thesis and Antithesis in Female Fashion History

Several phases have animated the debate on the evolution of fashion and on the contribution of female creativity in the definition of changes in taste, style and product; phases constantly oscillating between form or function, ornament and minimalism, real and ideal body, femininity and androgyny,

and between creativity achieved through direct manipulation of the material or filtered by the two-dimensionality of the drawing. These opposite categories have been intertwined along the historical path of fashion setting different scenarios and approaches yet never binding the evolution of fashion in general to a unique definition. Indeed, this evolution is not only related to the gender of designers, creative directors, dressmakers or tailors but also to a dialogue that has necessarily included the market; that is, the customers, who after all rule fashion successes and failures by being more and more “activators (and no longer *stupid dupes*) of social, cultural and identity processes starting from significance produced by the market” (Cova, Fuschillo, Pace, 2017, 28).

A series of actions and reactions have contributed to the creation of the abacus of elements, references, shapes and styles that constitute the contemporary vocabulary of women’s wardrobe, together with those changes, often derived from the bottom up (Crane, 2000, p. 14), generated by innovations linked to societal and technological progress, such as the evolution of the transport system from bicycle to car. It is interesting to see how, for example, in the Victorian era “women’s cyclewear became visual shorthand for the *New Woman* who was identified by her desire for progress, independent spirit and her athletic zeal” (Jungnickel, 2018, p. 16).

The unfolding of the history of fashion designers and of the products that have furthered or supported the emancipation of the female body and of the role of women in society traces a narrative that does not follow a linear path of “liberation” but that presents unedited scenarios. It is a history that, for example, witnessed Paul Poiret freeing women from corsets, but loading

them with decorations, ornaments, jewels and feathers; the same Poiret who tightened the female silhouette at leg level with his hobble skirt, which was so loved by his clients yet too tight to allow agile movements – a new torture, but one that women liked so much! It required a woman to make that project real, usable. Indeed, it was Jeanne Paquin who perfected that fashion item by adding “ingenious hidden pleats, so that, although the skirt looked slim, walking was a pleasure” (Steele, 1991, p. 29).

While it is almost taken for granted that the research for practicality and comfort should always be implemented in projects developed by women, one can easily observe that, even on this issue, opinions are not shared. It is enough to compare the methods and approaches of four different women, who are symbols of emancipation not only in the fashion field, to spot their divergent visions: Jeanne Lanvin, Madelaine Vionnet, Coco Chanel and Elsa Schiaparelli.

Jeanne Lanvin, for example, affirmed that “modern clothes need some sort of romantic quality [...] they should not be too prosaic and practical” (Steele, 1991, p. 37). In a period of liberation from the corsets, she presented, meeting with enormous public success, the *robe de style* (Fig. 1), a model of dress inspired by the shapes of the 18th century, featuring volumes that redesigned the feminine silhouette with a tight-fitting bodice and a wide skirt on the hips, supported by a basket structure. A garment that was extremely structured for that period and that reshaped the body to the extent of appearing anachronistic in a period characterised by the emancipation of the female body. In the same years, Madeleine Vionnet – who claimed to be the one who freed women from that *chose orthopédique* that was the corset, and not Poiret – defined more simple and linear silhouettes.



Figure 1. House of Lanvin, *Robe de Style*, Autumn/Winter 1926, silk, rhinestones, pearls. © The Metropolitan Museum of Art, New York.

Rejecting drawing as part of the creative process for being a simplification of reality, Vionnet put in place a new approach, shaping her creations on a scale mannequin (Fig. 2). In this way, working directly with materials, she could better test the most appropriate cut, in order to make the dress follow the shape of the body and not only lean on it; a body that, however, had to be proportioned and well made. Vionnet, in fact, while rejecting to redesign the woman’s body, only designed for a specific type of woman, that is, an ideal woman who could embody a particular idea of eternal beauty (Golbin, 2009, p. 14) – “a woman’s muscles are the best corset one could imagine” (Beucler, 1929, p. 31). But Vionnet also debunked another false myth regarding the fact that women designers design thinking about themselves: the French couturier would have never worn her creations since they were not designed for her who, not wiry, wore only “sack dresses” (Chapsal, 1989, p. 159).

If Vionnet refined, Chanel dressed. If Vionnet celebrated the ideal of beauty of the female body, Chanel celebrated herself. Their personalities and approaches were very different, but represent effectively the multiplicity of design methods and relationships that can be experienced talking about creativity, fashion and women. This complexity is fully expressed by Gabrielle Chanel’s contradictory figure: if on the one hand, she embodied the quintessence of women’s liberation and innovated the abacus of clothing and materials archetypes, inventing sportswear and making jersey elegant (Fig. 3), on the other hand, she never included trousers in her collections, even though she was one of the first women to adopt them, breaking the rules of dressing well.



Figure 2. Madeleine Vionnet used a wooden dummy to create her fashion designs, 1930 c. © Apic/ Getty Images.



Figure 3. Gabrielle “Coco” Chanel wearing one of her suits in the grounds at Faubourg Saint-Honoré, Paris, 1929. © Sasha/Getty Images.

Also, she considered the miniskirt (the manifesto of women’s emancipation of the Sixties and Seventies brought to the spotlight by Mary Quant) “disgusting and making fun of the old little girls who wore it” (Steele, 1991, p. 50).

In opposition to the emphasis on functionality and simplicity, Elsa Schiaparelli, “the Italian artist who makes clothes”, as Chanel called her, is fully entitled to be part of the debate on women’s creativity in fashion. If for Chanel comfort was the ultimate goal of her fashion approach, for Schiaparelli there was no distinction between clothes and costume, between fashion as a mirror of the everyday life and costume design as a staging, as the theatricalisation of life. For the Italian artist, design was an artistic act that she performed by means of countless collaborations with artists such as Salvador Dalí and Jean Cocteau. Masculine and feminine are not settled here through the comfort of sportswear but through extremely designed and rigorous silhouettes, exaggerated in volumes, decorations and colours (Fig. 4) – an exhibited femininity, theatrical and glamorous, and a “resource used by women (...) in a perennially unequal society” (Dyhouse, 2010, p. 5).

3. Fashion Creativities: New Forms of Dialectic Thinking

Form or function, ornament and comfort, real and ideal body, femininity and androgyny and creativeness achieved through the direct manipulation of matter or filtered by the two-dimensionality of the drawing: these dichotomies regularly return in the debate between fashion and female creativity. Today, we prefer to talk about a dialogue rather than a conflict because, in the complexity of the creative fashion process, “some of the highest forms of creative thinking appear to be dialectical.



Figure 4. Elsa Schiaparelli, *Hat shaped like a shoe*, and masculine jacket with an applique in the form of lips, 1937. © Ullstein Bild/ Getty Images .

They often involve processes such as combining and recombining ideas, searching for complementary and coordinating multiple perspectives” (Runco, Pritzker, 1999, p. 551), perfectly reflecting the current fashion landscape. At the beginning of the fashion industry though, very precise statements delineated almost dogmatic fashion assertions (such as those imposed by Poiret, Vionnet, Madame Grès and Chanel in their ateliers). It is only with the evolution of the fashion system and with the passage from couture to *prêt-à-porter* and the related increase of the expansion of the market, that multiple antitheses have been generated, producing endless, contradictory visions and alternate yet simultaneous concepts and styles. Following the spirit of time and place, different forms and styles have taken turns: from the idea of fashion as an aesthetic necessity and the good taste by Biki (Segre Reinach, 2019, p. 26) to the sharpness of Mila Schön’s lines, from Sonia Rykiel’s seductive and charming *vraie femmes*, to Vivienne Westwood’s excessive and citationist political commitment or the basic and essential one of Katharine Hamnett; from Krizia’s fashion “liberated from the rhetoric of *clichés*” (Tutino Vercelloni, 1995, p. 50), to Rei Kawakubo’s sculptures to wear, just to name a few. Different shapes and styles that have often generated very closed categories.

In a certain way, we can affirm that now we are going through a phase of synthesis, in which contradictory concepts are integrated into a dialectical framework, setting projects that do not deny the past but rather that realise new narratives based on it. Creativity, while remaining a personal gesture, is enriched by a broader dialogue among designers within style offices (a melting pot of ideas and creative sharing), but also

by a wider understanding of the contemporary world; it is a feeling that often takes shape from a personal need but which in reality becomes an interpretation of the demands of a precise market segment, just as happened with the Prada phenomenon. The *ugly chic* – as the press labelled it – is the result of the lack in the 1980s market, saturated with over-designed goods, of products that could respond to Miuccia Prada’s style; a style in contrast with “conventional ideas of beauty, of the generic appeal of the beautiful, glamorous, bourgeois woman” (Bolton, Koda, 2012, p. 60). At the time, while fashion was fostering clichés of beauty, Miuccia Prada began her own exploration of the meanings of beauty itself by researching precious materials (such as brocade, furs and embroidery) and combining them with more everyday materials (men’s fabrics, knitwear, cotton and bolts) (Fig. 5) and by working on clothing archetypes such as workwear, uniforms and, above all, those skirts that became her true laboratory of creative experimentation.

A work on archetypes, in this case masculine, was carried out in 2010 by Phoebe Philo, at the time creative director at Céline, with her Five Perfect Trousers collection based on the different wearability of trousers and on their different occasions of use, so to designate the fundamental *bricks* of the wardrobe. With it, a fresh capacity to read the present and to amplify the discourse of one’s personal vision was born: that of a design attitude which has translated and defined some of the most interesting *design actions* of fashion in recent decades. Like the work of Consuelo Castiglioni who, using her instinct as a design tool, in the second half of the Nineties, re-interpreted fur establishing a new aesthetic and creating a process that was the opposite of the one implemented by Chanel.



Figure 5. Prada, Autumn/Winter 2004–2005 women collection. A detail of the material mix of furs, embroidery, men’s fabrics, knitwear and bolts. © Patrick Hertzog/afp/Getty Images.

Indeed, while the French couturier brought poor materials into haute couture, Consuelo Castiglioni at Marni revolutionised the concept of fur, that was not impoverished but redefined into new forms through dyeing, inlaying and hybridisation of materials (Fig. 6). Knowledge of materials and formal experimentation are the design signature of Marianna Rosati, founder and designer of DROME, too. Through her work, she wants to “renew the concept of leather, thinking of it as a fabric, every day and easy-to-use element, without forgetting its natural strength and luxury” (Sanò, 2015, p. 303) (Fig. 7).



Figure 6. Marni. Autumn/Winter 2011-2012. A detail of the material mix of furs and neoprene designed by Consuelo Castiglioni. © Chris Moore/Catwalking/Getty Images.

Figure 7. DROME. Autumn/Winter 2018-2019. A detail of a leather outfit created by Marianna Rosati using leather as a fabric. © Kristy Sparow/Getty Images.

In this very context, took shape the philosophy and work carried out by Maria Grazia Chiuri, initially in partnership with Pier Paolo Piccioli at Valentino and then alone at Dior, the maison where she is creative director since 2017. Being the first woman to lead the maison since its foundation gives her the opportunity to define and shape her design vision from scratch: Chiuri’s work describes a concept of creativity that is the very essence of projectuality, not only as an abstract romantic idea but also as a real scientific discipline. For her, to be a fashion designer means to give life to a concrete project that has to start with women, to think about women and to design for women, that is, first of all, to understand that women are the ones who choose. At the end of the Second World War, women chose to be forced into the exaggerated forms of Christian Dior’s New Look and, in the Sixties, women chose to wear the miniskirt, as Mary Quant herself claimed: “It wasn’t me or Courrèges who invented the miniskirt anyway, it was the girls in the street who did” (Lyman, 1972, p. 198). Therefore, not the imposition of a male or female vision of femininity, but a choice: in antithesis with the restrictions of war in the first case, in line with the nascent youth movements in the second. Once more, fashion as a mirror of the changes in society.

We Should All Be Feminists, the speech given in 2012 at TEDx-Euston by Nigerian-born writer Chimamanda Ngozi Adichie, became a *fashionable* slogan in 2017, having been printed on the T-shirts (Fig. 8) presented by Maria Grazia Chiuri in her first collection designed for Dior. The decision to use this phrase as the opening of her adventure at the French fashion

house was a real programmatic manifesto, meant to reiterate not only the need to define a gender vision of fashion design but also the necessity of understanding how to interpret the present as a “happy feminist”.

Fashion as a communicative interface in connection with the body and with other people, as a productive system and as an economic and political agent increasingly contributes to defining new forms of dresses and bodies. Also, fashion renewed ways of thinking fit into the contemporary debate (and market) of genderless fashion, a debate that has broadened the vocabulary of design possibilities, defining aesthetic and stylistic neologisms, without completely replacing the lexicon built over the years. In fact, if “clothes do not have a gender” (Flaccavento, 2020), it is also true that bodies have gender, they have different peculiarities, shapes and needs, often resulting from cultural, geographical, historical and social constructs, which are rooted in the physicality of the body, subject and object of fashion.

The relationship among the neutrality of clothing, the characteristics of bodies and the ways of thinking and designing of designers – whether men or women – have created precise approaches capable of determining not only new types of products but also new design methods and multiple designs. If on the one hand, the abstraction of the concept of woman – implemented by some female designers such as Rei Kawakubo, Vivienne Westwood and Iris van Herpen, who have made formal and conceptual research their main focus – has triggered design languages that sublimate, celebrate or even re-elaborate the female body; on the other hand, it is often thanks to the vision and creativity of female designers that

some changes occurred, not only of product but of mindset and creative process. It is no coincidence, that the creators of what has been defined *ugly chic* were women – i.e. Miuccia Prada who, in her first fashion show in 1988, brought the Flintstones together with the Jetsons, as *WWD* wrote, and Consuelo Castiglioni with the creation, among other things, of the iconic Fussbett shoes. A label, that of chic with bad taste, that simplifies a broader and more ample concept. The path that Prada and Castiglioni set out was able to formalise a design approach, that did not start from an abstract concept but rather from a personal – almost private – idea of fashion, femininity and beauty. This approach, built on the foundations laid by Schiaparelli, Vionnet, Chanel and Quant, has been able to originate an aesthetic and certain kinds of products that women like; and women like them because by adopting them they are able to achieve that personal, self-referential well-being (understood here in a positive sense), which transcends the eyes of those who, eventually, look at them. This well-being is not necessarily defined through the simplicity of form and comfort but also arises from intricate constructions capable of defining pure aesthetics: an often hidden complexity, with a precise sensitivity for fabrics and chromatic matching, often intentionally audacious. It is no surprise that, especially in the contemporary world, figures such as the already mentioned Miuccia Prada and Consuelo Castiglioni, but also Phoebe Philo, Stella McCartney, Marianna Rosati, Clare Waight Keller, Natacha Ramsay-Levi, Sarah Burton and Maria Grazia Chiuri, have been able to build a direct dialogue with their audience, considering the awareness of the various forms of female body and sensuality.



Figure 8. Spring/Summer 2017. The T-shirt “We Should All Be Feminists” shown by Maria Grazia Chiuri during her first collection. © Victor VIRGILE/Gamma-Rapho/ Getty Images.

A difference in approach and style can be defined by contrast. If for Consuelo Castiglioni complexity was hidden among the pleats of apparently simple volumes, for Francesco Risso, at the head of Marni since 2016, complexity means excess and is manifested through deliberately wrong and out-of-scale shapes; hence, the unexpected of Castiglioni becomes the quirky of Risso. If for Phoebe Philo, at the helm of Céline from 2008 to 2017, the design research was characterised by a reinterpretation of historical archetypes, often excessively conceptual, for Hedi Slimane, there since 2018, the fashion project becomes a citation and a recovery of historical imagery re-proposed in an almost *captionical* way; hence, the abstraction of Phoebe Philo, becomes a caption for Hedi Slimane. Then again, if for Gianfranco Ferré, John Galliano and Raf Simons, the vision of Dior is a formal field of experimentation where the creative act becomes excess if not – especially with Galliano – costume, with Maria Grazia Chiuri the gesture of shaping the female body becomes a creative act that, while not losing its structure, defines and follows rather than hiding, concealing, overwriting the body: it is a shift from superstructures to pure and simple structure. Capabilities of interpreting history, of understanding the body and of the *giusta misura* that rarely depreciate and become costume. Capabilities which probably only the design thinking of some women can manage and control.

References

- Barthes, R. (1983). *The Fashion System*. Hill and Wang.
- Beucler, A. [1929]. Chez Madeleine Vionnet. In P. Golbin (Ed.) (2009). *Madeleine Vionnet*. Rizzoli.
- Bolton, A., & Koda, H. (Eds.). (2012). *Schiaparelli & Prada. Impossible Conversations*. The Metropolitan Museum of Art.
- Chapsal, M. (1989). *La Chair de la Robe*. Fayard.
- Cova, B., Fuschillo, G., Pace, S. (2017). *Le marche siamo noi: Navigare nella cultura del consumo*. Franco Angeli.
- Crane, D. (2000). *Fashion and Its Social Agendas: Class, Gender, and Identity in Clothing*. University of Chicago Press.
- Dyhouse, C. (2010). *Glamour: Women, History, Feminism*. Zed Books Ltd.
- Fiorani, E. (2006). *Moda, corpo, immaginario. Il divenire moda del mondo fra tradizione e innovazione*. POLI.design.
- Flaccavento, A. (2020). Ma i vestiti hanno sesso. *Vogue Italia*, 837, May, 25.
- Flew, T. (2012). *The Creative Industries: Culture and Policy*. SAGE Publications Ltd.
- Golbin, P. (Ed.) (2009). *Madeleine Vionnet*. Rizzoli.
- Jones, E. (1955). *The Life and Work of Sigmund Freud, Vol. 2*. Basic Books.
- Jungnickel, K. (2018). *Bikes and Bloomers. Victorian Women Inventors and their Extraordinary Cycle Wear*. Goldsmiths Press/ MIT Press.
- Lyman, R. (Ed.). (1972). *Couture: An Illustrated History of the Great Paris Designers and Their Creation*. Doubleday & Co.
- Runco, M. A., & Pritzker, S. R. (Eds.). (1999). *Encyclopedia of creativity, Vol. 1 A-H and Vol. 2 I-Z with indexes*. Academic Press.
- Sanò, F. (2015). Drome. In P. Bertola & V. Linfante (Eds.). *Il nuovo vocabolario della moda italiana* (p. 303). Mandragora.
- Segre Reinach, S. (2019). *Biki. Visioni francesi per una moda italiana*. Rizzoli.
- Simmel, G. [1905]. The Philosophy of Fashion. In D. P. Frisby, & M. Featherstone (Eds.). (1997). *Simmel on Culture: Selected Writings* (pp. 187-205). SAGE Publications Ltd.

Steele, V. (1991). *Women of Fashion. Twentieth-Century Designers*. Rizzoli.

Tutino Vercelloni, I. (1995). *Krizia. Una storia*. Skira.

Women Crafting Today: a Literature Review

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Keywords

Women Design, Women Craft, Craft Sensibilities, Roles of Women, Technology, DIY, Design Practices, Gender Issue, Literature Review.

Abstract

There is a vast body of research exploring the roles women can contribute to design creation and crafting. In the past, historical studies have paid attention to the role of women in the applied and decorative arts, more than the role of women in design and technologies, giving men a more significant role in the manufacturing technological dimension. In recent years, the consumers, as well as the designers' interest in handcrafting has grown in popularity in Europe, USA, and finally also in Asia, for many different reasons worldwide showing a rich phenomenology. Craft exhibitions, fairs, shows, and web platforms (like Etsy.com) have been making echo to the century Arts and Crafts movement. This new craft movement, characterized by a growing community of young women, has also been seen as a political phenomenon with some aspects related to a third wave feminist do-it-yourself. Beyond the political aspects, women crafting has been acquired more and more considerable cultural, social, and commercial values.

In this article, we present a systematic analysis of the rich phenomenology of contemporary women crafting with the support of available evidence-based literature concerning the role of women in today's and future design and production. We organize our findings into clusters describing the key roles that women play in the design creation and crafting. We also put light in the future design connecting women thinking and craft sensibility to new technologies (like 3D or 4D printing).

1. Introduction: Why This Review?

For decades, many scholars have investigated and recognized the role that women play in the applied and decorative arts, in making and creating, especially in pottery, textile, jewelry, handmade clothes, knitting, and furniture.

DIY craft – defined as a movement which mostly women make stuff with their own hands – offer freedom, flexibility and potential. It has been the subject of a variety of research studies, and a growing number of these are paying particular attention to the connection between women craft and cultural economy. Gender researchers have tended to focus on particular domains, such as public policy or financial performance, or on certain specific factors of women craft, including technology, reality, or feminism. However, rarely do authors indicate precisely how women specifically contribute to design, or indeed what the connection of women thinking and craft sensibility is to new technologies. In this article, we investigate whether the women craft studies literature contains answers to those questions. This task is not without its challenges, given how liberally the words “women” and “craft” are used throughout the literature. In order to build a comprehensive yet focused understanding of the contribution and value women craft can create for design sensibility, we undertook a review of the relationship between women and craft reported in design studies literature during the last ten years. This review includes research examining the relationship between women craft, craft sensibility, and gender issues, studies focusing on the roles played by women in the craft making creation process and the results it produces, and on the factors contributing to notions of the link between women and craft more generally.

The main goal of this review was to establish how design academics have attempted to understand and portray the women craft over the last ten years. This review presents the contributions design academics and practitioners have made towards answering an open question regarding the value women offer to craft processes and outcomes.

The results of the review have been here presented in three parts. The first describes the methodology followed and the initial findings drew from the literature. The second presents an analysis of the most relevant studies. The third discusses an interpretive mapping of the findings, and includes proposals regarding areas for future research.

2. Research Methodology

To carry out the review, a preliminary methodology was established. The research draws from multiple literature across various disciplines, including media and communication studies, cultural studies, cultural economy, feminism, art and crafts history, political economy, and internet studies.

25 articles, relevant to the discipline, have been considered important for the research that was carried on during November of 2019. Thirty papers have been screened by reading the abstracts. Papers that in a way did not contribute to the review objective were eliminated, defining a total of 25 references, including papers and reports.

Six articles have been read in full, producing a manual analysis of each one and a summary card was created for each article detailing its explicit reference to women craft. The review followed a specific methods based on: participant-observation, digital and visual data capture of online content, case

studies, and semi-structured interviews with women crafters and creation entrepreneurs.

Through this review, it was possible to perform an analysis utilizing the abstracts.

3. Initial Findings

It is important to note that much of the literature that has been identified was not based on empirical, quantitative evidence, it was either a narrative analysis of case studies, which varied in quality and methodology, or was based on the author's own experiences and the underlying assumptions built over a long history of experiential validation. Some papers were based on purely critical/historical discourse that did not need robust empirical support. This factor was considered important for the academic design community as well as for the findings from this analysis. The qualitative nature of the papers reviewed reflects into analysis and conclusions drawn later. In sum, 60 percent of the papers as Literature, Experiences, Examples, and Opinions (LEEO) have been classified. This review contains more LEEO pieces than any other kind. LEEOs could be literature reviews, theory development, opinion pieces, experience with case studies, or small academic and professional anecdotes. Of the remaining literature analyzed, 30 percent came under the heading of Qualitative Studies. The selection of qualitative studies papers gather, structure, and analyze qualitative data in a variety of ways, including interviews, case studies, observations, and focus groups. The remaining 10 percent of the papers have been defined as Quantitative Studies. Quantitative studies papers analyze the role of women craft using quantitative data, sur-

veys, mathematical models, economic models, and other methods involving numbers and figures. These three types of analysis form the foundation upon which academic design community principally built its overall narrative.

Three initial points stood out during the creation of the abstracts for the 25 documents. The first – and most prominent – is that there are a wide variety of meanings attributed to women craft, and as a result, a variety of impacts women craft may have beyond pure styling activities. Contemporary craft is marked by an overwhelmingly female production workforce, emphasizing a need to understand the gendered aspects of its labors, identities and privileges. Unsurprisingly, the articles in-depth analyses show the changing roles and identities of women with regard to creative work and the rapidly growing sector of the economy that DIY production represents provide a comprehensive yet nuanced response to what is clearly a complex cultural phenomenon (Wallace, 2014, p.17).

A second point, related to the first, is that with craft's long-standing roots in "women's work", it is perhaps not surprising that the field's star system elevates women as taste-makers; however, when comparing DIY craft to other culture industries (film, fashion or architecture, for example), it is a standout in terms of a gendered hierarchy that predominantly endorses female producers with symbolic capital. This suggests a more feminist understanding of mutual support and community consistent with a history of independent and self-publishing of women's work (Wallace, 2014, p.142).

4. Principal Findings

After the full reading of each article and the creation of their relative abstracts contents were clustered into groups according to how they explain the roles of women in making, in design, in DIY craft, in technology, and the craft sensibility of women and the reality of craft women.

Many documents make claims about women craft but there are few explicit descriptions or quantifiable analyses of how women specifically contribute to design and what the connection of women thinking and craft sensibility to new technologies.

Therefore, the analysis have been presented with one caveat, because there was no consistently, clearly defined notion of the craft sensibility among the reviewed documents, it was necessary to make certain assumptions and work with implicit ideas. The roles here categorized are the result of a kind of pooling of common ideas in the absence of concrete explanations or empirical findings. Although there may be a number of gray areas that have not been included, it is still possible to consider this classification a valid and valuable endeavor. There is a need to define the craft sensibility more explicitly. Clusters serve as a contribution to this discussion.

4.1. Roles of Women in Making

In general, the majority of researchers who studied the issue of women in the craft field gave the consumption of crafts by females more attention than women's contribution in making. So how about women's making?

It is clear that the dynamics of making, connecting and building micro-enterprises are deeply gendered aspects of the new wave of indie craft and its cultural economy. With the assistance of

new technologies, women making will take more and more important effects. However, the roles of women in making are far from clear and precise in the design studies literature.

4.2. Roles of Women in Design

Many discussions about the women design in diverse disciplines have been identified during this review. Women's design, micro-credit lines and rapid manufacturing technologies make up an explosive mixture, groundbreaking given the effects it could have in the evolution of socio-cultural models and for the development of territorial economies (Ferrara, 2013, p. 344).

Marinella Ferrara analyses the evolution and new opportunities for design in the network social of the Mediterranean women. Although referring in particular to Mediterranean women, there are common trends for all women in the whole world. Many professional women are experimenting new ways towards self-affirmation and professional developments thanks to the communication system, that is more and more fluid and changeable, by creating new instruments and languages, opening new ways, thus starting a process of global personal interaction that is turning around the social web (Ferrara, 2012).

4.3. Roles of Women in DIY Craft

Modern craft is no longer a sequestered and quaint domestic leisure activity; crafts and DIY have redefined their images and social stigmas with progressive agendas of emancipation, individualization, sub-cultural identification and anti-commercialism as well as emerged as a multi-billion dollar industry (Wallace, 2014, p. 104).

DIY craft is a dynamic field that articulates and dis-articulates with various technologies, institutions, informal ties and socially networked forms of capital. The distributed nature of DIY craft depends on individual crafters weaving webs of connection with proprietary technologies, e-commerce infrastructures and corporations such as Etsy, and participating in aspects of network sociality to operate and grow their micro-enterprises (Wallace, 2014, p. 155).

DIY craft today is a movement. It's about women who make stuff with their own hands. DIY craft seems to offer freedom, flexibility and potential. "DIY is not only a term we use, but a lifestyle we live". Crafters are described as having "do-it-yourself backgrounds whereby they create innovative work using traditional craft methods, but not based on preexisting patterns" (Wallace, 2014).

The community of crafters is made up mostly of women. Women were motivated to find more satisfying creative work. Mostly women, many of whom aspire to leverage their craft skills into a way to quit their day jobs. The roles and identities of women are changing with regard to creative work, and the rapidly growing sector of the economy that DIY production represents (Wallace, 2014).

The informally networked and entrepreneurial nature of modern indie crafting requires women to play multiple roles in the circuit of culture.

In the article "Professionalism, Amateurism and the Boundaries of Design", Gerry Beegan and Paul Atkinson mentioned that craft is now posited as a form of self-reliance and an earth-friendly means of subverting conformity and passive consumption (Beegan, Atkinson, 2018).

Female domination of the craft industries caused a lot of changes in the traditional craft industry, artistically and socially. Constructing social and cultural meaning through women's craft making and production was a central advantage of women's predominance in the crafts industry. Badar Almamari mentioned that female artistry and taste became part of silversmith craft industry. What about in other craft industry? Women being more creative in the craft design, when the craft is related to fashion and female accessories (Almamari, 2015). These dynamics require crafty women to play multiple roles in the circuit of culture, and most often for paltry wages and significant emotional output.

4.4. Roles of Women in Technology

Paradoxically, part of craft's resurgence is in fact due to advancements in technology. Mobile media and social networks that make it easy for crafters to produce an abundance of Instagram photos and hash-tagged projects and that have extended craft from offline, individual spaces and studios and into everyday mediated conversation, with the influences and inspirations that brings (Wallace, 2014, p. 168).

Female participants connected the gender change in some crafts with the appearance of new technologies, so that males and females became equal in terms of specialization and skills, where in the past, men had predominated crafts that needed hard skills, like stone and metal working. Today, some technologies help women to practice all crafts including hard skills and activities (Almamari, 2015).

“This time within the areas of industrial design and even craft production, as the emerging technologies of rapid prototyp-

ing and direct digital manufacture give users the potential not only to design three-dimensional products but also to produce them at will.” That means with the assistance of advanced technologies , the designers and crafters will be in good hands in accomplishing their creative ideas nowadays and in the future (Beegan, Atkinson, 2018).

There are advantages and disadvantages when women do business using Etsy. Etsy provides a venue for women to step outside this and to own their own businesses working with their hands. Benefits of this include making one’s own schedule, managing the business’ budgets, providing care for children while working at home, and other qualities.

Clearly Etsy.com does broaden women’s options in many ways. Using Etsy women are able to display their social identity via their art and craft to a large community. It is possible to consider Etsy as a new kind of technology whereby women are no longer afraid of technology as before but they absolutely can use this tool to develop their craft business in nowadays and future. The only problem is when women concentrate on the creative design of craft, they probably have not enough time to deal with the technology issues such as maintaining the online sales while they may get better with the assistance of men. In conclusion, gender cooperation will be perfect system in the online craft business in future (Gillette, 2012).

4.5. Craft Sensibilities of Women

The enterprising young women of Jacqueline Wallace’s study cultivated an interest in craft as children in the somewhat traditional lineage associated with craft’s feminine and domestic roots. However, in returning to craft as young adults

– as makers and entrepreneurs – the opportunities and access are afforded to them are a result of feminism’s significant achievements. These young women are more educated, mobile and technologically connected than their predecessors (Wallace, 2014).

Marinella Ferrara demonstrated women’s qualities in the changing world and for the future: they are women with a marked aesthetic sensibility, who have managed to integrate their professional activity with a cultural and social commitment. They are women aware of their own rights, who question the stereotypes imposed by the cultures of origin, with difficult paths of integration within the community to which they belong and success in the labor world. They are proof of the great determination to enter debates and share ideas, to participate in the economic, social and cultural evolution of Mediterranean realities (but also for the other countries). Women are flexible and practical, and recognize the essential values of life. They have a marked sensibility for the social aspects of development, for care of the environment, for conserving resources. They prefer a fluent relation with the matter and nature of things. They pay attention to relations between people and especially to a more democratic style. All these qualities are important for building a “healthier future” (Ferrara, 2013).

4.6. Crafty Women in Reality

Indeed, from childhood beginnings, craft has been an integral element of many young women’s upbringing throughout time in Western society. What inspired their DIY activity and desire to make things by hand? Interestingly, many of the women attributed their early interest in making to experienc-

es in childhood, to familial influences, particularly those of their maternal relationships.

From learning to craft from mothers and grandmothers, contemporary women share these influential beginnings of their fore sisters; Today, young women's relationship to craft combines these early influences and feminist achievements with new technological affordances, new modes of work and a set of political ideals that brought renewed interest in craft (Wallace, 2014, p. 165).

There's a whole history of women and craft and handmade goods and domestic life. Today, craft is a way to be your own boss and for women to start their own businesses.

Today's crafty women must negotiate. As do-it-yourself cultural intermediaries, these women really do it all.

Contemporary craft – the notion of embodied practice as antidote to disembodied digital work and the e-commerce, promotional aspects, and social networking of the Web 2.0 era – we begin to see some of the dynamics and productive tensions at play in resurgence of craft in the digital era that today's crafters experience (Wallace, 2014, p. 168). These dynamics require crafty women to play multiple roles in the circuit of culture, and most often for paltry wages and significant emotional output.

This new “women's work” – outside conventional notions of professional work and yet not bracketed by the domestic sphere – is particular to the distributed, networked nature of the digital era and the tensions of negotiating the creative and enterprising selves of the crafty women. These women are led to believe that success stems from unwavering self-discipline and a 24/7 ethic of unbounded workdays.

It is noted that, in general, women are more likely to start small businesses in retail and service sectors, which typically have much lower returns and higher failure rates than other sectors, such as technology, and that the average female-led small enterprise closes within three years. This fact runs counter to what otherwise might be assumed about middle-class crafters: that their financial position is secure. Given the high failure rates, it is inevitable that many women will end up with loans to repay, or, operate in a hand-to-mouth situation that remains precarious (Wallace, 2014, p. 193).

Contemporary DIY crafters affirmed that making is connecting and connecting is making. Crafty women have carved out important space in the blogosphere, which has enabled them to use crafting as a springboard for cultivating kinships online, underscoring the importance of community, anointing the voices of women as part of feminist tradition, while wholly founding a new discursive practice, an “e-criture feminine.”

Women are deeply invested in a creative identity and a sense of self-reliance as personally empowering, where they’ve adopted a post-feminist mindset and ambivalence to the feminist histories that have affected their current opportunities. Rather, they have naturalized the risks and precariousness of craft entrepreneurship through a largely uncritical absorption of dominant neoliberal discourses on the masculinized “enterprising self,” notions of self-sufficiency and prompts to “quit your day job” in a post-Fordist era. They also negotiate multiple identities, particularly as the craft economy is divided among independent young women who have no children or are intentionally waiting to start a family and mompreneurs, whose unpaid domestic and child-rearing responsibilities add another layer to

the so-called freedoms that entrepreneurship of this nature is touted as bringing (Wallace, 2014, p. 209).

4.7. Feminism for Crafty Women

In general, the post-Fordist economy and the conditions of its work have favoured the skills and flexibility of female workers, alongside feminism's achievements toward women's increased independence and career opportunities has led to "a feminization of the workforce". Affective labour is also typically associated with feminized labour – the overall nature of work becoming more service-oriented and communication-based emphasizing affective work traditionally performed by women (Wallace, 2014, p. 187).

Today the economy is feminizing everyone. The DIY crafters of this economy are highly educated women, having benefited from the work of second-wave feminists to enable access to post-secondary education for young women. Rather, for these crafty women, feminism is somewhat passé, not relevant to their day-to-day work and craft.

Multiple roles and social expectations of mothers and unpaid reproductive and domestic labour are taken for granted as part of the familial make-up. Further, the "myth of flexibility," associated with entrepreneurial activity for women with children underscores that, without the means to offset family responsibilities with additional childcare or a partner who takes on primary care responsibilities, these responsibilities continual to fall to the mompreneur. Unlike men in these types of enterprises who often have greater mobility to meet clients and network, women in these businesses, particularly if they have children, are more domestically implicated and

can experience the false flexibility of entrepreneurship. The conditions of women engaged in creative micro-entrepreneurship might, in fact, be “worsening in contrast to what women might expect from a job with set hours and legal entitlements in regard to family life” (Wallace, 2014, p. 195).

5. Discussion and Conclusions

The aim of this review has been to explore the last ten years of research literature dealing specifically with the study of the roles – women activity plays in creative processes. This revealed three issues.

- A major obstacle in this task is a lack of clarity and precision with regard to the definitions of craft sensibility in the papers.
- Many positive insights on the value women offer to making and design were brief mentions unsupported by substantive analysis.
- Many of the articles that refer to the roles of women in technology by using short examples, case studies, or personal anecdotes – again, few included detailed analysis, especially of quantitative data.

A fair conclusion, therefore, is that women’s roles presented in the design literature to date relies on experiential episodes, specific examples, case studies, opinions, and anecdotes. Although this makes these findings unique and interesting, the nature of the information published in the literature presents some issues in terms of reliability. The evidence in the design literature of the contributions women can make to craft is still unclear.

In spite of the lack of clarity and evidence, an important result of this review has been that we now understand the narrative that has emerged over the past ten years. Hearsay and experiential discourse is often part of that narrative – many of the studies here analyzed used case studies and qualitative data collection methods. It is impossible, with the available data, to produce a formal model of this literature review – which was not the intended purpose –, mapping out the prevailing narrative and clustering the most prevalent characteristics of the women’s role. These clusters do not constitute a formal taxonomy; instead, they represent an effort to describe – with some kind of order – what has been found. Indeed, this attempt to identify and formalize from the literature the roles women can play in creation areas was helpful in order to better understand when it is most commonly used during this process in relation to the different roles that were identified.

The information presented in the previous sections of this review contains assumptions and gray areas that require further investigation. Hopefully, women design, women craft, craft sensibility are valuable labels, but it is here argued that more explicit and precise language is needed to specify the role, or roles of women in creative areas. In this direction, it is possible to suggest three lines of future researches in order to explore the roles that women activities play in creation.

- What do we understand by the word “craft”? While gray areas and overlapping roles are unlikely to entirely disappear, by developing a more consistent labeling of activities it should be easier to differentiate one type of craft from

another, and clarify the characteristics of different applications of craft sensibility.

- How does the role women play in the creative process specifically relate to craft? It is not enough to define the roles women can play in design; we must also establish a clear connection between those roles and its specific benefits or contributions to craft. These studies will need researchers to identify and develop a set of dedicated measurement tools.
- Which indicators and methodologies will most accurately measure the contributions women can make to craft? This avenue of research will seek to integrate quantitative and qualitative measures not only of economic value, but also social and environmental impact. The contributions women can make to craft should be measured along a wider spectrum aligned with current socioeconomic paradigms—not only against revenue projections and benchmarks. Most of the research reported in this review is qualitative, leaving a large gap in quantitative evidence that will significantly enrich the narratives, opinions, and experiences currently presented in the design literature.

Finally, it is also necessary to recognize that the framework for this review presents two core limitations. The first is related to the scope of the review. The intention was to establish how women's role has been portrayed in the design literature over the last ten years. However, this objective leaves out other domains of literature where this relationship is of interest and consequence. The disciplines of engineering, management, and business have their own literature studying and ex-

plaining of women’s role. Without taking these contributions into account, the answer we seek about that connection will be always incomplete.

The second limitation regards the terms used to frame the literature search, that were limited to terms identified as central – and without strong bias – during the research for the “women craft” project. We do recognize that other terms would also be valid, and that the net ought to be cast much more widely in the future.

Last but not least, further research might investigate the intersections of multidisciplinary social enterprises co-work spaces or digital collaborators – for women, by women – that would bring together material craft production skills; computer programming, web publishing and data analytic skills; and business management, grant-writing and sustainable capital strategies, such as profit-sharing.

References

- Almamari, B. (2015). What Happens When Women Dominate Traditional Craft Industries: The Omani Case. *Sage Open*, 5, 2.
- Beegan, G., & Atkinson, P. (2008). Professionalism, Amateurism and the Boundaries of Design. *Journal of Design History*, 21(4).
- Callen, A. (1979). *Women artists of the arts and crafts movement, 1870-1914*. Pantheon Books.
- Callen, A. (1985). Sexual division of labor in the arts and crafts movement. *Woman's Art Journal*, 5 (2), 1-6.
- Colucci, M. (2005). *research shows: younger consumers spur increase in yarn projects*. <http://www.craftyarnCouncil.com/know.html>.
- Driscoll, C. (1999). Girl culture, revenge and global capitalism: cybergirls, riot grrls, spice girls. *Australian Feminist Studies*, 14 (29), 173-193.
- Dhamija, J. (1981). Women and handicrafts: Myth and reality. *Seeds*, 1(1), 1-16.
- Ferrara, M. (2011). Design and self-production. The advanced dimension of handcraft. *Strategic Design Research Journal*, 4, 1.
- Ferrara, M. (2012). The Mediterranean of Women. Evolutions and New Opportunities for Design in the Network Society. *PAD journal*, 8.
- Ferrara, M. (2013). The Mediterranean through Women: Women, Design and Democracy. What Future for the Mediterranean? *Quaderns de la Mediterrania*, 18/19, 101-109.
- Fountain, J. E. (2000). Constructing the information society: women, information technology, and design. *Technology in Society*, 1(22), 45-62.
- Gillette, E. (2012). Crafting a Space: A Feminist Analysis of the Relationship Between Women, Craft, Business and Technology on etsy.com. *Portland State University*, 11(13).
- Goggin, M. D. & Tobin, B. F. (Eds) (2009). *Women and things, 1750–1950. Gendered material strategies*. Ashgate.
- Riccini, R. (2017). Le designer e le altre. In Riccini, R. (Ed.), *Angelica e Bradamante. Le donne del design* (pp. 259-266). Il Poligrafo.
- Wallace, J. (2014). *Handmade 2.0: Women, DIY Networks and the Cultural Economy of Craft*. Concordia University.



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Women's Entrepreneurship in Fashion Design during the 20th Century

The Case Study of Teresina Negri and GRISINA

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Abstract

The general theme of this paper is the role of women in the development of business systems and in the creation and anticipation of design scenarios through invention products and registered models, in the women's clothing sector, during the 20th century. The case we are presenting here to the scientific community is the result of an ongoing original and unpublished research study concerning a female entrepreneur and creative mind, Teresina Negri (1879-1974).

During the course of her life, characterised by different forms of creativity, she was able, according to the different periods and the socio-economic context, to give the most appropriate response to the evolution of customs and behaviors, becoming emblematic and a pioneer of a way of positioning the female figure towards a proactive society.

In conclusion, the discovery and the research activity about Teresina Negri are gathering a multiplicity of documentary sources all over the world, that incorporate innovative aspects and offer an original contribution to the theme of the role of women, in the recent past, in design creations and business history and are emblematic of a creative fervour that has been able to combine inventiveness and entrepreneurial ability as well as social and economic affirmation.

1. The Beginnings in Dance and Theatre

Teresina Negri (known as Grisina, the stage name of Teresa Maria Margherita Negri; Turin, 28.05.1879 – Principality of Monaco, 18.01.1974) is an Italian (naturalised French) dancer, entrepreneur, and designer (Fig. 1).

Teresa and her sister Margherita (1880-1936), daughters of a carpenter and a factory worker, study to become seamstresses; however, they attend ballet classes, which they keep secret from their parents. Teresa is particularly gifted in this art, and upon being discovered, in 1895, only 16 years old, she runs away from home to Rome where she begins her career as a dancer.

From the theatres of Rome, she moves to those of Naples, and then on to France. In 1902, she is employed by the Nice Opera House and, from 1905 to 1908, she works at the Monte Carlo Theatre as a *coryphée*.

Between 1908 and 1911, Negri enters Parisian high society with a small troupe of dancers led and directed by her, and with whom she performs during dinners and private parties. A letter¹ sent by set designer R. Piot² to the theatre director J. Rouché³ confirms this. In 1911 she performs at the Hébertot Theatre under the direction of L. Staats⁴: already aged thirty-two, this is her first leading role.

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1. René Piot, letter to Jacques Rouché, [1911]. Fonds Rouché, Th. des Arts, R8(4), Pièce 15(24), BN-Opera.
 2. René Piot (Paris, 1863 - ibid. 1934), painter and pupil of the Académie Julian and G. Moreau, was the author of great frescoes and sketches for the Gobelins tapestries.
 3. Jacques Rouché (Lunel, 16.11.1862 - Paris, 9.11.1957) was a French patron, entrepreneur, theatre director and film producer. He contributed to the transformation of the French theatre by directing the Théâtre des Arts from 1910 to 1913 and, as director of the Paris Opera (1915-45), he gave greater impetus and splendour to choreographic activity.
 4. Léonard Armand Staats (Paris, 26.11.1877 - ibid. 15.02.1952) was a renowned French dancer and choreographer, maître de ballet of the Paris Opera from 1908 to 1926, and from 1926 to 1928 the leading choreographer at the Roxy Movie Palace in New York.



Figure 1. On the left: Teresina Negri, 1912. Source: private collection. On the right: *coryphées* the Monte Carlo Theatre, 1906. Source: Archives Monte Carlo SBM.

Her dances, which combine the classical tradition of the Italian school with Isadora Duncan's experimental forms of expression, are a huge success, and bring her sudden fame. She is then hired by the Opéra-Comique Theatre, where she dances between 1912 and 1913, and under the aegis of the choreographer Mariquita⁵, she wins the coveted role of *danseuse étoile*. At that time, she takes part in conferences on dance with Mata Hari and G. Wague⁶, while in 1913, her choice to desert the highly prestigious Opéra-Comique Theatre to play the leading role in the Théâtre Marigny's successful *Le Triomphe de Bacchus* causes quite a stir.

5. Marie-Thérèse Gamalery known as Madame Mariquita (c. 1838 - Paris, 5.10.1922) was an internationally-renowned dancer, choreographer and dance instructor. She was choreographic director of the *Palais de la Danse* during the 1900 Expo, and *maîtresse de ballet* at the Opéra-Comique in Paris from 1898 to 1920. Among her best known students are Liane de Pougy and Bella Otero.

6. Georges Wague, at that time Georges Marie Valentin Waag (Paris, 14.1.1874 - Menton, 17.04.1965) was a French mime actor, pedagogue and silent film actor.

At the same time, she establishes an extensive network of public relations and becomes a regular guest at the *soirées* organised by the *Escholiers*, an association of lovers of literary and artistic life, who came together in order to produce shows and discover new talent, with particular attention to the phenomena of worldliness.

In 1914, together with the *étoile* Dithy Darling, she presents for the first time in Paris the Furlana or *Danse du Pape*, an ancient form of dance which was given a new lease of life when Pope Pius X expressed his preference for it, compared to other dances that were popular at that time. The fact that Negri immediately puts herself at the service of this fashion, conducting precise historical-philological research and with the help of one of the most important choreographers of the time, the aforementioned Staats, further highlights her artistic and intellectual skills and versatility, as well as her meticulous attention to trends and the product offered.

In 1914, the Negri-Darling couple is called upon to perform at the New Middlesex Theatre in London, and in Manchester in the company of the *impresario* F. Karno⁷.

When she returns to Paris in 1915, Teresina Negri takes on the role of France in *Europe*, an allegorical pantomime about the First World War, shown at the Alhambra Theatre. Because of the themes it deals with, it causes a scandal and is censored. This is her final public appearance.

7. Fred Karno, the pseudonym of Frederick John Westcott (Exeter, 26.03.1866 - Lilliput, 17.09.1941) was one of the most important theatre producers of his time, and a well-known supporter of great talents, including Charlie Chaplin and Stan Laurel.

2. Professional Transformation from Dance to Fashion Design

When her dazzling career as a dancer ends abruptly, Negri reunites with her family, who are still living in Italy. In 1920 she returns to Paris where, together with her sister (Margherita Negri Aiassa, shirtmaker in Turin), she starts a fashion workshop under the pseudonym of Madame Grisina. The business, focused on creating and producing lingerie and luxury swimwear, is extremely successful in the context of Parisian fashion, often preempting styles and ways of use. Negri is acutely aware of the areas of reference of the customs and behaviours characterising the emancipation of women of her time. Because of this, much of the experience she has acquired during her dancing career and the skills and expertise she attained from her family heritage are poured, as potential data relating to an entrepreneurial project, into her decision to launch her own brand of women's underwear.

Her entrepreneurial activity is characterised by craftsmanship, attention to detail, innovative use of materials, ease of use and attention to ergonomic requirements and practicality, combined with elegance and measured, basic shapes. The original and revolutionary designs come from an in-depth knowledge of practical needs partly resulting from Negri's experience in dance and spark demand in several countries (France, USA, Algeria, Vietnam, Switzerland, Cuba).

In her creative entrepreneurial activity, which continues without interruption until 1961, Negri dedicates herself – as we will see later – to an intense patent production, protecting the fruit of her ingenuity. In addition to taking care of the product throughout the entire cycle of conception, design and consumption, Negri personally supervises its distribution to her own boutiques and

through a very wide and precise advertising effort, using appropriate and innovative communication tools: radio advertisements, ads in newspapers and magazines and art photography.

3. Creation of a Brand Identity

Although Negri never created a real monogram with which to personalise her garments (as, for example, Jean Patou was the first to do, by affixing to her creations the monogram made up of the initials JP and as Coco Chanel also later did), the brand GRISINA was born with disarming simplicity from the acronym composed of one syllable from the surname Negri, and two from the name Teresina. This is a very strong stamp of identity, behind which the inventor both hides and reveals herself at the same time. Grisina is not just a product, but a person: Madame Grisina, the creator. And it is no coincidence that, at the time of putting together her identity documents, in order to acquire French citizenship, the entrepreneur makes the choice to officially register as Teresa Maria, known as Grisina, Negri. GRISINA is also an international brand, officially registered in Bern on January 10, 1935 and related to the “manufacture of brassieres, girdles, belts, swimsuits and women’s clothing in general, which are worn under clothes”⁸.

4. Identification of a Target Audience and Characterisation of a Niche in the Reference Product Sector

The target audience identified is a type of emancipated woman, who is in step with the times, cultured and uninhibited; who

8. From *Costituzione Società Anonima Italiana “Grisina”*, notarially designed by Notaio Dott. Cav. Erminio Martelli, in Milan, 27.05.1936, rep. n° 761, arch. 549.

follows the evolution of current trends and uses clothing as a visual code of belonging.

During the First World War, with men occupied at the front, women of all social classes begin to feel the need for simpler and more practical clothes that allow freedom of movement and let them lead much more dynamic lives than before. With this in mind, we cannot fail to mention the role of Paul Poiret who, even before the Great War, had freed women from the constraint of corsets.

Aided by the influences provoked by cinema and the freedom of styles deriving from musical rhythms such as the fox-trot, jazz and the charleston, the process of women's liberation from the 19th century constraints of bodices, girdles and skirts made with whale bones is now underway.

The ways of dressing and the history of underwear follow, in parallel, that of women's liberation and, as described by C. Saint-Laurent (1986, pp. 85-101), are based on three categories of interpretative investigation of the phenomenon: the sleeping women (the sophisticated relationship between the woman and her clothes); the bathers (rites and myths linked to the joyful exercise of rediscovered bathing: think, for all of them, of the Côte d'Azur Riviera and the literary and imaginative repercussions of D.H. Lawrence, or those of the artistic depictions of bathers by A. Renoir onwards); the dancers (who went from knee-length trousers to short skirts and tutus, and then moved on to feather-light fabrics which, wrapping the dancer's body, wrapped it in flickers).

Therefore, in each of these categories of investigation, Teresina Negri was able to contribute her inventions.

5. Design and Development of New Products and Patenting of Inventions at an International Level

Being aware of the value of her work and the innovations of her designs for women's underwear, since 1920 Negri is fully committed to an intense patent activity in the battle against imitations. She organises a legal protection structure that makes use of notaries and lawyers, and files registrations with patent offices in France, Italy, UK, Canada, the USA, and Cuba, in order to defend the artistic and technological property of the registered models, from which there is a great attention and care of the executive detail and descriptive precision of the components and their assembly.

Studies have made it possible to recover the complete documentation of most of these international patents, with the exception of those filed in Italy from 1934 to 1938, due to the temporary closure of the State Archives buildings in Rome, where they are kept.

The descriptions accompanying patent applications are striking due to the topicality and rigorous precision of the technical language used and contain not only detailed illustrations of the construction methods but also statements regarding the advantages and usefulness of the new solutions.

It is interesting to consider how the creative intuitions that lead Negri to process these patents are signs of an extraordinary ability to understand practical issues and aesthetic needs, often predicting future scenarios, assisted by great inventiveness and a profound foresight, whose trajectories of innovation have lasted until the present day.

These merits are evidenced by the fact that one of her bra models is exhibited in the Rijksmuseum in Amsterdam (Fig. 2).



Figure 2. Brassiere with a Low-Cut Back, Grisina, c. 1926 - c. 1932. Rijksmuseum, Amsterdam. Source: <http://hdl.handle.net/10934/RM0001.COLLECT.15665>.

The caption accompanying the item reads:

In the late 1920s and the 1930s, many evening dresses had low-cut-backs, revealing a so-called back *décolletage*. The design of this brassiere accommodates this style: the straps can be wound around the body, leaving the back bare. The model is called ‘Le Grisina Invisible’ (The Invisible Grisina), because the flesh-coloured tulle was practically invisible when the bra was worn.

Let us take a closer look at some of these models of invention.

5.1. Soutien-gorge

The first patent application for this bra model is filed by the entrepreneur in Paris on February 14, 1920 and its object is:

un soutien-gorge remarquable notamment par ce fait qu’il permet de maintenir correctement les seins, grâce à la constitution appropriée dudit soutien-gorge qui oblige les seins à se mouler

respectivement dans chacune des deux poches qu'il forme et cela sans le secours d'aucune baleinage ni d'aucune bande de renforcement, mais simplement par l'assemblage par couture rabattue et piquée, de trois pièces de tissu convenablement coupées composant chacune des moitiés du soutien-gorge symétriques par rapport au milieu de la poitrine⁹. (Fig. 3)



Figure 3. On the left: Teresina Negri, drawings from patent, Paris, 1920. On the right: Grisina advertisement, *Comoedia Illustré*, 1920. Source: gallica.bnf.fr / BnF.

9. “Its object is a brassiere worthy of note, above due to the fact that it allows the breasts to be supported correctly, thanks to the appropriate construction of the bra, which forces the breasts to mould themselves to the two bra cups, and this without the aid of any ribbing or reinforcement band, but simply because of the assembly with folded and sewn seams, of three pieces of fabric appropriately cut to form each of the halves of the bra symmetrical in relation to the centre of the breast”, from *Résumé*, in *Brevet d'Invention*, section XVI (*Habillement*), part 1 (*Mercerie, ganterie, lingerie, fleurs et plumes, corsets, épingles*), no. 510.063, 14.02.1920, p. 2.

The radical and unprecedented design of the bra, as J. Farrell-Beck and C. Gau observe, “had contouring seams similar to those of 1960s bras”¹⁰, makes the brand an immediate success.

5.2. Masque pour le Repos du Visage

Negri's inventiveness, together with her ability to capture and satisfy the most diverse female desires and needs that fashion is maintaining, such as body care and remedies against imperfections, is also manifested in a model that is included in the product sector Chirurgie, médecine, hygiène, salubrité, sécurité. Gymnastique, hydrothérapie, natation. It is a mask for resting the face, patented on October 9, 1924 (Fig. 4), that

grâce à sa forme particulière, moule d'une façon parfaite le visage en s'appliquant sur toutes ses parties, permettant ainsi de faire disparaître les bajoues, double mentons, bouffissures et rides et permettant également l'application d'onguents, crèmes, etc. Ce masque est destiné à remplacer les articles en caoutchouc dits hygiéniques, lesquels sont plus ou moins efficaces et vont à l'encontre du but recherché en ramollissant les muscles du visage, en ternissant la peau par l'excès de transpiration qu'ils provoquent tout en fatiguant inutilement.¹¹

10. Farrell-Beck, J. & Gau, C. (2002). *Uplift: The Bra in America*. Philadelphia: University of Pennsylvania Press, p. 54.

11. “Thanks to its particular shape, it perfectly shapes the face as it is applied to all its parts, thus eliminating sagging cheekbones, double chin, swelling and wrinkles, and also allowing the application of ointments, creams, etc.”. This mask is intended to replace the so-called hygienic articles made from latex, which are more or less effective and go against the desired objective, softening the muscles of the face, dulling the skin due to the excess sweat they cause, and tiring it unnecessarily”, from *Brevet d'Invention*, section XIX (*Chirurgie, médecine, hygiène, salubrité, sécurité*), part 3 (*Gymnastique, hydrothérapie, natation*) n° 587.083, 09.10.1924, p. 1.

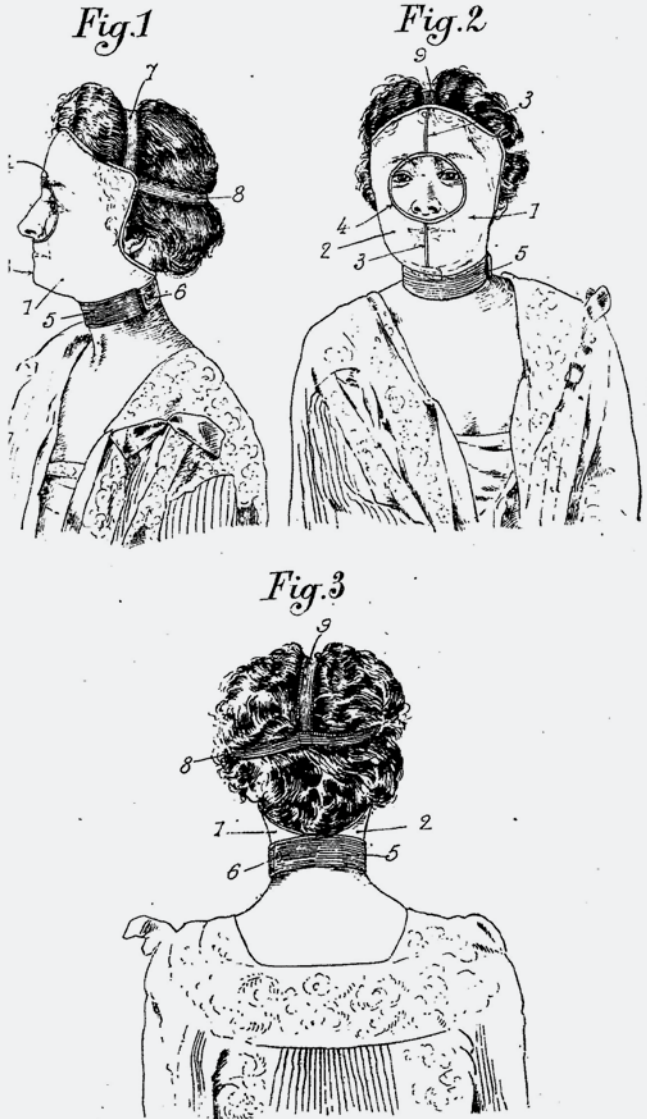


Figure 4. Teresina Negri, drawings from patent, Paris, 1924.

5.3. Nouveau Maillot de Bain pour Dames

On March 24, 1932, a ladies' swimsuit is patented, available in two variants. The first is a costume consisting of an upper part, the edges of which draw two curved and convex lines upwards, arranged symmetrically, and at the top of which are attached elastic laces, and two trapezoidal side and back pieces, fixed laterally along the edges of the front upper part and featuring, at the ends, devices to fasten them to each other. This solution therefore allows a double fastening of the costume. Furthermore, in this version, the garment can also be found “ajouré, grâce à des effets de dentelles, broderie, tulle ou analogues, sur tout ou partie de sa surface, de manière à permettre le passage de rayons du soleil tout en dissimulant les formes et en protégeant l'épiderme”¹² (Fig. 5). The second solution is made from a single piece of fabric, cut in its upper part symmetrically with respect to the longitudinal axis, and along a line such that the front part, at the top, forms the two cups which are to contain and shape the breasts. A common feature of the two versions is undoubtedly to give rise to “deux poches qui, au lieu d'aplatir les seins, les contournent, en les moulant et en les maintenant, sans faire pression sur eux”.¹³ Once again, Grisina's product not only meets practical needs, improving the body's silhouette and protecting it from overexposure to sunlight, but also those of an aesthetic nature, in the attention to detail of the design and materials chosen.

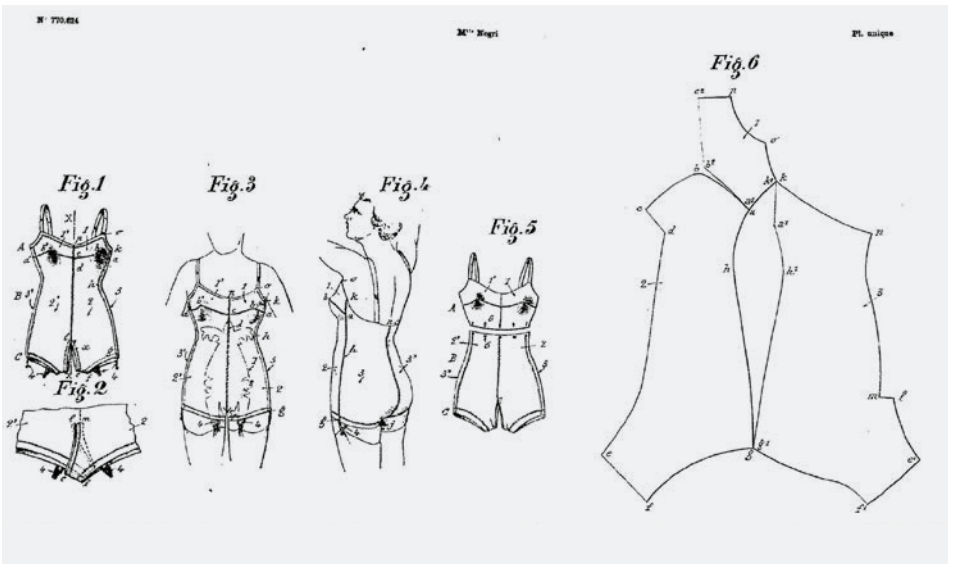
12. “Perforated, thanks to the effects of lace, embroidery, tulle or similar, on all or part of its surface, so as to allow the sun's rays to pass through, while concealing the shape and protecting the epidermis”, by *Résumé*, in *Brevet d'Invention*, no. 734.167, 24.03.1932, p. 1.

13. “Two pockets that, instead of flattening the breasts, surround them, shaping and supporting them, without putting pressure on them”, by *Résumé*, in *Brevet d'Invention*, no. 734.168, 24.03.1932, p. 3.



Figure 5. On the left: Teresina Negri, drawings from patent, Paris, 1932. On the right: article about the Grisina swimwear, *L'Intransigeant*, 1932. Source: gallica.bnf.fr / BnF.

This is in line with the most fashionable trends of the time, such as the fascination with tanning, which, after having been associated for centuries with the less well-off social classes and therefore far from common taste, just at the beginning of the 1930s, had acquired popularity due to Chanel.



6
VOGUE



LES CRÉATIONS DE
"GRISINA"

La "GAINE GRISINA"
En tissu extensible lavable
Moulage sculptural du corps

Le
"GRISINA MAINTIEN-GORGE"
Invisible, donne la perfection
à la poitrine

La
CEINTURE-CULOTTE OUVRANTE
Amincit et rectifie les imperfections

Le
MAILLOT DE BAIN "GRISINA"
Le CORSELET - La LINGERIE
Tous brevetés

GRISINA
14, Rue d'Alger - Paris
(Près Place Vendôme)
Tél. : Opéra 92-67



Figure 6. In the upper part: Teresina Negri, drawings from patent, Paris, 1934. In the bottom part: Grisina advertisement, *Vogue Paris*, 1935. Source: gallica.bnf.fr / BnF.

5.4. Sous-Vêtement pour Dames

On March 24, 1934, Negri files a patent for an elasticated undergarment consisting of a bra, girdle and culotte (Fig. 6). The culotte gives rise to the use of garters and is able to replace the corset, while the bra can be sewn or independent, and if necessary buttoned to the girdle. The undergarment is therefore intended to improve and slim down the female form, and, since it is designed to be made of elastic fabric, to shape and support the breasts in their natural position. But that's not all: one of the most interesting innovations undoubtedly lies in the fact that, unlike other similar garments which were widespread at that time, this, which forms a single garment, given the structural continuity, eliminates the need to layer several individual items, whose edges would generally overlap, thus giving rise to unsightly folds and marks underneath the clothes.

6. Coverage of the Various Markets on an International Level

During the 1920's, Grisina's merchandise begins to garner interest from the national and international markets, and we have seen this in the main shopping centres in Algeria, Switzerland, Vietnam, Cuba and the USA: Saks Fifth Avenue, Macy's and Stern Brothers in New York, Saks Fifth Avenue in Miami Beach, Sax-Kay in Detroit, The May Co. in Los Angeles.

In particular, the demand for lingerie from American retailers increases to such an extent that it is likely to exceed the limits of the tailor's shop production capabilities, which still retains the characteristics of artisan production, and this gives rise to numerous cases of counterfeiting. In May 1929, on magazine Women's Wear, Negri announces that, as of October of the same year, "she no longer has a representative in the United

States. Brassieres of this type not coming direct from Madame GRISINA in PARIS are copies and do not give the correct line to the feminine figure”. Nevertheless, Grisina’s garments are present in the U.S. market at least until the mid-1930s.

7. Visual and Advertising Communication

Teresina Negri begins sustained visual communication campaigns to promote the brand’s mission and contents, also with reference to the use of tools and methods typical of professional or art photography and, with these tools, she implements a wide penetration in the sector’s advertising, also at an international level. In addition to a widespread presence in the main trade magazines and prominent newspapers, there are extensive editorials to promote and document the quality of her creations in fashion and entertainment magazines of the time, such as *Le Théâtre*, *Fémina*, *Les Modes de la Femme de France*, etc. We saw how the first result of Negri’s ingenuity is a bra, which is revolutionary both in its design and its practical input. A few months after its launch on the market, it is praised in the magazine *Comoedia Illustré*, as follows:

C’est moins que rien! Un morceau de tulle: mais coupé et cousu de telle sorte qu’il s’enroule et s’adapte à la gorge comme une double coupe arachnéenne. Sa transparence laisse voir la délicatesse de la peau, et malgré sa finesse, ce léger maintien conserve et retient la gorge sans la déplacer. Quel avantage pour la danse ou le sport!¹⁴.

14. “It’s less than nothing! A piece of tulle: but cut and sewn in such a way as to envelop and fit the breast like a spider’s web double cut. Being transparent, you see the delicacy of the skin, and despite its fineness, this light support supports and holds the breast without moving it. What an advantage for dance and sport!”, from *Mon Carnet*, in *Comoedia Illustré*, VII, n° 6, 15.04.1920, p. 296.

As can be inferred from this first journalistic review, the product is aimed, though without any preclusion for everyday and social use, at dance and sports activities, undoubtedly due to the creator's previous artistic experience.

And so the bra is also advertised in programs and flyers of the major Parisian theatres, such as the Théâtre des Champs-Élysées and the Théâtre Sarah-Bernhardt.

From the '30s, Negri begins sustained visual communication campaign through advertisements made using artistic and original photographs, taken by photographers such as G.L. Manuel Frères, H. Clarke (Fig. 7) and G. Saad (Fig. 8).

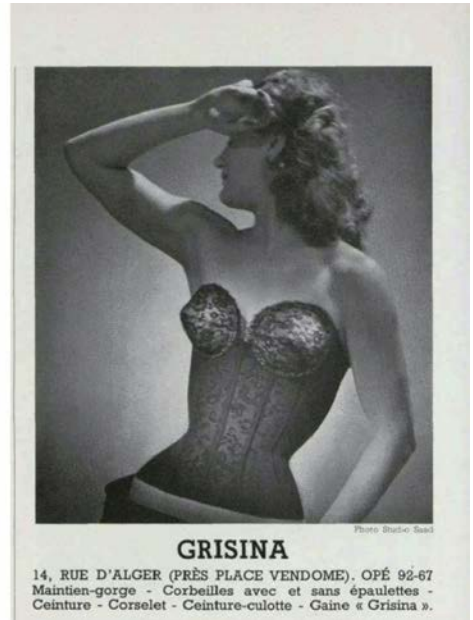


Figure 7. On the left: Henry Clarke, Grisina bra, 1949. On the right: Studio Saad, Grisina corset, "L'Officiel de la Mode", n° 357/358. Source: private collection.



Figure 8. On the left: Georges Saad, Grisina swimwear, 1953. On the right: Teddy Piaz, Grisina swimwear, 1955. Source: private collection.

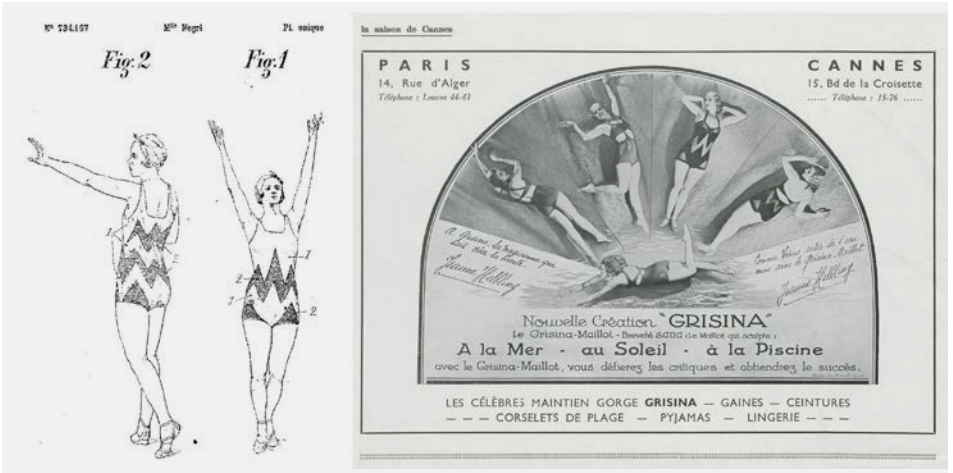


Figure 9. On the left: Teresina Negri, drawings from patent, Paris, 1932. On the right: Grisina advertisement, *La saison de Cannes*, 1932. Source: gallica.bnf.fr / BnF.

8. Business Creation, Financial and Real Estate Administration

Although Negri's activity initially takes place at home in her apartment, in 1923, in response to the growth in demand for garments on a national and international scale, the entrepreneur expands her production and distribution spaces, renting a boutique with a workshop on the upper floor, in the very centrally-located Rue d'Alger, near Place Vendôme, the Parisian fashion district par excellence. A second sales space is opened in 1932 in Cannes. Although the Cannes experience lasts only two years – probably as a result of the worsening health of Teresina's sister who is admitted to the Sanatorium in nearby Vence in 1933 – it bolsters Grisina's fame and prestige. In 1935, in a symbol of the continuous commercial expansion of the business, a corporate nucleus of Grisina is established, along with the consequent opening of a new Italian store in Piazza Santa Maria Beltrade, near Piazza Duomo, in Milan, the productive hub of the Italian market and a major international metropolis.

In 1941, when Negri acquires French citizenship, and with the advent of the Second World War, all her assets and property in Italy – including the Company – are confiscated. However, this doesn't slow down the economic growth of Grisina, which the entrepreneur has meanwhile (in 1939) converted into a new corporate structure in Paris, whose partners includes bank officials, publicists and prominent members of the Parisian fashion scene. The articles of association of the Grisina Company are carefully drafted, and give full powers to Negri, who assumes the role of sole director and then president and general manager.

Another strong sign of Negri's socio-economic emancipation is the prenuptial agreement of 1938, signed together with her husband Henri Espirac.

It is drawn up in such a way as to guarantee her total independence in asset management, in a regime of separation of assets, and full freedom of choice in the conjugal context. It has also been possible to trace, through extensive documentation, the turnover of the boutique between 1937 and 1938, with figures of 1,034,125.60 Fr (discounted figure € 609,063.72) and 1,257,355.18 Fr (discounted figure € 665,969.11), numbers showing obvious growth, and surprising considering the single homemade style production unit.

The business, which is always run by Teresina Negri, despite her aged, ceases to trade in 1961, when faces with the frenetic and pressing pace of industrial production to which Grisina, which has developed into a niche product sector, offering a largely tailor-made manufacturing service, is unable to align itself. Negri, as if wishing to take the brand identity with her forever, doesn't give in, but rather prefers to permanently close the Company.

However, a few years later, several local and national entrepreneurs in France attempts - albeit in vain - to ride on the successful wake left by Negri, by filing new patents and trademarks in the name of Grisina.

Lastly, research carried out at the French Land Registry showed that the entrepreneur has invested a large part of Grisina's income in luxury real estate, from which she has managed to obtain a considerable financial return: a castle in Saint-Tropez, several apartments in Paris and in Saint-Raph-

ael, and the *Villa Unda Maris* in the Principality of Monaco, which is to be her last residence.

In 1939, Teresina marries the French baritone and bibliophile Henri Espirac (1890-1950) in Monte Carlo, and thus obtains French citizenship, ensuring that her assets are intact in anticipation of the Second World War.

After spending her last years between Paris, Saint-Tropez and Geneva, the businesswoman moves permanently to her villa in Monaco, where she dies at the age of 94.

She is buried in France, in the cemetery of Cap-d'Ail.

9. Conclusions

At the end of this story, of almost legendary character, based on just a few available documents and despite the obstacles to the reconstruction of a complex biography, we can draw some fundamental considerations on the real reasons that pushed the daughter of a carpenter and a factory worker to embark on such a dazzling, industrious and successful career in the various fields in which she operated. In the first place, we feel a reason lies in the redemption from a condition of misery, reached through huge sacrifices, including the move away from home and from her parents in late 19th century Turin in order to expatriate to France and UK, at that time more modern countries boasting societies more open than Italy to the unprejudiced acceptance of women's contribution beyond the artistic field, in politics, economics and social activism, letting them occupy without inhibitions roles and prerogatives in an anti-traditional sense not subordinate to male hegemony. Let us not forget that, historically, feminism had its roots precisely in France, during the late Enlightenment, developing

further in the last two decades of the 19th century and extending therefore to Great Britain and the US. We can accordingly presume that underlying the radically innovative and pioneering approach of Teresina Negri, especially in her role as designer, was a precise strategy of exploiting the favourable historical and social conditions for re-evaluating women's position in those very countries where it was easier to get objective validations and acknowledgments, not least among them those of economic and financial advantage, and penetrate fields usually reserved for the traditional patriarchal society. Secondly, another reason might be sought in the personalities Teresina was coming into contact with by virtue of her career as a dancer. In the current state of researches, which are still going on, we do not know much about the encounters that might have influenced the reasons for her success, but, undoubtedly, having frequented the cosmopolitan elite environments of culture, theatre, show business and fashion might have developed in her an aptitude for detecting the signs of novel tendencies that she translated into her designs. Teresina certainly paid the price for professional success by finding sentimental fulfilment at an advanced age, marrying the person who was then going to be her husband until his death and choosing in marriage, too, an artist and an intellectual.

References

- Farrell-Beck, J. & Gau, C. (2002). *Uplift: The Bra in America*. University of Pennsylvania Press.
- Grisina (1932, August 10). *La saison de Cannes*.
- Grisina (1951). *L'Officiel de la Mode*, 357/358, 181.
- La mode a ses secrets (1949). *Album de la Mode du Figaro*, 21.
- Laurent, J. & Saint-Laurent, C. (1986). *Intimo: storia, immagini, seduzioni della biancheria femminile*. Idealibri.
- Vanina (1920, April 15). Mon Carnet. *Comoedia Illustré*, 7 (9), 296.
- Paris Corsetieres Ease Waistlines. Bra Separation by Wiring (1949, June 9). *Women's Wear Daily*, 26.
- Pour vos sports d'été, Madame... (1932, August 10). *L'Intransigent*, 2.
- Saint-Laurent, C. (1966). *L'histoire imprévue des dessous féminines*. Solar.
- Silhouettes nouvelles (1947). *L'Art et la Mode*, 2714, 58.
- The Supple, Natural Lines From Paris (1949, June 9). *Women's Wear Daily*, 24.

Rosa Menni Giolli and the Passion for Batik

Middle and Far Eastern Influences between the Two Wars

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Keywords

Textile Design, Silk, Batik, Deco, Milano, Middle and Far East Influences.

Abstract

This paper aims at focusing on the protodesigner Rosa Menni Giolli and her passion for batik. She is chosen as an example of emancipation and female vitality among several Italian “thread designers” (Papini, 1923) during the third and fourth decade of the twentieth century. She also exemplifies the effects of fascination for Middle and Far East in Italy during the time among the two world wars (’20 and ’30). On the trade, exhibitions and Mediterranean exchanges were easy to find stimuli for Italian textiles in renewing decorative forms, patterns, and special makings influenced by distant cultures. Often these external inspirations depend from national political cultures and colonial exchanges as well from the need of defense artisanal processes against the increasing predominance of industrial ones. In the batik method Rosa Menni found an old Oriental technique that gave her the opportunity to renew her repertoire by combining her artistic inclination with craft, her love for woodcut and precious material such as silk, the experimentation with patterns such as colors. She had a large artistic background that gave her strong stimuli: the oriental ones in a different way than they did for artists and designers during Art Nouveau period, for her they became a grammatical repertory for a new process of “stylization by synthesis” (Papini, 1923) that characterized 20s Italian style from art to design. The case of Rosa Menni is also an example for mixing artistic and crafts technicians and a woman of early emancipation. She successfully opened in 1921 her enterprise named Le Stoffe della Rosa and was the head of her-made laboratory which employed several workers.

1. Foreword

While the first decade of the twentieth century was characterized by the enchantment of Art Nouveau with exotic worlds as an escape, in the 1920s Italian textile production looked to the Orient in a new way, as a search for cultural identity and stimulus for new, autonomous processes. The fascination with the Middle and Far East was due to the awareness of the connection between artistic and artisanal processes that remained integral in those cultures and defense of the relationship between “art and craft” against the gradual predominance of industrial processes – something that linked all the Italian protodesigners “artists of thread” (Papini, 1923).

Towards the industrialization of textiles, as serial production, there are many hesitations and concerns about the loss of traditional craftsmanship skills in which the Italian female entrepreneurial peculiarities identified themselves. Although the Monza exhibitions in the early 1920s attempted to safeguard alongside women’s industries under the common hat of Italianness that the director Guido Marangoni preferred in an open confrontation with the international trends hosted in Monza, even self-defensive positions by women arose, for example in articles around embroidery by Elisa Ricci (Ricci, 1925) or by the artist Rosa Menni (Menni Giolli, 1924).

In addition to exhibitions and women’s criticism, the urgency of a national fashion identity was manifested in 1919 in Italy through the first National Congress for the Clothing Industries, a sign of a movement of autonomy from French dominance and also of the climate of support and trust towards cloths and textiles businesses including women’s ones. This is confirmed by the birth of the national magazine *Lidel*,

founded in the same 1919 by Lydia De Liguoro, an influential woman in the Milanese and Italian fashion culture and arbiter of taste. She was moved by “the will of a steadfast woman’s heart, which intended to address to the flower of the women of Italy” (De Liguoro, 1934) dedicated both to modern women-readers and to feminine genius documented inside the pages. As example of that Italian identity that she had pushed to enroll in the *Fascio* women’s union in Milan headquarters of the Humanitarian Society, professional school whose Fashion section had been run since the first decade of the twentieth century by Rosa Genoni, supporter of Italian originality (Grandi & Vaccari, 2004, pp. 21-29, 103-106; Gnoli, 2017). This both protective and control Italian climate encouraged female entrepreneurial in the wake of the pioneers Maria Monaci Gallenga e Rosa Genoni, tailoring challenges of an artistic nature capable of incorporating avant-garde vitalism.

This essay focuses on the case of Rosa Menni Giolli (Milano 1889 - Melzo 1975) and her artistic/artisan production grafted into this humus with the use of the piece dyeing technique called *batik*, imported from Southeast Asia. Her artistic vocation represented the inspiring soul of practical research in a unique mix (Orsi Landini, 1991; Grandi & Vaccari, 2004). Materials, processes and colors, as well as the organization of the work in the laboratory, and then the promotion strategies, were stages and integral parts of her company *Le stoffe della Rosa*, exemplary female, artistic and entrepreneurial emancipation, during the 1920s in Italy (Ricci, 1991; Gnoli, 2017) starting from the tone of the chosen title. It seems to intercept the exhortations of the campaign by the *Fascio* women’s union in Milan, which asked to call for Italian names of clothing

and firms (De Liguoro, 1920). *Le stoffe della Rosa* plays with the definite article a very domestic effect to the floral proper name. As has been repeatedly stated this was in fact the time of “fashion designed by artists and artist-craftsmen – among them many women – who, although limited in their commercial impact, proved to be careful to incorporate the coeval artistic experimentation and the instances connected to the debate between artisanal product and artistic product, to arrive, also in the field of clothing, to the formulation of an autonomous Italian style”(Grandi & Vaccari 2004, pp. 21-29, 103-106), which will represent the foundation for the birth of Italian *Alta Moda* in the post-war period.

Rosa Menni summarizes the concept of emancipated female entrepreneurship with artistic attitude in her own preface in the catalog of her solo exhibition at the Galleria Pesaro in Milan in 1923: “going from the design to the realized form...I do not at all believe that a so-called decorative art studio could be considered vital if it merely stops at the design, if it limits itself to the idea part of the project” (Menni Giolli in A.B., 1920). Still in this transitional period vitalist and profoundly artistic tendencies prevailed in processes in harmony with a theoretical approach and the ideal of the total work of art. Again Menni Giolli exhorts “one needs to become one with the material for which he creates, to know it, to shape it...until one knows all its secrets in depth and art and craft make a whole that lives in life, that participates entirely in one’s own destiny” (Menni Giolli, n.d.).

Wife of the art critic Raffaele Giolli, she had a large wide knowledge of the styles and tastes of the time in Europe and Italy, a strong historical background and in particular she was

fascinated from those “beautiful Oriental silks” (Menni Giolli, n.d.) that she could profusely find in Italian shops before the First World War.

The trade of objects and imported textiles from China and Japan had never diminished and rather increased with the crisis of the Chinese feudal lords between the nineteenth and twentieth centuries and the constant good diplomatic relations between Italy and Japan; meanwhile starting in 1902 the Italian protectorate presided over the region of Peking (Montedo Mapelli, 2006). After the war arrest, the visit of the future emperor Hirohito to Italy and the first flight between Rome and Tokyo in 1920 were signs of renewed consolidation of ties from before the war between the world’s two major producers of silk (Brenni, 1926). During this period silk could still be the material of choice for Italian designers as testifies *Lidel*. Meanwhile in the increasingly practical, rationalist and spare apartments of the Milanese and Italian bourgeoisie, collecting Oriental objects survived as can be perceived in the interiors, for example by architects Rava, Albini, Buzzi, (Fig. 1) photographed for *Domus* and *Casabella*. There, geometric and essential modern furnishings were perfectly integrated with pieces from exotic collections but also with modern Italian objects and fabrics in agreement with the original interpretation of oriental styles.

While Parisian fashion remained as the driving fulcrum in Europe of the Orientalizing trend with its “arabesque sensuality drunk with color” kept alive by the *mise en scène* of the Ballets Russes and their imaginative visitation from the Orient concocted by the stylist Paul Poiret (Messina, 2013), the Italian trend reached a proper directness as the decorative arts show.

According to the critic Roberto Papini, their “originality is not in its bizarreness or trying to astonish but on a rigorous line of logical adherence to the needs of the material used, of the return to simplified forms, trimmed, purified in obedience to the healthiest ideas of the guiding architecture and master of any artistic rebirth”(Papini, 1923): a process of “stylization by synthesis” through which “are reborn the pure values – plastic, design, chromatic of mass, line and tone” rediscovering the old tradition (Papini, 1930). Thus, the traditions coexisted with the renewed interest for forms, materials and processes which derived from distant cultures and with which they dialogued for certain “primitive” affinities of style and adherence to manual, antique or rudimentary traditions. Within this climate women entrepreneurs, designers and inventors of textiles, processes and patterns easily moved between traditions and innovations never denying their underlying artistic (Papini, 1923).



Figure 1. Carlo Emilio Rava, Furniture (with African weapons) in Lunchroom, Milan, 1933. Photo from Mollino, 1947.



Figure 2. Rosa Menni Giolli photo portrait, 1923ca. From Menni Giolli, n.d.

2. “Art of the East and Fashion of the West. The Decoration in Style is Batik”¹

Rosa Menni (Fig. 2), graduate of the Accademia di Brera, convinced of the quality of textiles “dyed in pieces” (“*tinti in pezze*”) (Menni Giolli, s.d.) compared to yarns, made the batik as her primary expressive tool even if she didn’t disdain to paint and print the most varied fabrics from cottons to velvets, from silks to linen. While, for example, other thread designers as Carla Visconti di Modrone² adopted batik in combination with her refined embroidery for goods of Oriental origin like kimonos and dressing gowns (Giuggiari, 2018 (Fig. 3), Menni customizes the Javanese batik which she develops through printing benches with which she creates artistic decorative systems for furnishing fabrics as well as for clothes. As in a painting the synthetic patterns take shape in Rosa Menni’s fabric and maintain in the tightness of the simplified dress, tunics, jackets and *pijami* (Fig. 4) as well in Fauve, Bauhaus and more innovative Deco that are suitable for the synthesis and stylization of the decorations.

Distant lands continue to procure “unusual and pleasing sparks of inspiration” we read in an article of *Lidel* from 1920 dedicated to the technique of batik (M.C., 1920).

1. Arte d’oriente e moda d’occidente (il Batik). *Lidel*, a.II, January 1, 1920.

2. The activity of Carla Erba, wife of Count Visconti di Modrone, is little known but worthy of attention. Luchino Visconti’s mother had not only interested in being the only woman welcomed by the Lancia and Ponti Labyrinth but for a refined philanthropic activity of protodesign of embroidered fabric and also printed textile. This essay’s author is doing research about her activity.





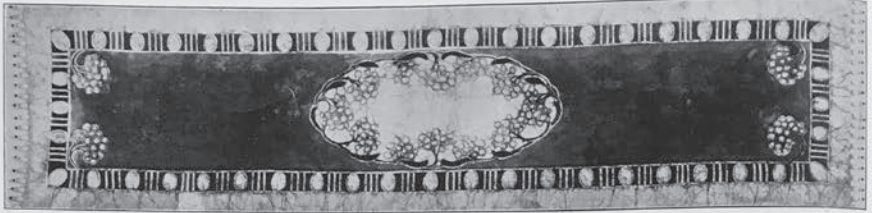
Pijama.

Figure 4. Rosa Menni Giolli, Pijam of swallows. From Menni Giolli, n.d.

The first fabrics painted with this technique, which originated from the Malaysian archipelago³, exposed to a vast Western audience were the costumes worn by the Java dancers at the Universal Exposition in Paris in 1900. Therefore, even though there was already a school in Holland for the dying of fabrics according to this method, they were the light dresses of the priestly dancers to spread from Paris into Europe the fashion for batik which enjoyed a wide following in Italy (Fig. 5a, 5b) in the years between the wars which was hardly a coincidence. It was the period that witnessed a dynamic artisanal industriousness by women in the textile sector which several people like Vittorio Ferrari supposed formed the basis for the quality of the Italian handmade tradition. From Milan to Rome, the school of batik spread⁴, to teach in rapid apprenticeships the *Kitab* method of dyeing by immersion light silks that were “washable” and could be done by any woman in her own house as claimed by the advertisements widespread in every magazine “very easy to do, not requiring any special skills in painting or drawing to do it yourself” (*Scuola del Batik*, 1925) (Fig. 6).

3. The word batik derives from *tik*, which means drop in Malay. The origins of this technique are of controversial provenance – from either China or India – but it surely developed in the Java Island in Indonesia where for centuries very refined examples have been produced, all of them worked exclusively by hand. These goods express through their designs and colors the founding elements of the culture and social life of the Indonesian people and fuse together in their essence the design capacity, artistic expression and the technical-manual skills of those who create them. The MUDEC Museum of Milan has hosted an exhibition (without a catalogue) *From Batik to Art Nouveau: The thread that links East and West* (June 8 – August, 26 2018) dedicated to Oriental batiks as stimuli for European Art Nouveau batiks, therefore the period immediately preceding the one discussed in this text. See also Hitchcock, Nuryanti, 2000.

4. Milanese schools of printed fabrics were increasing, such as that of the Kitab Method by Maddalena Dalla Riva with stands at the Milan Trade Fair in 1925, advertised on *Lidel* (De Liguoro, 1926).



ARTE D'ORIENTE E MODA D'OCCIDENTE

La decorazione di moda è il "Batik" che ritroviamo ovunque, perchè ovunque può essere applicato, nella casa e nelle vesti, sulla tela o sul velluto.

Nella ricerca affannosa della novità la Moda chiede non di rado l'ispirazione al passato o alle più lontane regioni esotiche. Sempre e ovunque, perfino presso i popoli più semplici e primitivi, ha esistito un'arte per dar risalto alla bellezza muliebre o per adornare il nido: è naturale

che si spigoli tra gli innumerevoli modelli offerti dai secoli scorsi o dai paesi remoti per scegliere qualche punto gradevole poco comune. La scelta è suggerita talvolta dal più fortunato dei casi, e vi è poi chi si meraviglia che si sia tanto tardato a sfruttare una buona idea; ma bisogna che l'idea colpisca la fantasia di uno dei despoti della Moda,

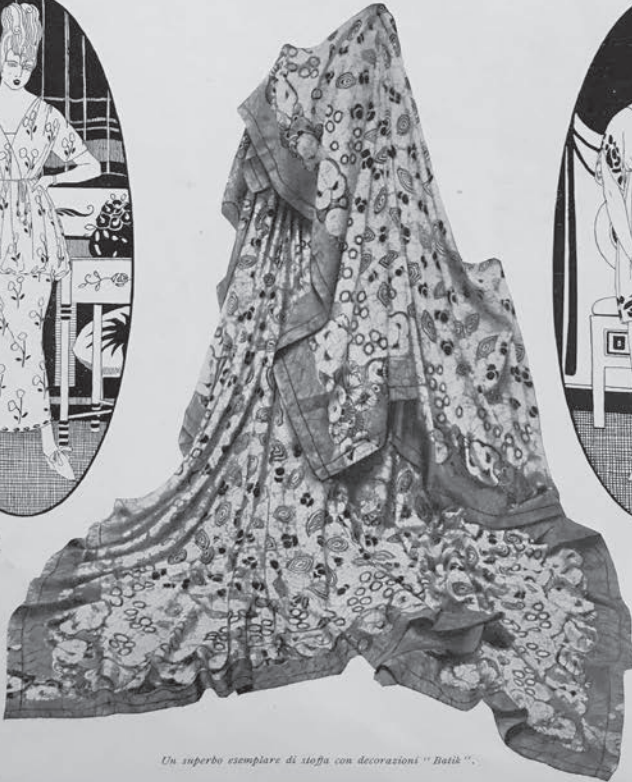
che non hanno l'abitudine di frequentare gli archivi e le pinacoteche o di viaggiare agli antipodi, a scopo professionale.

Una graziosa idea di decorazione delle stoffe è stata suggerita, durante l'esposizione universale di Parigi nel 1900, da un gruppo di fanciulle giava-



Abito in voile con applicazioni batik

A Giava certi disegni a tre colori non potevano servire che al capo supremo.



Un superbo esemplare di stoffa con decorazioni "Batik".



Abito in seta con applicazioni batik

Così la nostra elegantissima vuole un modello disegnato per lei sola.



L'utilizzazione del Batik può avere la sua applicazione massima in tutto ciò che rende bella la nostra casa - portiere, cuscini, abatjour, brise-bise, tappeti, fodere per libri, scatole - e la fantasia si può lanciare nelle creazioni più libere di luce e di colori.

nesi che, per conto di un impresario, ballavano, innanzi alla folla cosmopolita, le danze native. Si ammiravano le loro pose quasi jeratiche, i loro gesti delicati, gli ondeggiamenti da cigno del loro collo sottile, ma gli occhi erano attratti anche dal loro caratteristico costume. Il corpo esile era avvolto in due rettangolari di stoffa, di cui uno modellava i seni e l'altro si arrotolava dalla cintola alle caviglie: unico ornamento una sciarpa stretta alla cintura, con le estremità a frange svolazzanti, che, danzando, le fanciulle agitavano con gesto quasi d'automata. La leggera stoffa dell'abito sommario offriva allo sguardo una varietà singolare di disegni dai colori vivaci in cui si sbizzarriva la fantasia orientale. Non era evidentemente una stoffa trapunta né colorata coi metodi consueti, e i disegni apparivano originali non tanto per l'invenzione quanto per il modo con cui erano resi. Alcuni artisti curiosi vollero guardarli da vicino e chiesero spiegazioni all'impresario olandese: fu così che vennero a scoprire il *batik*. Seppero anche che in Olanda esisteva già una scuola per la lavorazione della stoffa secondo il metodo giavaneese. L'idea piacque, ma non attecchì subito: soltanto da alcuni anni si è pensato ad aprire a Parigi un laboratorio analogo i cui prodotti vanno ora incontrando il più largo favore, non solo negli ambienti d'eccezione, ma anche nel mondo più elegante.

Il *batik*, è, in poche parole, il principio dell'acqua forte applicato alle stoffe. Si comincia col dare alla seta o al cotone la consistenza necessaria per mezzo d'un bagno nell'olio di ricino. La stoffa, asciugata, viene quindi distesa sopra un telaio di bambù e la Giavane, tenendo vicino un vaso pieno di cera vergine che una fiammella conserva liquida senza farla bollire, vi immerge un piccolo strumento, una specie di mira di rame con un manico di bambù e un cancellino più o meno sottile che permette di ottenere effetti più o meno tenui: attraverso il piccolo tubo la donna versa la cera sul disegno accennato grossolanamente col carbone. È un disegno tradizionale, secolare, in cui si vedono sbocciare fiori, insetti e uccelli meravigliosi. Riscaldato il disegno con la cera, la donna immerge la stoffa in un bagno di color giallo, e di giallo si colorano tutte le parti che la cera non ricopre: si lascia quindi asciugare la stoffa che in una nuova bollitura perde la cera lasciando vedere un disegno bianco su sfondo giallo. Con un procedimento analogo vengono quindi spalmate di cera le parti gialle, per poter immergere la stoffa in un bagno azzurro e dare al disegno un rilievo color indaco. Sovrapponendo i due colori complementari, la donna giavaneese ottiene anche una magnifica tinta verde.

È questo il sistema adottato nell'isola dell'Oceano Indiano, ma i mezzi di cui si dispone in Europa hanno permesso di renderlo ancora più accurato. Vi è una maggiore varietà di colori; i chimici hanno tratto da piante esotiche nuove e più delicate tinte. La fantasia orientale rimane fedele ai disegni ispirati dalla flora: gli artisti occidentali cercano, senza allontanarsi soverchiamente dall'idea tipica, nuove combinazioni di ritmi e di colori. L'arte moderna trova un nuovo campo fertile da coltivare. Le stoffe lavorate col *batik*, non si prestano soltanto all'ammirazione degli spettatori ai lumi della ribalta: vanno conquistando anche l'intimità dei salotti, e l'intimità ancor più gelosa e discreta della grazia femminile. Già parecchie dame dell'aristocrazia italiana si sono invaghiate delle stoffe così lavorate, seguendo l'esempio della regina di Romania che ne ha fatto un mantello. Esse hanno potuto invaghiarsene vedendole esposte nelle mostre e nelle sartorie parigine. Non v'è alcuna ragione perché in Italia, nella patria della luce e dei colori, non abbia a trionfare un'arte che trae dalla gamma dei colori il suo fascino.

me.



Esposizione di lavori eseguiti da Madame Pangon (61, rue Le Rollie, Parigi).

Figure 5b. Arte d'oriente e moda d'occidente (il Batik). From *Lidel*, a.II, January 1, 1920.

SCUOLA DEL BATIK METODO KITAB



Scialle decorato a fiorami multicolori col Batik "Metodo KITAB"

Le Signore e Signorine che vogliono dare al loro abbigliamento e alla loro casa una particolare impronta d'arte e di buon gusto, troveranno alla scuola del Batik Metodo KITAB (corso V. Emanuele 22, Milano) il più valido aiuto, poichè il Metodo KITAB facilmente adattabile a tutti gli stili, dispone di una gamma ricchissima di bei colori creati in due tipi, per la pittura su seta e quella su cotone.

La "Scuola del Batik" per venire incontro al desiderio delle sue numerose allieve e clienti pubblica una piccola e artistica rivista ricca di disegni in nero e a colori specialmente studiati per la decorazione Metodo KITAB e con un disegno in grandezza naturale di esecuzione.

Il numero di saggio viene inviato contro vaglia di L. 3,20 diretto alla signora Maddalena Da-Riva, Corso Vittorio Emanuele, 22, pagabile presso la succursale postale n. 25, Milano.

La "Scuola del Batik" espone alla Fiera Campionaria di Milano, negli Standa N. 2730 - 2732 Gruppo V a destra dell'ingresso del Padiglione delle Arti Decorative, una bella raccolta di lavori eseguiti coi colori e col Metodo "KITAB".

Batik involved a simple process of distributing wax through a sort of metallic pipe with a small tube on marks transmitted with a small instrument (*tjanting*) from decorative graphic repertoires that the schools made available to the students along with a rich range of colors for silk or cotton (M.C., 1920). The ease accounted for the growing popularity of the technique in this environment of a return to a national manual tradition and the blossoming of artisanal “small industries” in which women played a strong role. It was also up to women to take the leading roles in artistic batik.

An enthusiast of silk-screen printing since as early as her schooling, Rosa Menni developed a personal process of *mor-sure* (biting) with the incision of woodblocks, far from kitab and domestic production. She was fascinated by the original Indian procedures with their effects of very thin branches, “those veins that radiate from the colored areas above the other colored ones” (Buffoni, 1923), and she was able to use the veins of wood to create on silk as an expert woodcutter similar effects, but more expressive and dependent on the irregularities of the matrices with some vague reference to primitive cultures and suggestions derived from their rudimentary drawing essentiality. Anyway, as she remembers, woods appeared so strange to the habits of the printing works and above all to print on fabric where no one in Italy had ever seen such. Otherwise Mariano Fortuny as well as Maria Gallenga molded patterns but inspired by the old tradition or refined oriental decorations more in line with the eclecticism of the time and with decorative serial use of the matrices. Instead Menni loved that sturdy imprint of engraved wood that usually disappears in the mechanical workmanship of

the engravers who reduce the wood to the coldness of marble and metal. Moreover, she introduced on this method a “messy joy” of colors (Fig. 7), dipping the fabric in dyes for the batik coloration and personalizing the decorations, many of which were based on exotic models as she writes in her unpublished autobiography, a tableau of Italian intellectual society of that time which deserves to be printed (Menni Giolli, *Una donna fra due secoli*).

Therefore, the case of Rosa Menni was not part of the heedless appropriation of the “do-it-yourself” batik in the nationalist and colonial climate, but her evident high artistic inclination could find general acclaim for the spread of the medium.



Figure 7. Rosa Menni Giolli, model of colors and forms for batik. Milano, E. Badaracco Foundation, Menni Giolli Archive.

The success achieved both in Monza and in Paris in 1925 declares the positive reception of her production considered on the border of both art and design. Through her study of geometry, her experimentation with processes, Rosa Menni developed her personal revolution compared to the “prudent old silks and perfect balances of the things from beyond the Alps” (Menni Giolli, n.d.).

As it is quoted on the magazines, she updated the slow process of the true batik “to several layers of wax and subsequent color baths” on the cottons, as well as the “pinched” techniques of the *chibori* and the *placa* prints on canvas, velvet or silk (Buffoni, 1923) according to her own artistic experiments by creating unique pieces making use of a printing laboratory from the beginning.

Her interpretation – she was aware – produced results that are “undisciplined and powerful; the colors too showy, the designs agitate shapes that are somewhat incomplete” (Pansera, 2006). As she describes on the Galleria Pesaro Exhibition catalog: it may happen that “a carefully researched color tone is frayed in cooking, another salt of two tone”. The effects of colors even depend on the different supports: wool, silk, linen, velvet, jute or paper. “Each material has its mystery. Today – she added – we have to engrave wood and linoleum, tomorrow to cut zinc and cardboard. The work is varied and restless”. Rosa advocated the use of synthetic colors, aniline, capable of effects no less unusual and new compared to vegetable and animal colors of the traditional oriental batik, and as well they “do not alter even to hot soaps, or to long exposure to light”.



Figure 8. Rosa Menni Giolli, Eastern landscape. Milano, E. Badaracco Foundation, Menni Giolli Archive.

She could conclude “this personal experiences bring combinations and secret additions that in the years will multiply indefinitely” (Menni Giolli, n.d.).

The sensitivity towards a spiritual universe which is manifest in her writings has connections both with Oriental culture and avant-garde that flutter in her patterns for fabrics, in designs and textiles conserved in her archive preserved at the Fondazione Badaracco of Milan⁵ (Menni Giolli, n.d.; Menni Giolli, n.d.).

5. The Rosa Giolli Menni Archives are loaned by her heirs to the Elvira Badaracco Foundation in Milan.



Figure 9. Geometric shapes. Watercolor. Milano, E. Badaracco Foundation, Menni Giolli Archive.

Therefore, among her designs we find clear inspiration from Javese batik, from Chinese chibori and bandanas from India, that she herself recounts having studied since 1918.

Anyway her exotic landscapes (Fig. 8), cashmere decorations and synthetic floral motifs straddle Fauvist tones and Futurist geometries (Fig. 9) when circles and curved lines with an Orphic flair (between artists Kupka and Delaunay and his wife⁶) do not predominate, the fruit of a visual and cultural knowledge of an Italian updated “upper-class dilettante” (Bossaglia, 1979).

6. If the asymmetrical profiles of the dynamic dress cuts by the avant-garde, from the Futurists to Sonia Delauney, reinvented a new set-up of the dress in synesthesia with the geometric and chromatic patterns, although in a similar sense on the Deco context impoverished of preciousness, even Rosa Menni gave movement and depth with color and subjects (Orsi Landini, 1991).

Likewise, the sister embroiderers of young Marcello Nizzoli must have experienced wefts of threads for similar layouts full of color (Fig. 10).

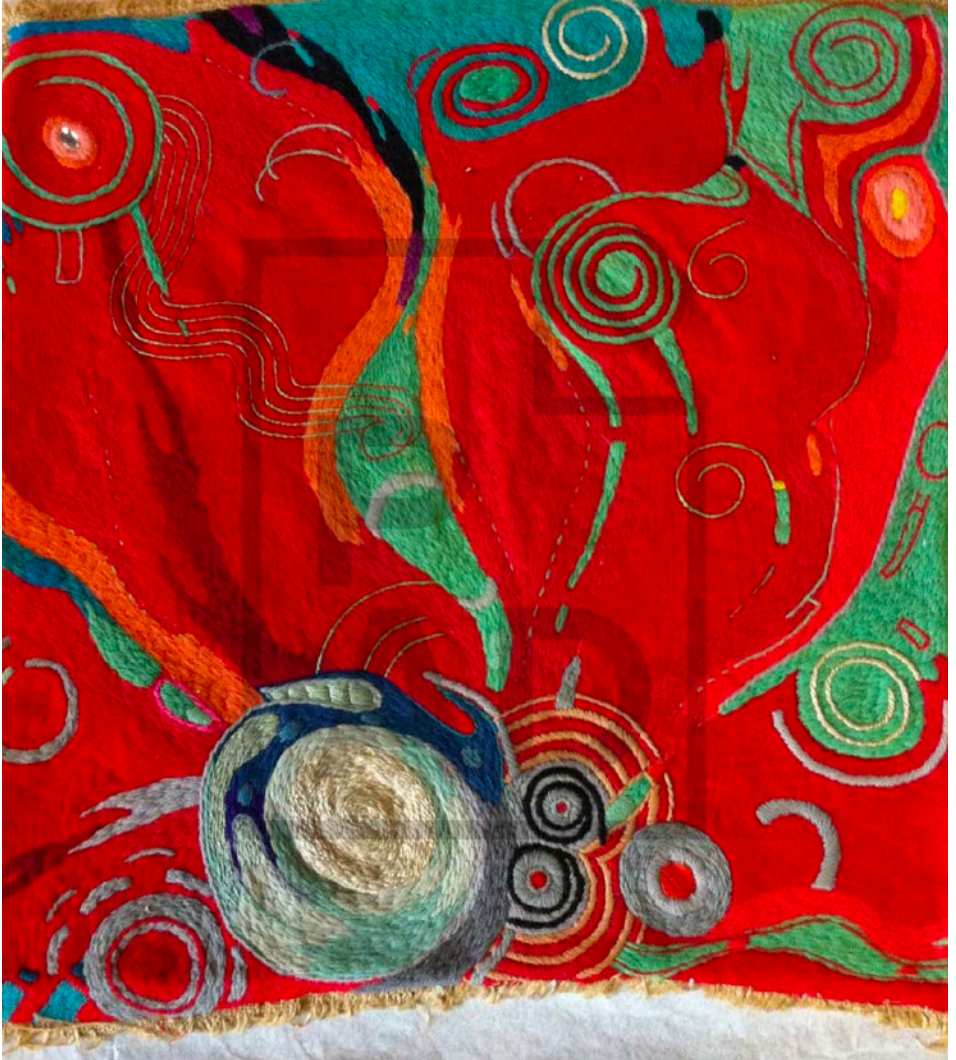


Figure 10. Marcello Nizzoli, Notes of colour, 1914 (perhaps later). Jute embroidery in wool and silk with a thrown stitch. Probable execution of his sisters. Florence, Uffizi, Gabinetto Disegni e Stampe Collection.

Nizzoli was also a distinguished Futurist in the early 1920s and good friend of the couple Giolli Menni. (Menni Giolli, n.d.). He designed patterns with geometric forms for cushions allusive of a Japanese synthesis but uprooted, dreamy, oriental arabesques in “undisciplined and powerful” geometric swirls like the patterns of Rosa Menni Giolli (Fig. 11), also charmed by the Orient but full of jumbles of crazy colors and agitated, disorderly designs (Menni Giolli, n.d.), that in fact looked to the Italian and French avant-garde scene (Bossaglia, 1979).

For Rosa the suggestions from exotic cultures were absorbed within a search for identity, one’s own style in a period of growing nationalism, in the tireless tenacity to guide her products with personal style and expertise.



Figure 11. Rosa Menni Giolli, patten for batik, watercolor. Milano, E. Badaracco Foundation, Menni Giolli Archive.

Quote: “I feel the need to be entirely of my time and to express myself with a current word without taking up the ancients, but only by spontaneously descending from them as traditions allow” (Menni Giolli, n.d.).

While she was still a student she was reading Hölderling, and the motto below her woodcut logo that she used for her laboratory *Le stoffe della Rosa* (Rosa’s fabrics) (Fig. 12), adopted a verse from a laud of Jacopone da Todi: “*Dal folle sapienza, E dalla spina rosa*” (“From folly wisdom, and from the thorn the rose”) which in reminding us of her name, summarizes well the startling vigor against any medieval intellectualism of a master of Vulgate poetry of a spiritual and Franciscan inclination (from Francesco d’Assisi), perhaps a self-identifying metaphor for batik, a modern “pauperess” of the traditional practices of Italian textiles.



Figure 12. Rosa Menni Giolli, *Le stoffe della Rosa*, Giolli Menni’s trademark textile, 1920. Woodcut.

Her Orphist explosions of rhythmic lines and concentric colors, the dynamic distortions of Oriental patterns or colonial between Africa and the Middle East, presume therefore on one hand the mediation of Klimt and the Secessionists more so than of Orphism and the Parisian deco geometries as well as the colors of Matisse understandably loved (Menni Giolli, n.d., B.6.F.3, p.25). On the other hand, they reveal a direct knowledge of precedents, a passion for the Orient that she shared with her writer and art historian husband Raffaello. For example, he dedicated an article to the new *Museo milanese di arte orientale*, opened at the Castello Sforzesco, in his magazine *Poligono* (April 1930, pp. 359-366) stating how much Milan was “so rich in Chinese and Japanese art”. At the same time Giolli couple’s interest in Oriental philosophy and occultism could have certainly contributed to Rosa’s revisitation of exotic patterns conditioned by a fluid and “non-static” perception of eternity and space as a world view.

3. Le Stoffe della Rosa

Financially supported by her parents in entrepreneurship, she opened a laboratory in the same year she married Raffaello Giolli (February 27, 1920). For a decade the laboratory of strongly artistic characteristics concentrated all her entrepreneurial energies without ever ceding to her domestic duties – meanwhile three children were born – or to the pressures of high costs (machines, fabrics, colors, labor). She kept the atelier active until the end of the decade when the death of her father in 1929, her main financial supporter, the growing costs and the great depression (Mingardo, Caccia) put into crisis the complex system of international sales relations that she had

set up, unsustainable for a direct-run art workshop; then the editorial work of her husband redirected her interests. During the decade, in the various locations (from Via dell'Unione to Via Petrella even to the basement rooms, filled with worktables and machines, of the villetta named *Honolulu* in via Compagnone close to the Samples Fair where the Giollis went to live in 1923 and later in Via Filippo Carcano 19 (Menni Giolli, n.d.), Rosa firsthand designed fabrics and prepared them “almost until the printing”. She had learned “fixing, washing, and pressing” (Menni Giolli, n.d.), from silk bleaching to ironing, at the printing house of Edoardo Mattoi. His premature death led Rosa to “emancipation”, to open her own laboratory in 1923 under the name and brand *Le stoffe della Rosa*. It was a true artistic laboratory with designers, dyers and printers, considered not as workers but collaborators, against the current in the era of industrialization when the number of female workers increased as well as home-based crafts according to the main domestic role for women (Calanca, 2002; Gnoli, 2017). This grit of an emancipated woman ready to face social competition like man transpires from the biographical chronicles as she appears photographed for the 1923 catalog in a straight *robe-chemise* that leaves her arms bare as we can probably imagine the legs at the knee (Fig. 2). One of those clothes that “accept” the body, it was said then, in the name of the practicality and simplicity of the cuts, but not of the fabrics, a sign of an all-Italian tradition, as one of the Milanese pioneer seamstresses of independent fashion wrote, Marta Palmer, one of the clients of the same Giolli Menni. In favor of the independence of Italian fashion, Palmer exclaimed “to create a beautiful dress you only need a nice cloth! (...) No

country in the world can boast more beautiful and colorful clothes than our country” (Gnoli, 2017, p.28).

Rosa surrounded herself with capable people of “particular and brilliant intellect (...), who became friends and worked together”: Giulia Veronesi, Raffaello’s best student, Anna Maria Mazzucchelli later editor of Casabella and wife of Carlo Ludovico Argan, and the precious Triestine painter Maria Lupieri who would become the link with another undertake protodesigner from Trieste, Anita Pittoni. Rosa describes with pride her completely artisanal laboratory⁷, using the word “primitive” to underline the handmade approach and the new language that was produced there.

She designs, selects the tones and decides the duration for the immersion of the fabrics in the color, but she also entrusts the work to her team when she has to take maternity leave (Menni Giolli, n.d., v.II, cap.II [1921]). Within domestic walls therefore, she shared with her helpers, skills and a “spiritual penetration” that we believe guided the interpretation of the practices and decorative forms of exotic taste in an almost theosophical sense, a very common line of thinking in the arts during the first decades of the twentieth century (Parisi, 2018), shared by the Giolli couple.

This democratic philosophy that had penetrated the laboratory was dramatically halted with the Fascist regime and even the deportation and death of Raffaello (1945) in Gusen

7. From the brochure printed to advertise the birth of the Anonymous Company *Le stoffe della Rosa*, we learn that the laboratory still included a limited number of workers as in an artistic laboratory size: five printers, two apprentices, a young lady in charge of the airbrush and another for batik.

II, extermination subfield of Mauthausen, and the execution of their partisan son Ferdinando (Barzaghi, 2006; Mingardo, Caccia). Before that fatal weather, in the still confident 1920s and 1930s the Giollis enthusiasm was seen in their participation in intellectual circles in Milan⁸, from that of Margherita Sarfatti (Barisoni, 2018) to that of the editors Antonietta e Guido Treves who procured numerous commissions for Rosa: among the most prestigious D’Annunzio and several collector friends like Giuseppe Chierichetti who was a cotton merchant willing to support Rosa’s atelier by supplying furniture and as an agent for commissions.

Encouraged by the growth of national and international interest for her brand and for guarantee the good health of the laboratory – “now that the production difficulties are overcome and the internal system is perfect” she wrote –, Rosa clearly understood the importance of starting with own business and an autonomous dissemination campaign. To this end, April 18 1925 the brand *Le stoffe della Rosa* became an Anonymous Company. It was printed a program in order to explain the company mission and the aim of finding shareholders willing to support the company and its spread of fame and work increased on Italy and the international market and meantime trying to maintain expressive artistic freedom. All the causes of its future decline are contained in the irreconcilable and contradictory relationship between the artistry and uniqueness of the production (“art batik fabrics, the only

8. They themselves would have a gathering every Thursday evening, (Menni Giolli, *Una donna fra due secoli*).

ones that are printed in Italy directly from original woods engraved by the artist”), and the ambition, “given the perfect technical elaboration”, to “guarantee every use in the home and in life” of the fabrics and therefore to foresee a large-scale production (*Programma di costituzione*, 1925). The program lists many applications: “upholstery, doors, cushions, furniture and table covers, rugs, tablecloths, clothes” and much more, as well as a long list of exhibitions where those products had distinguished and an equally long list of national and international sales representatives. In short, a pedigree was summarized that was appropriate to the qualitative leap that the company intended to make: organize the national and international sales in a broader and more autonomous way (which should have also led to an increase in production, as was impossible in the artistic meticulous workshop), on the basis of the proud conviction of producing, unique fabrics in the personal and modern batik method or painted and printed fabrics, and riding on the export policy of the National Government of Italian silk production. Heroic project understandable with all its euphoric utopia in the times of the first female emancipation that makes itself strong in offering unique forms and productions such as batiks (Orsi Landini, 1991). Raffaello Giolli professor of art history, critic and writer, in a note written to his wife in 1922 shows all his support to her appealing “little red rose” (referring to the logo with a rose within the oval designed by his wife both used as a signature in the drapes and as a logo in the letterhead of the company), and called “business woman” while he feels himself her “secretary of commerce” engaged in shipments to important magazines such as *Vogue* or between providers and customers.



Figure 13. Textiles by Rosa Menni Giolli, Lombardia Room at Decorative Arts Exhibition in Monza 1925.

The success obtained by Rosa Menni Giolli printed fabrics at the decorative arts exhibitions contributed to the sudden increase of production. She started from *The Exhibition of the Humanitarian Society* in Milan of 1919 then several personal rooms at the Galleria Pesaro of Milan, at the first exposition of the Monza Biennale in 1923 and also at the second in 1925 (Fig. 13) like the two, for furnishings and clothing, that would earn for her the gold medal at the prestigious Universal Exposition in Paris that same year.

Her batiks and textiles painted with the aerograph in that personal and exotic style ended up in an exceptional variety of places in the mid 1920s: for summer clothes, for fashionable

fashion houses like Ventura (for which Rosa realized the set design in velvet for the small theater – exhibition set). She writes “in the triumphant days of my work in textiles I had as clients not only Ventura but also Palmer, Vogue, Quarti who at that time was the best furniture maker of Milan” (Menni Giolli, n.d.). For Quarti she produced furnishings like cushions and screens, and in 1927 she was working also for Domus Nova of Gio Ponti and Rinascente (Menni Giolli, n.d.). The same year she drew settings for La Scala and for the production of *Diana e la Tuda* by Luigi Pirandello at the Eden Theater. Thanks to Mr. Treves the rooms of the Vittoriale and the wardrobe of D’Annunzio, “robes, kimonos, bedspread”, and a brown velvet tunic for the “mystic creative silents of the Im-maginifico!”, were enriched with Rosa batiks with “a complete universe of suns” previously exhibited in Monza (Fig. 14-15).



Figure 14. Lombardia Velvet Room at Decorative Arts Exhibition in Monza with several Menni Giolli's textiles, 1925. From *Emporium*, Vol. LXII, n. 367, p. 29 (1925).

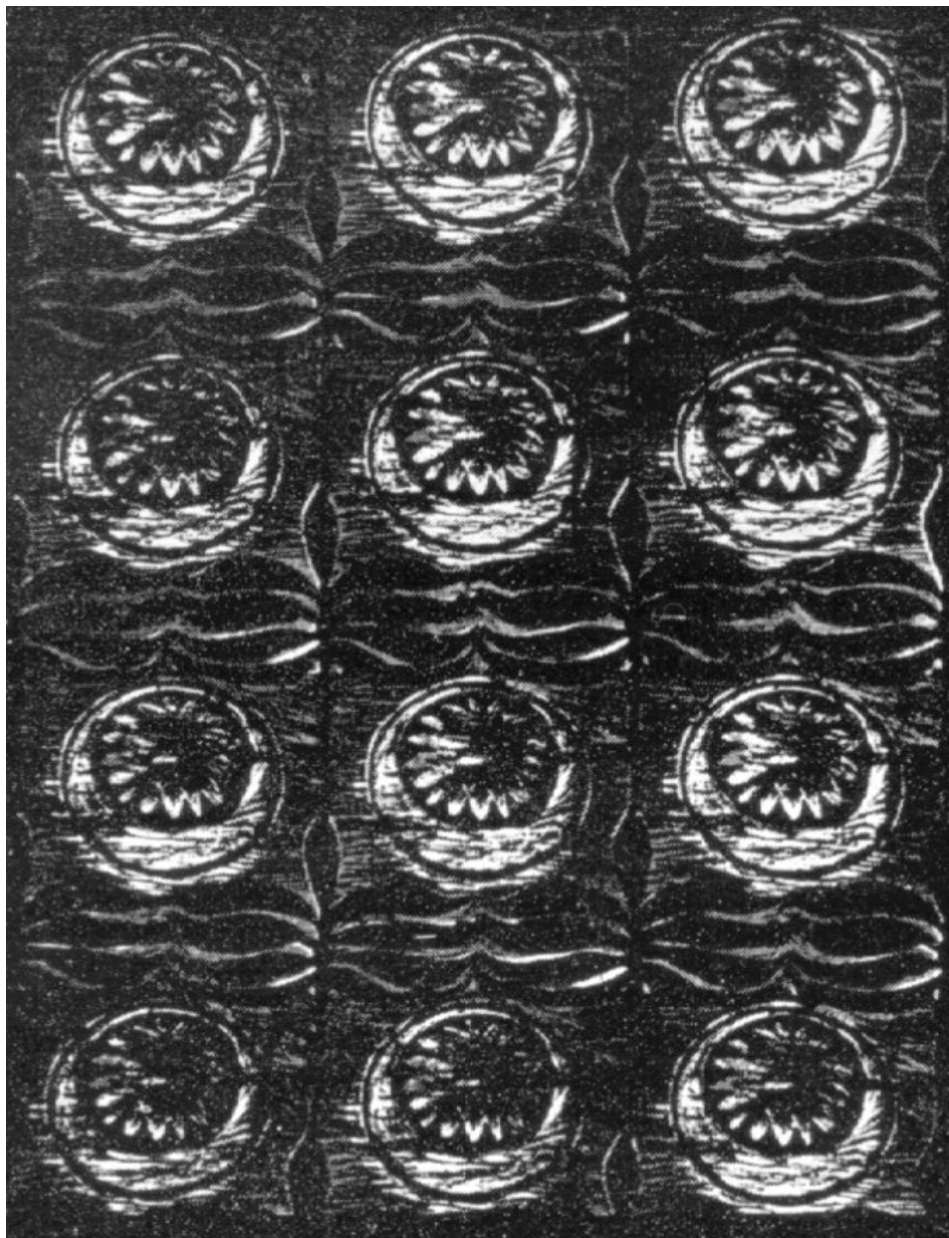


Figure 15. Rosa Menni Giolli Sun cover. Detail of the sunshade cover made for D'Annunzio. The same motif is visible on one of the walls in Decorative Arts Exhibition in Monza, 1925. From *Emporium*, Vol. LVIII, n. 345, p. 152.

D'Annunzio in a gesture of gratitude invited her to the Vittoriale, which she had to decline because of her advanced stage of pregnancy (Menni Giolli, n.d.)⁹.

In Paris in 1925, the neo-traditionalist Italian pavilion of Armando Brasini, which little satisfied the modern souls had been, according to Raffaello Giolli “providentially saved by the participation of Adolfo Wildt” (Giolli, n.d.). The two had known each other since 1912 when Giolli was the first in Italy to appreciate the sculpture (Giusti, 2007). Their close friendship would lead the critic to choose Wildt as witness at his wedding with Rosa Menni.

Later Rosa’s fabrics completely covered the Parisian rooms (Fig. 16) that hosted the diaphanous or geometrical sculptures by Wildt, an immersive space in the subtle harmony between marble silhouettes and the decoration on the textiles, united by a similar spiritual vitalism and an organic concept of a work of art, without distinctions or hierarchies between major and minor arts. This was the same dialogue that the sculptures of Wildt had established in the 1922 Venice Biennale when displayed alongside the wrought iron works of Mazzucotelli, naturally an affinity not of styles but of value given to the traces and love of hand craftsmanship.

9. In the archives of the Vittoriale, it seems there is no evident traces left of the commercial relations between the Vate and Rosa Menni Giolli, despite the fact that in her autobiography and in the advertisements, as well as in the Programme for the establishment of the *Società Anonima Le stoffe della Rosa*, it is widely cited. The volumes on fashion and D'Annunzio, in fact, recall tailors and textile personalities that Rosa knew and worked for, like Palmer, do not mention Menni Giolli as the author of specific garments and furnishings such as the fabric of the suns (Andreoli, 1988; Sorge, 2015). It is the author’s intention to deepen this unexplored aspect.



Figure 16. Adolf Wildt and Rosa Menni Giolli exhibition room, 1925. Italian Pavillon, The International Exhibition of Modern Decorative and Industrial Arts Paris. Photo from *Emporium*, 1925, vol. LXII, n. 367, p.29

Therefore, Wildt must have shared that same fundamental philosophy that Rosa stated in her pages: “the artist is not a hypothetical person but a complete one. Lyrical intuition is not an abstraction without weight, rather it is nothing other than a way of knowing”.

4. Conclusion

Enthusiastic about these ideas, Rosa Menni created her fabrics without consideration for costs, which were always higher than the revenues and always more unsustainable. The attempt to create a public limited company financed by entre-

preneurs with a global distribution failed in the management of the artist «incapable of tying herself to the routine of the work» and the industry, “a festering wound”, as she defined it, that would limit her to a not artistic engraving of her woodblocks “in a way to which her spirit could not conform”. A drastic and cathartic epilogue ensued: once the studio closed, as she recounts in her memoirs, a large blaze destroyed about 450 of her woodblocks, traces of her “long constructive work” (Menni Giolli, n.d., B.6.F.5, p.47). Nothing remained, but the batik of those schools that in 1925, the year of success for Rosa’s artistic batiks, were exhibiting at the Fiera Campionaria in Milan, the examples of Maddalena Da Riva students who used the Kitab method and the predefined repertoires and those that were produced in the school still displayed at the Triennale as artistic craft.

The entrepreneurial effort of experimental genius like Rosa Menni were destined to succumb in the titanic costs and efforts to control the unique product. Who ever more produces, better wins.

Only in the end of 1940s after the painful wartime episodes which gravely struck the Giolli family, would Rosa return to her old passion for textiles with a completely new experience in Vaigiato, her country house close to Orta Lake, dedicated to weaving wool from her own farm in the eco of autarchic fashion.

References

- A.B. (1920, August). Le mostre nella saletta di Lidel. Le stoffe di Rosa Menni Giolli. *Lidel*, 8(II), 59.
- Andreoli, A.M. (Ed.) (1988). *Il guardaroba di Gabriele D'Annunzio: conformismo e trasgressione*. La Nuova Italia.
- Barisoni, E. (2018). *Viaggio alle fonti dell'arte: il moderno e l'eterno Margherita Sarfatti 1919-1939*. Zel Edizioni.
- Barzaghi, I. (2006). Raffaello Giolli: dalla critica d'arte a Mauthausen. *Storia in Lombardia*, 2(XXVI), 23–62.
- Brenni, L. (1926, September). Tessuti di tela stampati in Italia. *Seterie d'Italia*, 11–16.
- Bossaglia, R. (1979). Rosa Giolli Menni (disegni per stoffe). *Quaderni di Architettura e Design*, 3.
- Buffoni, D. (1923, July). Stoffe, *Lidel*, 7(V), 40–47.
- Calanca, D. (2002). *Storia sociale della moda*. Bruno Mondadori.
- De Liguoro, L. (1920, August). La donna nelle nuove opere di rivendicazione nazionale. *Lidel*, 8(II), 15–16.
- De Liguoro, L. (1926, September). Le nostre botteghe dell'arte tessile. *Seterie d'Italia*, 22.
- L.d.L. (De Liguoro, L.) (1926, December). L'arte di Rosa Giolli Menni. *Seterie d'Italia*, 24.
- Giusti, L. (2007). Giolli e Wildt: l'arte all'ordine del giorno. In D.A. Abadal & A. Montrasio (Eds.). *I marmi di Adolfo Wildt anima mundi* (pp. 48–55). [Exhibition catalogue]. Silvana Editoriale.
- Gnoli, S. (2017). *Eleganza Fascista. La moda dagli anni Venti alla fine della guerra*. Carocci Editore.
- Grandi, S. & Vaccari, A. (2004). *Vestire il Ventennio. Moda e cultura artistica in Italia tra le due guerre*. Bononia University Press.
- Guggiari, M. (2018, October). La nipote: «Chi era mio zio Luchino Visconti?», interview to Anna Gastel. *Corriere di Como*, 30.

- Hitchcock, M. & Nuryanti, W. (2000). *Building on Batik. The Globalization of a Craft Community*. Routledge.
- Mazzanti, A. (2015). Mondi lontani nelle arti italiane 1923-1930. In F. Irace, A. Mazzanti, A. Negri, C. Orsini & O. Selvafolta (Eds.). *Mondi a Milano. Culture ed Esposizioni 1874-1940* (pp. 157-171). [Exhibition catalogue]. Sole24Ore.
- M. C. (1920, January). Arte d'oriente e moda d'occidente (il Batik). *Lidel*, 1 (II), 32-33.
- Menni Giolli, R. (s.d.) [1972]. *Una donna fra due secoli (Nel mondo di Persefore)*. Unpublished autobiography Rosa Menni Giolli Archives. Fondazione Badaracco.
- Menni Giolli, R. (1924, January). Vetrine artistiche mode e eleganze. *La Settimana Ambrosiana*, 20.
- Menni Giolli, R. (n.d.) [1923]. *Le mie stoffe*. Edizione della Galleria Pesaro – Alfieri & Lacroix.
- Menni Giolli, R. (1961). Prefazione. In R. Giolli. *La disfatta dell'Ottocento*. Einaudi.
- Messina, R. (2013). Il fecondo 'Orientalismo? Dei Balletti russi di Djagilev. In L. Sestan & L. Tonini (Eds.). *Un impero verso Oriente. Tendenze orientali- ste e arte russa fra Otto e Novecento* (pp. 113-134). Il Torcoliere.
- Mingardo, M. & Caccia, P. (s.d.). *Rosa Menni*. Enciclopedia delle donne. <http://www.enciclopediadelledonne.it/biografie/rosa-giolli-menni/>.
- Mollino, C. (1947). *Architettura arte e tecnica*. Chiantore.
- Montecervino, A. (1920, June-July). Ricami orientali. *Lidel*, 7 (II), 68.
- Montedo Mapelli, A. (2006). *Tra Oriente e Occidente. Stampe italiane della prima metà del '900*. Artemide.
- Orsi Landini, R. (1991), L'artista e il sarto. I rapporti fra arte e moda nell'Italia degli Anni Venti. In K. Aschengreen Piacenti (Ed.). *Anni Venti. La nascita dell'abito moderno* (pp. 35-64). Centro Di.
- Pansera, A. (2006). Artigiane/artiste-designer "e" imprenditrici nel Novecento italiano. In M.A. Trasforini (Ed.). *Donne d'arte: storie e generazioni* (pp. 102-105). Meltemi Editore.

Papini, R. (1923). Le arti del filo e della stampa. In R. Papini (Ed.), *Le arti a Monza nel MCMXXIII* (pp. 110-124). Istituto Italiano d'Arti Grafiche.

Papini, R. (1930). *Le arti d'oggi: architettura e arti decorative in Europa*. Casa Editrice d'Arte Bestetti e Tumminelli, p. 22.

Programma di costituzione della Società Anonima «Le stoffe della rosa». (1925?). Arti Grafiche Rizzoli.

Ricci, E. (1925), *Ricami italiani antichi e moderni*. Le Monnier.

Ricci, S. (1991), La signorina moderna. Moda e emancipazione femminile negli Anni Venti. In K. Aschengreen Piacenti (Ed.). *Anni Venti. La nascita dell'abito moderno* (pp. 9-33). Centro Di.

Scuola del Batik. Metodo Kitab (1925, April 15). *Lidel*, 4(VII), 10.

Sorge, P. (2015). *D'Annunzio e la magia della moda*. Elliot.

Design and Science, from the Bauhaus to Neotropical Research at USP

The Trajectory of Marta Erps-Breuer

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Keywords

History of design, Gender Studies, Marta Erps-Breuer, Bauhaus, University of São Paulo.

Abstract

This article analyzes the trajectory of designer and scientist Marta Erps-Breuer (Frankfurt, Germany, 1902 - São Paulo, Brazil, 1977) from her training at the Bauhaus to the work she performed at the Department of Genetics and Evolutionary Biology at the University of São Paulo where she contributed to pioneering research from the 1930s to the 1970s. We have mapped three axes that lead us to understand her trajectory: the training and workspaces she occupied; the migration from Germany to Brazil; and the social relations she established. Gender studies, which permeate our theoretical and methodological approach, provided us with fundamental contributions in the search for available sources and in the interpretation of the materials found. From this perspective, we seek through Marta's journey to make explicit the challenges present in the documentation of women's work in the field of design.

1. Introduction

Through the journey of designer Marta Erps-Breuer's¹, we will begin to analyze the social place that women occupied at the Bauhaus, their professional opportunities and the spaces they circulated in. This inquiry will be extended to the work that she developed at the Department of Genetics and Evolutionary Biology at the USP (University of São Paulo (USP)) in Brazil where she worked as a laboratory technician and scientist for four decades. During this period, Marta participated in important research on genetics and published more than 20 articles in the field, which are still noteworthy today.

From the beginning of this investigation, gender studies have been necessary in order to trace the various paths in the documentation that reveal the trajectory of women in historical processes. Authors Joan Scott (1986), Michelle Perrot (1998) and Françoise Thébaud (2007) highlighted the power relations in the arranging of workspaces and in the professions configured as *for women* in a historiographical approach. In this way, they proved to be essential in problematizing the silences surrounding the contributions of women to the production of knowledge, as well as in considering gender as a category of historical analysis (Joan Scott, 1986, 2010). Through the life of Marta Erps-Breuer we will reflect on gender relations in workspaces in the design field from this theoretical and methodological perspective, and also on the hierarchies that configure the production, circulation and documentation of its artifacts.

1. In the documents we found in Germany, Marta's name is written in different ways. At the Bauhaus, some use her birth name, abbreviated to Martha Erps, and others use Martha Erps-Breuer after her marriage to Marcel Breuer. Alternatively, the letters she wrote in Brazil were signed using her name without the letter "h" (Marta Erps-Breuer). We chose to use this final version.

We also found that the research of Cheryl Buckley (1986), Beatriz Colomina (1998), Isabel Campi (2011), and Rozsika Parker and Griselda Pollock (2013) have been important to the preparation of this article. These works have been initiated with the invisibility of women and the gaps in the documentation of their work in thinking about how they contributed significantly to the history of design, architecture and art. The authors highlighted the importance of reflecting on creative and design activities in relation to the places, spaces and social contexts where artifacts are produced, in addition to exploring the ways of producing hierarchies in these fields. These studies led us to consider Marta Erps-Breuer's trajectory along three axes: first, the places she passed through and the artifacts she produced; second, her migration from Germany to Brazil; and, finally, the social relations she established. The articulation of these axes was fundamental for mapping the relevant archives² and for documenting the life and work of the designer.

We will start with the designer's association with the Bauhaus from 1921 to 1928³, during which the school moved from Weimar to Dessau. She trained as a regular student between 1922 and 1924. Her older brother, Ludwig Erps, had immigrated to Brazil and Marta began her association with that

2. To document the course of Marta Erps-Breuer's work, we consulted several collections from different institutions: the Berlin Bauhaus-Archiv, the Stiftung Bauhaus Dessau, the Walter Gropius Open Archive, the Marcel Breuer Digital Archive, SLUB Dresden and the Institute of Biosciences-USP.

3. Her time at the institution can be understood from several records: the first, from 1921, is an engraving of the designer's profile. Between 1922 and 1924, Marta was part of the group of regular Bauhaus students according to a document in the Walter Gropius Open Archive. From 1926 to 1928, she participated informally in the school according to photographic records and her own reports found in letters exchanged with colleagues Ise Gropius and Kurt Schmidt in this period.

country when she visited him in 1925. Shortly after returning to Europe, in 1926, she married architect and designer Marcel Breuer⁴, the recently installed master of the Bauhaus furniture workshop. In the part of the article covering this period, we seek to highlight opportunities for women to participate in the school, the relationships Marta developed with her colleagues, and the way she used the knowledge acquired there in her professional career.

In 1931, the designer returned to Brazil and decided to settle in São Paulo where she began her career as an illustrator of scientific works. Her artistic, technical and observational skills in microscopic analysis led to an invitation for her to join a team of researchers at the newly created USP. In 1935, she was hired as a laboratory technician in the Biology department.

At USP, Marta developed a pioneering role in the research of biology and genetics, and went on to publish a series of articles over her career of nearly forty years. Her work focused mainly on the study of two types of flies: *Drosophila* and *Rhynchosciara*. In addition to her scientific work, Marta also dedicated herself to the artistic work she had started at the Bauhaus. Even though she had settled in South America, she exchanged correspondence with her classmates and met with them on several occasions. We also took note of her effort to chronicle her professional trajectory in Brazil and to send her works to Germany at the end of the 1960s.

4. Marcel Breuer (1902-1981) was a student at the Bauhaus between the years 1920 and 1924. In 1925, he became a young master at the joinery workshop where he remained until 1928. For more on the path of the designer and architect at the Bauhaus, see: Droste (2019).

Through Marta Erps-Breuer's journey, we intend to reflect on challenges to the documentation of women's work in the design field. We also seek to contextualize aspects of the designer's career in order to recount her work in design as much as in science.

2. Methods: Marta Erps-Breuer's Trajectory as Traced through Interviews and Archives

This article is a preliminary part of an ongoing doctoral research study investigating the trajectory of women in modern Brazilian design, including Marta Erps-Breuer. This began with an interview conducted in early 2018 with Brazilian art researcher Ana Mae Barbosa. Soon after, we started researching at the Department of Genetics and Evolutionary Biology at USP. We interviewed three researchers, Carlos Ribeiro Vilela, João Stenghel Morgante and Nícia Wendel de Magalhães, who worked with Marta in the Biosciences Institute at the same institution.

We started archival research with the collection of the Institute of Biosciences-USP in Brazil, which has gathered documents, objects and images of the work done by Erps-Breuer's, who was both a designer and scientist. In addition, with the aim of documenting her career at the Bauhaus, we turned first to online archives with the Walter Gropius Open Archive and the Marcel Breuer Digital Archive, and later to the physical archives in Germany with the Berlin Bauhaus-Archiv, the Stiftung Bauhaus Dessau and The Saxon State and University Library of Dresden (SLUB) at the end of 2019.

In addition to photographs and images of the artworks produced by Marta during her time at the Bauhaus, we also analyzed a set of correspondences that the designer exchanged with

former colleagues at the school, including Ise Gropius and Kurt Schmidt. These letters were instrumental for us in tracing a network of relations maintained by Marta Erps-Breuer throughout her life and mainly in the late 1960s when she showed interest in sending her works to Germany for documentation.

3. From the Bauhaus to USP

3.1. Weimar Period (1921-1924)

Marta Erps-Breuer's path in Weimar followed that of many designers who attended the German school. Therefore, before we document her work from this period, it is important to contextualize the professional opportunities and the spaces that were open to women at the Bauhaus. The research of Magdalena Droste (2019)⁵ and Sigrid Weltge (1993) are fundamental to this understanding. In their work, they analyzed everything from barriers to entry – institutional impediments and places where women were more readily accepted – to how these aspects affected the production of artifacts and the hierarchies attributed to them.

According to Droste (2019, p. 84), the first speech given by director Walter Gropius to Bauhaus students was meant to guarantee “absolute equality of rights, but also absolute equality of obligations” for all students. Gropius mentioned that there would be “no special treatment for women, at work everyone is an artisan”. The Weimar Constitution of 1919 guaranteed unlimited freedom of education for women.

5. The first edition of the work “Bauhaus: 1919-1933” was in 1990. After that, the book had later publications and the most recent version was updated in 2019, which we used in this research.

However, due to the excessive number of women applicants to the school in 1920, Gropius suggested to the Master's Council that the selection process should be more rigorous, particularly in the case of future designers. At that time, the school already had a large number of women, which, to his way of thinking, could lower the institution's prestige. His advice was that, after the first year of basic studies, women should be sent to the weaving workshop.

In addition to textiles, ceramics and bookbinding were offered, but this last course was discontinued in 1922. In October of the following year, the school recommended that no women students should be admitted to the ceramics studio, but this would be revoked shortly afterwards due to the lack of staff and the eventual closing of the studio. Droste (2019, p. 87) summarizes the Bauhaus era in Weimar as a period that made it difficult for women to gain access. Even confronted with this scenario, it is important to point out that women designers participated, produced and distinguished themselves in several workshops at the school, as was the case of Marianne Brandt (1893-1983) in the metal workshop, Marguerite Friedlaender (1896-1985) in the ceramic workshop, and Alma Buscher (1899-1944) in the furniture workshop, as noted by the author.

The institutional decisions made in the early years of the school show that the revolutionary ideals of the Bauhaus were based on perceptions of the traditional society of the time, with its clear division between gender roles which defined different spaces and rights for women and men. The “absolute equality of rights”, supported by Gropius in the school's opening address, was not absolute for all, and had separate definitions of equality and rights for each gender.

For researchers Sandra Kemker, Ulrike Müller and Ingrid Radewaldt (2009), this was reflected in the fact that, over the years, the enrollment of women decreased dramatically. In 1919, there were 84 women students and 79 men, but in the last year (1932-1933), that number fell to 25 women and 90 men. In 1922, the year that Marta Erps-Breuer – then 20 years old – enrolled as a student at the Bauhaus, there were 52 women students and 95 men students.

Marta's trajectory at the school followed a common scenario for women there. In the first cycle, she attended the basic program; in the second, her studies were focused on workshops and materials, which in her case applied mainly to the weaving workshop. According to the 1922 Bauhaus program, this training consisted of a preliminary six-month form theory course (*Vorlehre*), and then a three-year training period in the workshops (*Werklehre*). This academic period included a course intended to deepen considerations of form, which was accompanied by color, composition and construction studies (Droste, 2019, p. 73).

As a student at the weaving workshop in 1923, Marta participated in the school's first exhibition with a rug composed of geometric elements. The production of textile objects at the Weimar school was marked by a strong relationship between utility and experimentation. During this period, the weaving studio was under the supervision of painter Georg Muche⁶. Items that integrated furniture were produced here, as well as

6. It is important to mention that the design of the experimental house 'Am Horn' is by Georg Muche, who also took over the direction and organization of the 1923 exhibition. Muche replaced Johannes Itten in 1921, who until then was the master of form in the weaving workshop. See more: Weltge (1993, p. 59).

carpets and murals for that year Bauhaus Exhibition and also for the experimental house 'Am Horn'. This was the case with Marta Erps-Breuer's work, which was exhibited with Marcel Breuer's furniture in the living room. At the time, Marcel was a student at the school and participated in the furniture workshop run by Walter Gropius. One of the objectives of the exhibition was to build a model house fully furnished with the school's designs in order to demonstrate the close collaboration between the workshops.

Regarding the carpet created by Marta (Fig. 1), researcher Sigrig Weltge (1993, p. 60) highlights the arrangement of geometric elements that unifies the other objects in the room and leads the viewer's gaze from one point in space to another. While Marcel Breuer's furniture looks heavy, unlike the examples he would develop later in the Dessau period, Marta's woolen textile piece already seemed to demonstrate a balance between form and space while also containing an asymmetrical character using squares, rectangles, and straight and crooked lines. In her later work (from 1924), Marta continued to explore the composition of geometric shapes. In this piece (Fig. 2), her concern with utility is more evident: it is designed to serve both as a blanket and as a piano cover, making use of lighter material in a mixture of wool and cotton. In this case, we can perceive the juxtaposition of the strata through the use of colors and textures. Researcher T'ai Smith (2014) cites this work by Marta as part of a transition period between Weimar and Dessau. For the author, the elaboration of Marta's work in large format and the use of materials such as cotton and wool are characteristic of the weaving practiced at the Weimar school.



Figure 1. In the foreground, a carpet by Marta Erps-Breuer at the Bauhaus Exhibition in Weimar in 1923. Source: Bauhaus-Archiv Berlin.

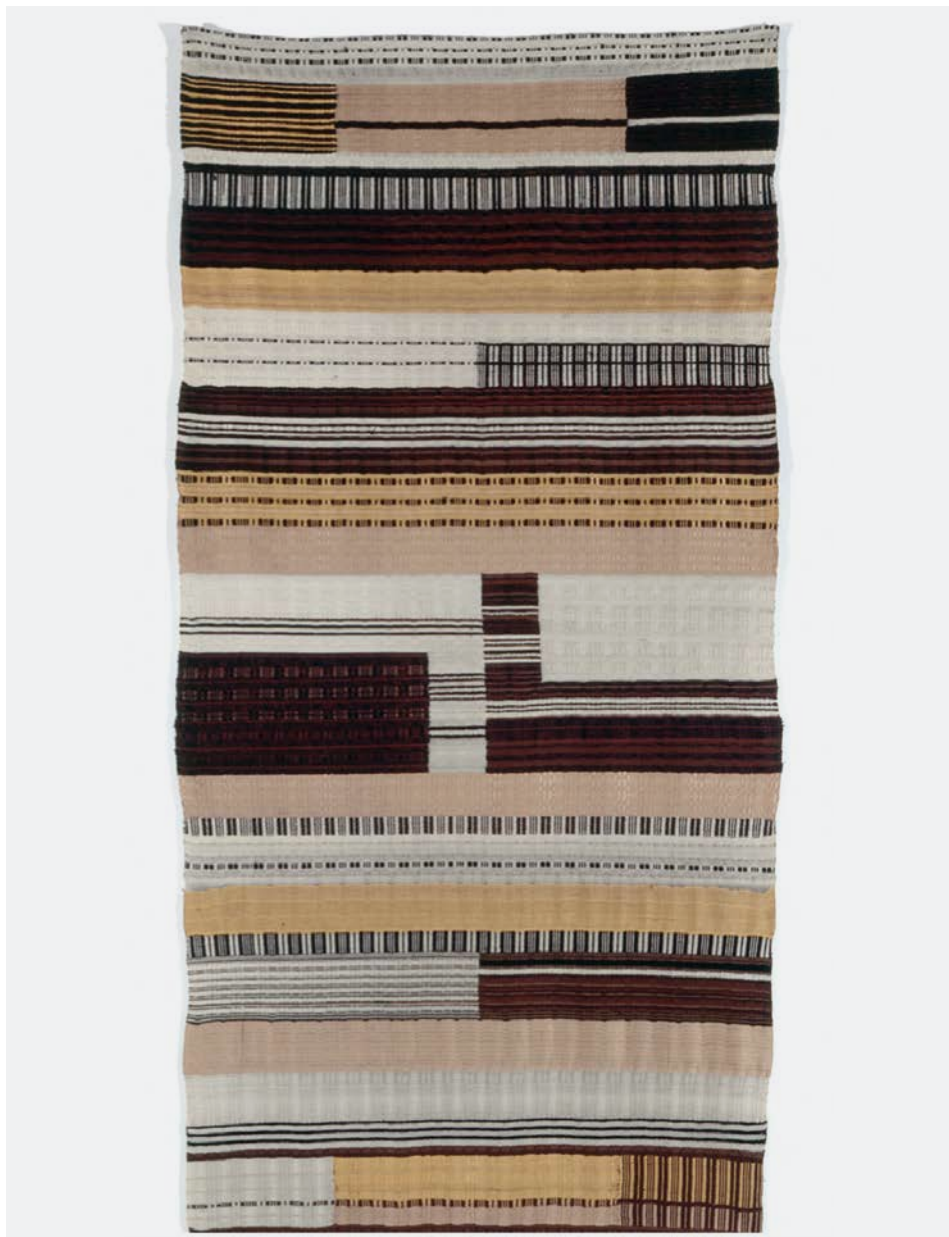


Figure 2. Work by Marta Erps-Breuer: blanket / wall hanging / piano cover (1924). Source: Bauhaus-Archiv Berlin.

However, the designer anticipated this experimentation using strata with these same materials, which would occur later at smaller scales and with other materials, such as with the addition of synthetic threads.

By this time she was already working under the supervision of Gunta Stölzl⁷ in Dessau. Upon coming into contact with the school's documented history and the connection of women with the weaving workshop, we can perceive a series of institutional impediments to women's access to training spaces. There is a path in the history of the Bauhaus that takes women to certain places and types of artifacts. What we find in the trajectories of many women students along with Marta is that, despite the restrictions and that women were directed to the weaving workshop, they in fact circulated more broadly, acquired additional skills and used these in their career paths.

Therefore, we realized that the course of our analysis would not lead us to understanding textiles as an essentially feminine territory, but instead to observing the ways it was used by women as a space for work and artistic experimentation. From this perspective, Marta's trajectory provides us with important elements that help us understand the possibilities for women's professional growth and activity in the design field.

7. Gunta Stölzl (1897-1983) was a student at the Bauhaus between the years 1919 and 1925. In Dessau, the designer took charge the weaving workshop as a young master of form in 1925. Despite the appointment, it was not until 1927 that the organization and content of the course came under her direction. Gunta Stölzl remained at the school until 1931, two years before it was closed. For more on her career at the Bauhaus, see: Droste (2019), Weltge (1993) and Smith (2014).

3.2. Dessau Period (1926-1928)

We did not find any records of Marta's schoolwork during the Dessau period, though we believe she had informally attended various workshops. This hypothesis comes from the statements⁸ of professors Carlos Vilela and João Morgante, members of the Department of Genetics and Evolutionary Biology-USP. Both reported that the studies the designer developed at this institution were interspersed with drawings, photography, collages, wood figures and ceramics, which were probably the result of her exercises at the German school. It is possible that Marta had participated in workshops outside of her weaving curriculum starting with her time at Weimar where the ceramics program had been discontinued before the school's move to Dessau.

In the collection of the department where Marta worked at USP, we consulted several of her study notebooks with drawings and a series of photographs, which she used to systematize and document her research in the field of biological sciences. In addition, Marta also developed models in wood and ceramics of the insects that she analyzed. Observing the technical skills demonstrated by these studies conducted in Brazil, it is possible to find practical knowledge that could have derived from her multidisciplinary training during her years of association with the Bauhaus from 1921 to 1928.

8. These statements were obtained in interviews at the Department of Genetics and Evolutionary Biology-USP, conducted between March and June 2019.



Figure 3. Selection of works by Marta Erps-Breuer accomplished at USP. Source: Archives of the Department of Genetics and Evolutionary Biology (USP).

In relation to the above works⁹ (Fig. 3), we saw the possibility that Marta had participated in two Dessau Bauhaus workshops: typography, under the direction of Herbert Bayer¹⁰, and sculpture studio, under the direction of Joost Schmidt¹¹.

9. Image 1 (top left): photograph “Water bug with eggs”, 1940; image 2 (top right): notebook with drawings made from enlarged photographs (1930s); image 3 (bottom left): 1930s study notebook, with drawings of cells and biological tissues, entitled “Marta Breuer Technical Notebook”; image 4 (bottom right): wooden sculpture of the species *Drosophila melanogaster* (1959).

10. Herbert Bayer (1900-1985) was a student at the Bauhaus from 1921 to 1925. In 1925, he became a young master responsible for the typography and advertising workshop where remained until 1928.

11. Joost Schmidt (1893-1948) was a student at the Bauhaus from 1919 to 1925. At the Dessau Bauhaus, Schmidt became a young master responsible for the sculpture workshop (1928-1930), in addition to the advertising, typography and printing workshop (1928-1932) from which the school's photography department emerged.

In both workshops, photography was used as a support for exercises. In sculpture, Schmidt used it as a way of exploring three-dimensional objects and their distortion, rotation and reflection. In typography, Bayer worked with Moholy-Nagy¹² using photography for the elaboration of typographic compositions (Droste, 2019).

Walter Gropius's resignation from the school board in 1928 was accompanied by the departure of three masters from Dessau's workshops: Herbert Bayer, László Moholy-Nagy and Marcel Breuer. When he left the institution, Marcel and Marta moved to Berlin where he opened an architecture office and worked on interior and furniture design. Regarding Marta's professional life in Berlin, we found no record. In the early 1930s, Marta decided to travel again to Brazil and settled in the city of São Paulo where she began to work in 1932 as a science illustrator. With her choice to emigrate permanently, she separated from Marcel Breuer and formalized the arrangement in 1936¹³.

3.3. University of São Paulo, Brazil

In São Paulo in 1935, Marta Erps-Breuer was hired by the recently founded University of São Paulo to participate in pioneering research in the biological sciences as a laboratory technician. In a period when the Department of General Biology was located at the USP School of Medicine, she initially

12. László Moholy-Nagy (1895-1946) worked at the Bauhaus from 1923 to 1928 as a master of form. As head of the metal workshop, he promoted modern lighting design and prototype development and, therefore, the transition from handicrafts to industrial technologies.

13. This information is mentioned by Marta Erps-Breuer in correspondence exchanged with Kurt Schmidt. The letter was written in São Paulo in August 1967.



Figure 4. Marta Erps-Breuer, in the center with a dark jersey, with colleagues from USP. Source: Archives of the Department of Genetics and Evolutionary Biology (USP).

focused on the study and preparation of biological tissues alongside André Dreyfus¹⁴. During this period, Marta took part in numerous expeditions on the coast of São Paulo for scientific observation and insect collecting which contributed to the research conducted at the university. After the death of André Dreyfus in 1952, she started to work with Crodowaldo Pavan¹⁵. Excursions with the group of fellow lab researchers became frequent and were mainly for the collection of *drosophilae*.

14. André Dreyfus (1897-1952) was a Brazilian doctor and biologist. Dreyfus helped establish of the University of São Paulo (USP) when he was invited to direct the Department of General Biology in the Faculty of Philosophy, Sciences and Letters. He is regarded as a founder of genetic studies in Brazil.

15. Crodowaldo Pavan (1919-2009) was a student of natural history at the USP Faculty of Philosophy, Sciences and Letters where he worked under the guidance of André Dreyfus. In 1942, he assumed the position of assistant professor there. After Dreyfus's death, Pavan took over as professor at the institution, where he remained until 1978.



Figure 5. Marta collecting samples during a research trip to the coast of São Paulo. Source: Archives of the Department of Genetics and Evolutionary Biology (USP).

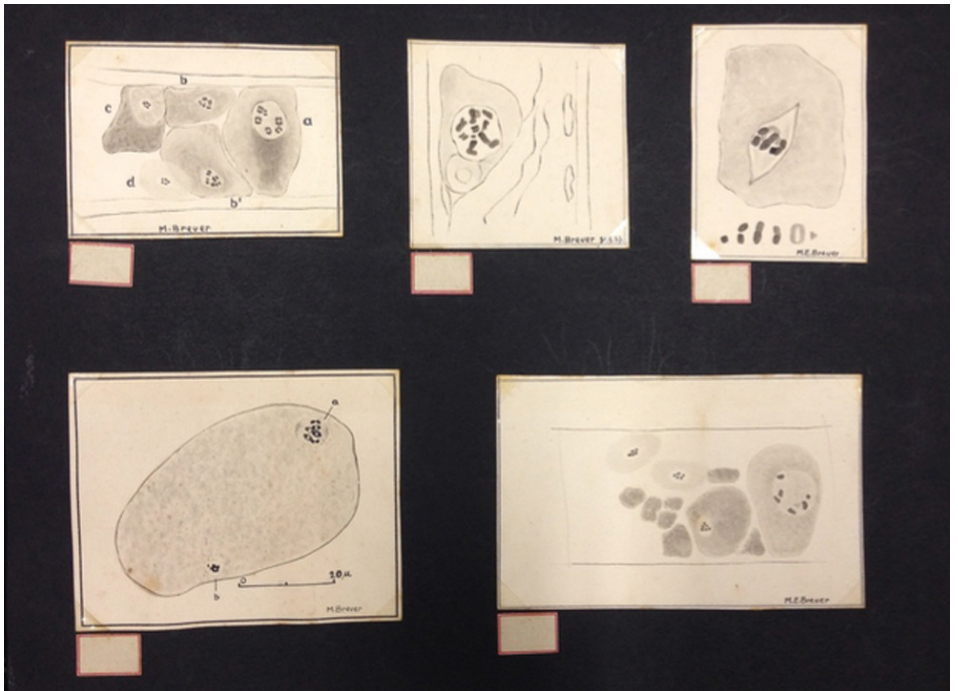


Figure 6. Notebooks by Marta Erps-Breuer for research developed at USP in the 1930s. Source: Archives of the Department of Genetics and Evolutionary Biology (USP).



Figure 7. Wood carving of the species *Drosophila melanogaster* (1959). Source: Archives of the Department of Genetics and Evolutionary Biology (USP).

During her time at the department of Genetics and Evolutionary Biology, Marta was the author and co-author of numerous scientific articles that were responsible for Brazil's prominence in genetic research. In addition to research, she also worked on the documentation and detailing of studies with her drawings, diagrams, sculptures and photographs.

The designer's notebooks located in the department's collection are full of drawings, diagrams and notes. The photographs are organized according to field trips undertaken mainly during the 1940s and 1950s. The first studies in which Marta participated were published in the 1940s on the species *Telenomus fariai* (wasp) together with the institute's director at that time, André Dreyfus. In the decade that followed, Marta dedicated herself to the study of two flies: *Drosophila* and *Rhynchosciara*.

One of the projects that marked the designer's trajectory was research into the species *Drosophila melanogaster*, which con-

tributed to significant advances in genetic studies in the country and was part of the main branches of research undertaken by the department at that time. To view the insect in more detail, Marta created a wooden sculpture that reproduced the species at an enlarged scale.

Between 1967 and 1971, Marta published four articles alone (Polythene chromosomes of the salivary glands of *Rhynchosciara angelae* (1967a); *Rhynchosciara baschanti*, a new Brazilian species (1967b); Revision of the genus *Rhynchosciara Rübbsaamen* in the Neotropical region (1969); and *Rhynchosciara papaveroi*: a new Brazilian species (1971).

In research developed by Marta in 1967, she paid tribute to Rudolf Baschant by naming one of her discoveries after him (*Rhynchosciara baschanti*). His work is intertwined with Marta's and they were very close friends at school. In 1921, Baschant produced an engraving entitled 'Marta with flowers' (Fig. 8). One can see a similarity of interests in the career paths and the activities of Marta and Rudolf. Before attending the Bauhaus, Marta had contact with insect and plant studies, and these would go on to have an impact on her work in the 1930s and 1940s when she worked as a science illustrator. Rudolf Baschant worked from 1934 to 1949 at the Institute of Botany at the universities of Halle, Germany, and in Innsbruck, Austria. He also participated in botanical expedition studies in Europe, Africa and Latin America. In the 1950s, Baschant worked in the botanical garden in Linz, Austria¹⁶.

16. Information on Rudolf Baschant's career path (1897-1955) was found on the websites Kauperts straßenführer Berlin and Nordico Stadtmuseum Linz.



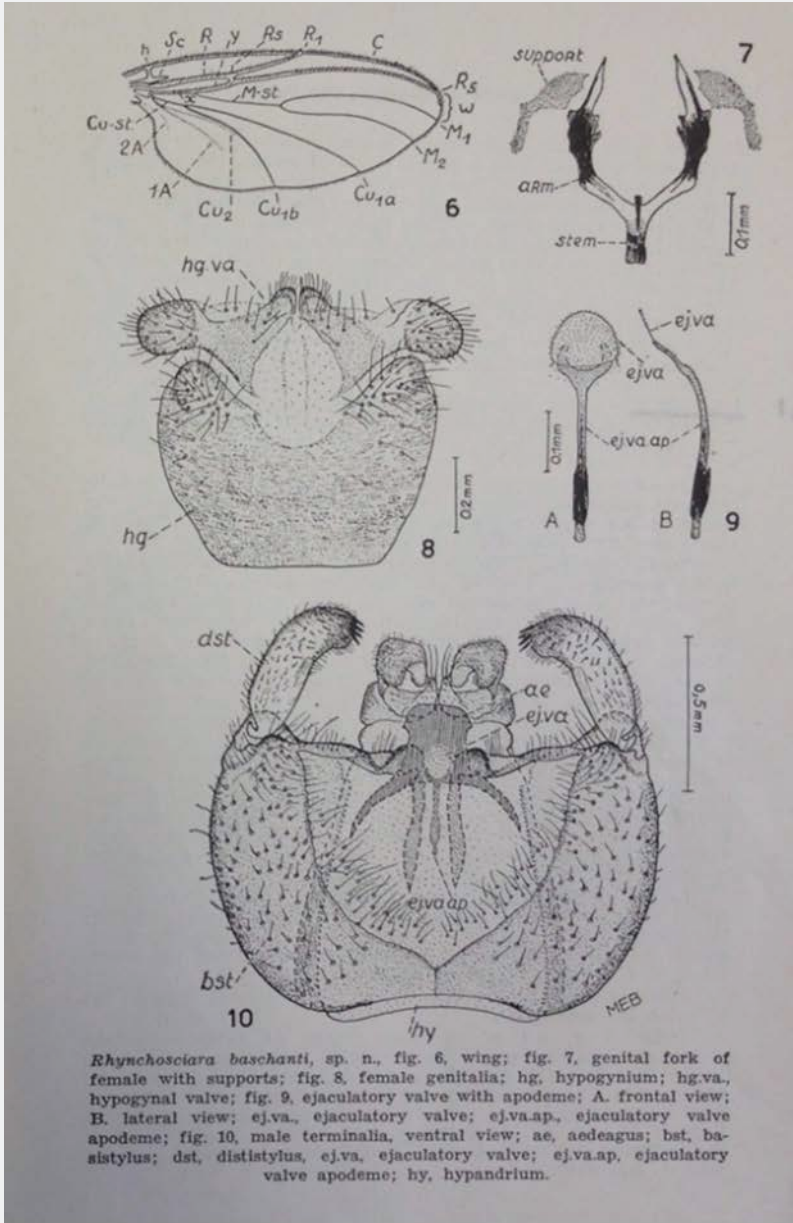
Figure 8. Engraving 'Marta with Flowers' by Rudolf Baschant, 1921. Source: Droste (2019, p. 86).

His death in 1955 came as a blow to Marta. In one of her letters to Kurt Schmidt¹⁷, Marta writes of her last meeting with Baschant:

I saw Rudi [Rudolf Baschant] in 1955 for the last time three days before his death. He was very ill, he was almost in agony. When his lips expressed a faint smile, I realized that he had recognized me. We were unable to exchange a single word. He had asked so much for a visit from me and I rushed there as quickly as I could, even so, I almost arrived too late. I had selected some plants that he had asked for, but he was unable to show any further interest. The older and more alone we become, the more we lack our good old comrades (...) By the way, Rudi was here once. He was a passionate botanist and had a huge collection. He didn't want to see anything but nature. (Erps-Breuer, 1967c, p. 1)

The 1955 trip on which Marta met Rudolf Baschant was part of a grant that she had received that year to travel through Europe, the United States, Cuba, Peru, Bolivia, Chile and Argentina. Marta corresponded with Kurt Schmidt between 1967 and 1970, and in their letters they express concern with sending their work to Germany as a way of documenting it.

17. Kurt Schmidt (1901-1991) was a student at the Bauhaus from 1920 to 1924. At the Weimar Bauhaus, Kurt acted alongside Georg Teeltscher and FW Bogler on the design of The Mechanical Ballet. This work was projected onto a curtain wall at the school's first exhibition in 1923. The following year, the piece was shown at the Berlin Philharmonic. In addition, he designed and choreographed the dance game "The Man at the Switchboard", held on the fifth anniversary of the Weimar Bauhaus in 1924.



Rhynchosciara baschanti, sp. n., fig. 6, wing; fig. 7, genital fork of female with supports; fig. 8, female genitalia; hg, hypopygium; hg.va., hypogynal valve; fig. 9, ejaculatory valve with apodeme; A, frontal view; B, lateral view; ej.va., ejaculatory valve; ej.va.ap., ejaculatory valve apodeme; fig. 10, male terminalia, ventral view; ae, aedeagus; bst, basistylus; dst, dististylus, ej.va., ejaculatory valve; ej.va.ap., ejaculatory valve apodeme; hy, hypandrium.

This concern is also present in the correspondence that Marta exchanged with Ise Gropius¹⁸ throughout the 1960s. Marta described her research to both of them and forwarded copies of published articles, in particular, the one related to the new species *Rhynchosciara baschanti*. (Fig.9)

This species is connected to a line of research that Marta developed at USP beginning in 1950. In 1967, she published two articles: a review on the species *Rhynchosciara angelae*, discovered by Nonato and Pavan (1951), and another on *Rhynchosciara baschanti*. The first species was the starting point for the study in which she elaborated, together with Pavan, the analysis of the polythene chromosomes present in the genetic material of these flies.

According to biologist Carlos Ribeiro Vilela¹⁹, who worked alongside Marta for several years, technical detailing was one of her hallmarks among the department staff. He told us about her significance to the research developed at USP thanks to the systematization and scientific rigor of her documentation materials.

4. Final Discussions: Challenges to Documenting the Trajectory of Women in the Design Field

Throughout this study, one of the main challenges was gathering materials spread throughout various archives and connecting two different moments in the work of Marta Erps-Breuer.

18. Ise Gropius (1897-1983) worked professionally as a writer and editor. At the Bauhaus, she was central to the documentation and dissemination of the school's works and ideals. After immigrating to the United States with Walter Gropius in 1937 when he became Chair of the Department of Architecture at Harvard University, she continued to write about the German institution. In 1938, she helped create the catalog for the exhibition *Bauhaus 1919-1928* at the Museum of Modern Art (MoMA), which was published in partnership with Walter Gropius and Herbert Bayer. See: Rössler, 2019.

19. From an interview conducted in March 2019.

However, when exploring her career as a biologist at USP, we found parallels between the work developed there and the skills she learned at the Bauhaus, such as illustration, photography, collage and sculpture, even though it was thought that the designer had interrupted her artistic work and even severed contact with members of the German school. The letters in these archives led us to discover a constant dialogue between the works carried out at the two institutions, the Bauhaus and USP. Through the exchange of correspondence in the period Marta lived in Brazil, we found reports of meetings with colleagues from the German school in São Paulo, and also of the trips she made through the United States and Europe at different times in her life. Additionally, in the writings of her final decade there is a more explicit concern in sending her Brazilian scientific and artistic works to Germany so that they could be documented and included in the history of the Bauhaus that was being recounted. This article is a preliminary part of a broader research, which investigates the trajectory of women in modern Brazilian design and includes Marta Erps-Breuer.

Thinking about the constitution of memories and reflecting on the participation of women in historical and social processes, as highlighted by researcher Françoise Thébaud (2011, p. 62), allowed us to consider a future in which, “the voices of the past find an echo in contemporary concerns”. Our intention, when conducting a documentation search into the work of women, is to expand the narratives that permeate the history of design, and also to explore the challenges that are part of this elaboration.

References

- Barbosa, A. M. & Facca, C. A. (2019). A Bauhaus e John Dewey: questão de gênero e o legado de Marta Erps-Breuer. In V. Amaral & A.M. Barbosa (Eds.). *As mulheres não devem ficar em silêncio: arte, design e educação*. Editora Cortez.
- Buckley, C. (1986). Made in Patriarchy: Toward a Feminist Analysis of Women and Design. *Design Issues*, 3(2), 3-14.
- Campi, I. (2011). *Reflexions sobre la història i les teories historiogràfiques del disseny* [Discurs d'ingrés de l'acadèmica à la Reial Acadèmia Catalana de Belles Arts de Sant Jordi]. https://www.academia.edu/29811397/Reflexions_sobre_la_hist%C3%B2ria_i_les_teories_historiogr%C3%A0fiques_del_disseny.
- Colomina, B. (1998). *La publicité du privé: de Loos à le Corbusier*. Éditions HYX.
- Droste, M. (2019). *Bauhaus: 1919-1933*. Taschen.
- Dreyfus, A. & Erps-Breuer, M. (1943) Unicidade ou dualidade dos machos de Telenomus fariar? *Revista Brasileira de Biologia*, 3, 431-441.
- Erps-Breuer, M. (1967a). Cromossomos politênicos das glândulas salivares de *Rhynchosciara angelae* Nonato & Pavan, 1951 (Diptera, Sciaridae). *Revista Brasileira de Biologia*, 27, 105-108.
- Erps-Breuer, M. (1967b). *Rhynchosciara baschanti* (Diptera, Nematocera, Sciaridae), a new Brazilian species. *Papéis Avulsos de Zoologia*, 20, 259-263.
- Erps-Breuer, M. (1967c). Letter to Kurt Schmidt, August 19th, 1967. Archive Kurt Schmidt. The Saxon State and University Library of Dresden.
- Erps-Breuer, M. (1969). Revision of the genus *Rhynchosciara* Rübsaamen (Diptera, Sciaridae) in the Neotropical region. *Arq Zool*, 17, 167-198.
- Erps-Breuer, M. (1971) *Rhynchosciara papaveroi*, a new Brazilian species (Diptera, Sciaridae). *Papéis Avulsos de Zoologia*, 25, 35-40.
- Kemker, S., Müller, U. & Radewaldt, I. (2009). *Bauhaus women: art, handi-craft and design*. Flammarion.
- Parker, R., & Pollock, G. (2013). *Old Mistresses: women, art, ideology*. I.B. Tauris & Co.
- Perrot, M. (1998). *Les femmes ou les silences de l'histoire*. Flammarion.

- Rössler, P. (2019). *Bauhaus mädels: a tribute to pioneering women artists*. Taschen.
- Scott, J. (1986). Gender: A Useful Category of Historical Analysis. *The American Historical Review*, 91, 1053-1075.
- Scott, J. (2010). Gender: Still a useful category of analysis? *Diogenes*, 57(1), 7-14.
- Vilela, C. R. & Cunha, A. B. (2006). On Marta Breuer and some of her unpublished drawings of *Drosophila* spp. Male terminalia (Diptera, Drosophilidae). *Genetics and Molecular Biology*, 29(3), 580-587.
- Thébaud, F. (2007). *Écrire l'histoire des femmes et du genre*. ENS Éditions.
- Thébaud, F. (2011). Écrire l'histoire des femmes et du genre: Comparaisons et connexions européennes. In A. Bellavitis & N. Edelman (Eds.), *Genre, femmes, histoire en Europe* (pp. 11-33). Presses Universitaires de Paris Nanterre.
- Smith, T. (2014). *Bauhaus weaving theory: from feminine craft to mode of design*. University of Minnesota Press.
- Weltge, S. (1993). *Women's work: textile art from the Bauhaus*. Thames and Hudson.

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Gertrud Goldschmidt and Ruth Vollmer

Mathematical Experimentations and the Legacy of Bauhaus Trained Women

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Keywords

Women Design, Bauhaus Legacy, Post-War Art, Tactility, Mathematical Art.

Abstract

Gertrud Goldschmidt (commonly known as Gego) and Ruth Vollmer (née Landschoff) were two Jewish women artists that migrated from Germany to America, due to the advent of Nazism. To contribute to their critical reconfiguration, this article explores their important role as women and refugee artists in representing the bridge between modernism and postmodernism in the context of sculpture and decorative arts. Indeed, combining craftsmanship and a fascination with mathematical theories revealed through the drawing's complexity, the shape's definition and the value of material, they reinvented the artistic tradition within design approaches. Incorporating aspects of kinetic art, Gego made three-dimensional constructions with which she attempted to challenge the conventions associated with static artworks. Vollmer experimented with wire, steel, and copper mesh to create figural forms that derive from complex constructions of mathematical theories. Even though Gego and Vollmer had no direct impact on one another, they did share the vital New York and they were both influenced by a European avant-garde heritage of Bauhaus and Russian Constructivism.

This article seeks to give a new voice to these pioneering women's artistic discourses, that were extremely inventive in the creation of an experimental design minimalism and a mathematical formalism.

1. Historical Context

In the historical context of post-war America new visual languages attempted to respond to the crisis that has developed in contemporary art. Thus, the temporal and spatial experience of post-minimalism critically began to emphasize the physical process of the artistic ideation and try to invest the sculptural medium with expressive qualities.

The sixties were, in fact, the paradigm of postmodern era, in which the intensity of the creative gesture played a fundamental role in the increasingly experimental practices.

While Europe began the process of dealing with immeasurable trauma of war, exile and relocation, America emerged as the center of artistic creativity.

This was the moment of a crisis, of time, representation, mediums and objects. In 1959, Ferreira Gullar essay *Teoria do não-objeto*

posited the nonobject as the inevitable culmination of the move away from realistic representation in modern painting, while it radically broke with the prevailing emphasis in concrete art on a modernist pictorial ontology that concerned the organization of a painting's constituent elements. (Amor, 2016, p. 3)

In the same years, artists developed a kind of anxiety related to time due to the historical unknowing produced by the very fast pervasiveness of the information age. In particular, chronophobia is described as “an experience of unease and anxiety about time, a feeling that events are moving too fast and are thus hard to make sense of” (Lee, 2006).

One of the most influential contribution in a time of world-wide anxiety is the enduring legacy of German modernism. For instance, the echoes of the Bauhaus design were aesthetically present in the pedagogic methods used by female artists in post-war America such as Gertrud Goldschmidt and Ruth Vollmer. The School of Design in Dessau, famous for its multi-disciplinary approach to art and design education, was founded on the equal words of Walter Gropius, who proclaimed in his 1919 *Manifesto* that admission to the school was open to “any person of good repute, without regard to age or sex”. Nevertheless, this gender equality remained theoretical. Anja Bauhmhoff stresses these contradictions in *The Gendered World of the Bauhaus*:

In fact, the democratic tradition which is associated today with the Bauhaus was undermined by an ambiguous conception of craftsmanship and by a conception of art based on notions of male genius, which differentiated between three categories of art: fine art (*Kunst*), such as painting and sculpture; arts-and-crafts (*Kunstgewerbe*), like pottery and weaving; and handicraft or craftsmanship (*Handwerk*), such as carpentry. Moreover, these categories were themselves gendered: high art and handicraft were male domains, but arts-and-crafts was a female occupation, with comparatively low status. While the first Bauhaus statutes, such as its admission policies, explicitly prohibited sexual discrimination against women, the *de facto* Bauhaus policy did just that. (Baumhoff, 2001, p. 19)

Once immersed in Bauhaus theory, women artists and designers connected a new material revolution with a progressist visual expression. Their artistic stories have been denied and

negated hitherto by the old criticism, but in recent years more attention has been dedicated to the historically feminine menaced subjectivity.

2. Post-War Women Artists Battled in the Fields of Making Space

In the anxious post-war time, female artists were trying to build a new feminine history. In order to define a specific artistic creation and a psychological space, they interpreted their existential despair as an empowered form of matrixial resistance. In an intersection between art and history, women artists explored gender dynamics through new material processes that let their shaped objects' investigation find a new spatial and temporal meaning.

To contribute to acknowledge the underrepresented women's voices and challenges, the important exhibition *Making Space: Women Artists and Post-war Abstraction* held at the Museum of Modern Art in New York in 2017 featured nearly one hundred paintings, sculptures, photographs, drawings, prints, textiles, and ceramic by more than fifty women artists that found their own best achievements between the end of World War II and the start of the Feminist movement. As the title *Making space* suggests, this exhibition pivoted around the artworks of many women who were working during post-war time and dealing with abstraction as a way of making space within an artworld that was and still is male dominated. The gestural abstraction, usually associated with men artists and based on the rawness and immediacy of their marks, was used by Lee Krasner (American, 1908-1984), Helen Frankenthaler (American, 1928-2011), who invented the soak-stain technique, and

Joan Mitchell (American, 1925-1992). The reductive abstraction in which powerful structure is a matter of reaffirming a new artistic essence has largely to do with the fiber weavings of Magdalena Abakanowicz (Polish, born 1930), Sheila Hicks (American, born 1934), and Lenore Tawney (American, 1907-2007). Furthermore, the space in between painting and sculpture was explored by Lee Bontecou (American, born 1931), Louise Bourgeois (American, born France, 1911-2010) and Eva Hesse (American, born Germany, 1936-1970). The exhibition also featured many little-known treasures such as collages by Anne Ryan (American, 1889-1954), photographs by Gertrudes Altschul (Brazilian, born Germany, 1904-1962), and recent acquisitions on view for the first time at MoMA by Ruth Asawa (American, 1926-2013), Carol Rama (Italian, 1918-2015), and Alma Woodsey Thomas (American, 1891-1978).

Therefore, this group of extraordinary women artists played a very important key role in reinterpreting the constructivist trends of the post-war period through a complex use of mathematics and visual symbols. Specifically, they went back to existing artistic elements from twenties and thirties and in the new cultural and anxious context of the seventies they created their own visual syntax which had been assimilated to American sculpture and feminism with their memories and meanings. The idea of making art changed and turned into an intimate and revolutionary communication of bodily sensuality and feminist subjectivity. A perfect example of this aesthetic change is Alina Szapocznikow, a Polish artist utterly unknown until few years ago. One of her works that can be considered as an object design is her functional and experimental *Lampe-Bouche* (Fig. 1). This work configures itself as a revelation

into the disappeared modernisms of post-war Eastern Europe. Szapocznikow had many artistic relations to little known Czech sculptors such as Eva Kmentová (1928-80) and Vera Janousková (1922-2010) who need to be reconsidered within the contemporary representations of femininity.



Figure 1. Alina Szapocznikow, *Lampe-Bouche*, 1966, Coloured polyester resin, light bulb, electrical wiring and metal. Photo by Per Anders Ohlsson, Bonnier Gallery, Stockholm, 2013.

How many other women have been hidden behind the Iron Curtain that severed East from West in European modernism for forty years? (Pollock, 2013, p. 184)

3. Gertrud Goldschmidt and Ruth Vollmer: Definition of a New Mathematical Experimentation

These artistic legacies need to be erased from the historical record and restored to hegemonic cultural memory.

So to begin. Gertrud Goldschmidt (Gego) and Ruth Vollmer were two Jewish women sculptors and designers that migrated from Germany to America have rarely been mentioned by art historians. They have received little attention in the context of art historical scholarship until two significant books *Ruth Vollmer 1961-1978* (Rottner & Weibel, 2006a) and *Gego 1957-1988* (Rottner & Weibel, 2006b) were published in 2006 in conjunction with their German retrospective at the ZKM in Karlsruhe in 2006. The impact of exile and expatriation had implications on their historical underrepresentation.

Indeed, their project research was profoundly affected by trauma and traces of memory related to the phenomena of dislocation. The experience of enforced migration they lived has been articulated through an innovative constructivist tradition which reflects upon the new artistic media used in the sixties and the challenging role of women artists in the art world and in the socio-political environment.

They both were influenced by a European avant-garde heritage of Bauhaus and Russian Constructivism and reinvented an “organic constructivism” (Traba, 1977).

Although there is no evidence, besides a small paper with Gego’s address found in the Ruth Vollmer’s papers part of the

Archives of American Art, that they two were close friends, or that they had any direct artistic impact on one another, Vollmer and Gego did share the vital New York. Furthermore, in the Vollmer's collection at MoMA there is a lithograph by the painter and graphic designer Gerd Leufert, who was Gego's partner from 1952 onwards. Accordingly, this can be considered as a proof of their mutual knowledge.

Ruth Vollmer had to flee her native Germany and finally arrived in New York in 1935 with her husband, Hermann Vollmer, a pediatrician. She began to design three-dimensional modernist window displays for Tiffany, Bonwitt Teller, Lord and Taylor and other prominent New York businesses. Inheriting the traditions of Bauhaus, Vollmer brought the idiom of advanced modern art to the streets of New York City.

Thus, she joined the American Abstract Artists group in 1963 at the invitation of Leo Rabkin, who was its president at that time. She brought other younger artists into the group as exhibitors including Sol LeWitt, Mel Bochner, Richard Tuttle. In fact, she was a cherished friend to both Dorothea and Leo Rabkin. Theirs, as Susan Larsen, executive director of the Dorothea and Leo Rabkin Foundation, remembers, was an artistic as well as a social bond of friendship.

Vollmer's sculptural works from the 1960s and 1970s combine exacting craftsmanship and a fascination with mathematical models, such as Plato's philosophy of mathematics and Bernhard Riemann's non-Euclidean notion of space.

She was deeply interested in in the natural sciences and in their application to the arts. According to her formative efforts, the legendary New York gallerist Betty Parsons wrote

about Ruth Vollmer “the geometry of space, in an immortal pace, like the power in a flower” (Parsons, 1983, p. 20). She exhibited frequently at the Betty Parsons Gallery, New York, and influenced younger American artists such as Eva Hesse, Donald Judd, and Sol LeWitt.

How can all of this – a lifetime – be squeezed into works of art that are typically small-scale and unassertive? At first the inherited external disciplines were dominant: the constructions of Bach and the Bauhaus: the *Gemütlichkeit* of Euclid. However, nature kept intruding upon the neat world of geometry. (Friedman, 1965, p. 27)

Throughout the fifties, her work “emerged strata by strata as an archaeological excavation emerges” (Friedman, 1965, p. 28) and “took its place among the most compelling and uniquely satisfying works of the late 1960’s and early 1970’s” (Larsen, 1983, p. 9). In fact, she became a full-time artist late in life.

Unfortunately, contemporary critics at that time “seldom paid attention to her works, registering her individualism through the reductive lens of historical belatedness” (Rottner, 2006, p. 60). As Ann Reynolds points out, “Vollmer’s work had rarely been mentioned by art historians and curators even though she often appears in the archives and oral histories of others” (Reynolds, 2006, p. 49). The work she exhibited at Everson Museum of Art in 1974 “suggests that Vollmer is not primarily interested in a final finished product, which may be why they seem so incompletely considered” (Smith, 1974, p. 72).



Figure 2. Ruth Vollmer, *Steiner Surface*, 1970, Acrylic, collection Dorothea and Leo Rabkin. Photo by Karl Steel.



Figure 3. Ruth Vollmer, *Cosmic Fragments*, 1962, Bronze, Jack Tilton Gallery, New York. Photo by Virginia Marano, 2019.

The essence of her work lies deeply in her constructions and architectural objects. Based on mathematical models, Vollmer's *Steiner Surface* (Fig. 2) "dipped in its integument of translucent acrylic, which clings lightly and softly to the ribs of the form, it is just as delicately refined and as seemingly immaterial and object as the Gabo" (Vallye, 2006, p. 101).

She employed a geometrical vocabulary transferred into a cosmological realm. For instance, *Cosmic fragments* (Fig. 3), "the Ovaloids, *Walking ball* and *Obelisk* all reflect a modernist equation of art and subjectivity, the kind of surrealist engagement with psychic themes that preoccupied European artists" (Swenson, 2006, p. 96).

Looking more closely at Vollmer's sculptures and photographs, *Obelisk* appears "cartesian and surrealist, architectural and bodily, ancient and futuristic, a phallus punctured with holes, an unwieldy, uneasy object, which even the artist seems to have found difficult to place" (Lovatt, 2010, p. 156).

Vollmer's major shift to geometry did not occur until 1963, the same year Rabkin became president of the American Abstract Artists. He remembers:

I told her that she was far, far, far from being a surrealist, that her real angle should have been on geometric forms. And I had a big battle with her. I am very glad that I did. That's when I brought her the first piece of wax (Swenson, 2006, p. 96).

Vollmer made a grapefruit-size spheroid out of wax on this occasion, using strips of the material to build up a rounded shape instead of simply forming a ball. Probably this sculpture can be traced in one of these two photographs found in Vollmer's archives. She threw this first attempt in the trash can, but Rabkin and his wife, Dorothea, salvaged its cast in bronze. In Swenson's words:

Even after turning to the fine-art medium of bronze around 1960, she conceived her viewers as participants, dissolving boundaries between subject and object through staged physical encounters—objects were activated when touched and held, rotated, arranged, and, in the case of *Musical Forest* (Fig. 4), 1961, even played as an instrument. A slippery dual identity characterises her objects from the fifties and sixties: Forms are erotic and abstract, derived from geometry but alluding to the body.



Figure 4. Ruth Vollmer, *Musical Forest*, 1961, Bronze, Dorothea and Leo Rabkin Foundation, Portland (Maine). Photo by Virginia Marano, 2019.

Paradoxically, as Vollmer's sculpture grew more abstract, themes of eroticism and play grew more central.

With her embrace of geometry as a formal vocabulary in the early sixties, the sphere could support multiple readings-while remaining just a sphere (Swenson, 2006, p. 88).

Gego was born in Hamburg in 1912 and raised in a liberal Jewish family of bankers. She studied architecture and engineering at the Technical University of Stuttgart and graduated in 1938. She was influenced by the innovations of the Bauhaus, a creative laboratory of design that operated for over two decades in pre-Hitler Germany. But, in 1939 she had to leave Germany.

She moved to Caracas the following year but turned to the full-time practice of art only in the mid-1950s. Incorporating aspects of kinetic art and op art, she made three-dimensional constructions suggesting familiarity with the work of such Venezuelans as Carlos Cruz-Diez and Jesús Rafael Soto, who at that time were living in Paris (Morgan, 2016, p. 146). In 1987, on the initiative from the City of Hamburg, Professor Fritjof Trapp sent to Gego a questionnaire regarding her life in Caracas. This project was entitled *Exile and Emigration of Jews from Hamburg*. Gego completed this questionnaire several times, but never sent it back to Hamburg. The filled-in questionnaires were found in her estate after she died in 1994. They were headed “Reflections on my origins and encounters in life”. Gego used to call *bicho* her constructions which invade the space as thinking objects. It “signifies in Spanish animal or bug. In Venezuela, *bicho* is also a colloquial interjection of rejection, and a derived word such as *bichero*, is used to refer to groupings of different animals or heterogeneous objects” (Amor, 2005, p. 117). Her objects strongly become perceiving elements of a bigger assemblage. The expansion of any cell is infinite and the experience that resonate is a visual wonderment. She used to describe her geometric sculptures made in sixties and seventies as drawings without paper. Gego’s interdisciplinary work deconstructs the confinements of space and overcomes the division between the imaginary and the rational. She developed a distinctive style, combining geometric abstraction with her architectural and engineering education, and used three-dimensional lines that appeared to be in motion in the space as a translation of a projective experience.

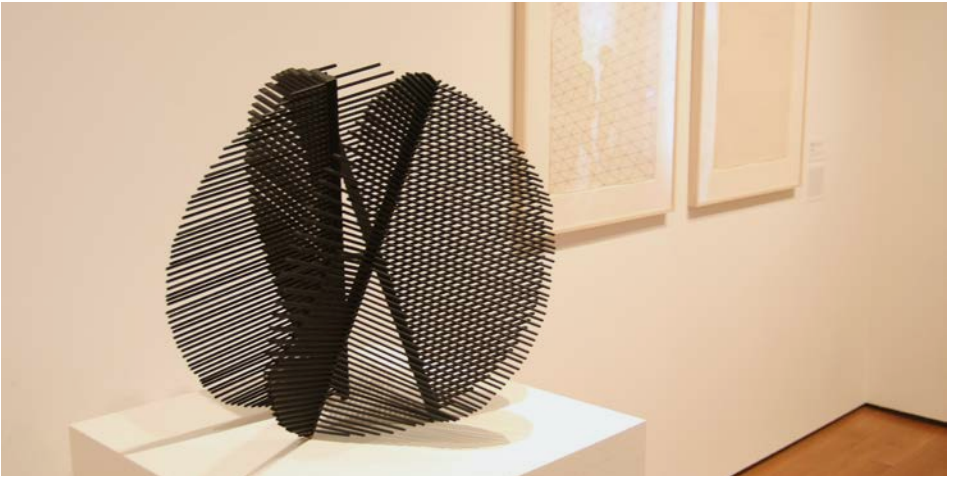


Figure 5. Gertrud Goldschmidt (Gego), *Sphere*, 1959, Welded brass and steel, Museum of Modern Art, New York. Photo by Richard Burghause, 2010.



Figure 6. Gertrud Goldschmidt (Gego), *Reticulárea*, 1969, Aluminum and stainless steel wire, Museo de Bellas Artes, Caracas. Photo by Luis Ricardo Castro, 2008.

She “expanded the line into planes, volumes and expansive nets to engage with the problems of form and space, using light, shadow, scale and gravity in a constant process of discovery” (Le Feuvre, 2017, p. 161). Her work appeared to be in motion, but it is only an illusion created by the movement of the viewer. This effect is especially evident in the *Sphere* (Fig. 5) and developed itself in the complex and intertwined structure called *Reticulárea* (Fig. 6).

It was created at the Museo de Bellas Artes in Caracas in 1969 and consists of an expansive, modular wire grid that transcends time and traverses the space. It enables the visitors to immerse themselves in its vanishing structure that seems to be infinite. This work, made by Gego at the age of fifty-seven, is one of her most radical installations in its “improper use of geometry, its attack on gestalt and organic integrity, its deployment of a deformative matrix and dismissal of proportions, symmetry, and delineation” (Amor, 2005, p. 118).

It transcends the apparent exactness of geometry and introduce the *situatedness* as a category. The fragile here seems to be combined with the permanent, and the transparency with the weight. In dialogue with this installation, Gego realized a small series of *Square Reticulares*.

Among them, there is *Reticularia Cuadrada horizontal 71/10* (Fig. 7), in which she stresses the geometry and mathematical discipline. According to Rina Carvajal, Gego privileges “freedom of experimentation” over aesthetics.

The rigorous technical and scientific precision Gego acquired in her early training as an architect and engineer and the skilled

craftsmanship she developed over the course of her career allowed her to explore deeply the possibilities for structural systems and materials, spatial anti modular organization, and the processes of manual labor. She managed to create innovative systems for manipulating aluminum, iron, and stainless steel which allowed her to work independently of welders. (Carvajal, 1999, p. 120)

4. The Legacy of Bauhaus

Gego and Vollmer proposed an alternative and symbolic spatial experience that presuppose a kinesthetic empathy.

They were able to reinvent and affirm their own practice in a predominantly male-dominated context. Their work was based on the structural translations of corporeal line, space and volume. Vollmer's mathematical forms and Gego's geometric abstract intricate metal weaving patterns build a visual vibration that explore different optic effects and many levels of perceptual experiences.

The Bauhaus's legacy in both artists formation interact with their compositional creativity. The materiality is crossed by a beautiful distortion that makes these objects and installations divinely repetitive and unique. The repetition is intertwined with the tactility category that denudes the fragility of the work itself. Yet, a tactile bodiliness in their sculptural and residual objects is invoked at the same time that the forms they prefer are intricate and complex.

Vollmer, hence, "designed and made playthings – *tactile sculptures* such as crocodile of corrugated metal and, later, a huge horsehair caterpillar – for the annual Children's Carnivals at the Museum of Modern Art" (Friedman, 1965, p. 28).

Gego's familiarity with Bauhaus took shape when she taught at the Architecture school of the Universidad Central in Caracas. Therefore, she contributed to the development of a Basics Design course modelled on Johannes Itten's Bauhaus *Vorkurs*, which has been "transmitted to Gego as verbal knowledge almost certainly by Gerd Leufert, who had been trained as a designer in Germany" (Kyburz, 2014, p. 67). It "applied a neo-liberal pedagogy which was inspired, among others, by the writings of the Swiss pedagogue Heinrich Pestalozzi (1746-1827), the German philosopher and founder of Anthroposophy, Rudolf Steiner (1961-1925) and the Italian pedagogue Maria Montessori (1870-1952)" (Kyburz, 2014, p. 73).

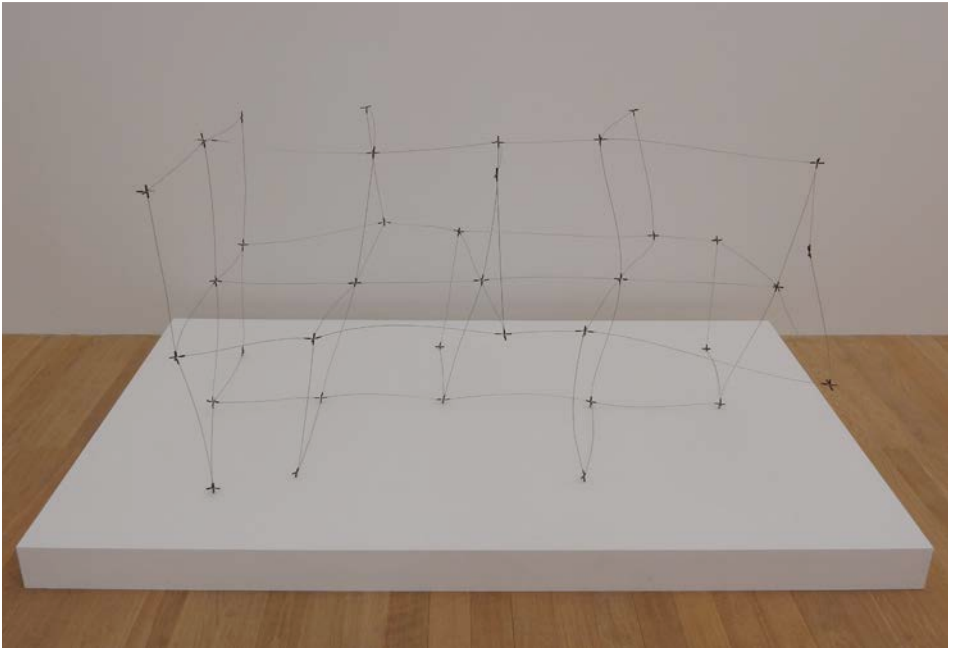


Figure 7. Gertrud Goldschmidt (Gego), *Reticularia Cuadrada horizontal 71/10*, 1971, Steel rods and metal joints, Tate Modern, London. Photo by Helen Sanders, 2016.

Henceforth, Gego introduced concepts such as line, space, volume, form, structure and the basics of spatial representation. There are many pictures from her students that show the Bauhaus-inspired interest in modularity and experiments in tensegrity (Amor, 2016). The University itself symbolizes the perfect integration of the arts, architecture and urban design. It was designed by the Venezuelan architect Carlos Raúl Villanueva and it became one of the most successful architectural building in Latin America.

The covered plaza by Villanueva, the linked Aula Magna auditorium and the latter designed with Alexander Calder define a distinct modern aesthetic model that reminds of the post-war experiments. The influence of Bauhaus's methods "coincides with the inauguration of the *Facultad de Arquitectura's* new building in 1957, where professors and students alike revolved around the philosophy of the Composition Workshop" (Auerbach, 2003, p. 407).

In the same years, Gego made her geometric experiments concrete in *Reticulárea* and her work embodied spatial interconnections, celebrating the variations of nets and knots (Fig. 8). It evokes Alexander Calder's early wire sculptures as well as the Buckminster Fuller's constructive design for the geodesic dome. As Amor writes in her beautiful and deeply researched book *Theories of the Nonobject*,

Gego seems to have been attracted to the aesthetic possibilities of these Bauhaus related exercises and expansive, netlike morphologies of space frames during these years of intense teaching. And given the fact that neither her *Flechas* nor the *Reticulárea* were

meant to enclose or cover space as Fuller's geodesic domes did, it is tempting to see Gego's work as a morphological and structural riposte to the German architect Konrad Wachsmann's large metal space frames of the early 1950s. (Amor, 2016, p. 182)

Following the Bauhaus, Gego and Vollmer were draftswomen, artists and designers. They reinvented the materials and the structure into a mode of self-empowerment and in new theoretical categories that transcend the modernist trajectory. In fact, the 2019 that marked the 100th birthday of the Bauhaus encouraged to revise the strong gender bias at the base of the Bauhaus school and started to recognize many female members of the school.

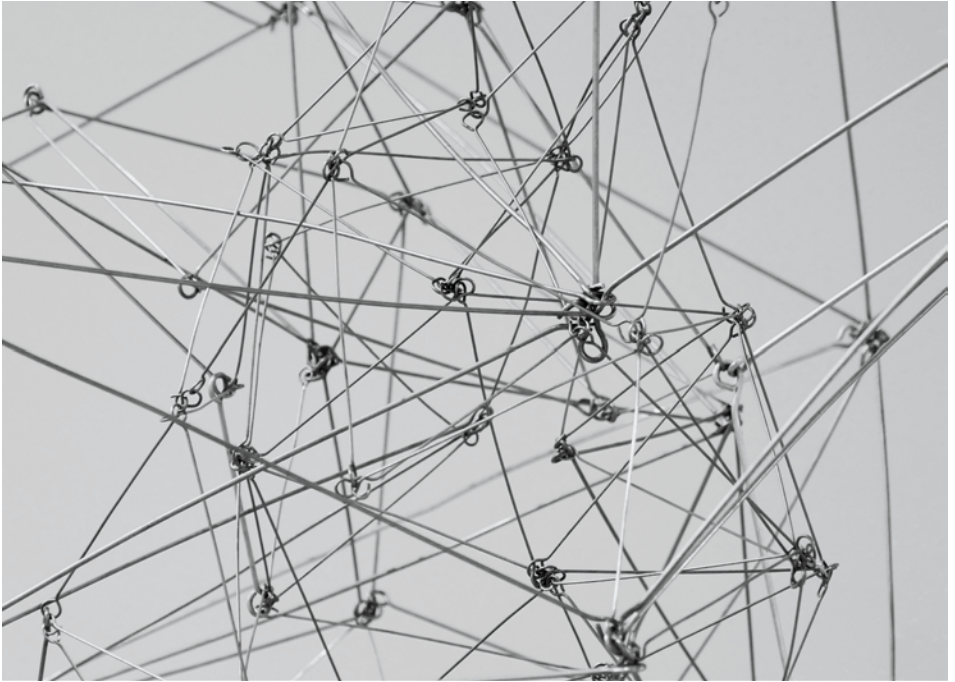


Figure 8. Gertrud Goldschmidt (Gego), *Esfera No. 2*, 1976, Wire and stainless steel, Fondation Cartier pour l'art contemporain, Paris. Photo by Barbara Smith, 2018.

Among them, Anni Albers, Marianne Brandt, Gertrud Arndt, Gunta Stölzl, Otti Berger, Ilse Fehling, Margarete Heymann, Ruth Vollmer, Gertrud Goldschmidt and many others.

5. Conclusion

This article tries to point out the importance of women designers and artists in the post-war time. Among them, Gego and Vollmer courageously defended their own artistic language and empowered new forms of female and Jewish identity. This contribution seeks to promote visibility of female protagonism in design with the intention of highlighting the feminine dimension of contemporary art production and the feminist vision involved.

Finally, this discussion wants to break with the hegemonic narrativity of an art world that continues to be dominated by a male gaze and contribute to an ongoing dialogue about women and design.

References

Amor, M. (2005). Another Geometry: Gego's Reticulárea, 1969-1982. *October*, 113, 101-125.

Amor, M. (2016). *Theories of the Nonobject. Argentina, Brazil, Venezuela, 1944-1969*. University of California Press.

Auerbach, R. (2003). Gego: Constructing a Didactics. In I. Peruga, J. Núñez, L. Pérez-Oramas, & R. Auerbach (Eds.), *Gego. Obra Completa 1955-1990* (pp. 407-12). Fundación Cisneros, Fundación Gego, Fundación Museo de Bellas Artes.

Baumhoff, A. (2001). *The Gendered World of the Bauhaus: The Politics of Power at the Weimar Republic's Premier Art Institute 1919-1931*. Peter Lang.

Carvajal, R. (1999). Gego Outside in, Inside out. In C. David & R. Carvajal (Eds.), *The Experimental Exercise of Freedom: Lygia Clark, Gego, Mathias Goeritz, Helio Oiticica, and Mira Schendel* (pp. 113-133) [Exhibition Catalogue]. Museum of Contemporary Art (MOCA).

Friedman, B. H. (1965, March). The Quiet World of Ruth Vollmer. *Art International*, 9(2), 26-28.

Kyburz, K. (2014). *The Right to Indifference: abstraction in the work of Gego (1912-1994) and Jesús Soto (1923-2005)*. Thesis for the Degree of a Doctor of Philosophy (PhD) 2008. Courtauld Institute of Art, University of London.

Larsen, S. (1983). A Reminiscence of Ruth Vollmer. In J. Dunbar, J. Tilton & R. Tuttle (Eds.), *Ruth Vollmer 1903-1982* (p. 9). Tilton Gallery.

Le Feuvre, L. (2017). The Event of Sculpture. In G. Reuter & U. Ströbele (Eds.), *Skulptur und Zeit im 20. und 21. Jahrhundert* (pp. 161-179). Böhlau Verlag.

Lee, P. M. (2006). *Chronophobia: On Time in the Art of the 1960s*. The MIT Press.

Lovatt, A. (2010, February). On Ruth Vollmer and Minimalism's Marginalia. *Art History*, 33(1), 151-69.

Morgan, A. L. (2016). *Historical Dictionary of Contemporary Art*. Rowman & Littlefield.

Parsons, B. (1983). Ruth Vollmer. In J. Dunbar, J. Tilton & R. Tuttle (Eds.), *Ruth Vollmer 1903-1982* (p. 20). Tilton Gallery.

Pollock, G. (2013). *After-affects | After-images: Trauma and aesthetic transformation in the virtual feminist museum*. Manchester University Press.

Reynolds, A. (2006), A Structure of Creativity. In N. Rottner & P. Weibel (Eds.), *Ruth Vollmer 1961-1978: Thinking the Line* (pp. 49-56). Hatje Cantz.

Rottner, N. & Weibel, P. (Eds.) (2006a). *Ruth Vollmer 1961-1978: Thinking the Line*. Ostfildern: Hatje Cantz.

Rottner, N. & Weibel, P. (Eds.). (2006b), *Gego 1957-1988: Thinking the Line*. Ostfildern: Hatje Cantz.

Rottner, N. (2006). Thinking the Line. In N. Rottner & P. Weibel (Eds.), *Ruth Vollmer 1961-1978: Thinking the Line* (pp. 59-70). Hatje Cantz.

Smith, R. (1974). Ruth Vollmer. Everson Museum of Art. *Artforum*, 13 (4), 71-72.

Swenson, K. (2006). Fragments Towards the Sphere: The Early Career(s) of Ruth Vollmer. In N. Rottner & P. Weibel (Eds.), *Ruth Vollmer 1961-1978: Thinking the Line* (pp. 87-98). Hatje Cantz.

Traba, M. (1977). *Gego*. Museo de Arte Contemporáneo de Caracas.

Vallye, A. (2006). The Reenchantment of the world: Ruth Vollmer's science. In N. Rottner & P. Weibel (Eds.), *Ruth Vollmer 1961-1978: Thinking the Line* (pp. 99-115). Hatje Cantz.

The Art of Daily Life Objects

Charlotte Perriand and Clara Porset

Dialogue with Tradition

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Keywords

Tradition, Renovation, Furniture Design, Art, Anonymous Object.

Abstract

The article wants to be a contribution to the understanding of the methodology for the renovation of anonymous popular object that in the middle of the second world war Charlotte Perriand carried out in Japan and Clara Porset undertook in Mexico. Porset, following her expulsion from the island of Cuba because of her radical political positions, moved to Mexico and pursued her interest in furniture design. In particular, she collaborated with Luis Barragan, designing several objects for his architectures. While, Charlotte Perriand, who collaborated with Le Corbusier, moved to Japan in 1940, when the Ministry of Industry invited her to define new guidelines for the Japanese industrial production. Both of them have undertaken in-depth studies on material and immaterial local culture, taking into account people's history and way of life, analyzing craft products, raw materials and local processing techniques. They were able to merge local crafts and culture with the architectural thought of the moment, showing that there is no break between true tradition and modernity. They believed that beauty is in the harmony of popular objects, which are closer to people needs.

1. One Foot into Tradition to Go in the Future

For many decades, the role women have played in design and architecture has not received the consideration it deserved. The creative contribution and the influence of women was only partially recognized: their presence was overshadowed by the prominent professionals with whom they collaborated and their contribution was often completely ignored. The society relegated female architects to a supporting position, even when they held the same role as the male partner, or marginalized in the field of interior design because it is considered frivolous and feminized, compared to architecture that was defined as male and therefore worthy of serious consideration (Vignelli, 2014). Even within the Bauhaus, the most progressive art and craft school in Twentieth Century, equality between men and women was never fully achieved. Although school enrolment was open to everybody, without any type of sexual discrimination,

Gropius's vision was, at heart, medieval, if apparently modern, and he was keen to keep women in their place – at looms, primarily, weaving modern fabrics for fashion houses and industrial production. He believed women thought in two dimensions, while men could grapple with three (Glancey, 2009).

In the early of 1940s, although in adverse social and cultural conditions, two women managed to stand out in the international panorama thanks to their research in the field of furniture design: they are Charlotte Perriand and Clara Porset, who respectively did an important job in Japan and Mexico. Japan had begun an imitation process with the West between

the late 1800s and early 1900s under the Meiji dynasty, with the aim of conquering the foreign market. “In the aftermath of the First World War to increase exports, tried to target and coordinate private initiatives in such a way as to quickly bridge the distance with the West”¹ (D’Amato, 2005, p.183). While in Mexico, the post-revolutionary reform of the 1920s-30s introduced the architecture of the Modern Movement within the country, that

had helped to remove the persistent influence of the Beaux-Arts and to emancipate the culture formed by deafening European models associated with foreign political control [and] was instead absorbed into the Mexican image as a vaguely universalizing force, significant [...] for the achievement of rapid technological progress (Curtis, 2006, p.493).

The transition to modern architecture in Mexico and the Westernization process in Japan had produced a contrast between deeply rooted local traditions and foreign models. Despite the different historical and geographic context in which they operated, Charlotte Perriand and Clara Porset shared a unity of purpose in carrying out their research, due to their similar cultural education in the Europe of the 1920s, namely: the democratization of good quality furniture for all social classes, the fusion between traditional culture and modern revolutionary thought, the skilful encounter between

1. «All’indomani del primo conflitto mondiale per incrementare le esportazioni ha cercato di indirizzare e coordinare le iniziative private in modo tale da colmare rapidamente le distanze con l’Occidente», D’Amato, G. (2005). *Storia del design*. Bruno Mondadori.

artisan and new industrial production techniques and, finally, the passion for anonymous objects of popular culture.

The work done by the two architects on the objects for daily life has allowed the values and meanings of the cultures and traditions of the past to continue to live over time and not to succumb to the Japanese and Mexican identities with the advance of modern transformations of the society, increasingly dominated by the economic dynamics of a globalized and unified market in its representations.

2. Japan Sensitivity meets Europe Lifestyle

Charlotte Perriand approached Eastern culture long before she landed on the coast of Japan. In 1934, when she was still working in Le Corbusier's studio, she met Junzo Sakakura. The two had made a strong friendship, together with Pierre Jeanneret and Josep Lluís Sert, and Sakakura gave to Perriand *The Book of Tea* written by Kakuzo Okakura (1906). The pages of this text, that she used several times during her oriental experience, allowed her to get to know the cult of tea, the theism, “a real adoration of beauty among the petty facts of everyday life” (Okakura, 2017, p.11). She also got to know the emptiness consistently present within Japanese culture.

On the threshold of the Forties of the Twentieth Century, Charlotte Perriand had the opportunity to deepen the knowledge of Japanese culture closely and directly. Advised by Junzo Sakakura, the Imperial Ministry of Commerce and Industry (MITI) invited Charlotte Perriand to spend a year in Japan as design consultant for the export and improving the quality of daily life objects that have to be sent in the West.

On the 12th June 1940, two days before Nazi Germany's invasion of Paris, Charlotte Perriand left France from the port of Marseille towards Kobe, where she arrives two months later.

Starting from 1868 Japan had started an industrialization process aimed at catching up with other political and economic world forces. In this perspective of expansion, Japan tried to develop artefacts to be exported. Nevertheless, the differences in culture and lifestyle didn't allow western citizens to understand those objects. Japan history and way of life were different from Western ones. At that time, there were no furnishings inside Japanese houses, their architecture was empty compared to Western ones. Over the years, the ministry had decided to encourage students to travel abroad to study new materials, new construction techniques and models of recent western furnishings. As a result, sterile copies of objects in style, hyper decorated, ugly and useless were produced, defined by foreign *japoneserie*.

Upon her arrival in Japan, Charlotte Perriand found a country where the design had multiple tensions: between vernacular and mass production; excellent craft techniques and new relationships with industry; tradition and innovation. In the first months of her stay in Japan, she toured the whole country, visiting important architectures and minor works, from the Imperial Palace to the Katsura Villa, from museums to factories, from shops to restaurants. Perriand studied people's life carefully, living with them to better understand the spirit and sensitivity of Eastern culture.

Perriand was particularly impressed by the *Mingei Kan* museum, abbreviation for *Minshuteki Kogei* that laterally means "folk art made by people for people".

The museum was founded in 1936 by Soestu Yanagi, father of Sori Yanagi, who assisted Charlotte during her entire experience in Japan. The museum collection included a series of anonymous everyday objects, produced by humble Japanese artisans and peasants. The beauty of these objects lays in their functionality, economy and honesty, their forms were a true expression of people's uses and needs. For Perriand, the anonymous object symbolizes the true art because, as she said, "is done with simple means and the extreme simplification is the highest level of art" (Barsac, 2015, p.34). Perriand shared the same ideas as the Mingei group, like the safeguard of local artisan production and the desire of introducing beauty into everyone's daily life.

Perriand realized that there were two necessary actions necessary to solve the paradox inherent into the export phenomenon which consisted of delivering everyday objects to the West without being familiar with their way of life. The first of these actions was making the Japanese understand the western lifestyle, uses and customs so different from the oriental ones. It was important not to copy the west. A long study of western culture, ways of living, eating, sleeping and carrying out the activities throughout the day had to be lead before the project. The aim of Perriand's research was to preserve craftsmanship using a production entirely based on local materials and techniques. This choice was due to the fact that the Second World War prevented the use of materials such as steel, used for war artefacts, but also considering that Japanese craftsmanship had a very important tradition and quality. We can say that Charlotte Perriand transformed the limits of the war into benefits for Japanese production.

By carrying out these operations, it was possible to make the transformations that were felt as necessary for the western ways of living, going “from tradition to the future in boldness” (Barsac, 2015, p.38) as well as maintaining the sensitivity of Japan without damaging it. In this way it was possible to carry on the tradition, enriching it with the memories of the past and the contingencies of the present.

The entire work done by Charlotte Perriand resulted in an exhibition in which all the objects necessary to furnish a hypothetical house were collected with particular attention on dining room, living room and bedroom. The exhibition *A Contribution to the Interior Furnishings of a House in the Year 2601. Selection, Tradition, Creation* opened in Tokyo on March 1941 and two month later was moved to Osaka. Perriand specified the chosen title at the entrance of the exhibition to make visitors understand the basis of her great work:

Selection, of good examples of everyday object taken from currently production and directly usable for European life.

Tradition, through photographic examples of the purest works from the past: everyday objects, architecture, showing that even if there is rupture in the contributions of modern era, there is also continuity. The spirit of truth that led to these works is an eternal spirit. All that really changes is lifestyle and technological expression, consistent with time.

Creation. True tradition does not mean copying, even faithfully, but creating in one’s own time subject to the same eternal laws. Creation is therefore part of tradition (Barsac, 2015, p.79).

Within the exhibition, there were two projects that specifically represented the synthesis of Perriand's work in Japan: a Bamboo bed and a Cantilever chair.

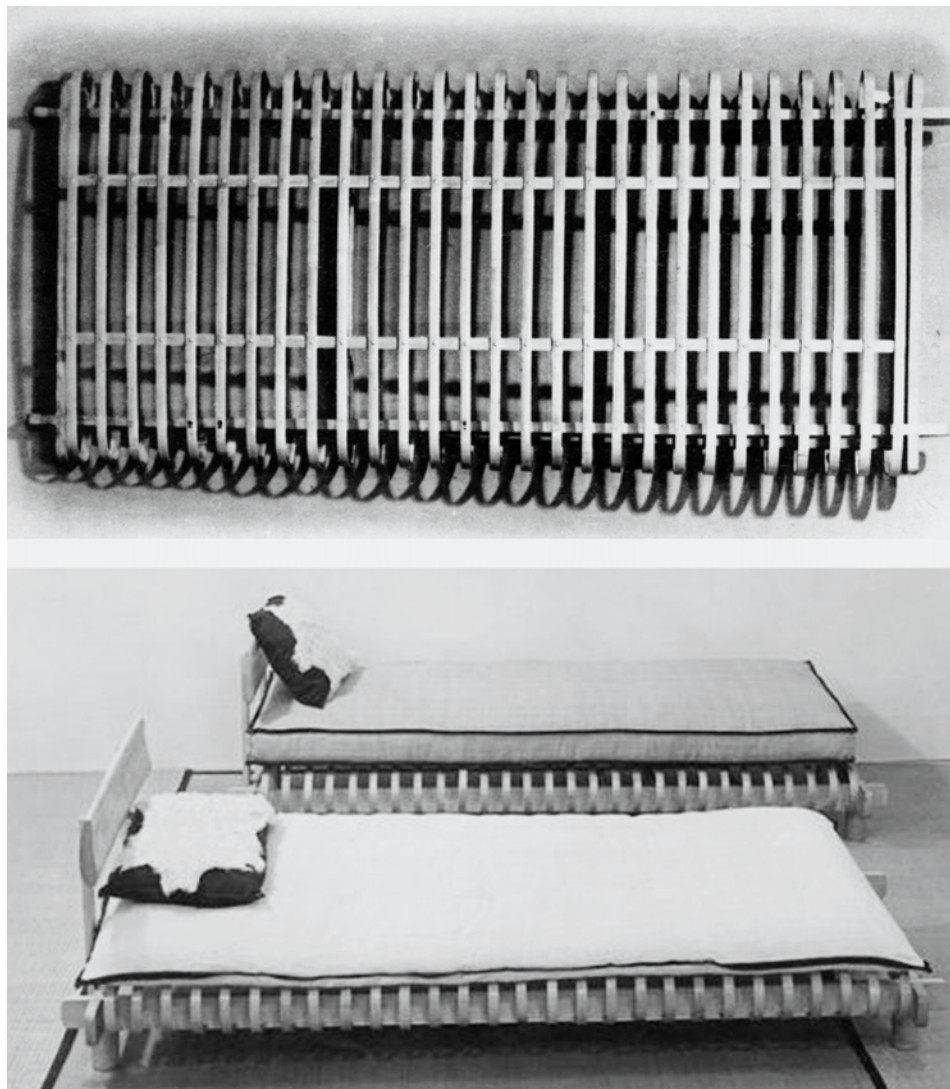


Figure 1. Charlotte Perriand, Bamboo bed, *Domus*, 219, May 1947, 56.

They were the true union of traditional craftsmanship, use of local materials and modern western lifestyle toward which the country was approaching.

The main theme was the Japanese gesture and philosophy of life. These two issues became the immaterial element that linked innovation and tradition.

The Bamboo bed (Fig. 1) was based on the same technique and aesthetic of Charlotte Perriand's Chaise longue bamboo (Fig. 2), redesigned, for the exhibition, with a Japanese essence and using natural materials. It was made of a bamboo frame that supported thin slats, parallel to the short side, on which the mattress – for westerners – or the futon – for Japanese people – rested. A structure that adheres perfectly to the human body and to its movements giving the impression of sleeping suspended. The material features were exploited at their maximum and its flexibility managed to give more comfort than the western nets.

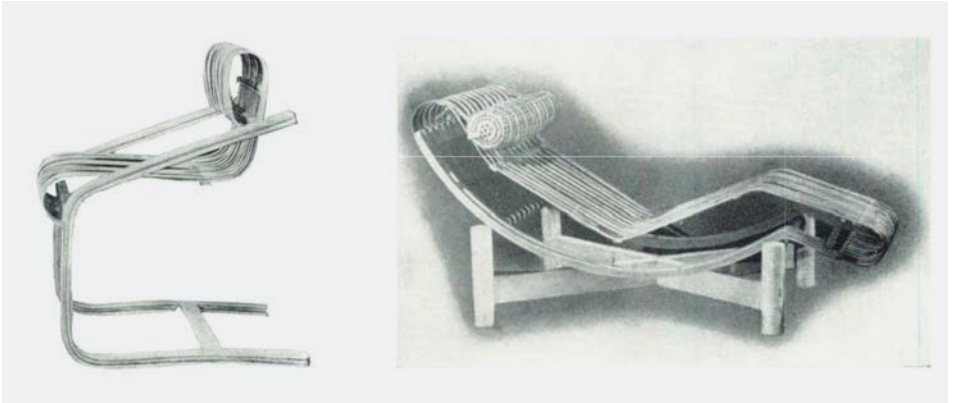


Figure 2. Charlotte Perriand, Cantilever chair (on the left) and Chaise longue bamboo (on the right), *Domus*, 219, May 1947, 55.

At that time beds did not exist in Japan yet. Therefore, Charlotte Perriand had to meet at the same time the needs of western people and the demand of local people who used to sleep on the floor, on a tatami mat in a multipurpose room. With this project, she managed to create an object that can be used in both cultures, without distorting the Japanese approach.

Indeed, the traditional Japanese house was made by a wooden frame with the floor placed at a higher level than the ground, tatami was placed on the wooden frame with people sleeping on the ground, suspended between earth and sky.

The same feeling was proposed in the Perriand's bamboo bed project as an intangible element of tradition that continues to persist over time.

The second example analyzed is the Cantilever chair (Fig. 2), clearly inspired to the Paimio chair (1931-32) designed by Alvar Aalto. The chair was designed by Kidokoro Umonji using curved plywood for the supporting structure and parallel bamboo slats for the seat. Charlotte was impressed by the object but she made some changes to make the most of the elasticity of bamboo. In this manner, the weight was evenly distributed over the whole chair while the latter, like the bed, could adapt itself to the human body movements, giving a new feeling of sitting. Bamboo changes shape according to people weight and not to their body, that allowed the object not to be blocked in a rigid form. It was an object born from the gesture and the study of oriental people body during their daily life. Indeed, the shape of the chair and its movement recalled the way of sitting on the knees of the Orientals (*seiza*), who swing with their bodies while carrying out activities on the *tatami*.

From this experience we can clearly understand the approach of Charlotte Perriand to the design, the philosophy she carried out throughout her whole life “[to] industrialize the impeccable and impersonal utilitarian forms, [to] lower costs and [to] leave to revived craftsmanship the task of humanizing by complements. To create furnishings as subtle, complex, and sensitive as the human body. That is our task” (Barsac 2015, p.11).

3. Mexican Popular Tradition joins Modern Thought

During the Second World War, there was another figure who worked hard to integrate the traditional culture with the modern sensibility: Clara Porset.

She was born in 1895 in Matanzas, Cuba, and thanks to her wealthy family, had the opportunity to travel all over the world, so after the graduation at Columbia University, went to Europe. In 1928 spent three years in Paris where she studied architecture and furniture design in the Henri Rapin’s atelier and attended the course of art at *École des Beaux Arts* and aesthetics at *Le Sorbonne*. Porset was interested in the theories and practices of the *Bauhaus* and had the opportunity to study furniture design at the Black Mountain College in North Carolina where she met Josef Albers, a former teacher at the school founded by Walter Gropius.

Exiled from Cuba in 1935, due to her opposition to Carlos Mendieta government, Porset decide to seek refuge in Mexico that was then living a period of economic, cultural and intellectual ferment inspired by Mexican Revolution. During this time, Porset managed to advance her architectural ideals with her political thinking, performing prominent roles within the *Liga de Escritores y Artistas Revolucionarios* (LEAR), a group

made up of socialist artists, writers, intellectuals and architects who believed in the social function of art as an active militant, with the aim of democratizing cultural production and with an anti-imperialist political perspective.

Within the LEAR she met her future husband, Xavier Guerrero, a founding member of the Mexican post-revolutionary Muralist Movement, who aimed at the re-foundation of the Mexican identity through the discovery and recovery of an authentic national culture rooted in indigenous and popular traditions. Thanks to Guerrero's knowledge of Mexican folk art, Clara Porset had the opportunity to deepen the Mexican popular culture and increase her skills on the country's traditional techniques and materials for the construction of furniture. For this reason, in 1940 Porset e Guerrero, together, took part in a competition called *Organic Design for Home Furnishing*, organized by the Museum Of Modern Art (MOMA) in New York. They obtained one of the four prizes thanks to a collection of what Porset herself called *Rural Furniture*. It was the first results of the research she carried on during her entire life in Mexico. Her inspiration came from the vernacular, combining industrial and handmade artefacts steeped in the craft tradition. She firmly believed that contemporary Mexican design should be rooted in the country's rich artisanal history. Porset's faith in both craft and industry along with her conviction that one could inspire the other, stemmed from her international education as well as her years of research into Mexico's folkloric heritage (García, 2014). She aimed at making the furnishings and the art of daily life objects accessible to everyone.

Clara Porset carried on her investigation even designing furniture for both Mexican manufacturers and modernist architects such as Max Cetto, Mario Pani and Enrique Yáñez. The best collaboration was with Luis Barragán: she designed various chairs for the residences he built such as *Casa Gálvez* (1955) or *Casa Estudio Barragán* (1948). The most noteworthy furniture was known as *Butaque*, that was used by Barragán in several houses projects, so frequently that for many years the authorship of the project was wrongly attributed to him instead of Clara Porset. This furniture is the symbol of the mission carried out in Mexico by Porset, aimed at erasing social and economic differences through good design and with elements accessible to everyone. The *Butaque* is an anonymous chair, found in the Mexican and Caribbean rural dwellings, which comes from Spain. It was absorbed and adapted to life in Mexico becoming an authentically Mexican popular and cultural expression. *Butaque* was a real *mestizo* piece of furniture, produced in every region of the country with small variations by each local craftsman and it was a low-slung chair, realized with wooden frames made by hand in tiny labs (Marín, 2019).

For many years, she strove to reinvent *butaques* (Fig. 3) studying different types to identify the sturdiest, most comfortable shapes, as well as forms of upholstery.

Some of her finest versions were designed for the *Mexico City Country Club* and the *Pierre Marqués Hotel* in Acapulco.

In this way, Clara Porset aimed to combine traditional Mexican construction techniques and materials with a functionalist emphasis on simplicity in the design and the use of industrial series production techniques.



Figure 3. Clara Porset, Butaque, traditional version (see first photo above left) and modern version of Porset, *Domus*, 281, April 1953, 50-51.

Moreover, she selected mainly rustic and natural materials for its furniture, associated with rural life in Mexico. She asserted that the use of materials such as “palm, tulle weaves, Mexican pine and red cedar wood provided a further psychological affinity between inhabitant and furnishings due to the regional Mexican character they have” (Sheppard, 2015). Porset hoped that the result of this combined effort would satisfy in a coherent object both the human need for function

and beauty, and, at the same time stripping away non-essential elements to embrace simplicity.

In the pages of important architecture and art magazines such as *Arquitectura México* and *Espacios*, she argued that the industrial development of design should be considered as an integral part of the larger project of the Mexican state. According to Porset, the acceleration of Mexico's economic development would lead to increase industrial productions rather than craftsmanship, compromising the cultural identity of the country.

Therefore, she invited state cultural organizations and private technical schools to manage this transition between craftsmanship and semi-industrial or industrial production, preserving the popular arts.

Porset argued that Mexico had to draw on its traditional plastic arts to give to Mexican industrial design its unique character. In 1952 she was invited to take part in the exhibition *El arte en la vida diaria* at the *Instituto Nacional de Bellas Artes* in Mexico City. Curating the exhibition was an irresistible opportunity to present a dynamic and inclusive vision of modern Mexican design that embraced both the industry and craftsmanship. At a time when many designers believed that craftsmanship could only be modernized by replacing hand-craftsmanship with mechanization, Porset valued both disciplines for their distinctive qualities and urged their practitioners to do the same. She commissioned a photographer to fill the building with giant photomontages of the evolution of Mexican crafts and industry to explain how and where the exhibits were made. In the exhibition, a selection of handcrafted objects such as furnishings, tissues and tools picked up by

Porset around Mexico was showed. At the same time, she promoted the good design for all people, selecting well-designed industrial daily furnishings and raising the standard of living. Through this event Clara Porset appealed to the Mexicans to accept the power of modern technology, adapting to the mass production the popular aesthetic sensitivities expressed by craft objects. Furthermore, the development of industrial-scale design would also have contributed to the formation of a unified and independent Mexico, both economically and culturally.

Within the exhibition catalogue, she expressed her doubts about the lack of support from Mexican industrialists, stating that they preferred to focus on foreign designs rather than original Mexicans ones.

The only real occasion to raise popular living standards was the ambitious residential building project *Centro Urbano Presidente Alemán* (CUPA) designed by Mario Pani in 1949 in Coyoacán, Mexico City. The residential complex included over a thousand apartments distributed over a group of six buildings. Clara Porset was commissioned for the design of low-cost furnishings, suitable for the interior spaces, to be offered for sale to new residents.

In Porset's thought such a project would have raised "general living standards, bringing efficiency and art into the daily circumstances of everyone" (Sheppard, 2015) thanks to the potential of industrial design. Her furnishings had the ability to aesthetically capture a symbolic reverence for the natives and combine it with the modernization process of the post-revolutionary Mexican state. Despite her good intentions, her furniture remained largely ignored and irrelevant to the daily life

of the new inhabitants, because the country's government and industrialists did not encourage it. Both did not really believe in the Cuban architect's project for social and cultural change.

Her innovations within tradition embody the very ideals of the Modern Movement and at the same time, she can be considered as one of the pioneers of Regionalism, taking into account not only the elements for the production of furniture but the complete scope of total interior design (Noelle, 2012, p.59).

Today, her approach would be considered timely and intelligent, but over sixty years ago, when the crafts were routinely derided in design circles as clumsy and archaic, it was dazzlingly visionary.

4. Conclusion

From the experience of Charlotte Perriand and Clara Porset it has been possible to deduce that a renewal of the traditional objects of everyday life is possible, but only if accompanied by a deep analysis of the place and the people.

In fact, before they could design, they investigated the history, culture, customs, and traditions of people, paying particular attention to the gesture and rituals of daily life, to natural and local materials. They deepened the techniques of the artisan tradition in order to merge them with the new industrial production that in those years was becoming increasingly dominant in the field of architecture. Therefore, it is clear that what is traditional is not immutable, but becomes a vehicle of principles and values even at the cost of adapting to the technologies and languages of the new times.

The very term of tradition derives from the Latin *traditio-onis* which means delivery, teaching, narration, but it also derives from *tradere* which indicates betrayal, therefore in its meaning of delivery, it implies the passage from one generation to another through a process of interpretation, conservation and, at the same time, innovation. Only by adjusting what one means with traditional, permanent values can persist over time.

The value of the mission carried out by Perriand and Porset is twofold: on the one hand, it is seen as knowledge and research useful for understanding the intrinsic values of the object, of the material and immaterial culture of a given country; on the other, it is a tool capable of re-proposing its use through a process of adaptation to the contingencies of modernity. With this operation, the two designers have pursued an important goal: to disseminate and understand the cultural values of man-made products over time, highlighting, as George Kubler says, “a design that was not visible to those who were part of it and that was unknown even to his contemporaries”² (Kubler, 2002, p.22).

2. «un disegno che non era visibile a coloro che ne furono parte e che era ignoto anche ai suoi contemporanei» Kubler, G. (2002). *La forma del tempo: la storia dell'arte e la storia delle cose*, Giulio Einaudi editore. (Originally published in 1972).

References

- Barsac, J. (2015). *Charlotte Perriand. Complete works. Volume 2: 1940-1955*. Scheidegger & Spiess.
- D'Amato, G. (2005). *Storia del design*. Bruno Mondadori.
- Glancey, J. (2009, November 7). Haus proud: The women of Bauhaus. *The Guardian*. Retrieved on <https://www.theguardian.com/artanddesign/2009/nov/07/the-women-of-bauhaus>.
- García, M.P. (2014, July 8). Cuba rediscovers Clara Porset. The Matanzas-born designer is introduced to a new generation. *Cuban Art News*. Retrieved on <https://cubanartnews.org/2014/07/08/cuba-rediscovers-clara-porset/>.
- Kubler, G. (2002). *La forma del tempo: la storia dell'arte e la storia delle cose*. Einaudi. (Original work published 1972).
- Curtis, W.J. (2006). *L'architettura moderna dal 1900*. Phaidon. (Original work published 1982).
- Marín, B. (2019, August 12). El legado de Clara Porset: la muerj que revolucionò México con una silla. *El País. Icon Design*. Retrieved on https://elpais.com/elpais/2019/08/05/icon_design/1565010329_239660.html.
- Noelle, L. (2012). Clara Porset. A modern designer for Mexico. *Do.co.mo.mo*, 46, 54-59.
- Okakura, K. (2017). *Lo zen e la cerimonia del tè*. Feltrinelli. (Original work published 1906).
- Sheppard, R. (2015, July 12-17). *Clara Porset and the Writing of a Political, Intellectual and Lived History of Interior Design in Post-Revolutionary Mexico* [Conference presentation]. 55° Congreso Internacional de Americanistas, San Salvador, El Salvador. Retrieved on https://www.academia.edu/18288204/Clara_Porset_and_the_Writing_of_a_Political_Intellectual_and_Lived_History_of_Interior_Design_in_Post-Revolutionary_Mexico.
- Vignelli, M. (2014). Lella Vignelli. *Domus*, 980, May, 34-36.

Clara Garesio, Ceramic Art and Design in the Neapolitan Context¹

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Keywords

Ceramic, Teachings, Artistic Expressiveness, Craftsmanship, Personal Path.

Abstract

The field of ceramic is always throbbing with experimentations of design planning, artistic expressions and handcrafts. Clara Garesio has been capable of expressing herself in all these variations as well as being active in the area of education throughout her career. Born in Turin in 1938, she studied at the “G. Ballardini” State School of Ceramic Art of Faenza, which was a cultural melting pot in the 50s and the 60s. She moved to Naples in 1962 and became part of a cycle of teachers in charge of initiating the G. Caselli State Vocational School for the industry and craftsmanship of ceramic, an institution that advocated the revival of traditional high-level craftsmanship. Naples offered her the opportunity to deal with the old tradition of porcelain crafts from Capodimonte, thus leading to creations that revived and innovated the traditional iconographic heritage. Her production ranged from artistically expressive objects, intended for architecture and public areas, whilst being also committed in designing tile modules, ornamental elements, and crockery shapes. A revisitation of the artist's life will enable us to contextualize her work in the Neapolitan setting and compare it with other design experiences intertwined with the fields of ceramic and craftsmanship.

1. Although this text is the result of a collaboration between the two authors, Alfonso Morone compiled paragraphs 2 and 4, whereas Susanna Parlato wrote paragraphs 1 and 3.

1. Education, the Influence of International Artistic Currents

A merely female interpretation of Clara Garesio would be rather abating. Her story is with no doubt that of a woman who worked in the field of ceramic art, a predominantly male domain at the time, yet she succeeded in making her mark. Extensively, having assembled various worlds such as that of education, production of handcrafts, artistic expressiveness, and design, through the experimentation of various materials and processes, Garesio deserves to be known for her uniqueness. The reason why her work has never achieved national recognition, despite the unquestionable value of her artistic career and personal background, was perhaps for her bashful personality, reluctant to public relations. It is thanks to her pupils and colleagues, who have had the chance to witness her educational and professional commitment, that the importance of her ceramic art activities has been acknowledged.

Two recent books about the artist, *Clara Garesio. Fuori dall'ombra* (2017) by Francesca Pirozzi and *Fiorire è il fine* (2016), edited by Franco Bertoni², shed a light on the main traits of her biography, by looking at the scenes and events that marked her long and hard-working life.

Born in Turin in 1938, she pursued her vocation at an early age and studied in her hometown at the Municipal School of Ceramic Art, before continuing such studies at the prestigious G. Ballardini State School of Ceramic Art in Faenza, where she was given the opportunity to study ceramics in depth

2. Clara Garesio's biography includes these recent essays as well as prior, but fundamental, papers: Alamaro, E. (2006), *Il ritorno di una desaparecida della ceramica italiana degli anni cinquanta: Clara Garesio*, «La Ceramica Moderna e Antica», 256, novembre, pages 8-9 Biffi Gentili, E. (2006), *Vietri: last but the best*, in *Le ceramiche di Clara Garesio*, Menabò, Salerno.

before graduating in 1957. In its heyday, the school of Faenza was an important centre for the entire country because of the many expressive and productive experiments (Della Piana, 2010). As Garesio herself stated, the teachers and pupils worked and experimented together in the school laboratories, therefore, research and teaching went hand in hand.

Gaetano Ballardini was an art historian and founder of both the *Premio Faenza* and of the ISA of Faenza. His activity turned the town into a thriving scene full of innovation. Not only did he strive to reconstruct the collections of the International Museum of Ceramics, which had been damaged during the war, he also ensured that museum hosted many exhibitions at the time. Amongst the exhibits were those of Picasso and Miró since the two Spaniards had recently begun to use ceramic as an expressive medium. As a result, the museum became a centre of cultural exchange for contemporary art expressions from all over the world (Pirozzi, 2016).

The school of Faenza applied an especially innovative method for the Italian scene, such method is rooted in the educational experience of one of the most important artistic schools of the 20th century. The Vchutemas experience in Russia is of particular interest for its advanced technical-artistic workshops, which was prior to Bahauhus, and was hence a forerunner of the artistic-industrial school model.

The ISA in Faenza on the other hand, was equally engaged in proving that the restricted idea of craftsmanship being a merely practical school was wrong, hence introducing the research of materials and processes, whose nature was undoubtedly more industrial due to the two fields of study implemented: art and technology (Bojani, 1995).



Figure 1. Clara Garesio; Study drawings; Variations on decorative theme of fish, extract from a table original size 70 x 100cm; Personal archive of the artist.

The manager during Garesio's years of attendance was the physicist Migliani, who was eager to explore new vitreous enamel with his pupils in the several workshops.

Angelo Biancini was another guide to Garesio, he held the post of teacher of plastics, previously taught by Domenico Rampelli. This double-faceted nature, at the same time expressive and industrial, was the background of the ISA of Faenza's key contributions to a new definition of ceramic production, detaching it from the mean view of it being a minor form of applied art. Although female figures grew within the school's community, the predominant preconception allowed only men to pursue the best professional careers. Goffredo Gaeta, Giuseppe Spagnuolo and Carlo Zauli, pupils that were contemporary to Garesio,

gained international attention from the fifties and went on to collaborate with important architects such as Gio Ponti, whereas women were allocated exclusively to teaching posts.

In such a setting, Garesio commenced her earlier production, and the initial stimuli came from the school, for instance, was appointed to produce a ceramic set for clients.

Simultaneously, she started her first collaborations, these include the one with the well-renowned local ceramist Carlo Zauli (Pirozzi, 2017).

From an art critic's standpoint, this educational period shows how Garesio's expressive research³, before she was even 20, featured a great awareness of and involvement in advanced pictorial research carried out by the *Group of Eight*, that evolved around abstractionism, realism and the informal (Ugolotti, 1958).

Meanwhile, Garesio started a parallel figurative re-elaboration besides abstract research, by embracing "an actual stylization code, that is at the same time agile and descriptive, as well as slim and ornamental" (Pirozzi, 2017, page 42) that resulted in the reinterpretation of recurring narrative subjects inspired by religious, epic, historical and fictional themes.

At about the age of 20, she began taking part in exhibitions as a representative member of the ISA of Faenza, hence she achieved her earliest accomplishments such as the *Premio Faenza* prize in 1956 and 1957 as well as taking part in the *XI Triennale di Milano* in which she exhibited a large blue, black and white decorative panel.

3. As regards such topic, Ugolotti wrote a review of a pair of porcelain containers and a large glazed ceramic vase from 1956, which was published in the journal "La Ceramica" (Ugolotti, M.B., 1958 b, *Il mondo in ceramica*, «La Ceramica», XIII, 4th of April, pages 48-49, page 27)



Figure 2. Clara Garesio; Study drawings; Variations on graphic decorative abstract theme and sculpture, original table size 70 x 100cm; Personal archive of the artist.

Although perfectly coincident academically wise, male and female paths in Faenza were divergent when it came to world of work. While Garesio's male fellow students are renowned, these include the names of Goffedo Gaeta, Giuseppe Spagnuolo, Carlo Zauli, the work of women appears to be palpable clear if not marginal to the historical and critical accounts of art dating back to that period. Garesio expresses the awareness, without specifics claims, of different perspectives that men and women might have, considering them as a social condition rooted in the culture of the time. "Women were educated and raised to work behind the scenes. Female troops paved the way to the men's actions, which then became of public domain, accordingly it was the man's name that came to the fore"⁴.

The total absence of visibility, however, hasn't hindered the prosperity and richness of her production, in which her educational work became a means of experimenting.

2. Teaching and Experimenting in Shapes in Isernia

After completing her studies in Faenza in 1957, she briefly returned to Turin, where she started her first apprenticeships, initially in Victor Cerrato's workshop, and then she worked for the local Vi.Bi factory.⁵

4. From the authors' interview with Clara Garesio, 14th of February 2020.

5. Founded in Turin in 1952, Vi.Bi Manufacturing produced, purchased, imported, and exported modern earthenware, artistic and common use ceramics. During Turin's economic boom, the factory expanded rapidly and by the mid-fifties, it employed over fifty workers, and it became actively involved in artistic research, which resulted in collaborations with Clara Garesio, as well as other important figures such as Mario Mesini and Mario Brunetti, and later on in the sixties, with ceramist and decorator Elsa Lagorio. In its later years, the factory impressed the logo "New Style" on its ceramics, however, it went out of business in 1972.

In 1958, the director of the ISA of Faenza, Emiliana, recommended her to ceramist Giorgio Saturni, who was the director of the G. Manupella Art School in Isernia, where she taught ceramic decoration and technology. The spell in Isernia, her first experience in Southern Italy, lasted for three years, and was a merry and productive example of her commitment. These years featured intense teaching activity that continued along with personal artistic productions and experimentations⁶. The school's location together with the craftsmanship surroundings undoubtedly facilitated research on a specific object: that was the vase. In this case, the *vase* was detached from its practical nature, that is an ancestral container, to take up a sculptural connotation through the technique of coiling, enriched with majolica a superficial embellishment. Such artistic experimentation was in fact Garesio's contribution to the renovation process of ceramics of that time. It was her attention to the details of superficial adornments that brings her research closer to a more graphic style, rather than to traditional ceramics, henceforth she was loomed into a vaster and more complex research of expressing the abstract and the informal.

The production of this period was very rich⁷, in this regard,

6. For a visualization of some of Garesio's projects, drawings and products see the following videos: *Il percorso artistico della ceramista Clara Garesio, dalla formazione faentina alle opere più recenti* <https://youtu.be/NkntZf62H8c>; *Clara Garesio. Taccuino di disegni nr. 1* available on <https://youtu.be/n25BhZossio>; *Clara Garesio. Taccuino di disegni nr. 2* available on <https://youtu.be/n25BhZossio>; *Clara Garesio. Taccuino di disegni nr. 3* available on <https://youtu.be/XS1rSfQudio>.

7. The activity of this initial, though decisive, period in Clara Garesio's production, as indicated in Pirozzi (2016), page 14, is well-documented today in a *corpus* of works, most of them owned by the artist and part acquired by the MIAAO in Turin and the Industrial Artistic Museum in Castellamonte (Turin) to which a file of papers and photographic reproductions of works, produced by the ceramist in order to prepare for teaching examinations.

the field of industrial processes was being explored, such as studies on the development of tile modules, and catalogues of crockery and ornamental models. These were features that aligned her with contemporary themes of design culture. This was a period of intense collaborations, which mushroomed in the ceramic department of the ISA of Isernia, with other renowned ceramists like Saturni, Belloni, and Mercante, which, despite the town's provincial situation being even more noticeable in the 50s, raised Isernia's involvement to the most advanced at a national level⁸.

3. The Neapolitan Experience: the Didactics for Innovating the Porcelain of Capodimonte

Clara Garesio moved to Naples in 1962, she was given a teaching post at the new State Vocational School of Industry and Craftsmanship G. Caselli, where she taught professional design and plastic. The school had opened a year earlier, and it was strategically intended to renew the seventeenth century tradition of Capodimonte ceramics, adjusting their manufacture to the modern context, as well as promoting apprenticeship as a means for new production opportunities. In order to highlight such purpose, the school was located in what was previously the Royal Factory of Capodimonte Porcelain, the venue of the original Bourbon plant⁹.

8. For a complete report on the School of Art of Isernia, see Biordi, R. (1961), *L'Istituto Statale d'Arte di Isernia*, in «La Ceramica», June, pages 45-47.

9. For a greater understanding of the origins of the ceramics of Capodimonte within the frame of Bourbon artistic productions, see the *Porcellana* section, Vega de Martini and Alvar González-Placios in the catalogue entitled *Civiltà del '700 a Napoli (1734-1799)*, vol.II, Centro Di, Naples 1979-1980.



Figure 3. Clara Garesio; Study drawings; Flower vases for lathe molding, original table size 70 x 100 cm. Personal archive of the artist.

Founded by the Minister of Public Education, at the time MP Giovanni Bosco, the school is located on what were once the premises of the porcelain factory that had been founded by Charles III of Bourbon, King of Naples and Sicily, in 1743. Professor Giorgio Baitello was appointed as director and organizer, who at the time was directing the State School of Ceramic Art of Sesto Fiorentino (Florence). The school was named after Giovanni Caselli, who decorated the royal factory upon Charles III's request. The pupils could choose between a range of courses and specializations, such as moulding, shaping, decorating and ceramic-chemistry.

The Caselli was meant to revamp the traditional manufacturing of Capodimonte ceramics in a systematic way, in the context of the cultural revolution of the sixties that ended up permeating the field of craftsmanship as well.

There is no doubt that personalities incline to assimilating creative and industrial aspects, such as Clara Garesio, would be instrumental to this prospect (Pansera, A. 2015).

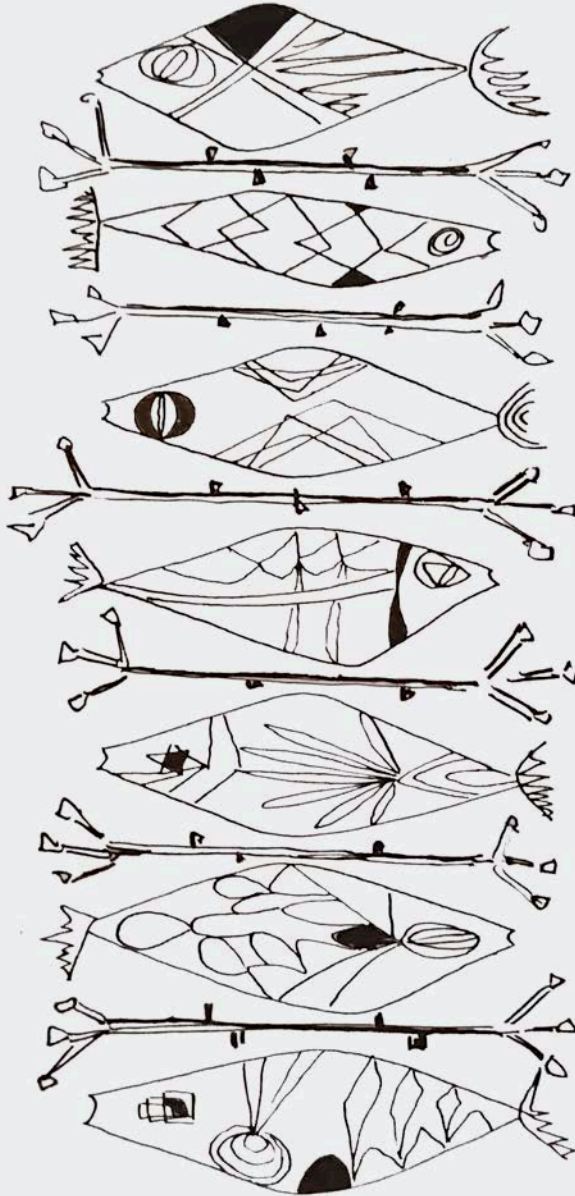


Figure 4. Clara Garesio; Study drawings; Variations on a figurative decorative theme of fish, original size 70 x 100 cm. Personal archive of the artist.

One of the principles of Garesio's work, is the need to find a connection between the embellishments and the shape of an object, leading the latter to take on the former.

A process that enabled to assimilate Garesio's teachings, at the beginning of her Neapolitan experience, to the attempt to resolve the dominant conflict of those years between rationality and creative thought, about recognizing a *decisional will* in the crafting project, which will be subsequently summarized by Alberto Rosselli and Paolo Cecchini in their educational work (Cecchini, Rosselli, 1973).

In order to ensure a successful outcome of this strategy, figures like Clara Garesio were fundamental, since their preparation included on the one hand a deep knowledge of traditional ceramic art, on the other hand their innovative ability, was rooted in their experience with the scene of Faenza, where Garesio acknowledged the many expressions of contemporary art, that was influenced by the works of Picasso and Miró.

“As an outsider, I had been summoned to breathe new life into an otherwise repetitive and static tradition”¹⁰.

Working at the *Caselli* school, enabled Garesio to both re-evaluate porcelain when measuring up to the manufacturing tradition of Capodimonte. Moreover, she became part of a community of producers and researchers. Garesio's lessons gave her a way to express herself, since she was used to staying in the shadow, and consequently there was very little communication with the general public. Therefore, her teaching activity was a means of discussion from which she could obtain new stimuli.

10. From the authors' interview with Clara Garesio, 14th of February 2020.

Her lessons resulted in collective class compositions, the same way contemporary art sees smaller components that reach greater expressive energy when assembled together, hence education is an opportunity to discuss and compare, and its outcome is nonetheless the relation amongst the parts. A sort of relational art¹¹, Garesio is the editor that deploys pupils in her compositional enterprise.

The creative production she conducted with her pupils embraces elements of great educational value, that pursue a kind of economy of the creative process. Garesio suggests that one should never throw away anything from the ongoing work, “so much as a disharmonious composition could have a fragment useable as a foothold from which one might progress”¹². Likewise, she encouraged retrieving scrap material, as damaged items might find a new life when assembled and modelled with newer elements. Hence, scrap material became a resource of a creative process whose nature is selective rather than excessive.

4. Craftsmanship Art & Design

During the late fifties and early sixties, traditional ceramic manufacturing methods were subject to an update inspired by the attention Italian design paid to planning, whose focus was mainly on approach and process methods rather than the result, that was nevertheless outstanding (Bassi, 2002).

11. Relational art is a form of contemporary art that flourished in the mid 90s and implied the active participation of the audience in shaping and defining the work they are enjoying. Nicolas Bourriaud (2010) *Relational Art*, Postmedia Books. (ed. originale *Esthétique relationnelle*, Dijon, Les presses du réel, 1998).

12. The authors' interview with Clara Garesio, 14th of February 2020.



Figure 5. Clara Garesio; Study drawings; Variations on graphic decorative abstract theme and sculpture, original table size 70 x 100cm; Personal archive of the artist.

In 1973, Enzo Mari submitted a proposal, called *Samos*, that consisted in planning through the use of matrices. He came up with 21 models that included vases, bowls, and trays, that all resulted from matching, overlapping, and welding rods, lozenges, and discs by means of wire drawing.

The final result was hence a series of incomplete products, merely matrices, drafts, whose final fulfilment could only occur thanks to a craftsman's intervention (Pedio, 1980).

The local scene saw Gio Ponti's works between 1960 and 1962. He made white and blue ceramics for the Parco dei Principi hotel in Sorrento, and for these items he used the same compositional principle, that implemented a basic, but efficient, intuitive method. This implied the deployment graphic matrices to generate a series of chromatic and compositional alternatives, each one intended for a different area of the hotel (La Pietra, 1995). The research of a balance between handcrafts and manufactures, was what the basic intention of such process.

Likewise, Nino Caruso followed the same principle in his experimentations for CAVA, a firm established in 1960, in the context of the Amalfi Coast, where 18th century ceramic floor tiles, known as *riggiole*, were still produced. Caruso suggested using slip casting to produce architectural coverings, that would present an embossed texture. The tiling shapes up with the juxtaposition of plastic modules, it is its variation, however, that generates variable textures, in which the specific generating element is indistinguishable (Cristallo, Guida, 2015). Roberto Mango's research followed suit. This was carried out in Naples during the fifties and was published in issue 313 of the magazine *Domus*.



Figure 6. Clara Garesio; Study drawings; Variations on graphic decorative abstract theme, original table size 70 x 100 cm. Personal archive of the artist.

A reportage project, his research initially focused on the historical tradition and eventually reached an innovative solution, namely a series of *unfinished objects*. More specifically, *spaghetti* shaped models of ordinary objects, in drawn ceramic paste, were braided like twigs. Trays, cups, candleholders, and lamps were all used to train young apprentice craftsmen, and revealed the need to promote learning processes by using ceramic manufacture instead of finished items (Guida, 2020). It came to be an instruction manual that could be used and customised by each craftsman and as it enabled a diversified mass production.

The above mentioned examples of interaction between design and ceramics show how marked the conceptual and process nature was, regardless of the innovation path.





Figure 8. Clara Garesio; Notebooks; Variations on abstract decorative themes and shapes of vases,- original size 70 x 100 cm. Personal archive of the artist.

Based on deploying local resources, the innovation projects convey a vocation typical of handicraft production. Meanwhile, in the Neapolitan scene, Garesio too was stimulated in a more systematic confrontation with the productive world, as a matter of fact Garesio's early years in Naples already showed a kind of transition towards themes that were representative of that mediation. This perfectly suited her, since artistic and productive research enable to establish a rapport with design.

Researching the synthesis between design, craftsmanship and expressive research, was a challenge taken on by many other protagonists of the Neapolitan scene, such as Riccardo Dalisi, who conceived the most popular model after collaborating with the tinsmiths of Rua Catalana¹³.

Aside from any essentially personal qualities and peculiarities, this course of action happens to be favoured by a strategy, recommended by Caselli himself, that encourages ties with other companies in the industry as well as suggesting exhibitions where both pupils and teachers can take part, such as *Mostra Mercato dell'Artigianato* in Florence (its 1966 edition was won by Garesio, who had made a coffee set), and *The International Home Show* at the *Mostra d'Oltremare* in Naples, for which the school selects the best works from the students every year. Often in need of completing civic and religious constructions, Naples offered many job opportunities, which Garesio regularly shared with her husband, the sculptor Pirozzi. Besides these activities, she occasionally took part in handcraft productions of Capodimonte porcelain, and more extensively, of the Mediterranean and Amalfi Coast tradition. Garesio would often spend her summer holidays on the Amalfi Coast, where she eventually got in touch with many local producers, to whom she suggested developing models that she herself had conceived. This initiated the integration of the Amalfi manufacturing tradition, Pirozzi's book reports (2017,

13. For greater understanding read Dalisi, R. (1987) *La caffettiera e Pulcinella*. Research on the Neapolitan Coffee Maker. 1979-1987, Officina Alessi. In which Riccardo Dalisi wrote about the research and creation of can prototypes, that resulted from a collaboration with tinsmiths when carrying out the "Neapolitan Coffee Maker" project for *Alessi, compasso d'oro* in 1981.

pag. 43, note 10) how, starting from the end of the 60s, Garesio regularly visited Vissichio's workshop and Fusco's ceramic studio in Atrani, and Laura di Santo and Alberto Sassone's workshop in Amalfi.

The ceramics of Vietri could rely on a variety of major figures throughout the 20th century, most of whom were women, and were commendable for having combined local expressive and productive methods, typical of the Amalfi Coast, with a more universal and cosmopolitan dimension.

In this respect, a clear example is the so-called "German" period, between the 20s and the outbreak of World War II.

A period in which the traditional methods in Vietri, experienced an evolution, thanks to the contribution of the many foreigners, mainly Germans, who had moved there, attracted by the allure of the Amalfi Coast, where they found employment in the many ceramic manufacture plants in the area (Jappelli, 2004, pages 77-78).

Polish artist Irene Kowaliska¹⁴, the Germans Margarete Thewalt Hannash, aka Bab, Marianne Amos, Elle Dölker brought an extraordinary breath of innovation to traditional ceramics, that was the result of German research in decorative arts dating back to the beginning of the 20th century. When she began visiting the Amalfi Coast, she met local craftsmen. In summer, she would work in shops, mainly owned by students who attended the school of porcelain in Naples.

14. For a deeper study of Irene Kowaliska, read the volume Vito Pinto e Gianni Grattacaso, *Irene Kowaliska* 1939, AreaBlu edizioni, 2018



Figure 9. Vases with various decorative themes and shapes. Personal archive of the artist.

Small companies were able to increase the quality of their production by drawing on Clara Garesio's research both from an artistic and productive standpoint. The entire production of Vietri ceramics had always relied on external help, even before the Germans arrived in the 30s, however tradition had been intact. The German period enriched the repertoire with new icons such as the "little donkey" which has since become the symbol of Vietri ceramics.

However, the integration between the leading artistic research and traditional manufacture continued in the latter part of the century. Several international personalities that are part of a current, that also includes Garesio if she is considered for the variety of approaches. Other names are: the painter Giuseppe Capogrossi who collaborated with the *Pinto Ceramics* firm since the end of the forties, as well as Ugo Marano, who carried out many ventures for the *Museo Vivo* project in the seventies¹⁵. Since the beginning of the new millennium, Garesio has started to show more of her work to the general public, subsequently many of her works are displayed in personal exhibitions and in museums, for which she has received many prizes. Yet, she has never left her teaching workshops for ceramic art enthusiasts.

Looking back at Clara Garesio's artistic career and personal life, it can be definitely stated, together with Bertoni, that the artist "conducted uninterrupted research.

15. A focus on the role of artistic research on Vietri ceramics is given by M. Bignardi, G. Zampino, *Artinceramica. Artisti contemporanei nelle faenze a Vietri sul Mare*, catalogue of the exhibition, Naples, Scuderie di Palazzo Reale, 21st March- 6th May 1997.

Despite time passing by and the cultural interferences, her work includes shapes and techniques as well as research paths previously interrupted and abandoned that come back to life. In a timeless fashion” (Bertoni, 2016, p 11).

Besides the highlighted technical and expressive qualities, the great innovative force of Clara Garesio is well-recognisable even in her strictness and in her vocation in applying and promoting an experimental method, in which educational, productive and expressive research all combine.

References

- Alamaro, E. (2006). Il ritorno di una desaparecida della ceramica italiana degli anni cinquanta: Clara Garesio. *La Ceramica Moderna e Antica*, 256, novembre, 8–9.
- Bassi, A. (2002). Arti applicate e design: dialogo e distinguo. In F. C. Drago (Ed.). *Nuovo antico. Dalla materia all'artefatto*. Ed. CNA e Confartigianato.
- Bertone, F. (2016). *Fiorire è il fine* [Exhibition catalogue]. Editalfa.
- Biffi Gentili, E. (2006). Vietri: last but the best. In *Le ceramiche di Clara Garesio*. Menabò.
- Biordi, R. (1961). L'Istituto Statale d'Arte di Isernia. *La Ceramica*, 6, giugno, 45–47.
- Bignardi, M., & Zampino, G., (1997). *Artinceramica. Artisti contemporanei nelle faenzere a Vietri sul Mare* [Exhibition catalogue]. Electa Napoli.
- Bojani, G. C. (1995). *Artigianato e design due esperienze a confronto: Deruta e Faenza* [Exhibition catalogue]. Milo.
- Bourriaud, N. (2010). *Relational Art*. Postmedia Books.
- Cecchini, P. & Rosselli, A. (1973). *I metodi del design, documenti sui recenti metodi di progettazione*. Clup.
- Cristallo, V. & Guida, E. (2014). Protagonisti e materiali della cultura del prodotto industriale nell'Italia più a sud. Interazioni e sperimentazioni nelle figure di Roberto Mango e Nino Caruso. *AIS/Design Journal. Storia e Ricerche*, 4 (2).
- Dalisi, R. (1987). *La caffettiera e Pulcinella. Research on the Neapolitan Coffee Maker. 1979–1987*. Officina Alessi.
- de Martini, V. & González-Palacios, A. (1980). Porcellana section. In Causa, R. & Spinosa, N. (Eds.). *Civiltà del '700 a Napoli (1734-1799)* (Vol. II). Centro Di.
- Dellapiana, E. (2010). *Il design della ceramica in Italia 1850-2000*. Electa Architettura.
- Guida, E. (2020). *Le ceramiche di Roberto Mango. Continuità di un progetto interrotto*. Edizioni Mudi.

- Jappelli, P. (Ed.) (2004). *Dall'artigianato artistico al design industriale. L'avventura degli oggetti in Campania dall'unità al duemila*. Electa Napoli.
- La Pietra, U. (1995). *Gio Ponti*. Rizzoli.
- Pansera, A. (2015). Una festa per gli occhi. In Pirozzi, F. (Ed.). *Clara Garesio. Una infinita primavera*. Tipografia Gutenberg.
- Pedio, R. (1980). *Enzo Mari designer*. Edizione Dedalo.
- Pinto, V., & Grattacaso, G. (2018). *Irene Kowaliska 1939*. AreaBlu Edizioni.
- Pirozzi, F. (2011, June 28). *Clara Garesio. Taccuino di disegni nr. 1* [Video]. YouTube. <https://www.youtube.com/watch?v=KuWTFjCs2Wc>.
- Pirozzi, F. (2011, July 3). *Clara Garesio. Taccuino di disegni nr. 2* [Video]. YouTube. <https://www.youtube.com/watch?v=n25BhZossio&t=1s>.
- Pirozzi, F. (2011, July 5). *Clara Garesio. Taccuino di disegni nr. 3* [Video]. YouTube. <https://www.youtube.com/watch?v=XS1rSfQudio>.
- Pirozzi, F. (2016). *Clara Garesio. Profilo biografico*. In F. Bertone (Ed.), *Clara Garesio. Fiorire è il fine*. Editalfa.
- Pirozzi, F. (2017). *Clara Garesio. Fuori dall'ombra*. In R. Riccini (Ed.). *Angelica e Bramante. Le donne del design* (pp. 41–52). Il Poligrafo.
- Pirozzi, F. (2018, December 13). *Il percorso artistico della ceramista Clara Garesio, dalla formazione faentina alle opere più recenti* [Video]. YouTube. <https://youtu.be/NkntZf62H8c>.
- Ugolotti, M.B. (1958). Il mondo in ceramica. *La Ceramica*, 3 (XIII), 26–27.
- Ugolotti, M.B. (1958b). Il mondo in ceramica. *La Ceramica*, 4 (XIII), 48–49.



ABOUT CURRENT PRACTICES

Designing Contemporary Living Spaces: a Feminist Perspective in Urbanism Coming from Col·lectiu Punt 6 in Barcelona

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Keywords

Feminist urbanism, Col·lectiu Punt 6, Urban Studies, Women in Design.

Abstract

Contemporary cities are often considered as a reflection of the society that inhabits in there. Urban planification has been historically shaped considering social, political and economic facts. But are cities designed contemplating everyone essentials and ways of life? How have gender studies and feminist perspectives influenced urban planification?

Those questions are raised by Col·lectiu Punt 6, an interdisciplinary cooperative of architects, sociologists and urbanists, with different backgrounds, and all of them women, working in Barcelona since 2005. From a feminist perspective, going beyond traditional gender binarism and proposing an intersectional analysis, their theories focus on the consideration of daily life as a central concept in urban planning.

This essay attempts to contribute to the dissemination of feminist urbanism theories and to illustrate how they have been progressively developed in the specific case of the city of Barcelona.

1. Introduction

This book is an attack on current city planning and rebuilding. It is also, and mostly, an attempt to introduce new principles of city planning and rebuilding, different and even opposite from those now taught in everything from schools of architecture and planning to the Sunday supplements and women's magazines. My attack is not based on quibbles about rebuilding methods or hairsplitting about fashions in design. It is an attack, rather, on the principles and aims that have shaped modern, orthodox city planning and rebuilding. (Jane Jacobs, 1961)

With these words, Jane Jacobs began her controversial book *The Death and Life of Great American Cities*, first published in 1961. The urbanism activist, theorist, and critic, who didn't come from an academic background, critiqued the tenets of urban design and planning defended by the most renowned urban planners and architects in the United States of her time. Jacobs advocated for the construction of cities based on the daily life of its inhabitants, understanding their plurality and diversity. The basic principles of her vision of urban planning and city design were ecology, citizen cooperation in urban planning and theories of care work, among others that are still fully relevant today. In this line of thought, we locate Col·lectiu Punt 6, a cooperative founded in 2005 by women architects, urban planners, and sociologists with diverse backgrounds and life experiences, but connected to the city of Barcelona. Drawing from the critical reading of their latest publication, *Urbanismo feminista. Por una transformación radical de los espacios de vida* (Col·lectiu Punt 6, 2019), we intend to clarify

who have been the main agents or mediators who have contributed to the implementation of the feminist perspective in the construction of the urban landscape of the city of Barcelona and to what extent it has been consolidated. The main aim is to contribute to the accounts on how architects, urban planners, and academics, as well as citizens organized in neighborhood movements, have contributed to the visibility of women and their consideration in the field of urban planning in collaboration with public institutions in recent years. Our hypothesis posits that the interaction of these multiple agents is necessary for the sustainability of urban planning.

2. Conceptual Tools and Methodology

The intention behind this research proposal is to discuss ideas and concepts that were developed within the framework of various projects carried out by the Research Group in Contemporary Art History and Design (GRACMON) of the Department of Art History of the University of Barcelona. We will take conceptual tools from the humanistic disciplines, such as the history of art and architecture and design and urban planning studies into consideration and contrast them with concepts developed within the field of gender studies. We are going to start from the theoretical approach of the studies on urban landscape and heritage to analyze the specific case study of the cultural landscape of the city of Barcelona. We understand the city concept from a holistic and global perspective; that is, it includes both the natural and the cultural sphere, as well as the tangible and intangible heritage (Nespral & Sala, 2020). That is, beyond the formal aspects, such as urban layout or movable and immovable property, the notion of cultural or

urban landscape contemplates the socio-political and economic conditions that have contributed to the construction, transformation and reinvention of the city over time, as well as the values it represents. It's precisely these values that are associated with the capitalist and patriarchal logic under which Western cities have been built, that Col·lectiu Punt 6 aims to disarticulate and rebuild by linking their theories on design and urban planning with gender studies. Based on their theories, which are collected in various experiences and publications, we propose to analyze how the feminist perspective has been applied to the configuration of the cultural landscape of the city of Barcelona.

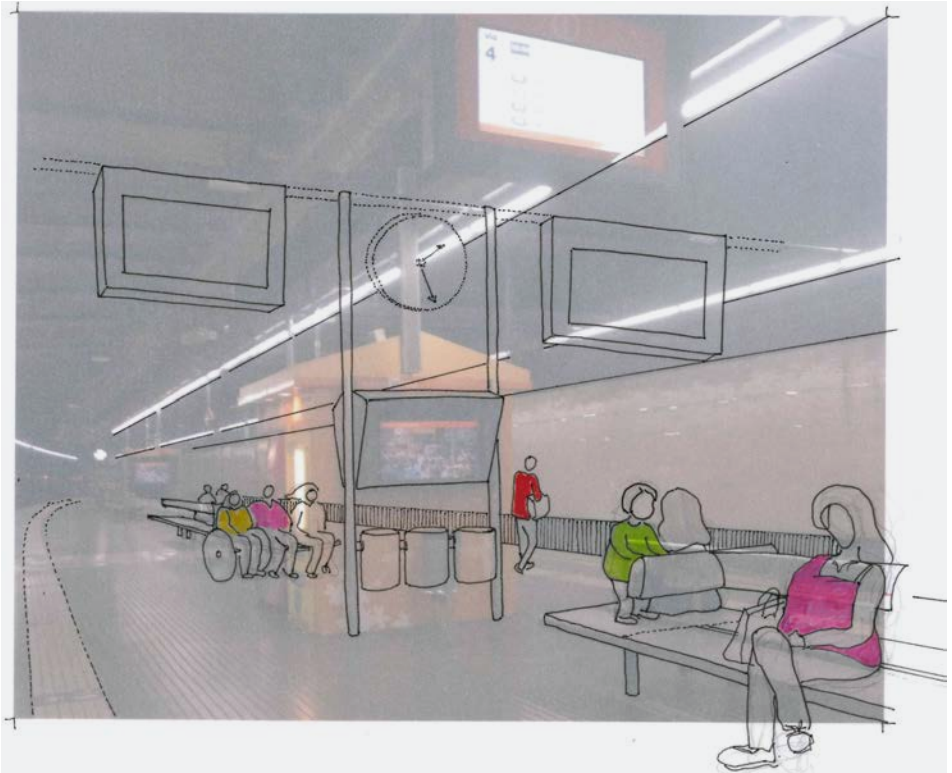


Figure 1. Marta Fonseca, proposals of attending care works in public transport, Col·lectiu Punt 6, 2020.



Figure 2. Marta Fonseca, Proposals of attending care works in public transport, Col·lectiu Punt 6, 2020.

To this effect, we will study the environment in which the urban landscape is produced from this perspective: the mediation space, which integrates all the actors who have fought for incorporating gender studies into the design of the city. That is, we do not exclusively privilege the study of producers (architects, urban planners, etc.), but we will also consider mediators (political, educational institutions, promoters, etc.) and inhabitants. We aim to identify and study the agents that have contributed to the consideration of the feminist perspective in shaping the urban landscape of Barcelona: urban planners and theorists, feminist thinkers, neighbors organized through collective movements, political institutions, etc. We consider that the interaction of these various actors is essential when putting into practice sustainable urban planning, which is focused on the lives of the people who will inhabit it.

3. The Feminist Perspective in Academic Studies on Urban Design and Planning in Barcelona

Isabel Campi has repeatedly analyzed how gender and a feminist perspective have contributed to questioning and challenging traditional definitions in design studies. Concerning the field of architecture and urban planning, in 2002 she explained that, historically, women had had little chance of participating in the design of the lived environment. After analyzing the work of various specialists who have pointed out this same issue, Campi outlined that “models of the city and housing, and even the concept of space itself, have been imagined and projected from a male perspective, based on criteria that may become obsolete in the future” (2002, p. 3). Zaida Muxí, architect and researcher and founder of the Col·lectiu Punt 6, has been a pioneer in the field of feminist studies applied to urban planning and architecture in the Spanish state and Catalonia¹. Similar to Jacobs, Muxí reflects on the construction of her discipline seen from the patriarchal experience and according to its specific set of values, which she defines as biased and exclusive of knowledge, which is “of another kind, of those who aren’t white, who aren’t rich, who aren’t powerful” (Muxí 2018, p. 18). According to her interpretation, feminist urbanism aims to dismantle these values that are reflected in our cities: ‘We could synthesize that the main objective of urbanism with a gender perspective is to observe

1. One of her latest publications is *Mujeres, casas y ciudades: más allá del umbral* (Barcelona, DPR, 2018), the result of years of work. In it, Muxí proposes rewriting the history of architecture and urbanism from a feminist perspective, against the traditional totalizing accounts of Western culture, and reviewing women who have taken positions in this regard in the history of the discipline. The researcher’s career, linked to the Higher Technical School of Architecture of the Polytechnic University of Catalonia (ETSAB), has been recognized in the field (Col·lectiu Punt 6, 2019, p. 15).

reality from different prisms than the usual ones, meaning the male and patriarchal one, which is exclusive in itself, since it considers a healthy man with all his capacities at their maximum splendor, with a permanent and paid job, and a private life sorted out by another person' (Muxí 2018, p. 26). The Col·lectiu Punt 6 starts from this definition of feminist urbanism and develops it further, as we will see later.

If we focus on the study of the feminist application to urban design in Barcelona, we need to point out some facts regarding the genealogy of thinkers and activists who have worked along these lines. It should be noted that the first woman to obtain a degree in architecture from the Barcelona School of Architecture was Margarita Brender Rubira in 1962². Just a decade later, the work of the architect and thinker Anna Bofill started to stand out. In 1980, the author delivered the lecture 'Woman and Architecture' in the context of the Independent Feminist Conference in Barcelona, highlighting the relationship between the patriarchal organization as a way of life in the urban environment and the construction of cities. As a member of the Ricardo Bofill Architecture Workshop, the architect participated in the conception of the Walden 7 housing building (1973-1975, Sant Just Desvern), which represents an attempt to materialize certain ideas regarding housing and sharing of domestic and neighborhood spaces traditionally considered as utopian. The design of the Plaça Catalunya Central Train Station also stands out regarding the security and visibility of this kind of

2. In fact, Brender Rubira studied architecture in Romania and what ETSAB did was to validate her studies in 1962. The first woman to study at this center was Mercè Serra i Barenys, who graduated in 1964. For more information, see Zaida MUXÍ (2013), "Primera generació de arquitectes catalanes, ETSAB 1964-1975". In *Jornades Mujer y Arquitectura: experiencia docente, investigadora y profesional*. A Coruña: Universidade da Coruña.

infrastructure, another of the marked objectives of feminism applied to the design of cities (Col·lectiu Punt 6 2019, pp. 51-52). Alongside historian Isabel Segura and Rosa Dumenjó, director of the Fundació Maria Aurèlia Capmany, Bofill promoted the project *Women and the city* (1996-1999) in collaboration with other associations, as well as with national and international institutions within the IV Plan of Community Action for equal rights between men and women of the European Commission. They analyzed the participation of women in urban planning, and the result was the publication of *El llibre blanc. Les dones i la ciutat* (Col·lectiu Punt 6 2019, p. 52). In this context, other works and research on the topic started to emerge in other fields such as sociology, geography or anthropology. Many of these projects were carried out in collaboration with public institutions, who were responsible for urban planning in the city of Barcelona, and subsequently had an impact on the elaboration of public policies that would become the first laws that included the gender perspective in the Spanish state in the early 2000s, as we will see below.

4. The Impact of Neighborhood Movements and Citizen Participation in Urban Design

The celebration of the *I Catalan Women's Conference* (Auditorium of the University of Barcelona, May 1976) revealed an increased awareness of the need to apply feminist thought to urban design³, which necessarily had to include citizen partic-

3. For more information: Isabel Segura (2019), *Barcelona Feminista. 1975-1988*. Ajuntament de Barcelona; Cristina Borderias & Mercè Renom (Eds.) (2008), *Dones en moviment(s): segles XVIII – XXI*, Publicacions Universitat de Barcelona.

ipation. These sessions resulted in the materialization of the claims of women as a political subject during the 1960s and 1970s in the following context: Spain was in the midst of the Democratic Transition (1975-1978), a period of total rethinking of its political system after the death of dictator Franco in 1975. In addition to academics and students, various women's groups from neighborhood movements in city districts, workers' associations, etc., and representatives of a wide range of positions and ideologies regarding the situation of women in the cultural logic of the moment participated in these meetings.

Among their main demands were issues related to labor rights, domestic and care work, education, family issues, divorce, abortion law, female sexuality, security, and urban mobility. Concerning urban planning, the presentation *Participación de la mujer en la vida ciudadana: la mujer en los barrios* (Participation of women in citizen life: women in neighborhoods), which was made by the Association of Women of L'Hospitalet stands out. The historian Isabel Segura has studied this topic in-depth, pointing out how issues such as the creation of public services such as schools, outpatient clinics, markets, nurseries, laundries or soup kitchens in their neighborhoods, as well as an improvement of the transport system were claimed in this presentation.

In fact, from 1950, and particularly during the 1960s and 1970s, the city of L'Hospitalet experienced uncontrolled growth, becoming a residence for migrants from other parts of the Spanish state who came to the large Catalan city in search of work. It quickly became one of the most densely populated cities in Europe. In areas such as Bellvitge, worker housing blocks were built that lacked the public services men-

tioned. Being located right next to Barcelona, a city commonly cited as an example of good design, L'Hospitalet's urban planning seemed particularly paradoxical. This is how the neighbors explained it in their presentation:

As an industrial city and due to the policy initiated by the Regime (General Franco dictatorship, 1939-1975), that entailed the development of some areas and the impoverishment others, Barcelona has experienced strong migratory movements that have consequently generated new and populous neighborhoods near the periphery or sometimes even entire cities. (...) In the neighborhood, it is the woman who suffers most directly from all the deficits of collective services due to her condition as a housewife.

Associació de Dones de l'Hospitalet.
I Jornades Catalanes de la Dona, 1976.

This problem affected other neighborhoods in the city of Barcelona, whose female inhabitants, grouped in neighborhood associations, or the so-called *vocalies de dones*, shared the same needs and claimed these rights. In addition to the residents of L'Hospitalet who made their presentation at the conference, other neighborhood women's movements managed to be taken into account in urban rehabilitation processes: whereas the residents of Carmel demanded the construction of public nurseries in their neighborhood (1973–1976), the residents of Sant Andreu del Palomar fought for the recognition of divorced women and the need for spaces for them (1978), and the movement in Besós requested the construction of decent and quality housing (Magro, 2014). In short, it was a joint realization of the

need for the participation of neighbors in urban design. Their demands had not been contemplated in the rational city model, which was considered modern, typical of the 1930s, in which planning was based on the creation of polygons – housing, factories, etc. – linked by traffic, without proximity services or consideration of daily life. The slogan “*Volem un barri digne per viure-hi*” was one of the most repeated among the neighbors during these demands (Segura, 2008, p. 103).

It is not our intention to further elaborate on this subject which has been thoroughly analyzed from a historical perspective by various specialists such as the aforementioned Segura or Magro. However, we think it’s necessary to stress that these claims were key in defining urban planning from a feminist perspective, with citizen participation being one of its core values, as defended by the Col·lectiu Punt 6. We have focused on an important event in recent history, but there have been multiple women’s movements that have intervened in the configuration of the urban landscape of Barcelona and its surroundings in the past – from the Industrial Revolution to the labor movements of the 20th century (Borderías, 2016). If we conduct a reading of neighborhood movements alongside academic research and the institutionalization processes of feminist urbanism, we find that, from a holistic point of view, they are a key factor in the fight for this recognition.

5. Col·lectiu Punt 6 and Its Theory: Feminist Urbanism: for a Radical Transformation of Living Spaces

The Col·lectiu Punt 6 emerged in connection with the work of Zaida Muxí and the investigations that were being carried out at the ETSAB. The collective has gained extensive practical

experience since its foundation in 2005: multiple workshops, teaching work, research, consulting and audits focusing on the development of urban planning with a feminist perspective. The cooperative was formed as such after the approval of the Catalan Law 2/2004 by the Generalitat de Catalunya on the 4th of June on the improvement of neighborhoods, urban areas, and towns that require special attention, whose sixth point referred to 'Gender equity in the use of urban space and facilities'. It was the first collective contemplating the consideration of the gender perspective in urban planning in the Spanish state (Col·lectiu Punt 6, 125)⁴.

Col·lectiu Punt 6 published its theories in the book *Urbanismo feminista. Por una transformación radical de los espacios de vida* (2019). The authors connect their research and practice to a genealogy of experiences, including those previously mentioned in the city of Barcelona. Their conception of feminist urbanism develops a model of the city opposite to the one resulting from the current neoliberal logic. They defend breaking with the spatial configuration based on the separation between the public or productive space, associated with the male role, and the private or reproductive space, associated with the female role. It is a dichotomy based on the sexual division of labor which has been perpetuated since the pro-

4. Most of the Col·lectiu Punt 6 projects have been carried out in Catalonia, many of them in Barcelona, although they have also been developed in other parts of Spain and internationally: Tunisia, Lebanon, Ivory Coast, Uruguay, Argentina, Bolivia, Colombia, Mexico or Canada, among others. Their intellectual production in the form of research articles or books is remarkable, both individually and collectively: on mobility and security, distribution of public and private spaces based on traditional gender roles, the daily life of women at night, the analysis of laws and public policies, education, among many other related topics. In the same way, they have developed various guides for the analysis of women's daily environments, based on experiences and audits of urban safety and quality integrating the gender perspective, which was the result of a cooperation with associations, schools, or public entities such as the City Council of Barcelona or the Diputació de Barcelona. For more information: <http://www.punt6.org/ca/>.

cesses derived from the industrialization of capitalist cities and societies of the so-called global north.

Col·lectiu Punt 6's proposition to break with this dichotomy is linked to the theories of care work and support networks developed within the framework of gender studies, which are characterized by the maxim to "put everyday life at the center"⁵, in this case of urban planning. Punt 6's practical methodology is based on the analysis of the spatial use of bodies, both in homes and the public space, while identifying the hierarchical difficulties that various subjectivities deal with in their daily lives. The collective's proposal to modify these hierarchical patterns aims to enhance the networks of mutual support and collective life against male domination in physical and symbolic spaces. It argues that these networks could be developed from the existence of "hard infrastructures", which would correspond to existing physical places for carrying out certain collective activities that would facilitate said daily life, and "soft infrastructures", based on social strategies or community networks that involve sharing the management of life and timings. Some examples of the collective life in Barcelona proposed by the authors are the housing cooperative under the *transfer-of-use* scheme La Borda, the alliance of social and solidarity economy projects La Comunal, or the housing cooperative La Dinamo, which are all located in the Sants neighborhood (Col·lectiu Punt 6, 2019, 86-91).

5. The definition of "daily life" that Col·lectiu Punt 6 proposes draws upon the tradition of gender studies specialized in care work and community support networks. Authors such as Hannah Arendt or María Ángeles Durán, in the Spanish setting, have established themselves as referents in this regard. For a more comprehensive analysis of the concept, see Col·lectiu Punt 6 (2019), "Ruptura de la dicotomía público-privado" in *Urbanismo feminista*.



Figure 3. Col·lectiu Punt 6, intergenerational mapification of daily routines and activities networks, 2020.



Figure 4. Col·lectiu Punt 6, recognition tour with women from the neighbourhood, 2020.

Col·lectiu Punt 6 criticizes androcentric and patriarchal urbanism and the functionalist and dispersed city, a model of a rational and modern city that was governed by the principles of living, circulating and working that were gathered in the Athens Charter (1941), which was the basis of the modern architecture. In the same way, it regards new global city models, as well as smart cities and preventive urbanism, “touristification”, and gentrification “predatory” as phenomena. These city models would be governed by the logic of the market, which acts to the detriment of urban identity and promotes standardized public spaces occupied by franchises and transnational chains that encourage mass consumption (Col·lectiu Punt 6, 2019, p. 103). In the case of Barcelona, this city model prevailed until 2015, entailing processes of the privatization of public services and facilities, while also making the public investment in popular neighborhoods disappear. In addition, according to Punt 6, the control and repression mechanisms of the circulation of groups that did not fit in the ideals of this city model, such as sex workers, homeless people, undocumented migrant people, etc. in the public space were tightened.

It became evident that this city model turned out to be unsustainable for many of its inhabitants which were affected by the processes of job insecurity, gentrification, environmental degradation, etc. With the change of government in the Barcelona City Council in 2015, Mayor Ada Colau and her municipal group began incorporating a much broader and more inclusive vision into public policies concerning urban planning. However, Col·lectiu Punt 6’s analysis of the existing legislative framework in urban planning reveals that although these new regu-

lations consider tools to implement a more plural and inclusive design that not only favors white European middle-class men with numerous privileges, they rarely have been put into practice. The change is remarkable, but “the laws will never carry out transgressive actions or actions contrary to the system that supports them.” (Col·lectiu Punt 6 2019, p. 123). However, they emphasize that “the inclusion of a gender perspective in regulations has contributed to naming and making hidden realities visible, which may be the first step to modify unequal material conditions” (Col·lectiu Punt 6 2019, p. 123).

In response to the exclusion of these “hidden realities”, Col·lectiu Punt 6 proposes an intersectional feminist approach, which goes beyond the traditional gender binarism and points out different categories of oppression marked by racism, classism, sexual identity, functional diversity, origin, and migratory status, among possible others. An intersectional analysis that allows us to envision and value daily life in its most complex form, avoiding simplifications (Col·lectiu Punt 6, pp. 134-135). To apply this perspective to urban design, they once again defend the active participation of the community, which they are ultimately working for in the urban design process. This participatory urbanism, which gained prominence in Barcelona in the 1970s, as well as in other cities of the Spanish state, was institutionalized in the following decades with dwindling effects. In any case, the authors emphasize that this participatory urbanism promoted by institutions wasn’t commonly implemented with an intersectional feminist perspective, although it is increasingly acknowledged (Col·lectiu Punt 6, pp. 147-148).

6. Conclusions

This essay attempts to contribute to the dissemination of feminist urbanism theories and to illustrate how they have been progressively developed in the specific case of the city of Barcelona. We have tried to clarify the main actors who have promoted their development and consolidation over time in the context of research, universities, neighborhood movements and public institutions. The definition of feminist urbanism proposed by Col·lectiu Punt 6 is based on the consideration of daily life as a central concept in urban planning, as well as cooperativeness and support networks based on an intersectional, open and plural approach. The implementation of these principles is presented as a current and future challenge in the design of cities.

References

- Associació de Dones de l'Hospitalet (1976). *La Mujer y los barrios*. [Conference presentation] Jornades Catalanes de la Dona. Archivo de la Transición. <https://archivodelatransicion.es/fondo-documental/movimientos-sociales-y-obreros/fondo-documental-movimientos-sociales-mujeres-i-jornades-catalanes-de-la-dona>.
- Borderias, C. (2016). *En moviment(s). Dones de Barcelona. 1976 [40 anys i més] 2016*. Ajuntament de Barcelona. <https://ajuntament.barcelona.cat/memoriademocratica/ca/programa/en-moviment-s-dones-de-barcelona/>.
- Campi, I. (2002). Diseño y Género: las aventuras de Venus en el reino de la razón. *On Diseño*, (232), 278-285.
- Col·lectiu Punt 6 (2019). *Urbanismo feminista. Por una transformación radical de los espacios de vida*. Virus.
- Jacobs, J. (1961), *The Death and Life of Great American Cities*. Random House.
- Magro Huertas, M. T. (2014). *Hacia la ciudad inclusiva. Prácticas sociales urbanas en Barcelona, 1969-1979*. Doctoral dissertation, Universitat Politècnica de Catalunya. UPC Campus Repository. <http://hdl.handle.net/2117/95394>.
- Muxí, Z. (2018). *Mujeres, casas y ciudades: más allá del umbral*. DPR.
- Nespral, F. & Sala, T. M. (Eds.) (2020). *Entre ciudades (Barcelona-Buenos Aires-Puebla). Paisajes culturales de la modernidad (1888-1929)*. Publicacions Universitat de Barcelona. Manuscript submitted for publication.
- Segura, I. (2008). Constructores de ciutats: el cas de Barcelona. In C. Borderías & Renom, M., *Dones en moviment(s): segles XVIII – XXI*. (pp. 101-116). Publicacions Universitat de Barcelona.
- Segura, I. (2019). *Barcelona Feminista. 1975-1988*. Ajuntament de Barcelona.

Identity and Care in the Daily Life Project of in Changing Women

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Keywords

Social Design, Design of Daily Life, Participatory Art, Social Ar, Identity.

Abstract

Ezio Manzini defines the project as the human capacity that allows us to read the state of things, recognize problems and opportunities, to imagine how things could be and what new meanings could be created, but above to realize what we imagined.

The project, therefore, understood as transformative capacity of reality, necessarily implies to go out of the so-called comfort zone, to give, with a creative and unusual wave, a change.

In the *Things of Others* project, led by an interdisciplinary team of the Architecture Department of the University of Florence, “things” have become the pretext for 40 refugees, to tell a part of their history and their life in their countries of origin. In the *Odissee Fiorite* format, through the mutual meeting and photography of three everyday objects that express experiences of life and cultures, related to the past, present and future, the artist and visual anthropologist Tiziana Menegazzo highlights the ability of women to do home wherever they are and wherever they come, regardless of their personal odysseys. How they manage, starting from the objects of daily life, to transform their memory into a future project, to be carried out in the care of every day, nourished by hope and tenacity.

1. Introduction

Ezio Manzini introduces the concept of social project as “aspetto caratterizzante dell’innovazione di questi anni e quindi anche di una possibile transizione verso una società sostenibile” (Manzini, E. 2019, p. 7) and he defines the project as the human capacity that allows us to read the state of things, recognize problems and opportunities, to imagine how things could be and what new meanings could be created, but above to realize what we imagined.

The project, therefore, understood as transformative capacity of reality, necessarily implies to go out of the so-called comfort zone, to give, with a creative and unusual wave, a change.

This capacity of design and transformation, intrinsic to human beings, emerges even more strongly when external conditions are more pressing, when it becomes necessary to leave the comfort zone. The practices of social innovation bottom up are developed just when some needs (primary and not) do not find adequate answers neither from the market nor from the institutions. The absence of the welfare politics opens the way to the arise of society’s self-organization and new forms of social aggregation in order to try to improve the quality of life of the populations and to look for solutions more satisfying and responding to their values and needs. We think to the maker movement, to the spread of practices such as co-working or co-housing, to social cooperatives, to those experiences more generally attributable to models of social innovation that also respond to problems related to youth unemployment and the difficulties linked to the economic crisis of the last decade.

We are just finishing this paper in the days of quarantine in the COVID-19 emergency, we are used to design and always looking forward, somehow controlling the outputs through the design process. We are experiencing on ourselves the frustration due to the uncertainty, the total lack of knowledge of what awaits us. We develop mathematical models, we proceed by trial and error, trying to find a way out that probably will be very different from what we can see and we will certainly have to measure ourselves with new solutions that will arise, as Manzini (2015) says, from a widespread and pervasive design. It will be very important then, when everything ends, to understand how we will all be changed and how these changes will manifest themselves. Certainly as designers, artists, intellectuals, we shall have the social and civil obligation to interpret, facilitate and promote the new scenarios that will open up.

The two projects we are going to talk about arise from the need to understand how the so-called “ordinary people”, and in particular women, manage to plan their own lives even in conditions of extreme hardship, caused by the need to migrate or flee, often from survival itself. All the protagonists of the *Odissee Fiorite* (2017-2018) – participatory art project realised by Tiziana Menegazzo, a woman artist and visual anthropologist – and *Le Cose degli Altri* (2016) project, have made a change – in some cases disruptive – of their own lives: they are women escaping from war or terrible situations, refugees, migrant women for work but also for love or simply to pursue one’s own dream. From this “changing” condition, a project emerges which, starting from its backgrounds, be-

comes an affirmation of a transformative identity capable of including, with Edgar Morin (2016), the improbable, the unexpected, which however opens up to a better future, compared to a present still too charged with disturbing ambiguities and uncertainties.

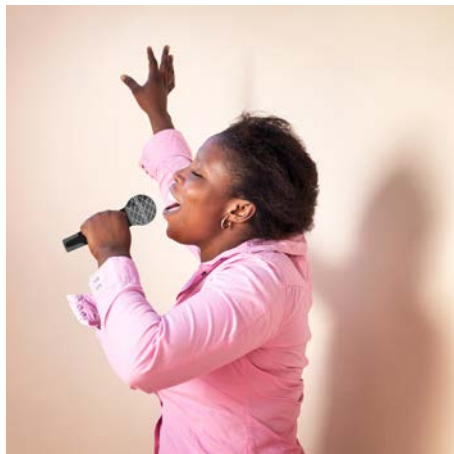
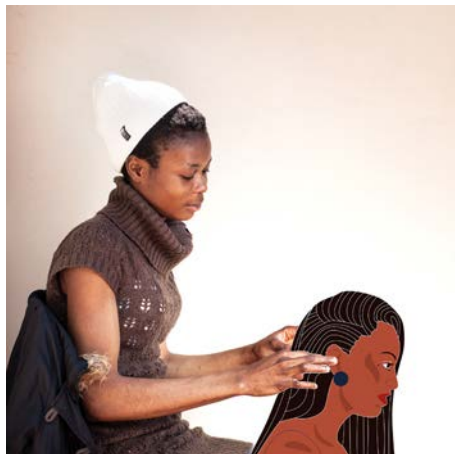
The investigative tool in both projects is represented by objects or rather things, since “The meaning of ‘thing’ is broader than that of ‘object’, since it also includes people or ideals and, more generally, everything that interests us and is close to our hearts” (Bodei, 2009, p.135).

The story of these projects finds its representation through objects, mediums, but also carriers and activators of values and therefore of potential transformations (Moretti, 2019). Things lost in the journey or only remembered, have become an opportunity to express, re-establish identity and make visible the protagonists of the project.

The methodologies applied are based on an interdisciplinary approach, with the significant contribution of social disciplines, such as anthropology and sociology, and highlight two visions that are design and art, which, as we shall see, end up converging. The convergence is firstly established in the participatory approach adopted in which subjects, and specifically women, become storytellers, co-authors of the artistic and creative process. Moreover, in the *Odissee Fiorite* project this aspect has been extended through the direct involvement of some of them in the crowdfunding implemented by the artist through the Eppela platform. In doing so, as well as participants, women became producers, active parties in the implementation of the project itself.



Figure 1. *Le Cose degli altri*. Photo ©Itaca Freelance.



Figures 2-5. *Le Cose degli altri*. Photo ©Itaca Freelance.

In this participatory creative process, the interaction between creative and co-creative subjects takes place through the relationship and the creation of an “intermediate” space in which, thanks to empathy, a “putting oneself in the place of” is implemented, but alternatively the elements remain distinct. It is in this space that the artistic and creative project takes place. And the designer, necessarily, interprets, or rather translates, in a continuous passage and dialogue from his own cultural dimension to that of the other and vice versa. Translation, in turn, is an activity of deep and bidirectional knowledge. In order to translate from one language to another it is necessary to know both deeply, so translation is not assimilation of the other to oneself, but appreciation of the distance between oneself and the other. (Kilani, 1997, pp. 22-23).

2. Migrant Identities between Memory and New Projects

The project *Le Cose degli altri* (Figures 1-5) is the result of an interdisciplinary team¹ of the Laboratory of Design for Sustainability (LDS) directed by Giuseppe Lotti, belonging to the Department of Architecture of the University of Florence in collaboration with Caritas of Florence and 3 reception centres for asylum seekers. In 2016 it was at the height of the migration crisis in Italy, but it seemed that once the boats arrived, the people on them disappeared, nobody knew anything about it anymore. The organization of the *Cos'è Festival* in its

1. The project's team consists of three designers, Giuseppe Lotti, Debora Giorgi, Irene Fiesoli, two photographers, Stefano Visconti and Flavia Veronesi from Itaca Freelance, an illustrator, Alessandra Marinelli and a sociologist, Paolo Costa. The project was carried out thanks to the disciplinary contribution of Caritas operators, the director Alessandro Martini and the head of the asylum seekers area, Marzio Mori.

first edition in 2016, dedicated to investigate and make explicit some of the socio-cultural, design and production processes that underlie the complex relationship that we entertain with things, it seemed to us an opportunity to give visibility to the protagonists of the migratory crisis and break that situation of detachment from the rest of the population that made them invisible to the majority of people.

Through a work of focus groups and individual interviews, we undertook the construction of the story of some flashes of life of these people and we decided to do it through the “things”, which represented the medium and the pretext to make visible their past, their origins and their memories. About 40 men and women participated in the project, who arrived on the coasts of our country in the summer of 2015. When, a few months later, we met them, for many of them the memories of a long and often dramatic journey, were still alive: in many cases this had meant crossing a large part of Africa, by the most diverse means, even on foot². Then everyone had stopped in Libya and there, in prison, had suffered terrible violence and abuse, until they embarked on a “barcone” risking their lives again. Finally, when they arrived in Italy, they found themselves suspended, waiting for the recognition of refugee status (Lotti, Giorgi & Costa, 2017, p. 14). Among these, the women, concentrated in a centre dedicated to them, lived in an even stronger condition of invisibility,

2. See the project *The Stories Behind a Line* by Federica Fragapane with Alex Piacentini that tells the stories of six asylum seekers who arrived in Italy in 2016 through the data that shaped their personal travelling line (<http://www.storiesbehindaline.com/>).

because in addition to being waiting for the recognition of political status, they risked retaliation for having denounced the traffickers who had brought them clandestinely to Italy and had exploited and subjected them to violence.

The format envisaged identifying an object that represented for them “home”, their identity, but quickly the object became a symbolic aggregator of meanings and a starting point for a future project, focused on the self-recognition of individual identity.

If there are few things that migrants can take with them when they embark on their journey, in the case of refugees these objects are not there at all. During the meetings with them, to overcome linguistic difficulties, we used the drawing as a real translation tool. That is why we have imagined and drawn the things in their hands, trying to make their stories visible, but also to stimulate the viewer to imagine what is behind them, to try to identify with those on the other side.

There are the “objects of affection”, because the objects make “home”, they help us to recreate a space of our own, a way of recognizing ourselves, like the ring given to Mohamed by his mother before leaving but stolen from him during the long months spent in Libya, waiting to find a passage to Italy. Then there are the objects that you use and that sometimes represent something else. A way of doing things, of eating, of cooking, of dressing, all those daily actions that enclose our culture and identify us as eating at the table all together, from the same dish: eating means sharing and the awareness of being safe in a family.

Finally, doing things: doing them in one way or another expresses a way of being, habits, traditions, in a word one’s

own culture. It was interesting to note that it was precisely the women who spoke about this, focusing their story on what they had been and what they wanted to plan for their future: the make-up case of Jennet, cosmetician and make-up artist who was also an opportunity to talk about traditional weddings in Nigeria, Mildred's microphone with which she sings in church, hairdresser's instruments, traditional hairstyles... Objects that represent their craft, their traditions of which they speak with pride, with nostalgia but never with resignation. Common objects, without any economic value in most cases, but made precious by memories, feelings, emotions that they tell and above all that catalyse new projects.

3. Material Culture as a Vehicle of Meaning Linked to the Migration of Women and Their Ability to Make a Home Wherever They Are.

The project, *Odissee Fiorite*, was conceived and realized for Turin, as part of FoTo, International Festival of Photography, curated by Museo Ettore Fico and then expanded in Florence, thanks to the invitation of the Design Department of the University of Florence and the participation with the exposition *Odissee Fiorite - Photographic fragments of women's stories*, organized by DIDA of University of Florence in the framework of the Festival *L'eredità delle donne* curated by Serena Dandini.

The project started from a reflection on a participatory art work I realized in 2014 in Morocco, where I stayed for an artistic residence at the Swiss-Moroccan foundation Dar Bel-larj in Marrakech, then merged into the exhibition *Féminin Pluriel*.



Figure 6. Féminin Pluriel, workshop with the Medina Women of Dar Bellarj Foundation in Marrakech. Photo ©Aniko Boehler



Figure 7. Féminin Pluriel, work for the exposition *Oui c'est moi* at Dar Bellarj Foundation in Marrakech. Photo ©Aniko Boehler.



Figure 8. Féminin Pluriel, the exposition *Oui c'est moi* at Dar Bellarj Foundation in Marrakech. Photo ©Aniko Boehler.

*L'éspace physique et mental des femmes*³ where I realized *Oui, c'est moi*. It is the story of 15 Muslim women of the Medina, told through 5 objects for each one, then photographed and assembled as identification totems. Fragments of history and stories have been embodied making it possible to decipher and represent themselves. A secret and social self at the same time, as can be seen from the type of objects chosen, where the visible, making visible, opens up to the possibility of the founding act of being there, here and now, claiming its inalienable right. The sentimental poignancy of the objects that each woman has chosen to represent herself underlines the poetics of the affections and lives that underlie them. *Odissee Fiorite* was the consequence and the natural deepening of this reflection, in a continuum of studies and personal interests that see at the center of my work an anthropoietic attitude directed towards a *weltanschauung* oriented to women, in the way of perceiving and making world and worlds. In particular, differently from what was done in Marrakech, where the intention was to investigate the mystery, to understand what identity was hidden behind the veil of the women of the Medina, with *Odissee Fiorite*, I wanted to highlight the ability of women to make a home wherever they are and from wherever they come, regardless of their personal odysseys; how they manage, starting from the objects of everyday life, to transform nostalgia into a desire for the future, to be realized in everyday care, nourished by hope and tenacity.

3. Féminin Pluriel is an artistic collective created & animated by Aniko Boehler and Debora Giorgi, art curators, in collaboration with a team of women: Brigitte Perkins/Tadert Titbirine, Florence Robert-Vissy/graphic design department ESAV Marrakech, Maha Elmadi/Fondation Dar Bellarj, Nathalie Locatelli/Galerie 127. Féminin Pluriel organizes artist residencies, workshops, conferences, in the field of visual arts with a special focus on women artists.

A real and metaphorical home at the same time, capable of transforming one's own personal experience, from an odyssey to a blossoming, interwoven with sharing and a propensity, specifically of gender, towards dialogue. Where the talk of children, of nostalgia for what one has left behind, of the dream of a different future ... highlights how female thought is naturally led towards a future of peace and integration. The intent has been to demonstrate, through photographed objects and the transcription of the narrative, how women have a greater porosity than men and how the sense of the future, inherent in biology, allows to create human and affective relationships starting from the territory where they are, without forgetting their roots.

The idea of working with objects has allowed me to have access to real cultural universes, varied and extremely significant, making it clear that the object is never something inert (Bodei, 2016) but, on the contrary, condenses a trail of affective, sociological and anthropological meanings, capable of testifying to the complexity of existences, in this case, feminine.

The object thus becomes a vehicle of immateriality (Miller, 2014), whispering and whispering of intimacy, where gender study and ethnographic turning point allowed breaches in the unspoken.

It is from here that I thought of using the same strategy as the object and direct storytelling, without interpreters, to give voice to women who have left their country, for whatever reason, and have started again elsewhere. I was interested in highlighting this feminine ability to rise up and create a future.

Odissee Fiorite was a work on the encounter between me and the foreign women present in Turin and Florence, where the

word foreigners understand both the tragedy of the refugees, and those who have been living in Turin or Florence for years for personal choices, and those who have just arrived there to study, not only from distant countries, but also from other Italian regions. I was interested to see what kind of cultural koinè is determined by the meeting of different cultures and humanity to prove how much, the difference is only wealth and opportunity. Through the mutual encounter and photography, I wanted to highlight the ability, all feminine, to transform the wound of separation into a flowery garden, where melancholy is intrigued, however, of the future.

The other aspect underlined by *Odissee Fiorite* is the concept of plastic identity, starting from that “I am another” of Rimbaudian memory (Rimbaud, 2004), to reach the position of Francesco Remotti, clearly contrary to any definition of static and rigid identity (Remotti, 2005). Considering it as a plastic process, in continuous evolution, capable of producing new wefts and warps, the result of meetings and relationships, identity becomes an opportunity to reflect on the feminine porosity, able to absorb stimuli and information from the outside, constantly integrating them, without forgetting their cultural origins. Identity understood as a dialectic between the ego, already plural as we know from psychoanalysis, and an exterior whose meaning is also constantly changing.

Odissee Fiorite has been a testimony to this.

Starting from a call, for 3/5 days I met, in various places, public and private, all the foreign women/girls of the two cities who wanted to tell about themselves through 3 personal objects (the past, the present and the future). The objects were then photographed and I transcribed their narration.

I have been contacted in both cities, by non-profit organizations operating in the social field: *Articolo10* in Turin and *Cospe* in Florence. This allowed me to meet refugee women, some just arrived from boats, all with devastating experiences in Libya, others with war and torture in their eyes. But all with the ability to transform an adverse fate into new possibilities, starting from the present. There are those who have started studying again, those who have set up a small cleaning company, those who have exploited their skills by inventing a job, those who, more simply, have learned to be autonomous. Through the objects brought by the women it has emerged that the objects/things are not inert material, but on the contrary they are able to trace maps of origin, preserve the native culture and create interrelationships with the territory in which they currently live, kneading another culture *in itinere*. Capable, that is, of making life (Dei & Meloni, 2017). A life that looks ahead, but does not forget its origins. It integrates and creates new plots. I have heard tales of war of those who, running away, lost their shoes, of those who risked ending up in the prostitution trade, of those who remember their grandmother's remedies against melancholy, of those who lost everything to the economic crisis of their country...

I met 47 women, listened to their story, laughed and cried with them, received various gifts (an amber-scented hair treatment, *bruschi* tomatoes, coffee, small embroidery, hugs, smiles, a bottle of wine), sometimes it was very difficult, sometimes cheerful. From all of them I received the courage to go on regardless of what happened yesterday. Blooms from odyssey, precisely.

Ages and places of origin extremely varied: Italy (from various regions), China, Congo, Chad, Cameroon, Ivory Coast, Brazil, Senegal, Great Britain, Finland, Gambia, Egypt, Slovakia, Siberia, Iran, Spain, Vietnam, Mauritius, Nigeria, Bangladesh, Dominican Republic, Romania; the youngest is an Italian student away from home who felt lost and the oldest is an English dancer, now a teacher in a nursery school.

In addition to cooking and, of course, language, which was then taught to the children, the past was represented by mothers' objects, Federica's green salad bowl, Raphaele's (Ivory Coast) or grandmothers' bone comb, like the amber bottle with which Amina (Chad) perfumed my hair, the crocheted doily with which Jana fights nostalgia the precious kajal box from Saeedeh (Iran) or the marabou from Kunkung (Gambia), to find a husband and protect her from all evils.

The relational circle never breaks and the memory is jealously guarded. It is not forgotten but transformed. A nomadic inner house that flows into the house, understood as a place where one lives and where care reigns.

If the present is often aimed at the hope of finding a job, it is the future that marks the difference and makes us understand how women look ahead with obstinate vision. Genilda (Brazil) has brought a miniature house, Ruth (Spain) a seed in a jewelry box, Ellise (USA), a new notebook with all-white sheets and Saffie (Gambia), a volleyball ball. Because volleyball is a team game where unity is the strength and without trust in each other you get nowhere. Perfect metaphor for what I wanted to demonstrate with this project: women look forward, aware that together you are stronger, looking for new connections, but they do not forget. They transform pain and suffering into planning.



RAPHAELLE

Costa D'Avorio – 32 anni

a Firenze da un anno

È arrivata in Italia circa un anno fa con la barca, i barconi che approdano a Crotona, dopo l'inferno della Libia.

Nel suo paese lavorava come agente di viaggio, le piaceva molto, ma il padre non voleva. Prima o poi vorrebbe trovare un impiego nell'ambito del turismo. Per ricordare il suo passato e tenere in vita il suo desiderio ha scelto un aereo, un modellino di aereo di linea, come quelli dove prenotava i biglietti quando era nel suo paese. Quando la nostalgia è feroce cucina l'attieke un piatto tipico del suo paese a base di farina di manioca.

Va a scuola, per ora è alle medie, poi si vedrà. Il presente lo associa a delle scarpe da ginnastica nere: ha iniziato il viaggio con quelle, ma durante la fuga le ha perse. Non vuole scappare più.

Aspetta un bambino che nascerà tra 4 mesi e, mentre si accarezza la pancia, dice che è preoccupata, perché non vuole che il/la suo/a bambino/a prenda freddo. È il suo futuro e vuole proteggerlo. Immagina la protezione come un cappottino e sorride.



SAFFIE

Gambia – 21 anni

a Firenze da due anni

In Italia dal 2016. Prima è arrivato il marito poi lei, passando dalla Libia dove è stata tre mesi che vorrebbe dimenticare.

Ha un bambino irresistibile e sorride spesso.

Le sue radici africane sono un pettine di legno che le aveva dato la madre parrucchiera e che non ha potuto portare con sé perché è scappata in fretta e furia. Ne ho cercato uno io per lei: è africano, è in legno.....spero che vada bene.

Anche lei se ne intende di capelli e fa le trecchine a Kunkung che è sua cugina. Vorrebbe trovare lavoro come parrucchiera, ma il suo presente è scandito da lavori domestici, tra cui stirare, che le piace molto perché ama avere tutto in ordine e la cura del suo bambino. Nel futuro vorrebbe leggerezza e gioia: ha scelto un pallone da pallavolo, un gioco di squadra dove l'unione fa la forza e senza fiducia nell'altro non si arriva da nessuna parte.

Guarda avanti e cerca connessioni.

The objects, never fetishes, have been the means, material witnesses of immateriality, of existences. Each one precious and unrepeatable, that every woman who has participated in the project has generously made available to all. Existences from which we can see a common thread represented by the obstinacy towards a better tomorrow where we can share, together, the difference as an opportunity to make humanity (Remotti, 2017).

4. Conclusions

The theme of migration has aroused a lot of interest from designers and artists, we think at the digital project *The Stories Behind a Line* by Federica Fragapane or Matteo Moretti who in his book (Moretti, 2019) and especially in the platform *Design for Migration* (<http://designformigration.com/>) collects in a repository some of the most interesting experiences in the field of design. Other art projects such as the interesting exhibition *When Home Won't Let You Stay: Migration through Contemporary Art* held in 2019 at the Institute of Contemporary Art in Boston, testify the interest of contemporary art in the subject.

In becoming interpreters of the complexity and challenges of the contemporary world, art and design are charged with ethical components and must always develop new tools of expression that allow them to accept contaminations and stimuli that come from different disciplinary fields.

In the projects described in this article we wanted to bring attention on the one hand to the theme of plural identities of women who move from one place to another for different reasons, and on the other hand to the capacity typical of women

of resilience and of planning in circumstances of change and discontinuity. In fact, the women of the medina of Marrakech are also women in change, since, thanks to the Dar Bellarj foundation, they have come out of the comfort of the home to reveal their *identité cachée* for a long time subjected to the strict rules of a patriarchal society. They did so with the strength of their creativity and solidarity, finding the capacity to reinvent and to propose themselves. So the women of *Le Cose degli Altri*, projected towards the future, however unknown, in symbolizing an object that represented them, rather than indulging in nostalgia, used the project to tell about themselves and their skills. Obviously the women of *Odissee Fiorite*, who in retracing their more or less dramatic stories, have chosen to create a house that “will let you stay”.

Design and artistic project find a convergence in giving voice to these stories, extracting their values and bringing these pieces of personal memory back into a collective memory space. Storytelling makes it possible to build a bridge between the microcosms of individual identities and the wider space of the female community, revealing the common traits of care, welcome and the ability to transform pain into new life. The plural narratives of the female through the visual and artistic medium thus become a choral project in which every identity is not simply destined to get lost, but rather finds strength in the community and participatory dimension. Artist and designer thus become the agents of catalysis that, thanks to the interdisciplinary contribution, make visible the meaning and value of these stories through a continuous dialogue that, in an effort to understand and accept differenc-

es, opens up to the vision of what is possible, expanding the boundaries of individual identities. In this space of the possible, whose boundaries widen to embrace what is different, the creative process takes place. Seeing differences burns visionary capacity and imagination.

References

- Bodei, R. (2009). *La vita delle cose*. Editori Laterza.
- Dei, F. & Meloni, P. (2017). *Antropologia della cultura materiale*. Carocci.
- Giorgi, D., Lotti, G. & Costa, P. (Eds.) (2017). *Le Cose degli Altri. Racconti migranti attraverso gli oggetti*. DIDApres.
- Kilani, M. (1997). *L'invenzione dell'altro*. Edizioni Dedalo.
- Manzini, E. (2018, October 18). *Progettualità sociale e Politica Per un circolo virtuoso tra progettualità sociale e Politica* [Seminar text]. Progettualità sociale e politiche. cheFare, DESIS Network and Triennale di Milano. https://www.che-fare.com/che-fare-media/2015/01/progettualita-soziale-e-Politica_position-paper-Ezio-Manzini-2.pdf.
- Manzini, E. (2018). *Politiche del Quotidiano*. Edizioni di Comunità.
- Manzini, E. (2015). *Design, When Everybody Designs: An Introduction to Design for Social Innovation*. MIT Press Ltd.
- Miller, D. (2013). *Per un'antropologia delle cose*. Ledizioni s.r.l.
- Miller, D. (2014). *Cose che parlano di noi. Un antropologo a casa nostra*. Il Mulino.
- Moretti, M. (2019). *Socio-Social Design. Design Practices for New Perspective on Migration*. Corraini Editore.
- Morin, E. (2016). *Sette lezioni sul pensiero globale*. Raffaello Cortina Editore.
- Remotti, F. (2005). *Contro l'identità*. Editori Laterza.
- Remotti, F. (2017). *Fare Umanità*. Editori Laterza.
- Rimbaud, A. (2004). *Opere in versi e in prosa*. Garzanti.

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How do Women Industrial Designers Succeed in the Workplace? Getting In and Getting On

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Keywords

Industrial Design, Gender, Career, Career Development Planning, Success.

Abstract

In Australia, despite comprising half of the design student population, women remain under-represented in the design world and rarely hold senior leadership roles or win high profile design awards. This qualitative research, focussing on the workplace experience of nineteen female industrial designers, explores how these women achieve success and the facilitators and barriers. Overall, success was defined as happiness, work-life balance and enjoyment and engagement with the design process; impact was also important, with one defining success as seeing a stranger using a product she had designed. Most found the industry to be male dominated and struggled to secure their first job, explaining the challenge of learning specific software programs and then developing the confidence and courage to actively contribute design ideas. A variety of different strategies was utilised to secure their first job, contacts, mentors and role models later empowering over half to develop their own design start-ups. The decision to become an entrepreneur was a conscious choice, enabling these women to follow their design passion with more flexible, parenting-friendly hours. This qualitative research provides some nuanced insights into how these women navigated entrenched gender stereotypes and traditionally masculine workplace norms. The findings suggest the need for more radical approaches to facilitating women's recruitment, retention, and progression.

1. Introduction

Despite comprising half of the design student population at university, women remain under-represented in the design world and rarely hold senior leadership roles or win high profile local, state or national design awards (Anthony, 2001; Fowler & Wilson, 2012; Roan & Stead, 2012). This gender inequality in career progression and visibility is illustrated very clearly in the architecture professional accreditation process: women comprise almost half (44%) of architecture students in Australia, yet only one per cent are directors at architectural firms and less than a fifth (ranging from 16-25% in each state) are actually registered architects (Matthewson, 2012). In the last decade, despite an approximately equal gender distribution among graduates from design disciplines, there remains an under-representation of women actually working in the field. This disparity raises an obvious question, specifically addressed by this research: what happens to these bright young women when they leave university and try to enter the design workforce? Where are they in the workforce and why they not represented, especially at the higher echelons of the profession? This qualitative research explores these questions, focussing on the experience of female industrial designers in Australia.

1.1. Women in Design

To date, little empirical research has investigated women's experience in either design education or the workforce, although significant anecdotal reporting suggests that women are under-represented in senior leadership roles and at high profile design awards (Anthony, 2001; Fowler & Wilson, 2004;

Fowler & Wilson, 2012; McMahan & Kiernan, 2017). As there is no published research relating directly to the focus area of this research, women in industrial/product design, looking to other design discipline areas (where women are also in the minority) provides some initial insight into the potential issues and barriers for female industrial designers.

A handful of studies have begun to look at the engagement of women in the architecture profession, which is renowned for supporting a highly male-dominated work environment and gendered professional culture. This small body of emergent research identifies the aggressive, competitive and masculine work environment as alienating women from the practice of architecture, explaining how most universities report that more women than men have graduated in architecture, yet these graduates are not present in the profession (Department of Labor, 2008; Roan & Stead, 2012; Sanchez de Madariaga, 2010; Whitman, 2005).

In the first comparative cross-national study of architects in three European countries (the UK, Spain and France), Caven, Navarro-Astor and Diop (2012) interviewed 66 women architects. Overall, there was a sense of “resigned accommodation” amongst these female architects, who described how they had little knowledge or understanding of the masculine work environment prior to entering it. University education left them ill equipped for site-based work, and they developed strategies such as the use of humour and emphasising their “otherness” to build their professional standing and highlight the value of their different skills (specifically, better com-

munication, complaining less and creating fewer problems). There was a sense that these positive attributes hindered their advancement as they “just get on with the job”.

1.2. Women in Creative Arts

As design is positioned across two very different fields (engineering and creative arts), it is important to explore if and how gender might impact the experience of women in creative arts careers, such as performance, design, creative writing, music, film, choreography and art, as well as in STEM fields (Science, Technology, Engineering and Mathematics). Although only a handful of studies have explored gender inequality issues for women in creative arts, the findings have generally been very similar to those investigating the experience of women in STEM fields. Women are under-represented in both production and decision-making roles, with existing cultural frameworks about art and gender disadvantaging women in both direct and indirect ways (Schmutz & Faupel, 2010).

Creative arts careers differ markedly from STEM careers in that they challenge dominant cultural standards of career success, typically offering a lifetime of career instability, competition and low pay (Brooks & Daniluk, 1998). Thus, it is interesting to note that the limited research on women in creative arts careers often identifies two unique factors not often detected within the STEM literature: (1) a strong, all-encompassing passion to pursue their (artistic) career and (2) significant opposition from family and friends for embarking on an artistically-inclined career path that is (typically) difficult to succeed in, unpredictable and poorly paid.

In their recent research exploring the experience of 21 female creatives (art directors, copywriters, and creative directors) working in advertising, Windels and Wei-Na found that the industry was still very much a deeply rooted boys' club "built around male norms, with systems in place to privilege male perspectives" (2012, p. 510) and where women's "voices, perspectives, and work were devalued" (2012, p. 511). Essentially, the participants felt it was easier for men to get to the top, as the creative department had a strong masculine paradigm that restricted women's ability to grow their careers. At a social level, these American women saw junior-level men socialise and form relationships with senior-level males; they felt they could not form the same bond, partly due to gender differences and partly because friendships between younger women and senior men can be seen as inappropriate. At a professional level, these female creatives also described being disadvantaged by gender-stereotypes and being pigeon-holed into working on less prestigious "female" assignments throughout their careers; one explained how they never worked on projects about beer but always on ones about tampons, and these projects were seldom "buzz-worthy" or represented in national awards (Windels & Wei-Na, 2012).

1.3. Women and the Industrial Design Profession in Australia

Given the limited research exploring the experiences of female designers, this study focuses specifically on how female industrial designers fare in the workplace. Industrial design often operates in a parallel way to the creative industries where there are networked clusters of small-to-medium enterprises, sole-traders and micro-businesses (Ashton, 2015;

R. Bridgstock, 2011) where the work is often freelance or short-term contracts due to the fluidity and movement within these types of businesses. The Design Institute of Australia (DIA) regularly carries out a salary survey across the design sector, reporting that the self-employed designer's salary dropped in 2013 with a significant drop being experienced by industrial designers (Robertson & Design Institute of Australia, 2014). The transition into industry could be seen to involve three interlinked stages: preparation, actual transition and outcomes in the labour market. It is not necessarily a linear path, as qualifications alone do not guarantee immediate entry into the workforce (Haukka, 2011; Haukka, Industries, Innovation, Council, & Technology, 2009). To date, there has been no published research investigating the experience of female industrial designers in the workplace. This research, an in-depth qualitative case study of 19 Australian female industrial designers, explicitly addresses this knowledge gap and focuses on their workplace experience.

2. Research Method

Given the very small body of literature exploring the experiences of women in design, an exploratory qualitative research approach was utilised due to its appropriateness for investigating unstudied populations and issues. To better understand the unique individual “lived experiences” of women in industrial design, we adopted a phenomenological approach where the researcher identifies the essence of human experience (Creswell, 2009; Liamputtong & Ezzy, 2009).

2.1. Participants

This interview study was conducted with women who had graduated from an industrial design course at one Australian university, and at the time of interview in 2011 they ranged in age from 21 to 37 years and had graduated between one and sixteen years ago. The majority (74%) were currently practising industrial designers, and reported working in a number of industries, from in-house design work at a major appliance company through to designing, producing and bringing to market their own products. Table 1 outlines the specific socio-demographic information, including current employment, position title and year of graduation.

Code	Year of graduation	Current type of employment	Position title used
6	1995	self employed	Designer
10	2002	self employed	Designer
19	2002	self employed	Designer
13	2002	self employed - stay at home Mum currently	stay at home Mum
1	2003	self employed	Industrial Designer
4	2003	on going contract	Industrial designer + graphic designer
16	2004	contract + own projects	Designer
18	2004	full time	Footwear Designer
5	2005	full time	Industrial Design + Account services
12	2005	full time	Account Manager
17	2005	full time	Ergonomist
2	2006	self employed	Design director
9	2006	full time contract	Exhibition Designer
8	2007	full time	Industrial Designer
14	2007	full time	Project Manager
3	2008	full time	Events officer
7	2009	part time	Designer
11	2010	internship	Junior Designer
15	2010	full time - on maternity leave	Industrial Designer

Table 1. Participants' socio-demographic profile.

2.2. Procedure

All participants responded to a broadcast email to female graduates of the course inviting them to participate in the research. Data collection in the form of in-depth interviews was conducted by the author (an experienced female Industrial Designer and academic) in a central convenient location. The Bruce and Lewis (1990) three-hurdle model was used to explain the factors that influence career advancement of women in design: getting the qualification (hurdle 1); getting the first job (hurdle 2); and becoming a success (hurdle 3) guided interview question development. The digitally recorded interviews were transcribed into text for analysis. The data was then read and re-read to identify key words articulated by the participants, first individually and then as a group to establish patterns of meaning (Creswell, 2003; Liamputtong, 2009).

3. Results

Focussing specifically on women industrial designers' experience in the workforce, the thematic analysis identified four key themes, which will be discussed in turn: breaking into the industry; once in the door; gender hurdles; and the move to entrepreneur.

3.1. Theme 1: Breaking In – “I Went to a Lot of Interviews, Lots and Lots of Interviews”

As the quotes in Table 2 illustrate, successfully breaking into the discipline after graduation required a number of different strategies and the conscious adoption of proactive career management behaviours, specifically: networks and networking; traditional and non-traditional pathways; and design

competitions and internships. Networks and networking were critical, with over half of the participants (63%) recalling that they actively engaged in networking to gain their first design job and that university academics and their final year self-directed major project enabled them to get that first job.

Networks & Networking	Design Strategies - competitions & internships	Non-traditional path - sidestepping
<p>I had spoken to her in one of my industrial design assignments. I called up all these people and I remember speaking to her. I called her up and said, 'Hi I interviewed you a few years ago and I'm really interested and would love to come and work for you'. It started off as work experience for a bit and it ended up being a position which was good and she was tough as, but it was really, really great and once you are on her great side she is the most invaluable mentor you could ever have she's fantastic. (#18)</p>	<p>My plan had been in third year to tee up some work experience, because the biggest obstacle to getting a job is work experience. The irony being if you don't have any, they won't hire you. So it's like okay, even if I have to volunteer that's fine, if that's going to get me what I need. And I figured for me the best way to do that was to enter a whole bunch of design competitions – and I was fortunate in doing furniture, there was quite a lot going on that year – and exhibit, anything I could. (#15)</p>	<p>So I got this receptionist position at a Furniture retailer. At least it is something design-related and got into something 9 to 5. As long as you are in the industry, it's like an ear to the ground, there's no point having a job that is not in the industry and just looking. (#14)</p>
<p>A friend of mine who was doing Industrial Design at another university and his Dad owned the company, he needed somebody to just do graphics and CAD stuff, I got the job designing backpacks and I more or less did that the whole way through the degree part-time. (#17)</p>	<p>No but if you put the work in ... get your foot in the door basically as I started off doing an internship with a guy doing furniture and he knew the people at another company and then when you start it seems like quite a small circle when you have some names it's easier to get other jobs and but that first little pluggin away was really hard and it's not easy to get a job, no. (#16)</p>	<p>First proper job was in production management in a point of sale company. So I sort of managed their factory sales, their product sales and then a lot optional manufacturing, China, Hong Kong. So not designing as such but more problem solving and troubleshooting, that sort of stuff. (#02)</p>
<p>I think you probably forwarded an email and I applied for that, or did they contact me? I can't remember. They were just starting up, they didn't have an office or anything ... and the interview was downstairs at uni, outside the workshop. But that was the first job. (#09)</p>	<p>The design director had done a lecture during our course. That was the consultancy that I wanted to work for. Then when we won this work experience, it all fell into place. During uni I had been working at a jewellery and accessories company and I quit my job there to do this six-week work experience. (#10)</p>	<p>I wanted to start earning money straight away so then I just applied for the easiest related thing that I could go for, which was the graphic artist position. Having the art background as well helped, so that was the first job. (#04)</p>

Table 2. Breaking in – strategies for securing their first design job.

Approximately a third of the participants (37%) reported following a more traditional path to find their first job, describing using employment websites but needing to be proactive in following up and cold calling. A minority reported consciously utilising non-traditional pathways as stepping-stones to their preferred career. For example, one took a job as a receptionist in a retail design-based company, which allowed her to remain connected to the industry and to build her network. A fifth (21%) described consciously engaging in career planning activities designed to facilitate their ability to get a job, such as internships and entering design-related competitions to build their portfolio and industry standing.

3.2. Theme 2: In the Door – “Basically, Just Understanding the Workforce”

Key challenges for these women in the first years in the workplace centred around the development of a professional career identity, with over half describing how they wanted validation of their career choice and years of study, and strongly desired the label designer on their business card. As the industrial design course offered a broad scope of experience, like most recent graduates, these design graduates described needing to build both their confidence and product-industry specific skills. Two key sub-themes emerged: developing self-confidence as a designer (specifically learning the discipline and language of the work); and embracing travel.

First, as the quotes in Table 3 illustrate, having secured their first jobs, these women then described an ongoing process of building confidence in their own design skills and growing

their understanding of the whole process of getting a piece of design to market in practice, from design to production and marketing. Industrial designers recalled the challenge of “learning the discipline of work” (#13) and unique workplace protocols – as one explained, it was about “trying to fit in and learn at the same time as doing your job” (#14). Second, travel features prominently in the career of a designer, as the place of manufacture in Australia has moved from being ‘down the road’ to predominantly in Asia. A critical part of a designer’s work is communicating with manufacturers, checking methods and materials and production techniques; this is often best achieved face to face, especially when establishing new relationships. These women recalled how, in the early stages of their career traveling, they were usually in a junior role and supported by a senior colleague. As women travelling to China and Korea, they experienced differing levels of respect for their position as a designer:

I know in one place we went to, they made the women go out of the room while the men did the business and then the women could come back in, It was just ... so degrading, [but] that’s the way they do it (#02).

Communication was often a significant challenge, with many of these women describing how they would utilise their design skills of drawing to facilitate understanding. Another, who was travelling alone a lot, described how she learned Mandarin to build up her confidence and found these language skills also helped in “getting good relationships, getting good pricing and stuff” (#02).

Learning the business	Building confidence
I learnt a lot of skills that helped me more in having a business of design, which is good; seeing how a whole company operates from human resources to accounts and also being exposed constantly to a full product cycle and dealing with suppliers and things like that. (#19)	I guess having the confidence and the courage to speak up and contribute your ideas in amongst a team of established professional designers. Believing enough in yourself that your thoughts are equally valid and worthwhile to all those other people who've been there however many years. (#15)
My key challenges were, well, getting a job in the first place and then I think learning to work, I think was a bit of a challenge, because I had spent so long in my 20s studying that I didn't have a lot of work experience. (#13)	I think getting up to speed with a lot of that industry specific knowledge. So whether that's project specific terminology, competence in whatever programs they're using. (#15)
Learning not to step on toes, really. Trying to fit in and learn at the same time as doing your job. Because I ask a lot of questions but with a small company, there is not always time for the questions to be answered. (#14)	Another challenge is when you work on a project ... trying to do those projects in a time frame, for the client. So you've got all these jobs - all these different jobs that you have to do and you have to manage your time and get five different projects' concepts out. You want three or four concepts for all the different jobs and you've by the end of the week to get all that done. (#05)

Table 3. Developing self-confidence as a designer - learning and growing in confidence.

3.3. Theme 3: Gender Hurdles – “Guys Will Never Get That”

Just over half of these designers (52%) described experiencing gender based issues and stereotypes in their workplaces, specifically: gendered behaviours, including sexism; male gate-keeping, where different standards are applied to women; and stereotypical perceptions of their skills and abilities. As one explained, the glass ceiling was there.

It sounds like you are kind of complaining about it or but it does exist. It's a bit of a glass ceiling and it is quite low in industrial design. I think, also, women have a different approach to design. (#07)

Only a handful of women described overt ongoing sexism, with one recalling a workplace where the owner and most of the staff were male. The few women designers employed were in accounts and finance, and had to actively flirt with the owner to do some design-related activity. She recalled how her own opportunities were significantly limited, as she was the only one who didn't flirt with him:

He liked the girls to banter to him and I didn't. So he didn't like me. He thought I was weird ... They played the game, they flirted with him and they got on well. You know, flirtation is harmless but not when it has to be a part of your job (#13).

More commonly, these women recalled male gate-keeping, driven by the underlying assumption that women are less able to make and produce the models required by these three dimensional, traditionally masculine design disciplines. Women felt they had to "try harder" and outperform their male colleagues, with women of child-bearing age subjected to scrutiny regarding their plan for having children. In contrast, a number also described using their gender and "otherness" to their advantage, charming suppliers and manufacturers:

I think also in some ways it's been beneficial for us being women because like, with suppliers and things, they find that quite refreshing. They are generally male dominated and they see these two friendly, youngish girls coming in and they are like, 'Oh, we will make a sample for you for free'. So I think in some ways we have played that card to our advantage a bit. (#19)

Finally, in terms of stereotypes, a number of women described how they perceived men to be more confident in their work, more willing to take more risks in both the workshop environment or product development and in promotion of themselves, and stereotypically more suited to this three-dimensional manufacturing based profession. These women described developing strategies to overcome this, becoming strong:

I think you have got to be quite strong because I found it's a massive boys' club. When I was starting, with the suppliers especially, if they saw any kind of weakness and they saw that you are a girl, they sort of they try and walk all over you' (#12).

This confidence, or ego, in men was further seen to be a reason for the difference in pay, with their male colleagues perceived to be more experienced at negotiation and willing to push for it. In contrast, they felt if a woman is assertive she is seen as “pushy” or “full of herself” (#04).

3.4. Theme 4: The Entrepreneurs “... If I Don't Do It Myself, I Will Never Do It”

Just under half of this group (42%) decided to back their own abilities and embrace their entrepreneurial spirit, creating their own businesses where they design, manufacture and supply their own products. Products produced by this group range from eyewear, jewellery and accessories, headphones and footwear to furniture and lighting. All these entrepreneurs described a passion to create something of their own, expressing delight and satisfaction when they received posi-

tive feedback from a user or saw their product in use. As one noted, “I have to give it another go otherwise this voice won’t go away” (#01). Rarely did they step directly from university into their own enterprise, with almost all describing an initial experience working for others in order to develop their knowledge, skill base, contacts and confidence. Further, the majority identified the importance of a mentor or role model, often an employer or family member who assisted in aspects of their new business:

Somebody that did help me a lot was one of my friend’s dads who does have a lot of products made in China. He was great in terms of negotiating the price and telling me all about shipping information and what all the terms were, customs and getting through all that. (#01)

As one noted, she had known from her second year at university that she wants to start her own business (a design consultancy) but knew that she first needed “some solid work experience before then, both to learn on the job, make contacts, network, all that kind of thing” (#15). The major motivations for entrepreneurship stemmed from dissatisfaction, either with the types of work, levels of creativity and work life balance.

4. Discussion

This study has provided insight into the experience of Australian female industrial designers in the workplace, identifying the perceived key facilitators and barriers to succeeding in their chosen careers. First, consistent with a large body of research, these women designers described how the transi-

tion from university to workplace is often a time of change and uncertainty for an individual, with the defining of career goals, finding a job and understanding what is expected proving to be challenges (De Vos, De Clippeleer, & Dewilde, 2009). Proactively planning for this transition and networking, specifically developing and maintaining relationships with relevant others who may be able to provide career advice or employment advocacy or opportunity at this early stage, was critical for “getting that first start” and early career success (Bridgstock, 2013; Eby, Butts, & Lockwood, 2003).

Second, transition to workplace culture seemed to be one of the largest hurdles; this is particularly acute if they have not engaged in any type of work experience during their education as it can provide context for their learning and understanding of graduate positions (Butcher, 2009; Perrone & Vickers, 2003; Walters, 2018). Graduates often perceive a tension between the skills they have developed while under academic guidance and those expected by potential employers. The university aims for broad transferable skills that will allow graduates to be flexible and adaptable to changing work environments whereas employers often focus on specific skills and abilities for their specific conditions (Ball, 2002; Davis, Savage, & Miller, 2009; Haukka, 2011; Perrone & Vickers, 2003; Smith, Clegg, Lawrence, & Todd, 2007).

Third, understanding the globalised, networked world of 21st century creative work is a valuable capability and may further lead to exposure to jobs in non-traditional sectors (Bridgstock, Goldsmith, Rodgers, & Hearn, 2015; R. S. Bridgstock,

2011). For these women, travel, predominantly to Asia, highlights the shift in the work of the industrial designer and how many companies involve designers more closely in all the activities of design-to-market. The ability to communicate in foreign languages along with international views are additional attributes that assist with new graduate employability (Yang, You, & Chen, 2005).

Fourth, the study illuminates the historical development of this discipline, being similar to that of engineering in that they both have an image of being dirty or technical and to do with machines, and are both industries that have been established with masculine patterns and values (Bruce, 1985; Bruce & Lewis, 1990; McMahan & Kiernan, 2017; Powell, Bagilhole, & Dainty, 2006). Although there has been an increase in the number of women making their way into the industry through successful education (Lockhart & Miller, 2015a), there are still significant gendered hurdles that the women face. Nonetheless, to achieve success and acceptance in this space, women often modify their behaviours by adopting male attributed traits such as toughness and competitiveness, or alternatively utilise deference, a more acceptable feminine characteristic. Often the types of work that are available to women in this space offer little creativity and responsibility, resulting in reduced opportunity for advancement (Windels & Mallia, 2015; Windels & Wei-Na, 2012). The women in this study who have been frustrated by these constraints and barriers have stepped away from the convention and developed their own entrepreneurial working environment producing their own products, taking control of the whole product to market process and

how they work. “So our studio is not open on Fridays, so that is part of our lifestyle choice” (#10). The move to self-employment most notably occurs at a time when they have developed confidence in their business skills and knowledge (Hanage, Scott, & Davies, 2016; Heilman & Chen, 2003; Henry, 2009; Langowitz & Minniti, 2007).

5. Conclusion

There has been an increase in the number of women studying design at university, specifically industrial design. In this paper we have considered some of the issues that challenge women when pursuing their careers after graduation from university. These findings are based on the experiences of 19 female industrial design course graduates interviewed. Some experiences and challenges appeared consistently across the interviewees even though their time in the workplace and type of work experiences differed. A number of the challenges or hurdles that were identified may hinder them in achieving their desired success. The understanding of these hurdles is important as they can be seen to push the women out of the mainstream industry to self-employment. This move often does provide a space for women to follow their passion and to tailor their work environment, although it removes women’s voices and sensibilities from the centre of the field.

This discipline-specific research, when read alongside that of other disciplines such as architecture, advertising and the creative industries, begins to suggest that there are common problems for women working in these creative fields (Adeokun & Opoko, 2015; R. S. Bridgstock, 2011; Caven &

Diop, 2012; Windels & Wei-Na, 2012). In particular, it highlights that there is still gender discrimination, a “boys club” where women are held to different standards – made to prove themselves, often offered the less creative jobs and thereby less remuneration, and there is little flexibility in place and hours of work making management of family and children difficult.

Future research should examine the experience of men also moving into this field to provide further understanding of how the industry embraces and treats all new graduates. Similarly, such research could investigate whether there is attitudinal change occurring: if younger men who studied alongside these women and who have not experienced any discrimination during their study (Lockhart & Miller, 2015b), have embraced the diversity and skills set women may bring to this creative environment.

References

- Adeokun, C. O., & Opoko, A. P. (2015). Exploring the Link between Motivation for Course-Choice and Retention in the Architectural Profession: Students' Perspectives. *Mediterranean Journal of Social Sciences*, 6(6) S1, 191-201.
- Anthony, K. H. (2001). *Designing for diversity: gender, race, and ethnicity in the architectural profession*. University of Illinois Press.
- Ashton, D. (2015). Creative work careers: pathways and portfolios for the creative economy. *Journal of Education and Work*, 28(4), 388-406. doi:10.1080/13639080.2014.997685.
- Ball, L. (2002). Preparing graduates in art and design to meet the challenges of working in the creative industries: a new model for work. *Art, Design & Communication in Higher Education*, 1(1), 10.
- Bridgstock, R. (2011). Skills for creative industries graduate success. *Education + Training*, 53(1), 9-26.
- Bridgstock, R. (2013). Professional Capabilities for Twenty-First Century Creative Careers: Lessons from Outstandingly Successful Australian Artists and Designers. *International Journal of Art & Design Education*, 32(2), 176-189. doi:10.1111/j.1476-8070.2013.01756.x.
- Bridgstock, R., Goldsmith, B., Rodgers, J., & Hearn, G. (2015). Creative graduate pathways within and beyond the creative industries. *Journal of Education and Work*, 28(4), 333-345. doi:10.1080/13639080.2014.997682.
- Bridgstock, R. S. (2011). Making it creatively: Building sustainable careers in the arts and creative industries. *Australian Career Practitioner Magazine*, 22(2), 11-13.
- Brooks, G. S., & Daniluk, J. C. (1998). Creative labors: The lives and careers of women artists. *Career Development Quarterly*, 46(3), 246-261.
- Bruce, M. (1985). A missing link: women and industrial design. *Design Studies*, 6(3), 150-156.
- Bruce, M., & Lewis, J. (1990). Women designers – is there a gender trap? *Design Studies*, 11(2), 114-120.

- Butcher, J. (2009). Off-campus learning and employability in undergraduate design: the Sorrell Young Design project as an innovative partnership. *Art, Design & Communication in Higher Education*, 7(3), 171-184. doi:10.1386/adche.7.3.171/1.
- Caven, V., & Diop, M. (2012). Architecture: a 'rewarding' career? An Anglo-French comparative study of intrinsic rewards in the architecture profession. *Construction Management and Economics*, 30(7), 513-523. doi:10.1080/01446193.2011.627356.
- Caven, V., Navarro-Astor, E., & Diop, M. (2012). A Cross-National Study of Accommodating and "Usurpatory" Practices by Women Architects in the UK, Spain and France. *Architectural Theory Review*, 17(2-3), 365-377. doi:10.1080/13264826.2012.732588.
- Creswell, J. W. (2003). *Research design : qualitative, quantitative, and mixed method approaches* (2nd ed.). Thousand Oaks, Calif.: Sage Publications.
- Creswell, J. W. (2009). *Research design : qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, Calif.: Sage Publications.
- Davis, R. M., Savage, S. M., & Miller, E. (2009). *Professional Education in Built Environment and Design: Exploring Stakeholder Roles and Responsibilities*. Paper presented at the 16th World Conference on Cooperative Education and Work Integrated Learning, Vancouver, Canada.
- De Vos, A., De Clippeleer, I., & Dewilde, T. (2009). Proactive career behaviours and career success during the early career. *Journal of Occupational & Organizational Psychology*, 82(4), 761-777.
- Department of Labor, U. S. (2008). *Nontraditional occupations for women in 2008*. Retrieved from <http://www.dol.gov/wb/factsheets/nontra2008.htm>.
- Eby, L. T., Butts, M., & Lockwood, A. (2003). Predictors of success in the era of the boundaryless career. *Journal of Organizational Behavior*, 24(6), 689-708.
- Fowler, B., & Wilson, F. (2004). Women Architects and Their Discontents. *Sociology*, 38(1), 101-119. doi:10.1177/10038038504039363.
- Fowler, B., & Wilson, F. M. (2012). Women Architects and Their Discontents. *Architectural Theory Review*, 17(2-3), 199-215. doi:10.1080/13264826.2012.744149.

- Hanage, R., Scott, J., & Davies, M. (2016). From 'Great Expectations' to 'Hard Times': A longitudinal study of creative graduate ventures. *International Journal of Entrepreneurial Behavior and Research*, 22(1), 17-38.
- Haukka, S. (2011). Education-to-work transitions of aspiring creatives. *Cultural Trends*, 20(1), 41-64. doi:10.1080/09548963.2011.540813.
- Haukka, S., Industries, I. f. C., Innovation, Council, A. R., & Technology, Q. U. o. (2009). From education to work in Australia's creative digital industries: the opinions and practices of aspiring creatives in the creative industries / Sandra Haukka. In (pp. 57 p.). Brisbane: QUT.
- Heilman, M. E., & Chen, J. J. (2003). Entrepreneurship as a solution: the allure of self-employment for women and minorities. *Human Resource Management Review*, 13(2), 347-364. doi:[http://dx.doi.org/10.1016/S1053-4822\(03\)00021-4](http://dx.doi.org/10.1016/S1053-4822(03)00021-4).
- Henry, C. (2009). Women and the creative industries: exploring the popular appeal. *Creative Industries Journal*, 2(2), 143-160. doi:10.1386/cij.2.2.143/1.
- Langowitz, N., & Minniti, M. (2007). The Entrepreneurial Propensity of Women. *Entrepreneurship: Theory & Practice*, 31(3), 341-364. doi:10.1111/j.1540-6520.2007.00177.x.
- Liamputtong, P. (2009). Qualitative data analysis: conceptual and practical considerations. *Health Promotion Journal of Australia*, 20(2), 133-139.
- Liamputtong, P., & Ezzy, D. (2009). *Qualitative research methods* (3rd ed.). Oxford ; New York :: Oxford University Press.
- Lockhart, C., & Miller, E. (2015a). Studying industrial design: Exploring the experience of female students. *Industrial Design Educators Network*(3), 11-25.
- Lockhart, C., & Miller, E. (2015b). *Women's experience of industrial design education: what worked, what didn't and where to in the future*. Paper presented at the ACUADS Conference 2014: The future of the discipline, Melbourne Victoria.
- Matthewson, G. (2012). "Nothing Else Will Do": The Call for Gender Equality in Architecture in Britain. *Architectural Theory Review*, 17(2-3), 245-259. doi:10.1080/13264826.2012.730172.
- McMahon, M., & Kiernan, L. (2017, 7 & 8 September). *Sisters are doing it for themselves?: Exploring gender in Irish Product Design Education*. Paper presented at the International Conference on Engineering and Product Design Education, Oslo and Akershus University College of Applied Sciences, Norway.

- Perrone, L., & Vickers, M. (2003). Life after graduation as a “very uncomfortable world”: an Australian case study. *Education + Training*, 45(2), 69-78.
- Powell, A., Bagilhole, B., & Dainty, A. (2006). The problem of women’s assimilation into UK engineering cultures: can critical mass work? *Equal Opportunities International*, 25(8), 688-699. doi:10.1108/02610150610719146.
- Roan, A., & Stead, N. (2012). A “New Institutional” Perspective on Women’s Position in Architecture: Considering the Cases of Australia and Sweden. *Architectural Theory Review*, 17(2-3), 378-398. doi:10.1080/13264826.2012.751890.
- Robertson, D., & Design Institute of Australia. (2014). *Fees & Salaries in the design professions 2014*.
- Sanchez de Madariaga, I. (2010). Women in architecture: the Spanish case. *Urban Research & Practice*, 3(2), 203-218. doi:10.1080/17535069.2010.481377
- Schmutz, V., & Faupel, A. (2010). Gender and Cultural Consecration in Popular Music. *Social Forces*, 89(2), 685-707.
- Smith, K., Clegg, S., Lawrence, E., & Todd, M. J. (2007). The challenges of reflection: students learning from work placements. *Innovations in Education and Teaching International*, 44(2), 131-141. doi:10.1080/14703290701241042.
- Walters, K. (2018). *Hegemony in Industrial Design: A case study of gendered communication styles*. Paper presented at the International Conference on Engineering and Product Design Education, Dyson School of Design Engineering, Imperial College, London, UK.
- Whitman, P. (2005). *Going Places. The Career Progression of Women in the Architectural Profession. Findings of a national study examining the careers of women in the architectural profession in Australia*. Retrieved from Brisbane.
- Windels, K., & Mallia, K. (2015). How being female impacts learning and career growth in advertising creative departments. *Employee Relations*, 37(1), 122-140. doi:doi:10.1108/ER-02-2014-0011.
- Windels, K., & Wei-Na, L. (2012). The construction of gender and creativity in advertising creative departments. *Gender in Management*, 27(8), 502-519. doi:http://dx.doi.org/10.1108/17542411211279706.
- Yang, M.-Y., You, M., & Chen, F.-C. (2005). Competencies and qualifications for industrial design jobs: implications for design practice, education, and student career guidance. *Design Studies*, 26(2), 155-189.

Crafting Futures: Inspiring Interdisciplinary Innovation with Young Craft Artisans in Malaysia

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Keywords

Indigenous Craft, Design Innovation, Creative Education, Studio-based Pedagogy, Interdisciplinarity.

Abstract

The authors present a studio-based approach to inspiring interdisciplinary innovation with young craft artisans in Malaysia drawing on *Crafting Futures*, a project delivered in partnership between the British Council and The Glasgow School of Art. The Malaysian craft context currently faces a range of challenges that have led to a precarity in communities where craft has historically been a key mode of economic production, in addition to youth migration, particularly young women, from villages to urban centres. In response to this, *Crafting Futures* is predicated on the economic empowerment of young women in South East Asia through fostering innovation and design-led skills for female artisans. A Design Innovation pop-up studio programme was co-designed with Malaysian-based craft experts, and delivered to young craft students studying at the Insitut Kraf Negara, a specialist craft school in Rawang, Kuala Lumpur. Studio-based pedagogy underpinned the programme, with a focus on nurturing creative capacity-building towards cultivating a collective community of practice centred on Design Innovation approaches. The authors share insights surrounding the co-design process of programme development and delivery, where themes around gender, neo-colonialism and cross-cultural collaboration emerged. The authors conclude by discussing the value and impact of participation for the students, and set out directions for future regionally-focused research in the Malaysian craft context.

1. Introduction

Crafting Futures is an international research and education programme delivered by the British Council in collaboration with UK-based Higher Education institutions, which seeks to protect, conserve and sustain craft practice with a focus on the economic empowerment of young women in South East Asia. In this article, the authors describe and critically reflect upon a Design Innovation pop-up studio programme that inspired interdisciplinary innovation with young craft artisans studying at the Insitut Kraf Negara (IKN), a specialist craft school in Rawang, Kuala Lumpur. The studio programme was co-designed by the Crafting Futures team – two design-researchers from The Innovation School at The Glasgow School of Art (GSA), representatives from the British Council, Malaysian craft experts, and teaching faculty from IKN – to address innovation challenges within the context of craft-based learning and creativity. The studio programme was delivered at IKN in February 2019 and introduced participatory approaches and principles through a range of collaborative activities; bringing together 22 students from across the six indigenous craft pathways: weaving, rattan, batik, metalwork, woodwork and ceramics. Key within the programme were opportunities for the students to engage with Malaysian-based craft experts as inspiring role-models – several of whom are highly successful female creative industry leaders and social entrepreneurs.

The Malaysian craft context currently faces a range of innovation and sustainability challenges from various cultural, social, economic and environmental forces.

This includes an under-appreciation of the technique and skills required in creating indigenous textiles (such as Pau Kumbu, Songket and Tanun), extending to a lack of awareness and recognition of craft-based heritage, and the vernacular materials connected to specific regions. The importance of protecting indigenous craft as culture assets (McHattie et al. 2019) is gaining local-level traction, however there is an attendant lack of structural support for craft and indigenous textile production and creative education. This has resulted in low morale in craft communities and rural villages where craft has historically been a mode of economic production. Furthermore, this fragility has been heightened by youth migration, particularly that of young women from longhouses and villages to urban centres, entering into low-skilled employment with global brands and organisations (LoveFrankie 2018). This combination of external factors is leading to precarity in indigenous craft techniques and practices, and has led to IKN experiencing challenges in recruiting students to their craft programmes (currently reaching one third of their total capacity of 600 students).

In response to this, and with an over-arching aim to contribute to a wider research agenda for the future of sustaining indigenous craft practices in Malaysia, the focus of the pop-up studio was on addressing participatory approaches and skills development to reimagine craft that has contemporary relevance. The IKN curricula is largely based on learning by rote with handbooks that detail the extensive techniques and processes relevant to each pathway – thus it could be argued that current craft education in this context is neither crea-

tive learning or learning creativity. In contrast, as a learning experience, during the pop-up studio the craft students were immersed in a range of participatory activities and engaged in cross-disciplinary collaboration, inspiration and ideation, critical reflection, and visual story-telling. Following the pop-up studio, the students described a shift in their creative mindset surrounding innovation and their identity and intention as craft practitioners. Unpacking this, the authors share insights surrounding the co-design process of programme development and delivery, where themes around gender, neo-colonialism and cross-cultural collaboration emerged. The authors conclude by discussing the value and impact of participation for the craft students, and set out directions for future research.

2. Studio-Based Learning

The approaches developed for the pop-up studio were informed by the field of Design Innovation, underpinned by Participatory Design (PD) approaches (Björgvinsson et al. 2010; Frauenberger et al. 2015; Simonsen & Robertson 2013). PD emphasizes the value of collaborative learning, which recognises users of design and other project stakeholders as experts of their own knowledge and “experience domain” (Sleeswijk Visser 2009, p.5). Often reported in PD studies is the process of participation being as meaningful and transformative as the final designed output (Bannon & Ehn 2013; Greenbaum & Loi 2012). Within a PD process, *relational tools* can be used to foster a shared design language that traverses disciplinary sociocultural practices and hierarchical boundaries (Brandt et al. 2013; Sanders 2002).

Building on this, and in seeking to inspire a culture of participation and community of practice (Wenger 1998), the design of the pop-up studio was aligned to studio-based pedagogy, which encourages exploration, experimentation and prototyping (Bull 2015). As described by Drew (2015), “[t]he process of learning becomes one of apprenticeship to the practice, by engaging with the real-world practice and understanding the process through narration, collaboration and social construction” (2015, p. 108). This pedagogical style is in contrast to how IKN students typically engage in craft-based learning. The students learn technical skills through observation, direction and repetition; a learning cycle that is output-orientated and places an emphasis on honing skills as opposed to fostering creative autonomy. Furthermore, craft practices at IKN are taught in *silos*, where cohorts across weaving, rattan and batik remain discrete from each other with little opportunity for interdisciplinarity. In seeking to widen the students’ repertoire beyond their technical skillset, key tenets of studio-based design pedagogy were employed, which foreground the social and collaborative dimensions of learning in a shared and immersive space (Lynas et al., 2013). As learners become more fluent in creative practice, they engage in tacit sense-making and reflective dialogue between themselves and the making and problem-solving process, and with their peers (Budge et al., 2013; Schön 1985; Shreeve 2015). The pop-up studio was designed to support learning in ways to become creative decision-makers – elevating the students’ highly technical practices as a means to differentiate themselves if and when they enter the craft sector. This was done through a series of individual and collaborative creative activities described in the next section.

3. Co-designing the Pop-Up Studio Programme

A critical awareness of the post-colonial context of Malaysia established the necessity to co-design the studio program with representatives from the British Council UK and British Council Malaysia, Malaysian-based craft experts and visual arts practitioners. This ensured the interventions were sensitively aligned to the cultural context; ethically mindful; and that the program was sustainable beyond the authors involvement. Agreements surrounding attribution and intellectual property were co-defined with each project partner and stakeholder during the process of recruitment, and were highlighted in the process of gaining institutional ethics approval and in a thorough risk assessment carried out before commencing the project.

Prior to the delivery of the studio in February 2019, a series of scoping activities took place in order to identify and work in partnership with six Malaysian-based craft experts and entrepreneurs to co-design the programme with the Crafting Futures team (Fig. 1). These craft experts engage with the local craft sector and are committed to providing education and entrepreneurial opportunities for young people in Malaysia. A key event during the programme development phase was a symposium where 65 craft professionals from across education, government (including Kraftangan, the governing body for craft in Malaysia), social enterprises and retail shared their experiences and insights around the challenges facing the local, regional and national craft sector. During this scoping phase, insights around gender inequalities emerged, where young women pursuing craft as a vocation is, in general, declining. This is particularly the case for young women and

girls below the age of 18, who leave school early as a result of caring responsibilities and/or marriage.

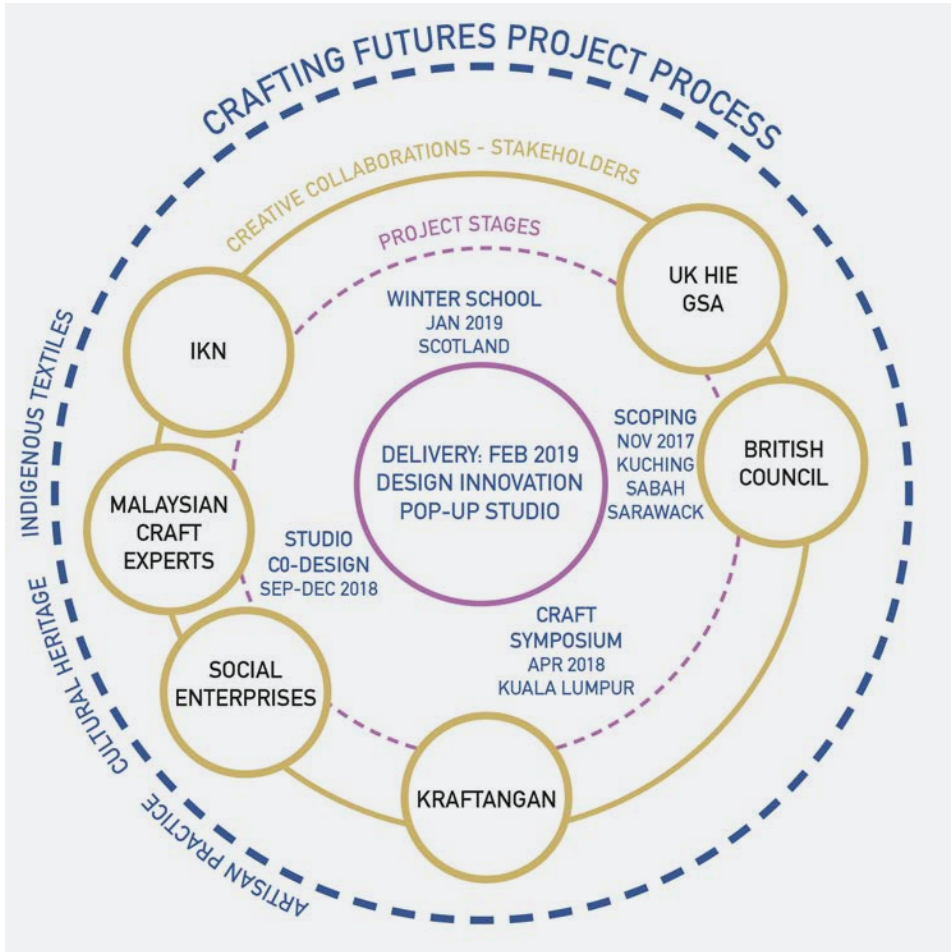


Figure 1. Crafting Futures Project Process Diagram, 2020.

In light of the gender-based barriers female artisans face in accessing educational and employment opportunities in the creative economies, nurturing capacity-building through mentorship was a key aspiration in the project.

The majority of the Malaysian-based craft experts recruited are highly successful female entrepreneurs and innovators who exemplify creative leadership; experiences and qualities the Crafting Futures team wanted to share with the craft students as positive female role-models to mobilise their sense of creative self-efficacy and agency.

In addition to scoping visits to Malaysia, in January 2019 members of the IKN faculty were invited to Winter School, an international programme held at GSA's Creative Campus in the Highlands and Islands of Scotland, to experience and participate in studio-based pedagogy delivered to Design Innovation postgraduate students. This knowledge exchange highlighted differences in cross-cultural pedagogical practices, which could be experienced in action at the intersection between craft practice, education and industry.

Underpinning the pop-up studio programme was a relational ethos that supported interdisciplinary craft collaboration between students, drawing upon vernacular materials and practices from their distinct craft disciplines. The programme consisted of six distinct activities that centred on cycles of creative action and critical reflection. In the next sections, the authors describe each activity in more detail.

3.1. Interdisciplinary Studio-Based Project

The studio-based project, which ran for the duration of the programme in parallel to the other activities, was facilitated by Eira, a principal architect who specialises in bamboo-based structures. The aim of the project was to provide the students with the opportunity to experiment with apply-

ing and adapting their skills to the context of other creative practices – in this case architecture – introducing them to interdisciplinary and collaborative ways of working. Having preassembled a bamboo framework (Fig. 2), Eira explained to the students how they could apply their skills to the structure to create individual craft-based panels with the collective goal of co-constructing a pavilion – demonstrating how they could bend rattan over the frame, wrap and weave wool around, and stack, balance, and hang bamboo rings.



Figure 2. Bamboo Pavilion Structure. Authors, 2019.

To encourage collaboration, students from across the six craft pathways were divided into cross-pathway groups, which was the first time they had worked alongside peers from other disciplines. Over the course of the week, the students began

upskilling each other through exchanging their craft skills and techniques (see Figure 3). Applying craft skills for a different purpose and intuitively engaging in peer learning differs to how the students are typically taught.



Figure 3. Studio-based Project: Co-constructing the Pavilion. Authors, 2019.

During the other programmed activities, the students continuously returned to the pavilion to develop their group panels, implementing their studio learning in an iterative process.

3.2. Design Journaling

At the beginning of the programme the students were given a design journal (Fig. 4) to document and share their ideas and creative decision-making. Journal pages were curated as “pin ups” for the students to share their reflections with their peers and the Crafting Futures team at the start of each day. The journal was intentionally designed to be used like a scrap-book, where the pages could be swapped around, torn and cut up, and put back together; encouraging creative authorship and autonomy.

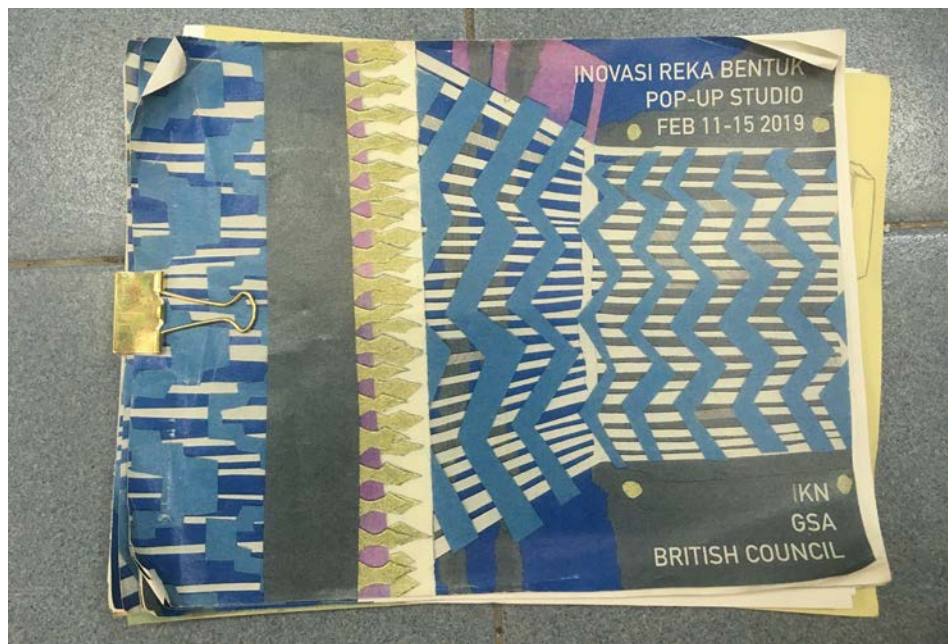


Figure 4. A Student's Design Journal. Authors, 2019.

To support the students in developing their unique identity narratives, batik designers Farah and Nabil, who both own and manager successful businesses in Malaysia, were invited to share their design philosophies as practitioners; the journeys of their businesses; how they gather inspiration for their collections; and ways they have innovated traditional batik techniques. In both cases, the designers emphasised the importance of collaboration, the need to be explorative and experimental, and to celebrate Malaysian culture in contemporary design. In response to these presentations, the students used their journals to prototype ideas and collage mood boards to tell a story behind what personally inspires them.

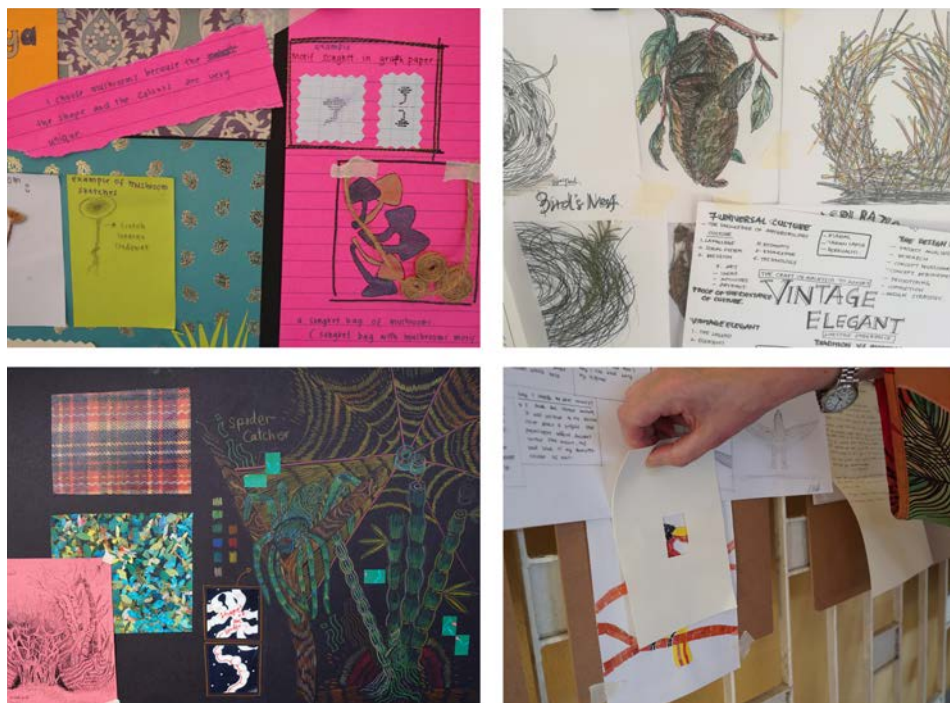


Figure 5. Pages from Student's Design Journals. Authors, 2019.

At the end of each day, the students were requested to take their design journals home with them to record their reflections. This independent activity informed group tutorials, where each student curated a pin-up that was used to unpack their ideas and insights. The students independently used a range of approaches (Fig. 5) such as collage, process diagrams, concept sketches, illustrations, and prototyped ideas for products. Through this process, the students began to reflect upon and articulate their own creative identity narratives through their visual story-telling.

3.4. Sourcing Design Inspiration

A key aim for the pop-up studio was to support the students in creative decision-making and to explore what inspires them as craft practitioners through engaging in a process of ideation and concept development. Sofea, a social entrepreneur who promotes Malaysian culture heritage through her contemporary textile accessories, shared her experiences and insights around principles for nurturing innovation, ways of maintaining a competitive advantage, design processes, and sources of inspiration. To apply this learning, the students returned to their creative groups and, facilitated by the Crafting Futures team, undertook a sensory walk around the IKN campus to source inspiration from nature to inspire their groups ongoing concept development for the pavilion textile panels. Students were encouraged to collect found objects (such as foliage, rocks and bark), draw, film, photograph, and take rubbings of inspiring objects, colours, organic and man-made structures, and textures from nature. On their return, the students arranged their found objects on a large table, describing what informed their decisions and how they might employ them conceptually in their pavilion textile panels (Fig. 6).



Figure 6. Collecting Design Inspiration. Authors, 2019.

3.5. Collaborative Filmmaking

Shen, a renowned Malaysian filmmaker and photographer joined the studio to share his experience and insights around the importance of documenting creative processes and ways of doing this visually through filmmaking. The student groups were encouraged to make and edit a series of short films on their mobile phones about the production of the pavilion, where they were asked to reflect on their choices of materials, colours, techniques used and the resultant compositions they had co-created. This filmmaking process took place at the end of each day of the studio, and towards the end of the week Shen supported the students to create a final film showcasing their entire design process.

3.6. Showcase Exhibition

The final day of the programme centred around showcasing the accumulation of the students' design work and the completed pavilion (which is now a permanent structure on the campus) to the wider IKN faculty from across teaching and management, British Council partners, and collaborating craft experts. The Crafting Futures team created a pop-up exhibition space and curated a display of pages from the students' journals and artefacts made and collected throughout the week, alongside a projection of the students' films (Fig. 7). During this celebratory event, the students presented their work and IKN's Principle shared his commendations and emphasised a need for innovation and participatory making to be more formally embedded into their craft curriculum as evidenced in the students' collaborative and interdisciplinary outputs.



Figure 7. Pop-up Studio Showcase. Authors, 2019.

3.7. Programme Evaluation

The studio programme concluded with a final reflective feedback session with the students, which centred on evaluating the programme. Each student was given a feedback questionnaire asking for their personal highlights of the week, if and how the pop-up studio has changed the way they think about design and if and how it has changed the way they will design in the future. Insights from this evaluation frame the following discussion, where the authors reflect on the efficacy of the studio programme and outline the key cross-institutional and cross-cultural challenges.

4. Discussion

Reflecting on the delivery of the programme, key insights emerged pertaining to the immersive nature of studio-based pedagogy in the context of technical craft education.

A key challenge was positioning this approach alongside the embedded educational practices at IKN. Experimenting with implementing a pedagogy that is in contrast to how and what is routinely delivered by IKN required a deep level of trust from the faculty. The co-design nature of the programme's development sought to mediate potential notions of neo-colonialism, where the over-arching objective was to introduce a different lens through which to view creative education, as opposed to critiquing and conferring curriculum change at IKN. At a local level, an example of this included adjusting the layout of the studio to physically and symbolically enculture a more democratic and participatory working space. Furthermore, collaboration with the bilingual IKN staff members played a crucial role in the delivery for programme, where language translation was required when explaining more abstract concepts that became overly complex when explained in English as opposed to Bahasa Malay.

In seeking to inspire interdisciplinary innovation, the co-construction of the pavilion as a collaborative studio-based project played a key role in anchoring the programme. As the students' engagement in developing their textile panels was an iterative process, it became a catalyst for team-building, forming social bonds, and as a relational tool for peer-to-peer knowledge and skills exchange:

My most enjoyable activity was making the pavilion project because I got some experience from my group and I'm learning something new from them like how to do weaving (Pop-up Studio Participant)

The most enjoyable activity for me [was] making the pavilion (...) we learned about the techniques and advantages of each of the majors. (Pop-up Studio Participant)

Working together and exchanging ideas with my friends from other disciplines. (Pop-up Studio Participant)

Another meaningful activity was the sensory walk where students were asked to collect sources of design inspiration. This included exploring the use of geometric forms, organic patterns and traditional cultural motifs. Based on their feedback, this activity appeared to be key in understanding how inspiration can be used in a design process – developing an awareness of what can influence and inspire them as designers. Throughout the programme, time was dedicated to sharing and reflecting on the development of these creative ideas. The students were encouraged to participate in group discussions and reflect on the work in their design journals, which were pinned up at the beginning of each day. In the feedback, the students commented on the value of this process and how it supported their creativity:

to find things as inspiration, [this] activity has changed the way I thought about design. (Pop-up Studio Participant)

How it's changed the way I think (...) that through doing the daily journals it's helped me think more creatively. (Pop-up Studio Participant)

What we see or hear or feel, we can keep in the journal and it can become inspiration to innovate. (Pop-up Studio Participant)

With the aim of expanding the students' repertoire beyond their technical skills, the programme stimulated a community of practice centred on learning, making and innovation. Bringing in expert voices from the Malaysian craft industry to share their own innovation journeys and how they set up independent craft enterprises provided the students with real-world examples and role models from their local context. Based on their feedback, the students were motivated by this engagement:

Design can be further expanded during the process and preparation. It inspired me as I watched and heard the talks given. (Pop-up Studio Participant)

The talks from them give me motivation about life (Pop-up Studio Participant)

Through the activities and the way, the pop-up studio taught us how to design. I love the way they taught us. (Pop-up Studio Participant)

When asked to reflect on if and how the pop-up studio had changed the way they think about design, many of the students described a shift in their mind-set about innovation as well as about their identity and intention as practitioners. The students described the transformative nature of the programme and how it will be carried forward into their craft practice:

Becoming someone who thinks more out of the box (...) Making us be more brave." (Pop-up Studio Participant)

This pop-up studio has changed my way of thinking about design by [looking more deeply] into the colour, structure, and characteristics of a design. (Pop-up Studio Participant)

Inspiration that shows us ourselves (...) Innovation changed [my] thinking. (Pop-up Studio Participant)

It has changed how I will design in the future (...) I no longer need to feel afraid to make mistakes because mistakes are also possibilities (Pop-up Studio Participant)

Underpinning the students' feedback in several of the examples above was a sense of growth particularly around their confidence in becoming more autonomous and "brave" in their creative decision-making. The impact of their participation is evident in how they will implement what they have learned in the future, and how it has changed the way they think about their craft practice and innovation.

5. Reflections

Returning to the over-arching aim of the Crafting Futures programme, the pop-up studio programme explored the role and impact of creative education in promoting innovation with young craft practitioners. However, this was only achieved through the development of a trusting relationship with the IKN faculty, where the physicality of the teaching space was sensitively re-arranged, and the experimental nature of the design process was legitimised.

Furthermore, key within the programme were opportunities for the students to engage with and learn from the Malay-

sian-based craft practitioners; the majority of who were female experts.

In the article, the authors have shared insights into the challenges of cross-institutional and cross-cultural collaboration and, in doing so, have evidenced the value and impact of participation for the IKN students. Seeking to contribute to a wider research agenda for the future of craft in Malaysia, opportunities for future research have been identified to support inclusive integration and female economic empowerment. This includes iterating and co-developing future pop-up programmes with IKN to contribute to their curriculum development in areas such as entrepreneurship, portfolio preparation, and introduce formal trajectories to support engagement between students and female craft mentors. Building on this, the authors are exploring the potential of developing the studio programme as regional creative hubs for young artisans living in rural communities – for example in Sabah and Sarawak. This research will inform local-level strategies to support greater recruitment and retention in craft education – particularly targeting those below the age of 18, so to cultivate sustainable youth craft-based livelihoods. Furthermore, to address gender inequalities in rural socio-economic infrastructures, the aim of this next phase is to further develop a distributed craft network of artisans, stakeholders and policy-makers and embed youth-led advocacy with a focus on female leadership to shape future policy and practice.

References

- Bannon, L. J. & Ehn, P. (2013). Design Matters in Participatory Design. In Simons, J. and Roberson, T. (Eds.), *Routledge International Handbook of Participatory Design* (pp. 37-63). Routledge.
- Björgvinsson, E., Ehn, P. & Hillgren, P.A. (2010, November). Participatory Design and Democratizing Innovation. *Proceedings of the 11th Biennial Participatory Design Conference*, 41-50, ACM. <https://doi.org/10.1145/1900441.1900448>.
- Brandt, E., Binder, T. & Sanders, E. (2013). Tools and Techniques: Ways to Engage Telling, Making and Enacting. In Simons, J. and Roberson, T. (Eds.), *Routledge International Handbook of Participatory Design* (pp.145-181). Routledge.
- Budge, K., Beale, C. & Lynas, E. (2013). A Chaotic Intervention: Creativity and Peer Learning in Design Education. *International Journal of Art & Design Education*, 32(2), 146-156. <https://doi.org/10.1111/j.1476-8070.2013.01734.x>.
- Bull, K. (2015). Transformative Practice as a Learning Approach for Industrial Designers. In Tovey, M. (Ed.), *Design Pedagogy: developments in art and design education* (pp. 113-134). Gower.
- Drew, L. (2015). The Experience of Teaching a Creative Practice: An Exploration of Conceptions and Approaches to Teaching, Linking Variation and the Community of Practice. In Tovey, M. (Ed.), *Design Pedagogy: Developments in Art and Design Education* (pp. 83-94). Gower.
- Frauenberger, C., Good, J., Fitzpatrick, G. & Iversen, O.S. (2015). In Pursuit of Rigour and Accountability in Participatory Design. *International Journal of Human-computer Studies*, 74, 93-106. <https://doi.org/10.1016/j.ijhcs.2014.09.004>.
- Greenbaum, J. & Loi, D. (2012). Participation, The Camel and The Elephant of Design: An Introduction. *CoDesign*, 8 (2-3), 81-85. <https://doi.org/10.1080/15710882.2012.690232>.
- LoveFrankie Report, British Council (2018). *Crafting Futures: Artisans in a Digital World*. A Research Study in Myanmar, Malaysia and Thailand. <https://tinyurl.com/ubtr6ql>.

Lynas, E., Budge, K. & Beale, C. (2013). Hands on: The Importance of Studio Learning in Design Education. *Visual Inquiry*, 2 (2), 127-138. https://doi.org/10.1386/vi.2.2.127_1.

McHattie, L, Champion, K, & Johnson, M. (2019). Crafting the Local: The Lived Experience of Craft Production in the Northern Isles of Scotland. *Cultural Trends*, 28 (4), 305-316.

Sanders, E. (2002). From User-centered to Participatory Design Approaches. In: *Design and the Social Sciences*. CRC Press, 18-25.

Schön, D. (1985). *The Design Studio: An Exploration of its Traditions and Potentials*. International Specialized Book Service Incorporated.

Shreeve, A. (2015). Signature Pedagogies in Design. In Tovey, M. (Ed.), *Design Pedagogy: Developments in Art and Design Education* (pp. 83-94). Gower.

Simonsen, J. & Robertson, T. (Eds). (2013). *Routledge International Handbook of Participatory Design*. Routledge.

Sleeswijk Visser, F. (2009). *Bringing the Everyday Life of People into Design*. TU Delft, Delft University of Technology.

Wenger, E. (1998). *Communities of Practice. Learning Meaning and Identity*. Cambridge University Press.

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“It Tells You What it Wants to Be”

How Women Make, with Immanence, Love, Decay and other Transgressions

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Keywords

Female Making, Immanence, Design Ontology, Material Agency, Feminist Design Critique.

Abstract

This paper discusses how a close encounter with a woman's making practice, when viewed through a critical feminist lens, can give space to a broader discussion on how female creative labour is viewed and valued. Drawing on a 2018 doctoral thesis titled 'How women make – exploring female making practice through design anthropology', the focus here is firstly, on how conceptions of immanence in a making practice have implications for ontological concepts of agency and, secondly, on the re-working of normative identity positions within women's different crafting and up-cycling practices. These in turn point to certain conceptions of the feminine in the public realm and how visual and material voice is perceived based on gender. Different opportunities for subversion materialise in the women's work through the interplay of concepts of beauty, femininity, nature, decay and death. The discussion highlights excerpts of a series of close up vignettes, which combined ethnographic, auto-ethnographic accounts and reflections informed by feminist theory and critique.

1. Introduction

This paper draws on research for my 2018 doctoral thesis *How women make – exploring female making practice through design anthropology*. I am here taking the opportunity to focus in on some of fieldwork with 2 of the 11 women who participated. The aim is to give space for the close-up vignettes, combining ethnographic, auto-ethnographic accounts with reflections informed by feminist theory and critique.

This extract is from larger body of ethnographic accounts which looked in close details at the What – i.e. what is the specific making practice of this particular woman, the How – i.e. the actual *process* of making; how this particular woman made at a particular point in time, and included the *emerging and analysis* of particular insights I had gained in the context of that particular woman’s making. In this paper, I am specifically surfacing how conceptions of agency within individual female making practice can allow us to consider ontological implications, as well as how thematic choices are communicated through visual and material voice making practices. My study combined ethnographic fieldwork with a critical holistic approach, which informed a research process that was concerned with the uncovering of social and material relations (Kjærsgaard & Otto, 2012).

Drawing on the fieldwork with one participant in particular called Bill, the discussion will consider how conceptualisations of immanence have historic importance in feminist theory, stemming from De Beauvoir’s (1949/2011) critique of immanence vs. transcendence in relation to gender. They are of interest because of how they surface ontological concepts of

agency and how such concepts relate to value judgements. Barad (2008) highlights that for both feminist and scientific analysis, understanding how foundational inscriptions of nature/culture dualism forecloses “the understanding of how ‘nature’ and ‘culture’ are formed” is crucial. “It tells you what it wants to be”, highlights the ethnographic account of Bill’s conception of immanence in her making practice in relation to ontological concepts of agency; secondly, on the re-working of normative identity positions in her crafting and up-cycling practice. The paper then also takes account of the different contexts in which the feminine can be both subverted and subverting, using the two very different examples of practice from Bill and another participant called Kaz. Analysing different approaches to in Bill’s and Kaz’s making practices will point to conceptions of the feminine in the public realm and how visual and material voice is perceived based on gender. Different aspects of subversion can be detected and discussed through playing with juxtaposing concepts, such as beauty, nature, death, femininity, motherhood and womanhood in the women’s work.

2. Thematic Framing of Women’s Making

When Parker and Pollock (1981) explored women’s place in the History of Art, they pointed out that the way the History of Art had been evaluated and studied up to that point, was “not an exercise of neutral ‘objective’ scholarship, but an ideological practice” (p. XVII), which unconsciously reproduced existing beliefs and values, through particular ways of seeing and interpreting. Having trained and practised as a Designer/Design Educator within a patriarchal and Western value system, I tried to remain alert to how this impacted on my own value percep-

tion – as to what counts as creative practice and what doesn’t. Part of the reason for choosing the term “make” was to release me of my own potential bias and ontological entrapment. Thus, the focus of this work did not lie with the specifics of the artefactual outcomes of the participants’ making practices. Whilst the outcomes of the making were observed and the makers’ interaction with their practices documented and reflected on, this was done in the context of a holistic looking at the different aspects of “how women make” and their own conceptualisation of it as well as my own.

Because it is a re-occurring question in relation to my research, I feel the need to make it clear that I will not be discussing women’s making in juxtaposition, comparison or difference, etc. to men’s making. I am not doing so consciously, as it would defeat the objective of this work, – which is for female making practice to be discussed and framed on and within its own terms and spaces. Whilst I do not preclude considering or analysing others thoughts on these matters, I do not wish to tend that field myself in this instance. When, – if ever – is a male writing about another man’s work asked how it might be framed in relation to female making practice? My work aims to give attention to female making practice outside of male oriented frameworks, – which as Criado-Perez (2019) points out, views men as the human default fundamental to human structure to the point where nothing can be discussed or created without maleness as a central reference point. I am not maliciously or accidentally omitting the male in my discussion, the omission is part of a carefully analysed and deliberated positionality of my work.

3. Methodology

This paper will discuss how the data 'created' during field-work with specific female makers connects to theory and broader discourse linked to female making practices. It shows some of the interpretative discussions and analysis and links to certain emerging themes.

In this paper, space is specifically given to two ethnographic accounts extracted from my larger body of work on women's making. In that larger body of work, I wrote a series of vignettes to make visible women's making practice in a holistic way. The vignettes were conceived as representational devices, which I used to enhance the understanding of the 'story' within the ethnographic accounts and how and why the interpretative discussion and analysis which followed emerged. The ethnographic account I am focusing on here is based on my encounters with Bill spring to summer 2017. She was one of my 12 participants, who I spent time with while they were making, - as with the others, I watched her make, I co-made with her, we chatted about her making and I also did a more formal semi-structured interview with her.

I am using the term vignettes as these written pieces were edited into snap-shot narratives to give an insight into what is particular about that woman's practice and her conceptualisation of it. These specifics are then built on, to form my interpretive discussion and analysis.

I am framing these potential case studies as ethnographic accounts as ethnography is most closely aligned with Anthropology. My ethnographic accounts and their vignettes

are also reflected by Van Maanen’s (1995) description of ethnography as storytelling, which White et al. (2009) highlight, entails the ‘researcher drawing ‘close to people and events’ and then writing about what was learned in situ’ (p. 24). Humphreys and Watson (2009) describe the use of vignettes within ethnography as a ‘descriptive scene-setting’, with an emphasis on ‘being there’ (p. 46), from which the interpretative discussion and analysis can be constructed (2009, p. 46).

4. Bill’s Making

Bill’s making is an integral part of her life. I met Bill a few years ago, because she is the sister of a friend. She is middle-aged, white and from a working-class background in South Yorkshire. Before I ever met Bill, I knew that she had made a lot of up-cycled furniture and artefacts. At that time Bill had a stand in a craft unit space in Sheffield from which she was selling her work. She has since had to give this up due to ill health. Currently her making practice focuses on a wide range of smaller craft-based items ranging from decorative picture frames, cake toppers, key rings, to typographic decorations and lots of other things. Many are wood based, but interact with lots of other materials depending on intended use and visual effect. It doesn’t seem that any particular material or artefact production defines Bill’s making, but the particular contexts and materials she can get her hands on determine her materials practice at any particular point in her life. What follows is an extract of a longer write up of conversations we had about Bills making.

4.1. Talking with Bill about Making

When asked about her history of making Bill says:

I’ve always mended stuff. I’ve never been able to afford new things and I think it’s wasteful having new things, you know, just because you need black worktops in your kitchen, your appliances need to be so and so colour. Me I’d rather just wait until they break and then mend them.

She says that now she is older she can afford things, but that it “goes against the grain” and that she has always loved recycling furniture. She identifies that she has always been creative, always liked making and as a kid used to make clothes, built things and helped her dad with cars, the scrapyard being her favourite place. Bill and her husband had their own painting and decorating business for around 10 years, working long hours and over weekends, whilst also having the unit with the upcycled furniture until Bill got ill, triggered by a neck injury. Since then she had to scale down, give up the decorating and the unit and is currently focusing on making smaller things to sell at craft fairs or online.

4.2. “Intra-Action” with Material

Bill highlights her frustration with having had to change her material practice because of her health problems, saying “I liked the upcycling of furniture, I loved that” and that she would still be doing that if her health would allow it:

I wouldn’t have looked twice at the little stuff that I make now, I like the big stuff, I like the, it’s, with big stuff it’s like instant gratification. You see something worn down and not being used and then you turn it into something beautiful, not like the stuff I make now.



Figure 1. *The table that carved itself.* Courtesy of Belinda Askew 2017.

When I ask whether the reason why she likes up-cycling furniture so much is because each piece is by necessity different, she doesn't only confirm this explicitly, but also goes deeper into her experience of up-cycling:

Yes, and each piece tells you what it wants to be. I know that sounds crazy. I got a wooden coffee table, a big coffee table and I thought “Oh I know what I'll do with that. I'll carve a river in it, carve a river with all the little inlets and what-have-you and then fill it all with photo luminescent resin.” So, I started carving this river and it turned into a tree. It honestly wouldn't go where I wanted it, every time I got to it, it would carve another bloody branch or something and it just did it itself. It didn't want to be a river. (Figure 1)

I ask her if it feels like the thing is already there and she says “Yes, it's just screaming to get out.” I comment that she seems to feel quite strongly about this and she says:

Absolutely. I did another one and that started as something else and it turned into an ammonite with the photo luminescent, but I didn't like that as much as the tree because that really, really spoke to me.

Bill seems to feel strongly that the larger items she has worked with and up-cycled, bring a kind of immanence with them. Another thing that is part of her up-cycling practice is the act of naming her creations:

Me: “So, you were just talking about that you'd done a light and then you said that you named it. Just describe what the light is and what you called it.”

Bill: “Yes, it’s a round brown wagon wheel kind of thing with three drops, three pendants, and the bottom of the pendants are hats, ladies’ hats, and I call it Ascot, or Ladies’ Day. It’s just a nice thing, it tells you what it wants to be.”

She tells me that she used to use those names on the labels to sell the items, but that she would not have to write the names down for herself as once she had named a creation, she does not forget its name.

4.3. Concepts of Immanence in Bill’s Making and Her Conceptualisation of It

When Bill talks about why she loved up-cycling so much, she is very clear in her assertions that part of the enjoyment is a feeling that the objects already come with a making destination of their own – “It tells you what it wants to be.” What she is describing appears to be a kind of power immanent in the objects – her material/matter, which are strong enough to ‘act back’ even against Bill’s personal plans for the object. (The planned river carving turning into a carving of a tree.) In order to challenge the positioning of materiality as either a given or a mere effect of human agency, Barrad (2008) proposes ‘a post-humanist materialist account of performativity’ (p. 145), which positions agency as a matter of intra-acting. This account of intra-acting also aligns to some extent to Ingold’s (2010) understanding “textility of making” (p. 92) and of “correspondence” (2013a), though he is less willing to divorce agency from human intentionality.

For Bill the smaller craft items she is producing from scratch ‘are boring’ – to her they do not possess the same strength of

power to act back as the old furniture and other re-purposed artefacts have. When Bill works on the furniture she appears to be experiencing what Barad (2008) calls ‘a congealing of agency’ (p. 139), where ‘matter is a substance in its intra-active becoming – not a thing but a doing’ (p. 139). When the intended river becomes a tree, Bill’s account of this is very reminiscent of what Ingold (2010) describes as the “textility of making”. He refers to Deleuze and Guattari’s (2004) account of the splitting of timber with an axe, where the blade enters the wood and is then guided by the history of the growth within the tree. This means ‘surrendering to the wood and following where it leads’ (Ingold, 2010, p. 451). I also propose that Bill’s perception that there is a pre-existing force or power within the pieces, is a kind of belief in immanence. Roelli (2004) reminds us that in Western metaphysics, the concepts of immanence and transcendence can be traced back to Plato and Aristotle, representing two divergent tendencies which place reality, as it can be known, either within or outside of the world. In religious terms, believing in transcendence is closely aligned with the ‘one’ god, external to oneself and materiality (Haynes, 2012). In contrast to this, immanence is aligned to beliefs of animism common in many religions around the world, where “god” or spirit can exist in matter and material alike. De Beauvoir (1949/2011) repeatedly critiqued women’s supposed leaning towards beliefs in immanence and situated it negatively in relation to men’s apparent striving to transcend.

De Beauvoir’s (1949/2011) particular take on immanence, which followed a deeply patriarchal tradition of Cartesian dualism with its roots in Greek philosophy, has been much critiqued

in feminist literature (Bartlett, 2004; Donovan, 1985; Grosz, 1994). De Beauvoir’s (1949/2011) evaluation was not only an explicit value judgement in terms of the idea that transcendence is a nobler concept than immanence, she also re-positioned the term specifically to denote different types of labour – creative labour is equated with transcendence primarily pursued by men, whereas women’s repetitive, mundane labour resides in immanence (Donovan, 1985). I would argue that Barad’s (2008) suggestion that ‘crucial to understanding the workings of power is an understanding of the nature of power in the fullness of its materiality’ (p. 128), is typical of a material feminist epistemology, using its plasticity to examine power and agency, both within the micro and the macro. It furthermore questions the Cartesian tradition of considering matter as primarily passive and immutable, whilst granting language and culture their own agency and historicity (Barad, 2007, 2008).

In that context, Bill’s belief in immanence would have to be differentiated from her actual activity of carving the wood, which based on De Beauvoir’s (1949/2011) distinction, would be an act of creativity and, as such, transcendent. De Beauvoir’s differentiations between acts residing in immanence or transcendence have been contested by many feminist theorists because of their construction within, and acceptance of, patriarchal hierarchies and value judgement (Haynes, 2012; Grosz, 1994). I would argue that De Beauvoir’s (1949/2011) distinction still has some importance if only because it inadvertently made visible how (female) labour was, and often still is, viewed and valued within patriarchy. I reject those evaluations in terms of having any ontological validity to my feminist world view and agree

in this context with Grosz (1994), who points out that feminist writing that adopts patriarchal philosophical assumption about the mind and body and its actions “can be regarded as complicit in the misogyny that characterizes Western reason” (p. 3). To understand the “making/feeling/imagining” trajectory of Bill’s belief in immanence, it is more helpful to consider Barad’s (2007, 2008) proposition of Onto-epistem-ology as the study of knowing in being, which she suggests as a better way of understanding how specific intra-actions matter, which I also think is more fruitful in relation to understanding female creative labour in general. The relational and dialogical nature of agency is easier to understand when we consider Barad’s (2008) proposition that “Agency is not an attribute but the ongoing reconfiguration of the world” (p. 126) and that “the very idea of matter as being vibrant is a philosophical as well as a political one” (p. 135).

5. The normative feminine as subversive

My thesis included an in-depth account of Kaz’s making, but here I am highlighting a selective aspect in order to surface different possibilities of subversion in female making practice. Kaz’s work plays with both the conceptions of femininity and the subversion of it. She works with both overtly feminine themes and some which are overtly male. In her feminine themed work, she often uses pastel colour themes and glitter, in some of the mosaics these are glitter tiles. She had told me how she just *had* to make something with them when she first saw them because they were so beautiful. In body adornment, glitter is often read as an amplification of femininity and indulging in excessive femininity carries its own moral cul-

tural condemnation (White, 2015). White (2015, p. 10) explains that through the societal lens, excess of glitter is often read as a demarcation of infantilism as well as sexual deviance, yet many women knowingly choose to ignore such connotations, because glitter affords them a personal aesthetic experience that is deeply satisfying. Thus, I would argue that, at least in the context of this societal lens, Kaz's themes of love, hearts, pinks and glitter are intrinsically subversive, because they overstep and ignore boundaries of moral judgement associated with excessive femininity, while her masculine themes subvert because they play with stereotypes of gender and are juxtaposed to feminine "softness" (Figures 2-3-4).

The re-occurrences of the word "love", heart, heart shapes, expressions of hope and ideals of life in Kaz's work could easily be construed as representing the timid, passive, typically "female" insipidness so condemned by De Beauvoir (1949/2011) in *The Second Sex*. I choose to read these themes in a very different way. I would argue that read in a particular way, Kaz's thematic concepts could also be considered radical. Patriarchal, neo-liberal capitalism often asks of women (and men) to accept divisive loneliness in order to attain success and get ahead (Foster, 2016). During my conversations with Kaz, emerged an account of the long intellectual and emotional struggle she had been through to reclaim her making and define success on her own terms. Which is why, to me, the conceptual themes in her work communicate a refusal of the harshness of these external pressures, whilst putting forward an alternative narrative of lived and aspirational values she situates herself in.



Figures 2-3-4. *Love Pancake*, *Love Shrine* and *Love Sky*. Courtesy of Karen Nolan 2017.

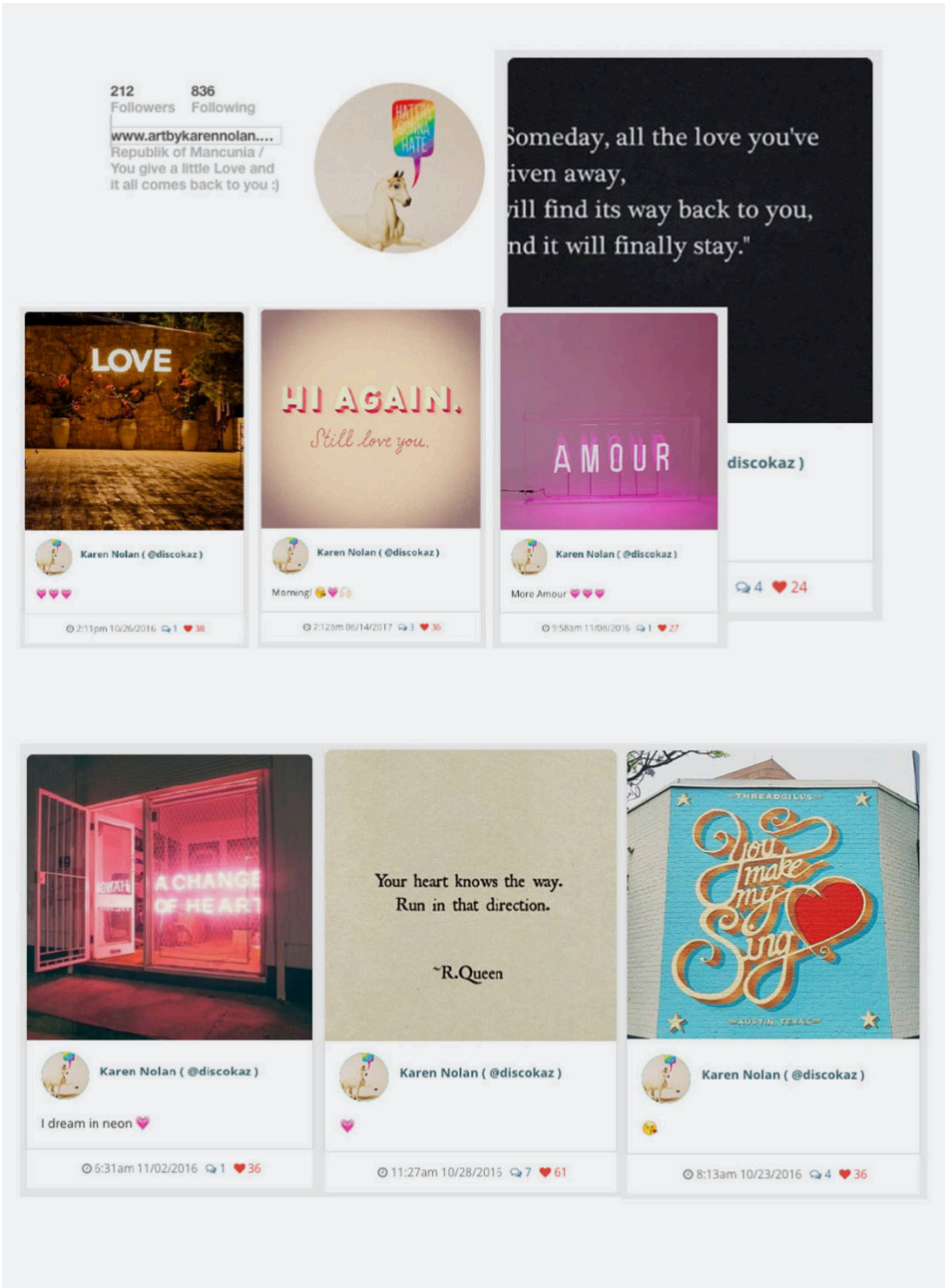


Figure 5. Online sentiments of love. Courtesy of Karen Nolan 2017.

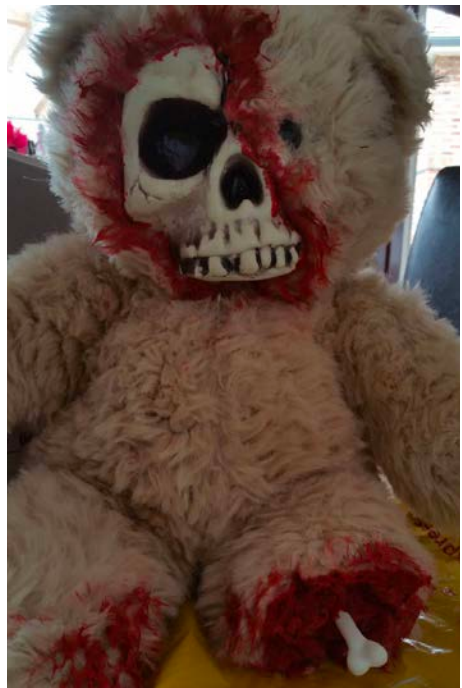
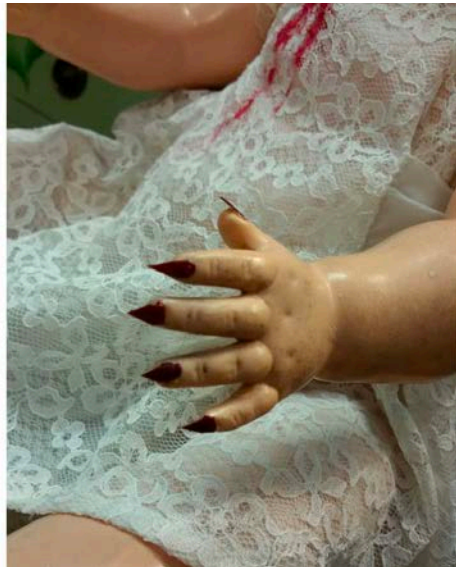
Kaz's conceptual continuity intermingles with her collection of the work of others, on both her Instagram and Facebook pages (Figure 5). Her re-posting of love-based visuals, reflects the hues of pink and red, cursive scripts, glitter and uplifting messages of her own work. White (2015) points to a quote from the Urban Dictionary which posits Facebook as a place where "fake girls can 'write on each other's walls how much they LOVE each other'" (2015, p. 10). Thus, the idea of LOVE is rendered at once feminine as well as fake, negating such posts' validity as a meaning-making gestures. Women are not unaware of how they are judged, they experience more trolling and abuse online than their male counterparts (White, 2015; Foster, 2016), which is why an insistence on posting themes that could be described as displaying normative femininity, could be considered as an act of subversion or resistance in itself, because of the broader misogynistic context that this is situated within.



Figures 6-7. *Halloween Baby* and *Coffin as Wardrobe*. Courtesy of Belinda Askew 2017.

6. Subversions of Concepts of Motherhood and the Feminine

Bill subverts the normative feminine by juxtaposing feminine beauty with death and feminine creation with decay. When Bill sent me her archival material of some of her previous creations we had talked about during my visit, I was struck at how different her aesthetic was to Kaz’s work, for example. But what I thought was interesting was that they were possibly similarly subversive in that they defied normative value judgement of femininity. With her themed Halloween babies and repurposing coffins as wardrobes, Bill’s work showed a lot of correlation with some of the female-making cultures Michele White discusses in *Producing Women – the internet, traditional femininity, queerness, and creativity* (2015) (Figures 6-7). Themes of death and decay are explored almost gleefully and Bill recounted happily how “grossed out” some people were by both here re-purposed coffins and her “Halloween babies”. These augmented dolls created by Bill for Halloween, reminded me of White (2015), who explains that the “reborn’ artists” community (who create life-like baby dolls for adult collectors), disturb understandings of the human, because the dolls are so lifelike that people outside of the reborn community often “read” them as dead babies. As such the women who engage in the reborn community become the most monstrous of humans – “mothers who allow their children to die or kill them” (p. 86). This perception is further strengthened by the creation of reborn premature babies, which are ill and attached to tubes and machinery to keep them “alive” (p. 87). Bill’s augmented Halloween dolls are not augmented to make them look kept alive but to make them look “deader” (Figures 8-9-10).



Figures 8-9-10. *Halloween Child, Halloween baby2, Halloween Teddy*. Courtesy of Belinda Askew 2017.

The underlying theme of decay in Bill's creations, – lovingly de-constructed with their scars, decay, bloody wound and added tech components, is deeply subversive. Her creations disturb not only because of what they are but also because they are created by a woman and, as such, transgress strong held societal beliefs about mothering, care, nurture. White (2015) describes the reborn community as also intersecting with the zombie bride community, where women dress up, use make up and plastic prosthetics in order to become “zombies” in public. She highlights that one of the reborn artists she observed made her first “creepy monster babies” for a friend who is part of the zombie bride community and how the public's reaction to these creations is often very hostile (p. 87). She proposes that the reason for this is that the public, consciously or un-consciously, identify it as a subversion of the societal norm of mothering and female stereotypes, and the zombie babies are identified as “contorted and perverse” (White, 2015, p. 87). Although Bill's Halloween creations are clearly not life-like, there is a similar subversion at play, and she uses very similar themes in making the toys dead-like – bones stick out, stapled together bloody wounds and discarded computer components are added, to tell visual and material narratives, familiar from horror films.

7. Conclusion

Subversion is an astonishingly shapeshifting act, since it conceptually depends on the context in which it is subverting. This means that two things quite the opposite of each other can be equally subversive because they are read and understood within different contexts.

In the women’s making I observed, I encountered subversion in a range of different ways. Here, I have highlighted the subversion of the normative feminine through concepts of death and decay in one woman’s practice (Bill) in juxtaposition with the overt use of feminine coded themes and materials as subverting in another’s (Kaz).

It’s worth recalling Bill talking about why she loved up-cycling so much more in contrast to making smaller craft items from scratch:

You see something worn down and not being used and then you turn it into something beautiful, not like the stuff I make now.

Whilst some of Bill’s practice aspires to beauty, this could not really be said of her Halloween range. However, her description of her experience of up-cycling does not just talk about the beauty value of the end product, but of the beauty she finds in the process of “making new” itself, – even if the making new involves death and horror. Channelling Persephone, Bill plays with concepts of beauty, nature, death, decay, femininity, motherhood and womanhood, whilst holding strong beliefs of immanence in connection to the material she works with. An immanence that urges her on in her creative endeavours.

This points to a discursive material practice where agency is not an attribute located in either her *or* her material, but is as Barad (2008) calls it “doing/being in its intra-activity” (p. 144). Which means that agency in Bill’s making is what happens between her and her material during making.

This understanding of material agency was surprisingly common in the women's making practices. Form-giving and meaning-making activities were very much situated at eye level with material and maker. Making was often conceptualised as an exchange with the inanimate, with the inanimate becoming animate and where the making is not static, but flows. Paying attention to one women's making can give space to discussions of ontology and can help us to gain insights within broader critical and philosophical frameworks, which frame agency as a site of transgression as well as transcendence and values it anew.

References

- Barad, K. (2007). *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press.
- Barad, K. (2008). Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter. In S. Alaimo & S. Hekman, *Material feminisms* (pp. 120-154). Indiana University Press.
- Bartlett, E. (2004). *Rebellious Feminism. Camus's Ethic of Rebellion and Feminist Thought*. Palgrave Macmillan.
- Criado Perez, C. (2019). *Invisible Women. Exposing Data Bias in a World Designed for Men*. VINTAGE _ Penguin Random House UK.
- De Beauvoir, S. (2011). *The second sex*. Vintage - Random House.
- Donovan, J. (1985). *Feminist Theory. The Intellectual Traditions of American Feminism*. Frederick Ungar Publishing Co.
- Foster, D. (2016) (1st ed.). Watkins Pub Ltd.
- Grosz, E. (1994). *Volatile Bodies*. Indiana University Press.
- Haynes, P. (2012). *Immanent Transcendence Reconfiguring Materialism in Continental Philosophy*. Bloomsbury.
- Humphreys, M. & Watson, T. (2009). Ethnographic Practices: From 'Writing-Up Ethnographic Research' to 'Writing Ethnography'. In S. Ybema, D. Yanow, H. Wels & F. Kamsteeg, *Organizational Ethnography: Studying the Complexities of Everyday Life* (pp. 40-55). SAGE Publications Ltd.
- Ingold, T. (2010). The textility of making. *Cambridge Journal of Economics*, 34(1), 91-102. doi: 10.1093/cje/bep042
- Ingold, T. (2013). The Maze and the Labyrinth: Walking and the Education of Attention. *Walk On. From Richard Long to Janet Cardiff*. Arts Edition North. https://issuu.com/stereographic/docs/walkon_for_issuu
- Kjærsgaard, M. & Otto, T. (2012). Anthropological Fieldwork and Designing Potential. In W. Gunn & J. Donovan, *Design and Anthropology*. Ashgate.
- Parker, R. & Pollock, G. (1981). *Old mistresses*. London: Pandora.
- Roelli, M. (2004). Immanence and Transcendence. *Bulletin de la Société Américaine de Philosophie de Langue Française*, 14 (2).

- Van Maanen, J. (1995). *Representation in ethnography*. Sage Publications.
- White, M. (2015). *Producing Women. The Internet, Traditional Femininity, Queerness, and Creativity*. Routledge.

IV

INTERVIEWS

Textile Design between Tradition & Innovation

Interview to Brigitte Perkins

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Keywords

Textile Design, Traditional Arts, Innovation, Social innovation, Embroidery.

Abstract

Through a long interview with Brigitte Perkins, a French textile designer who has worked in Morocco for 25 years, we want to present not only the story of a female designer, but also a common story of women through the Moroccan traditional arts of weaving and embroidery, imbued with a very strong symbolic dimension, where the weaving of fabrics, carpets and embroidery are deeply inscribed in Moroccan culture, with economic, social & cultural implications.

For many women, these traditional arts allow them financial autonomy, as well as a strong social bond. Between them, they weave relationships, exchanges of knowledge ... These arts, transmitted from mother to daughter, through which regional and family traditions are perpetuated, are usually the representation of the deep cultural expression of a feminine world, too often set aside or ignored.

Brigitte Perkins comes from the Parisian Fashion scene. In 1995, she founded the Atelier "Tadert Titbirine" in an old caravanserai in the medina of Marrakech, offering and revisiting the old tradition of weaving, with men, and then spinning and embroidery, with women, developing a production of excellence and innovative high-end. The particular character of Brigitte's project does not only reside in the conception of fabrics and products of remarkable refinement and quality, but above all in the methodologies that she established both for weaving and embroidery, which allow this level of excellence. Convinced that the aim of tradition is not to reinvent the invention itself indefinitely, but to preserve what has been transmitted, Brigitte, by modernizing traditional techniques, has indeed succeeded in perpetuating this knowledge and in restoring the value of a living testimony to a millennial tradition that defies time by mixing the dreams of yesterday and tomorrow.

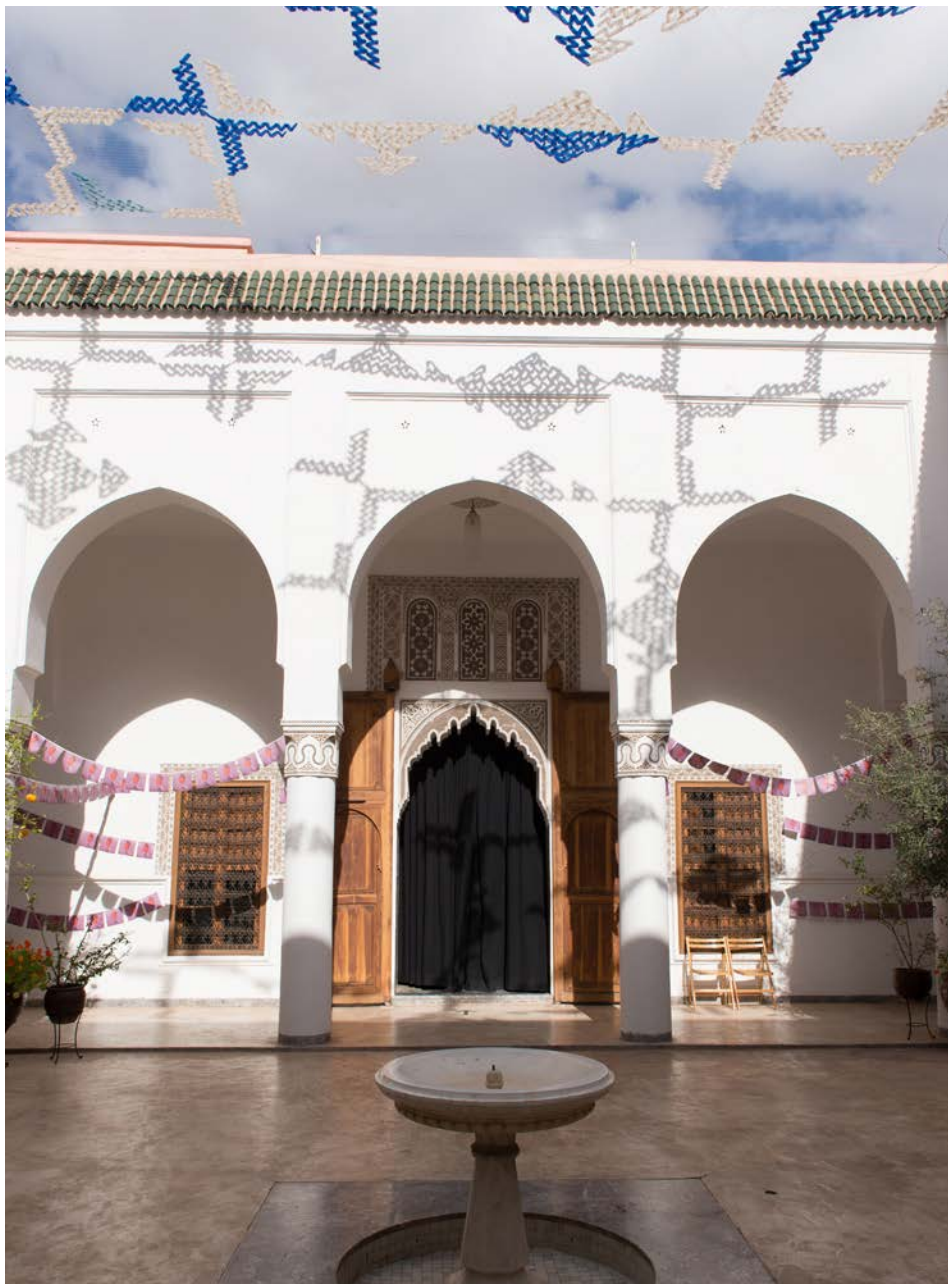


Figure 1. *Tapis du Ciel. Carpet of Heaven.* Work created for *Féminin Pluriel*. Photo by Terry Munson.



Figure 2. Brigitte Perkins/Atelier Tadert Tibtirine, embroidery of Fez in Gold Sabra on cotton voile. Photo by Brigitte Perkins.

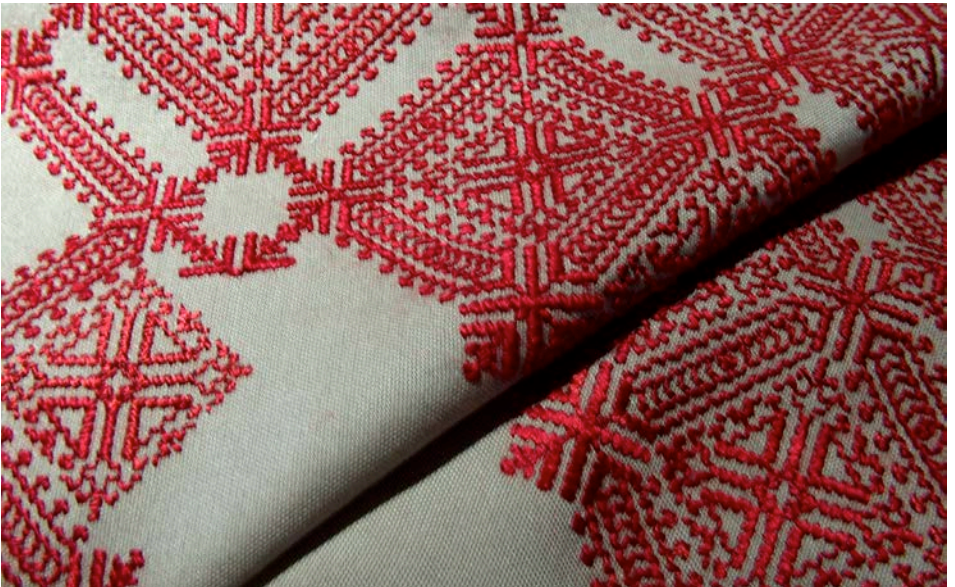


Figure 3. Brigitte Perkins/Atelier Tadert Tibtirine, silk embroidery of Fez on cotton. Photo by Brigitte Perkins.



Figure 4. Brigitte Perkins/Atelier Tadert Tibtirine, Fez embroidery on silk. Photo by Brigitte Perkins.



Figure 5. Brigitte Perkins/Workshop Tadert Tibtirine, cotton plaid. Photo by Brigitte Perkins.

DG: Can you tell us about how you came to Morocco and your work on textile design?

BP: Nothing was premeditated... I would never have come if one of my friends hadn't invited me to spend a few days by the sea in the south. Later I spent a year and a half, between 1990 and 1992 in Marrakech, discovering this country and especially the Berber communities of the Ourika Valley and the Ouirgane region on the road to Tizintest, their often very difficult living conditions, their potential.

I returned to Paris in mid 1992, but too far from the fashion world in which I worked, after what I had experienced in Morocco. So, I decided to set up a project in Morocco with women. Between 1993 and 1995 I divided my time between Paris and Marrakech and set up a network of Artisans for this rather ambitious initial project. Worked with *Potiers for actions*, a humanitarian association, carried out with the HEART WEAR Foundation.

In November 1995 this Foundation asked me to see what could be done in textiles. Met a corporation of Weavers, most of them elderly, in an old Foundouk in the Medina of Marrakech, who were weaving blankets and fabrics from *Djellabas* "beldi"¹. From the next day started with them a small series of samples with what I could find as (contraband) fibres on the spot.

The encouragements of some Parisian decorators, pushed me to continue. The evidence of a lack of structure immediately appeared to me and also that I had to commit myself really

1. The *djellaba* is the traditional Moroccan costume, *beldi* in Morocco, simply means traditional, hand-made, local, as opposed to *roumi* which suggests something more modern and industrial. Nda.

and for a long time! Everything was empirical and repetitive: the same drawings, few or no colours. I started colouring the textiles, but finding very few cotton colours, I started mixing them with *sabra*² threads used mainly by embroiderers on traditional outfits, which nobody was doing at the time (Fig. 1). The success was immediate. The Arab House, the first charming hotel in the medina of Marrakech, asked me to create their fabrics. It was during this period that the need for a more precise methodology than the one I was using became apparent, in order to be able to reproduce identical pieces of fabric without errors. The French and international press, which was interested in my work in fashion, followed me... we were increasingly solicited by decorators, prestigious interior designers and a private international clientele.

DG: How you have developed your work?

BP: We improved tools, looms, combs and smooths, developed textiles of different structures, work on matter and light. We had to import our raw material, as we couldn't find reliable spinners on site and yarns of the quality I wanted. The weavers easily adapted to the methodology, which I had developed with them, and were soon self-sufficient on the looms.

In 1998, I was asked to participate in a development project in Tamesloht – a city whose importance and influence was recognized until the independence of Morocco – which aimed to rehabilitate its *Zaouia* (small religious university or school) through a cultural project.

2. Vegetable silk derived from the agave, Nda.

We set up a cooperative of women embroiderers and spinners in Tamesloht, and we moved our weaving workshops there. We also set up a studio of “Tapissières” in Marrakech, since we supplied fabrics mainly for interiors, as well as a studio for the hand finishing of products, such as plaids, stoles, *Hammam* and bath sheets.

We collaborate with international artists on some of their works, running programs in partnership with universities, such as the University of Design and Architecture in Florence. (ShareDesign Project), or Foundations. We provide training in embroidery methodology (Fondation Orient Occident, Dar Bellarj) and sewing (Fondation Jardin Majorelle).

We produced a Manual for the Modernization of Moroccan Embroidery in 2008 for the Fondation Orient Occident.

DG: What is Design for you?

BP: An Aesthetic research applied to the creation of a form taking into account its function... in 3 words Aesthetic – Form – Function . Going to the essential and simplicity. When it comes to Textiles, transcribing images or a concept... telling stories.

DG: Your work is based on the traditional art of weaving and embroidery, as a designer innovation is a very important element, how can you combine these two things?

BP: All we did was innovate... my art direction work, methodologies, various partnerships and other achievements. The two seem to be inseparable, if we want to bring these traditional arts to life, we have to know how to transform them

while respecting the techniques, their deep essence and their history. The evolution must be constant and continuous.

DG: The fact of being a woman designer in a traditional society like the Moroccan one has created problems for you?

BP: No! because I created our company very quickly, a guarantee of independence, and the relationship with all the people who are part of it is based on respect, trust and recognition of everyone's abilities and their value. The first thing the weavers thanked me for was showing them that they could do beautiful things... Now living in Morocco is not an easy thing, you have to know how to protect yourself and put limits around you... there can be no real integration.

DG: You have trained perhaps about 500 women in weaving and embroidery, can you tell us about this experience?

BP: Not so many ! but about 250 to 300 ... In both Weaving and Embroidery, the work was very empirical, without structure or rigour, with a lot of bad practices, hence the importance of establishing methodologies and transmitting them through training. We have trained our Artisans & Craftswomen in these methods, who themselves form small groups selected among the most experienced, who in turn form others by creating the "domino effect" under our supervision, to be sure that the methodologies are well mastered and transmitted correctly. These well applied methodologies structure any work required. Preparations can sometimes take a long time, but this is a guarantee of the excellence of the desired result.

They reinforce in the Artisans the certainty of the quality of their know-how which can freely express itself thanks to them.

DG: You also work with women's associations and for development projects, can you tell us about this experience?

BP: Always through trainings whose quality is often lacking in Morocco. The social and economic impact cannot be sustainable if the training given is not good. When the technique is mastered it is already a considerable advantage that makes all the difference. Then it is necessary to apply it to the right products, to set up strategies. This is the work we do with different Foundations or Associations.

DG: The project you're most attached to?

BP: All those where there is transmission, sharing of knowledge, and aesthetic creation... those where students and Artists work with Artisans, such as *ShareDesign*³ with the University of Florence, *Féminin-Pluriel – L'Espace Physique et Mental des Femmes*⁴, etc... Mainly those that opening up new per-

3. *ShareDesign*, 2013, Joint project coordinated by Giuseppe Lotti and Debora Giorgi with the collaboration of Aniko Boehler between Dipartimento di Architettura Università di Firenze (DIDA-UNIFI), Marrakech (ESAV), Centre de Formation et Qualification dans les Métiers de l'Artisanat de Marrakech (CFQMAM) with the participation of several Moroccan Workshops and associations among which L'Atelier Tadert Tibtirine, Fondation Orient Occident, and others. During the project 40 students in Design from the two Universities DIDA-UNIFI and ESAV Marrakech, worked for 5 weeks with the craftsmen of CFQMAM for the realization of 50 prototypes.

4. *Féminin Pluriel* is an artistic collective created & animated by Aniko Boehler & Debora Giorgi, art curators, in 2014, in collaboration with Brigitte Perkins/Tadert Titbirine, Florence Robert-Visy/graphic design department ESAV Marrakech, Maha Elmadi/Fondation Dar Bellarj, Nathalie Locatelli/Galerie 127, Poster for Tomorrow, Voice Gallery, Dipartimento di Architettura Università di Firenze. Organizes artist residencies, workshops, conferences, in the field of visual arts with a special focus on women artists.

spectives for Artisans and make them discover other horizons where they also have their place. But above all the creation of this collection illustrating the Moroccan Embroideries, with the *Fondation Jardin Majorelle*, which will be the subject of exhibitions or illustrations during conferences, probably a book, completing the Handbook on Embroidery.

Each of our embroiderers signs one or several “Masterpiece” showing the different techniques of the repertoire, considering that each City in Morocco had its own technique, its compositions and its colours. This collection honours the mastery of their know-how, the culmination of these years with us and the recognition of their work and themselves.

This collection will bear witness not only to a technical repertoire, but also to the innovation brought to the compositions, to the way of appropriating traditional designs, to a space of freedom linked to creation.

Each project is always a new adventure that allows you to evolve, discover and learn.

DG: What are your next projects?

BP: An exhibition on Moroccan embroidery with the Museum of Angoulême (France) which owns the Prosper Ricard collection and will be invited to the Yves Saint Laurent Museum in Marrakech, for which we will have to provide some embroidered pieces. And this embroidery collection, on which we are still working, which will be a repertoire of the different urban embroideries that we master but also the demonstration of other interpretations of this Art. Collaborations with Artists and exclusive requests.

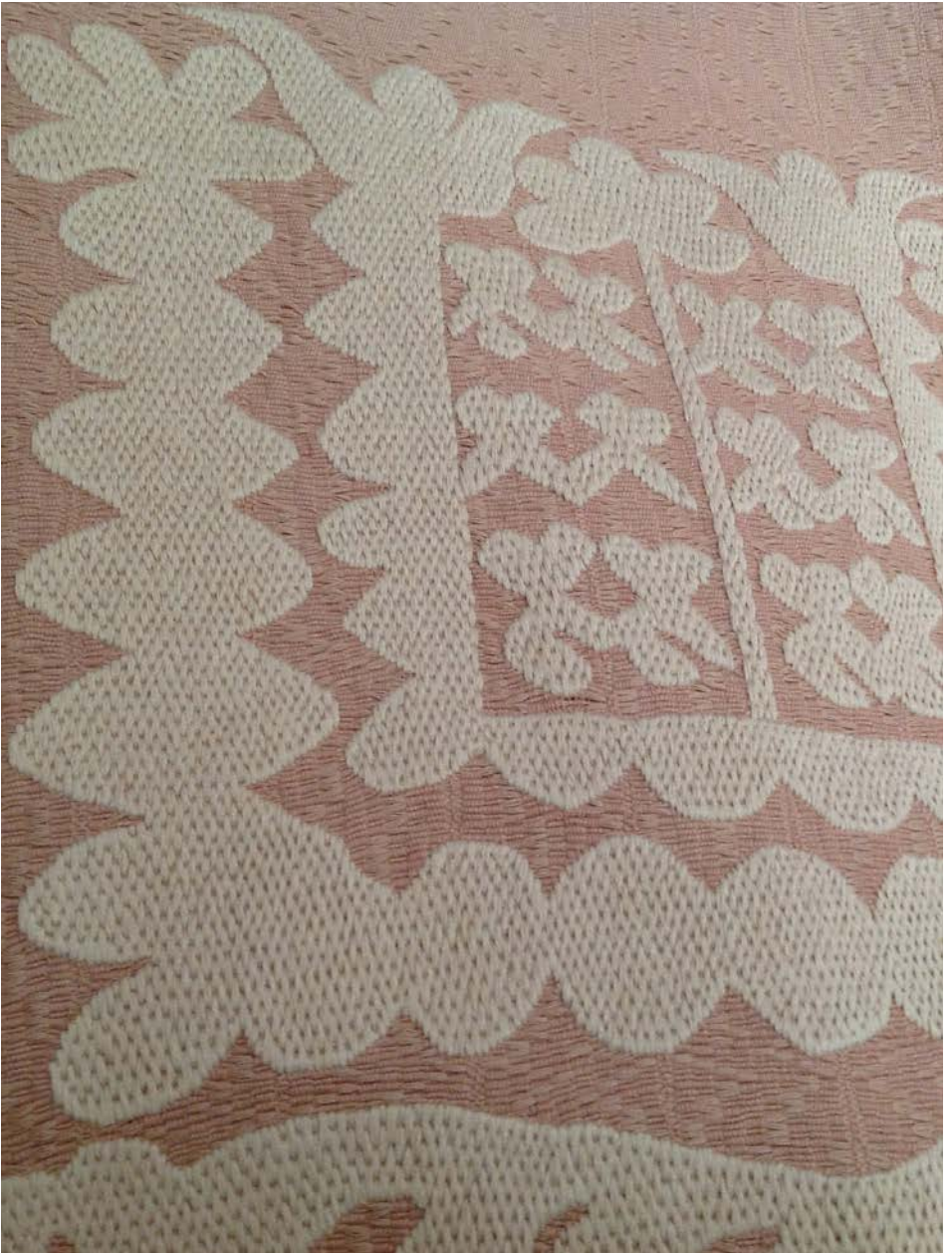


Figure 6. Brigitte Perkins/Atelier Tadert Tibtirine, Tetouan embroidery enlarged. Photo by Brigitte Perkins.



Figure 7. Collaboration with the ShareDesign project. Photo by Brigitte Perkins.



Figure 8. Collaboration with the ShareDesign project. Photo by Brigitte Perkins.

Women Sensibility Applied to New Materials and Technologies Processes / 1

Interview to Ross Stevens

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Marinella Ferrara

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Abstract

Ross Stevens, architect, industrial designer of many mass-produced products – including washing machines (Fisher and Paykel), lawn mowers (Morrison), televisions (Thomson, Saba) and lots of stereos (Perreaux and Plinius) also as a co-owner of PureAudio – and professor of design is engaged to establish a globally recognized design research expertise on multi-material 3D and 4D printing, at the School of Design Innovation of the Victoria University of Wellington, New Zealand. In the MADE lab (Multi-property Additive-manufacturing Design Experiments) students enjoy being free to explore multi-material printing and experiment with new design solutions. Meeting him on the occasion of the last World Industrial Design Conference and Industrial Design World Expo (WIDC 2019 & IDWE) in China, we were fascinated by his way of promoting women's work in the area of new digital printing technology. He helped us to understand the perspective of female students to generate novel applications of the technology to form complex and highly customized multi-material structures, assemblies, and products biology-inspired that cannot be made by any other means. He draws an analogy of women weaving and 3D printing as a complex process that requires patience and sensitivities to things like color, texture, and tactile qualities of the fiber. Ross thinks those sensitivities empower women in relation to this new emerging technology.



Q: We heard about your choice to involve students in your interesting research about new digital printing technology, advanced materials, and future vision. In your lab, you have been observed women students working in this area, their ideas, way of proceeding. What specific ability do you think women have in these areas? Are there any achievements from your projects made by women? What are the more representative projects of a feminine way of thinking and/or making?

A: It is interesting to watch young women working with technology. It does seem to be slightly different to the way my male students have in the past. Probably at the moment the male students are falling behind. And the young women seem to be dominant on our program now and certainly dominate the prize giving. The technology we focus on is 3D printing, so things around how you make digital information into three dimensional objects. And I think there seems to be quite a built-up multi-generational sense of frustration that women have been pushed away from technology. There is a lot more patience with machines female students than male students. If you think of crafts like weaving and 3D printing, they are quite similar sensitivities. Even if you repeat something many times, you have to repeat it really beautifully to get a consistent piece of embroidery on fabric. It's very similar. You build one layer on top of another layer. It has to be tested. The machines can do prints and do a job gradually. I think a lot of young women seem to be very good at the same thing what the machine do. 3D printing requires two sides: a digital side, which is the file you send to the machine; the other is a physical side which is

the plastic melting and temperatures heating writers. This is lovely digital, physical and sensitivity. So physical strength doesn't play any part in it. Printing seems to be a neutral territory. You don't need to be strong to do it. It's not dangerous.

Q: Do you believe there is potential in the creative areas of female students? Are they capable of expressing a sensitivity for technology, materials or sustainability in the lab MADE? Are they proposing a different type of innovation? What are their specific manifestations? Did you realize that women's design could have something different to express on projects with sophisticated technology?

A: I think old people see technology differently to not have everyone exploring it and expressing themselves through it. It's just foolish because you get a really limited dimension of what I could do. A lot of the products are bought by women and yet they are often designed by men. But without the sensitivity of what we might want, I think it's a huge empowerment for a country that can get all of the people. The more I travel, the more I see other countries, the happier I am in New Zealand seems to be empowering young woman pretty well at technology. We expect that half of our program will be open to women. More than half the price is going to the women. I would say that 80% of the prices will be going to young woman because of their dominant international acknowledgment.

Q: We all know that you are interested in the future of design, so what role do you think women will play in the future of design?

A: Generation of campaigns, lots of good role models and discussion about women doing things, have convinced young women they can do anything they haven't traditionally done. 3D printing makes us doing things that we wouldn't have thought possible before.

Q: Do you think there is in women designer a vision that subverts a masculinist bias in technology and design? Do you think there is a difference that could emerge through an overtly feminized technology or a critique of the production models supported by technology?

A: Yeah, I do. I'd be fascinated to see while women will take technology it will be different. And I don't think we know what it is yet. But, from what I can see, when young woman comes in our program, that would be very different. We do a lot of work close to biology. And so a lot of our research is inspired by biology or trying to make dynamic creatures or plants that move like biology or acts like biology. We find a very particular sensitivity coming from young women and an interest in biology and natural world. And I think we're starting to see some projects that we wouldn't have got from a young man. The technology and biology of the two things are really pretty exciting. It's more like natural technology, but we're cutting edge mixing the two.

Q: We have observed some 3D and 4D printing works designed by your students, which have bionic and organic forms, soft and delicate perception, close to nature, and material humanization, and so on. These characteristics

are more feminine or not? What outstanding characteristics do women display in design?

A: The materials become softer, more pliable and more precise. The printer that we use is a very precise printer putting down extremely small droplets. And one model can have a billion drops of reason that can be programmed. To do that, you really need a lot of sensitivity to tell it what to be. You have a lot of decisions to make. But as I say, if you're weaving something and weaving is a complex thing as well, and if you look at traditional woman and weaving, (there's a reason women have dominated weaving for a long time), it does require patience, sensitivities about things like color, texture and tactile qualities of the fiber. Maybe cooking is a little bit the same, too. But that's a complex thing where you bring a lot of subtle emotions into it. And it's really four dimensional, ingredients come from how you prepare them, to how you heat them and how you proceed them. I think those sensitivities empowering them. That's empowering hard and really cutting edge technology on top of those sensitivities.

Q: Which is the consideration about the role of women in design in your country?

A: We have a female prime minister who is in charge. She's a quite young mother. I think that helps to tell other people and other women that they can be what they wish to be. We're a pretty young country, so our rules are not particularly rigid. That's why amazing technology suits us quite well, apparently quite a pioneering. We're not very good at doing traditional

things competitively. Other countries get more history of mankind, so they tend to be better at traditional ways of making. And we have to be quite fast with change, this also inspires technology, art and design. It is interesting how many young women are studying industrial design in our programs: about 50%. 30 years ago, that would have been closer to 2% or 3%.

Q: There are topics in research field in your country that are preferred or dominated by women? Are there any specific topics approached only by women designers? Why?

A: We're starting to see a lot of women and things like the creative fields like design and architecture – and our faculty too – are now dominated by women. It's extremely competitive to get into the architecture. It's very very difficult. Higher education has been dominated by women. It's quite a profound shift to more women studying in university, winning more of the prizes, with more ambitious. This generation has been told they can do anything, whether they believe it or not.

Q: Is there any lack of technical ability of female designers in actual design projects? For example, how well do they master advanced materials or digital 3-4D printing?

A: Not really. I think in a creative project, the technical competence is part of it. I think it'll be one of my complaints of a masculine way of doing technology. We're not finding a young woman in any way technically inferior. Basically they will learn as well as the young men. So no, we're not seeing women behind. Maybe in one area, and that's coding. I'm

not sure why the computer coding is still dominated by men. It seems to be one of the last bastions of victim traditional masculine gigs. It requires a very particular kind of person. We struggle to get design students to study coding. It's somehow the creative process and mathematics. I think to learn the programs basically require tenacity and effect. It's said the women know what they're trying to make and they will put the time to learn and make sure they have the knowledge. So now we're not seeing a big difference.



Q: What's your plan with your research in the future?

A: I'm working on a game that's 3D printing, so everything I explore is emerging technologies that effect New Zealand industry. The research I'm doing is a multi-material printing.

It's very precise, multiple colors, multiple partners. And at the moment I'm trying to display inside prints so that once it is printed, I can still change things like color by keeping things locked up. When it's printed, it can still be reprogrammed.

I'm really interested in a lot of things such as where they come from, how they are used, where they go. Once you finish with them, you have a feedback into the system. Creating the material first and even at the end of its life history, absorbing it and making it into something else. Technically, we need to understand how to do that. That's one of the reasons I really like printing. It gets me pretty close to biology. I can't print a tree, but you know we're getting closer.

I am really interested in gender. You don't have to break down the barriers because they're not there. And as an example of how striking it is, we have a traditional workshop at the university and it's been so frustrating trying to give young woman students to go and work down there. But eventually we just bypassed. We set up clear time for the studios primarily, so the students wouldn't have to go and ask what the male team had to do something. And so that's one of the really big strategies. For years, we tried to break down the gender bias. We gave up because we couldn't change that. The culture was too loud and too old, too rigid, too harking back to the good old days of the past, so we literally bought a huge number of 3D printers and put them up in the studio. And now the students don't need to talk to people anymore, and they use the printers. They used to talk to their colleagues or other students. We give some demonstrators at the begging of how they work. So the students don't have to ask them for permission to use them or how to use them, what you have is a dialogue between the person and

the machine. And we find that much more equal. A woman is just as capable as men. And, the machine doesn't care watching the people who seems in the power, if it's not set up well. So that's one way we found really benefit to cut off the historical culture. I feel like they're equal to students. So, pretty lots of young women would go to the workshop. And the project would be pretty much made from them.

References

<http://www.containerhousenz.com/>

<http://made.ac.nz/>

<http://www.pureaudio.co.nz/>

Women Sensibility Applied to New Materials and Technologies Processes / 2

Interview to Nicole Hone

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Abstract

Nicole Hone is a young designer who completed her master's degree in Design Innovation with professor Ross Stevens as the supervisor, at Victoria University of Wellington, New Zealand, in 2018. Her master thesis is focused on the design of organic performance and the choreographed movement with emerging technologies. Her project Hydrophytes shows the feminine perspective on digital fabrication for designing alive physical objects inspired by research into the biology and synthetic biology to imagine solutions to the climate change problems of the ocean and marine species. Her futuristic creatures are made of multi-material 3D/4D printing and create immersive physical-based experiences through the video recording of their movements. The futuristic function of Hydrophytes encourages thought about the health of our future climate and the role of design in connecting man and nature. During the early stages of his project, experimenting with multi-materials 3D printing, Nicole found that the materials perform smoother and more organically in water as fragile parts are better supported. Having known that there were plans to redesign the National Aquarium of New Zealand, Nicole proposed to have a future-focused exhibition with moving aquatic creatures models that visitors could interact with. This idea, combined with her personal be fascinated with nature, lead to the concept of the futuristic aquatic plants, that include arrow pods, feather nurses, nomadic cleaners, haven flowers. Nicole chose to use PolyJet technology as it is excellent for printing small objects with fragile parts and complex organic forms with internal structures. We interviewed Nicole with questions focusing on her project and women's sensibilities in design and technology.



Figure 1. Nicole Hone and her biological creature sketches. Courtesy of Nicole Hone.

Q: What are the motivations of this project? What did they inspire you? Why did you want to create aquatic plants with multi-material 3D printing? Why were aquatic plants? What is the meaning you want to transmit with the new forms of life of your creations?

A:

- *Futuristic Aquatic Plants*

I have always been fascinated with nature; it inspires my design ideas and aesthetic. For this project, I became particularly interested in botany and marine life. I was amazed by the way sea creatures and corals moved and wanted to reflect similar qualities in my designs. During the early stages of test prints, I found that the materials performed smoother and more organically in water as fragile parts were supported better. At the beginning of my master's project, I also discovered that there were plans to redesign the National Aquarium of New Zealand. I thought “wouldn't it be really cool to have a future-focused exhibition with moving models that visitors could interact with?”. This idea, combined with my personal

interests and discoveries from the testing phase lead to the concept of futuristic aquatic plants.

- *Hydrophytes. Research for the Film and Exhibition Industry*

The *Hydrophytes* were created as part of a research project for a Master of Design Innovation degree at Victoria University of Wellington, New Zealand. My thesis focused on how to design and choreograph movement with multi-material 3D/4D printing. I was also looking at how this technology could be applied within the field of entertainment/education. I found that immersive experiences are becoming a growing trend in the film and exhibition and industries. Contemporary museums are becoming more *visitor-centered* and offering content that encourages us to think about the future and challenging issues. Filmmic worlds are expanding into theme parks to provide multi-sensory visitor experiences. With the alluring visual effects seen in movies, there is also a desire to reach out and touch the objects behind the screen. Within these contexts, I noticed that digital-based experiences were thriving but physical-based ones perhaps seemed less exciting and showed slow progress with the integration of new technology. My research proposed that physical objects, created with multi-material 3D/4D printing, have value in creating immersive physical-based experiences.

- *Multi-Material Printing with PolyJet*

I chose to use PolyJet technology as it is excellent for printing small objects with fragile parts and complex organic forms with internal structures. One unique opportunity is the ability to simultaneously print rigid and flexible materials which is beneficial for crafting the movement of objects. Existing de-

signs have not fully utilized the flexibility offered by PolyJet technology, leaving the aesthetics and application of organic movement relatively unexplored. Designs that were dynamic tended to focus on a single or basic motion or lacked a supporting context. My research aimed to showcase the artistic potential and industry application of this new technology by exploring a range of complex movements with 4D printing. Adding the dimension of time allows the creation of 3D printed objects that can move or change their shape or appearance – 4D printing. With multi-material printing, the appearance and behavior of objects can be designed with minimal post-processing.

- Speculative Design

The futuristic function of the *Hydrophytes* was inspired by research into synthetic biology and how climate change is affecting the ocean and marine species. Contextualized within the film, the Hydrophytes encourage thought about the health of our future climate and the role of design in connecting man and nature.

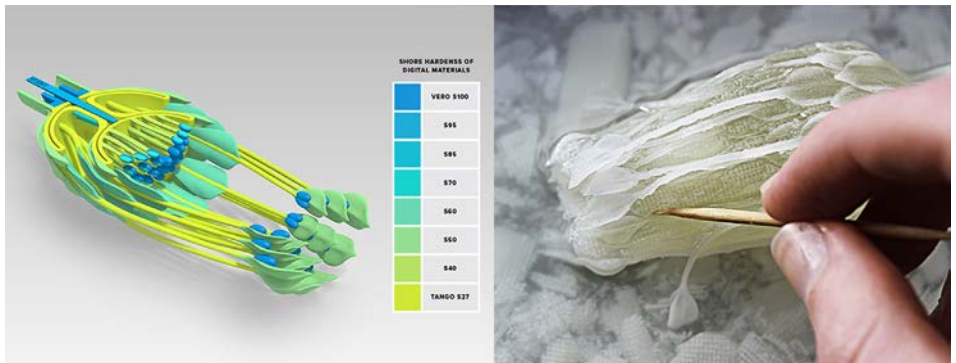


Figure 2. Nicole Hone, a digital drawing of the cross section view of the *Heaven Flower* (from *Hydrophytes* project), and Nicole carefully cleaning off the support material after 3D printing. Courtesy of Nicole Hone.

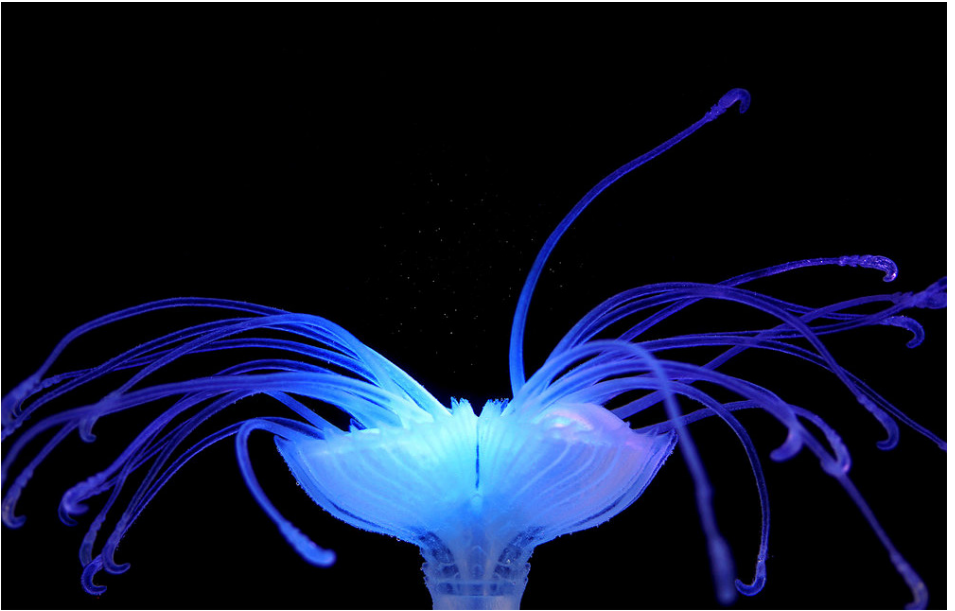


Figure 3. Nicole Hone, *Nomadic Cleaner* from *Hydrophytes* projects, a futuristic aquatic plant, 2018. Courtesy of Nicole Hone.

Q: How did you get the films of aquatic plants? They're really amazing! How long did design and printing take? What were the major difficulties for you in approaching the 4D printing technology and advanced materials in your project?

A: The *Hydrophytes* were filmed in a small fish tank while their movement was activated through a series of hand-held pumps. Coloured light was applied using an LED projector to complement the personality of each plant and enhance the perception of sentience. Filming took place across two days. The final film is true to life with no effects created in post-production. The *Hydrophytes* were developed over approximately four months within the master's research project. This included generating ideas, sketching, 3D modelling, material testing,

3D printing, cleaning, filming and evaluating. The objects themselves only took a few hours to be printed on the Stratasys machine. More time was required to carefully clean off the jelly-like support material that encased the objects. One major challenge for this project was the initial unpredictability of the materials and the resulting movement. The soft Tango material used at the time has low elasticity and durability levels, meaning a large amount of testing was required to understand tolerances and the behaviors of the materials.

Q: Do you think this technology is much better used for simulating natural creatures?

A: The way that PolyJet technology creates objects is becoming more like biology. A designer can control variation in material shore hardness, opacity and colour. With blends of hard bone-like structures and soft flesh-like areas printed in a single object, the materials feel and behave in strangely organic ways. Due to these aesthetic and performative qualities, multi-material 3D/4D printing is well-suited to simulating natural creatures.



Figure 4. Nicole Hone, interacting with the *Imp-root Hydrophyte* creature. Courtesy of Nicole Hone.

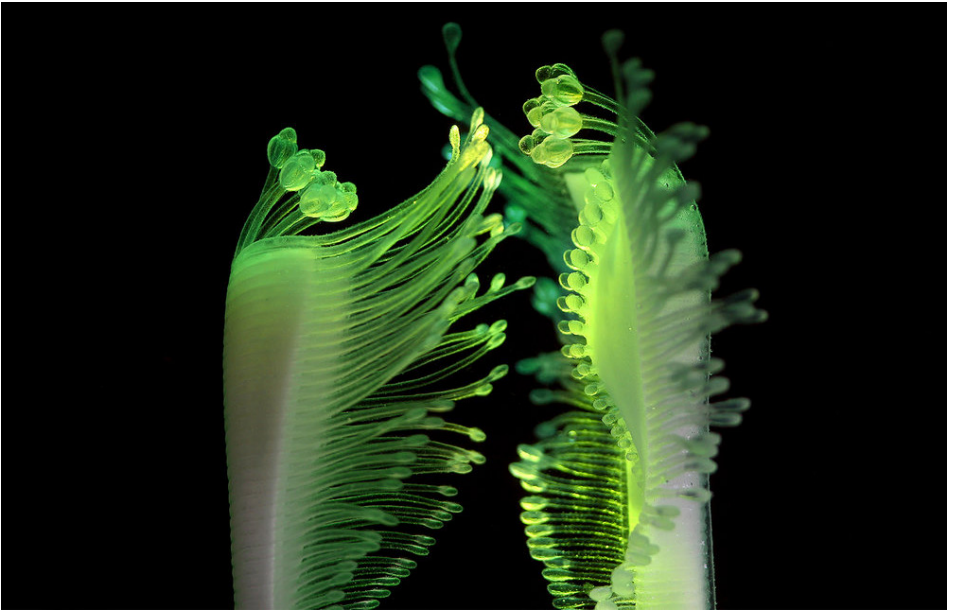


Figure 5. Nicole Hone, *Features Nurse* from *Hydrophytes* projects. Courtesy of Nicole Hone.

Q: Is there any audience or market demand for this project?

A: This type of 4D printing offers advantages for the film and exhibition industries. Film props designed with multi-material 4D printing could help prompt genuine reactions from actors and create convincing object-environment interactions. These props could even be used at promotional events or theme parks based around the film. There is also the possibility to create immersive educational experiences within the contemporary museum space. For example, natural history museums or aquariums could feature 4D printed animals to create exciting, interactive encounters for guests. With the efficiency of designing and manufacturing multiple variations of creatures such as the *Hydrophytes*, entire “forests” could be created with

diversity in character and movement. I think the tangible aspect of this technology is quite amazing making it great for use in the film collectables market – printing functionality directly into the objects and seeing them come to life in your hands. I have received many messages from people in a range of disciplines that have been interested in my work – from artists and designers to engineers and scientists, as well as the general public. They have been interested in potential collaboration projects, including the Hydrophytes in exhibitions, 3D printing awards and even showing enthusiasm to purchase the models. I am amazed that my work has been so well-received and I am thankful for all of the messages!

Q: Could you explain your words “this balance between controlled design and uncontrolled natural interaction leads to the creation of compelling organic performances”?

A: This sentence is explaining how believable organic movement can be created through a combination of the designer’s hand and nature’s hand. I will use the Haven Flower as an example to illustrate this. I designed the technical parts of the multi-stage blooming motion by controlling the shape and flexibility of each part in the computer (controlled design). Once printed and inflated the Haven Flower’s movement conforms to the “rules” of the real world as opposed to being designed through digital animation. Such real-world factors include gravity, water ripples or currents and interaction with other physical objects. This results in features such as the irregular arrangement and swaying of tentacular branches, sideways wiggling upon blooming and the bending action of the branch-

es caused by human touch (uncontrolled design). Elements of randomness and serendipity from the physical world enhance the lifelike qualities of the organic performance.

Q: Could you please tell us about your project team? What is the gender composition of your project team?

A: I created the *Hydrophytes* on my own as part of my master's thesis. I had two male supervisors – Ross Stevens and Bernard Guy.

Q: Imagine if this same project was approached by a male designer. Do you think it would be very different, apart from a difference in personality? Do you think there are differences between the female and male approaches to design in designing and approaching new technology?

A: Perhaps a male designer would have approached the project from a more technical perspective, looking more at the scien-

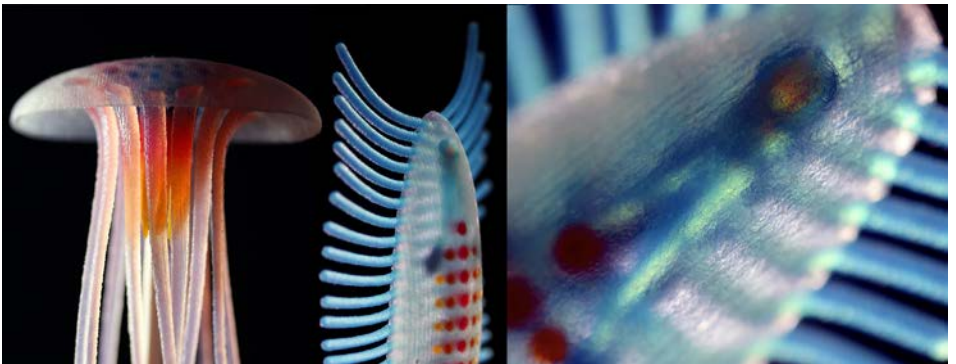


Figure 6. Nicole Hone, *Synthetic Jellies*, an exploration on 3D printed objects move independently thanks to a unique digital material memory, 2017. Courtesy of Nicole Hone.



Figure 7. Nicole Hone, *Sap Dwellers*, fantasy creatures that inhabit the dark depths of the forest, made up of varying degrees of flexibility allowing different parts to move when triggered. Courtesy of Nicole Hone.

tific properties of the materials and how they affect movement. While I did carry out my own material testing, I also assessed the designs from a more intuitive perspective in terms of whether the movement communicated the right character and emotion. I cannot say for sure if this is due to myself being a female designer. However, I do know that this perspective was an important part of being able to connect audiences with new technology and create immersive experiences.

Q: Do you think women’s sensitivity is more suitable for arts and crafts or for the new technologies? Why?

A: I think women’s sensitivity could actually enhance the connection between arts and crafts and new technologies. The digital age has brought about a variety of digital modelling and manufacturing tools that I believe has made industrial design more accessible to women. With these digital tools comes a new era of craft – where we harness the power and nuances of computers and machines to develop a new style of making.

Q: Do women have special sensitivities and contributions in future applications and implications of the fastest developing technology? Could it be said that they are closer to nature and have a stronger perception of “environmental footprint”; they have more environmentally conscious, and they are more able to produce friendly environmental works?

A: I think that it is important for people of all genders to work together to develop new technology and innovate applications, to incorporate multiple perspectives. Generally speaking, the caring, protective nature of women and our ability to slow down and think holistically could be an advantage to creating works with consideration for the environment.

Q: What role do you think women will play in the future of design?

A: Computer technology is allowing greater design freedom with the ability to model and manufacture nearly any imaginable form, once difficult to create with traditional methods. With such technology becoming of greater interest to women, I think we will continue to advance the digital aspects of design. We can expand our knowledge through coding and generative/procedural design, gaining enhanced skill with machines and ultimately strengthening the connection between technology, art, nature and people.

Q: What’s your plan with your design in the future? Are there any specific plans for further development and continuation of this project?

A: In 2019 I was working on a research project at Weta Workshop that involved combining voxel technology with multi-material 3D/4D printing. A voxel is a three-dimensional pixel. Voxel technology allows control over colour, transparency and materials on a particle by particle basis. This offers exciting opportunities to create more complex and realistic 4D printed objects with microscopic control. Voxel printing requires the use of procedural modelling tools during both the design and print slicing stage. I started to develop such methods in Houdini to advance on the research I did during the Hydrophytes project in 2018. While such research is currently on hold, I would like to continue exploring voxel 4D printing with organic themes – ie. printing animals, humans, environments or fictional creatures. Being able to incorporate sensors, 3D print with ‘smart’ materials or even living materials that can grow and evolve would also be fascinating. This would offer an enhanced ability to programme movement into the materials and create objects that really are alive!

References

<https://www.nicolehone.com/#/hydrophytes/>

<http://made.ac.nz/project/hydrophytes/>

<https://www.youtube.com/watch?v=e008jxkAQ-4>



V

BIOGRAPHIES

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Dr. Melanie Levick-Parkin's research is focused on visual communication and design & making practices in relation to intangible cultural heritage, heritage and archaeology, framed by Design Anthropological approaches. Most of her work is about the agency of visual and material language and informed by a feminist lens. She is particularly interested in how gender manifests in/ affects how meaning is made within the public sphere, both materially and visually and how power circumscribes who is able to make meaning and give form in different spheres. She is currently the MFA Design Programme leader at the Sheffield Institute of Arts, Sheffield Hallam University, and also supervises doctoral candidates across Art & Design and for the Research England funded, Lab4living 100 Year Life Project.

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Professor Lynn-Sayers McHattie (PhD, MBA, BA, PG Cert, FRSA) is Programme Director for Research at the Innovation School at The Glasgow School of Art. Lynn's research foregrounds questions around “crafting futures” in the creative economy. Her research explores craft and textile practices that connect to the indigenous landscape and culture of island communities and the role innovation can play in socio-cultural. She works extensively in the Highlands & Islands of Scotland and S.E. Asia. Lynn is involved in supervising doctoral and M.Res. students whose interdisciplinary inquiries blur the boundaries between addressing contextually located social and cultural challenges and design innovation practice.

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Tiziana Menegazzo

Artist and teacher. She lives and works in Turin. She trained in Florence where she graduated in painting at the Academy of Fine Arts followed by a master's degree in Modern Literature, with a thesis in visual anthropology on photography as a mode of self construction. She is currently completing a master's degree in Cultural Anthropology and Ethnology. Always interested in the contamination between different artistic languages, she alternates projects of participatory art, with a particular attention to the female condition, investigated through photography, narration and performance, to a research with an intimate and dreamlike character. She develops her artistic research in the field of gender studies and visual anthropology.

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Alfonso Morone

Associate Professor in Industrial Design, at the University of Naples “Federico II” Department of Architecture. Scholarship visiting student at Ecole Nationale Supérieure de Création Industrielle “Les Ateliers” of Paris. He was selected for the 20th “Compasso d’Oro” award, for the section Theoretical Researches and Design Studies, and he gained the Eco_Luoghi 2013 Contest launched by the Italian Environmental Ministry. His research, supported by many essays and writings, is especially concerned with Nature Based Solutions for devices able to face air pollution using natural systems through a combination of plants, phytoremediation mechanisms and bio-filters containing bio-absorbent nanomaterials and in the historical relationship between local manufacturing systems and industrial design. He is leading, as Principal Investigator, the AURA: industrial research and experimental development project for designing a new generation of green & smart

urban furniture supported by the Italian Ministry of Economic Development (2019-2022). In 2017 he wrote *La Fabbrica dell'Innovazione. Gli arredi del Palazzo delle Poste di Napoli 1936*, published by LetteraVentidue, Siracusa.

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Susanna Parlato

Architect and PhD student in design at Sapienza University of Rome. Received the bachelor's degree in Architecture at the Federico II University of Naples (2013) and the master's degree in Architecture for sustainable project at Politecnico di Torino (2016). Since 2017 she has been active within the Architecture Department of Federico II University of Naples being design teaching assistant, exam and degree committee member. She has been a research fellow at the CESMA of the Federico II University (2018-2019). From 2018 she started a collaboration with the Fondazione San Gennaro, an organization that promote social innovation, as a member of the ReMade lab research team whose purpose is to experiment innovative technology to recycle urban waste (plastic and metal) on a local scale. Her main research interests are in the areas of design for social innovation, design for territories, design for sustainability.

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Vera Renau

PhD Student in the programme Society and Culture: History, Anthropology, Arts and Heritage at University of Barcelona (Spain). Her doctoral research analyses the process of recognition of a selection of Catalan visual artists of the early twentieth century (1900 – 1930), and thus the operation of Spanish and Catalan modern art system. She focuses on clarify how art value is constructed by the interaction of different intermediaries in the visual arts field: the mechanism of building their reputations, identify phases, protagonists and dynamics that form part of the process, from an interdisciplinary approach. Member of the Gracmon Research Unit – History of Art & Contemporary Design Research Grup at UB, she holds a master's degree in Art History from the University of Barcelona. Her main research lines are art history, sociology of arts and culture and design studies. She has collaborated with cultural institutions as Direcció General de Patrimoni (Generalitat de Catalunya), Modern Art Department at Museu Nacional d'Art de Catalunya or Galleria Comunale d'Arte Moderna di Roma.

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Antonio Stefanelli

Architect, PhD student in Philosophy of Interior Architecture at Università degli Studi di Napoli "Federico II". He takes a degree in Architecture at the Department of Architecture of Università degli Studi di Napoli "Federico II" in 2017. He is part of several research group in the same University and he collaborated in the production of scientific publications and published essays and articles in trade magazines.

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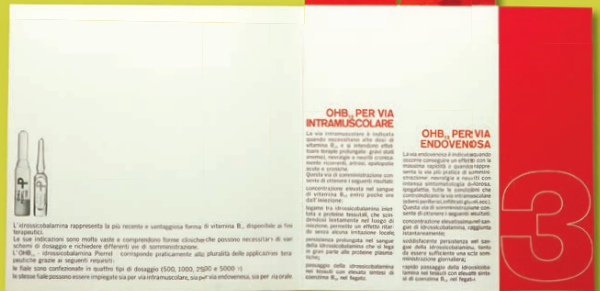
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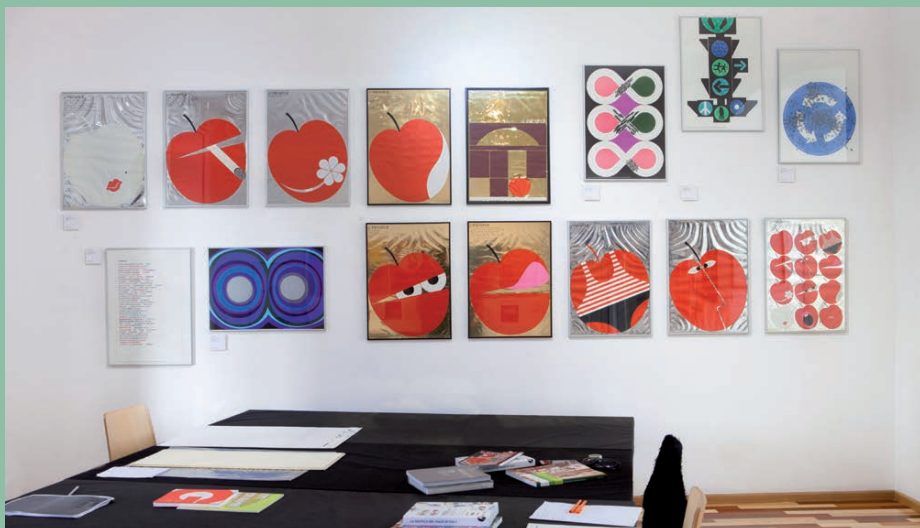
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