







# Trajectory of the Fashion, Sustainability and Inclusion Workgroup: Advances and Achievements in Fashion for Sustainability

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**Abstract.** This article presents an analysis of the works published in the working group – GT Fashion, Sustainability and Inclusion, since its creation in 2009 until the last edition in 2022 at the Colóquio de Moda congress. For this, a Systematic Bibliographic Review (RBS) was carried out in the Annals of the Fashion Colloquium, where 99 works were surveyed, which were analyzed according to the themes presented, based on the analysis of their titles and abstracts. As a result, it was possible to show the evolution of sustainability research in Brazil.

**Keywords:** Fashion colloquium · Work group · Fashion · Sustainability · Inclusion

## 1 Introduction

Fashion and its system have undergone significant changes since the beginning of this 21st century. Not only because of the maturation of higher education courses in fashion, demonstrated by the qualification of professors, but also because of the recurrent insertion of good professionals in the market. The academy embraced fashion, books and magazines, congresses and colloquiums, masters and doctorates multiplied throughout Brazil. The recognition of Fashion as a science did not happen for free, but has its course traced in the perseverance of professors-researchers who, through the production of knowledge, promoted its emancipation.

In this context, the merit of the Fashion Colloquium in the Brazilian scenario is undeniable. The Colóquio inaugurated its activities in 2005, being created by professors and researchers Dr. Maria de Fatima Costa Mattos and Prof. Dr. Kathia Castilho Cunha in the city of Ribeirão Preto (SP). To this day, it maintains its annual periodicity, during the pandemic the events took place online. The Colloquium's policy of openness and welcoming different research groups, added to the itinerancy policy in the country, provided the involvement and commitment of professors, students and universities in an efficient and consolidated community.

Over the years, it has established itself as the largest Fashion Congress in Brazil and is among the largest in South America, and is also characterized as an international event. It has had the regular participation of institutions and researchers from several countries such as Portugal, Spain, Italy, United Kingdom, Chile, Argentina, Colombia, among others.

From 2009 onwards, a working group was created – GT Fashion, Sustainability and Inclusion. Since its conception, it has accompanied the growth of research in fashion design for sustainability in Brazil (participations in congresses, book launches, insertion of disciplines in universities) and increases in master's and doctoral studies [1].

In this sense, the creation and solidification of this WG accompanied the growth of fashion research on related topics in the country. Considering this scenario, this study proposes an analysis of publications from 2009 to 2022 to identify the GT's trajectory, the topics discussed there, published articles and the development and evolution of research in the environmental, social and economic dimensions, with emphasis on socio-ethical criteria – environmental.

## 2 Theoretical Foundation

### 2.1 The Fashion System

Fashion was organized as a system in the mid-nineteenth century, when Frederic Worth started to hold fashion shows, in seasonal releases, emphasizing novelties, favoring the aestheticization of clothing. Fashion developed throughout the 20th century, moving the economy and changing hierarchical domains. The Fashion system, as we know it today, started with the great couturiers in power and haute couture dictating the rules.

In the 1960s/1970s, the desires of urban consumers in western democratic capitalist countries began to show themselves to be more imposing in the face of the authority of the great couturier. The fashion system, as well as all other stable and authoritarian systems (school, church, family) begins to collapse with the shocks of the counterculture. There is a famous saying: “children no longer want to look like their parents”. Open Fashion [2] represented by prêt-à-porter, imposes itself on haute couture and, democratically, expands consumer access. Fashion begins to segment itself, first catering to active minorities: young people, women (who become professionals), homosexuals and blacks. From then on, it enters the path of multiplicity that aims to serve markets that are increasingly differentiated socially and economically speaking.

The euphoric sense of economic progress that began in the post-war period sets up a frenetic match between young people in search of the latest fashion and fashion designers in the creation of the next. The values worshiped for fashion become novelty, democracy and multiplicity that, added to the culture of the American lifestyle, disseminated to the four corners of the cinema, promote the rise of consumption. For Lebow [3] the order to consume was so incisive that even today its echo is present. The surplus of goods produced by the effectiveness of industrial productivity needs to be consumed.

At the end of the 20th century, the individual assumes power in the fashion hierarchy. The consumer is the protagonist of the choices, he reorganizes the use of fashion. France is no longer the center of Fashion, there are many couturiers emerging in different parts of the world. And Lipovetsky [2] summarizes: the offers make up a rich patchwork

of fashions in the plural. The consumer is the articulator of personal combinations, enjoying fashion like an à la carte menu. All classes are carried away by the intoxication of consumption and change, which goes beyond clothing fashion and gains the universe of objects.

However, in the beginning of the third millennium, the installed consumerism goes through sieves and other values beyond the aesthetics start to star in fashion. Ethics starts to control exaggerations, the excesses of environmental and social exploitation in the search for a more sustainable global economy. A warning signal is triggered. Many thinkers, sociologists, environmentalists, economists, philosophers, designers, politicians and even renowned fashion labels wield the flag of sustainability. Our role as research professors of fashion and design was to pay close attention to the zeitgeist, the spirit of the times, which moves the bowels of fashion.

Analyzing some critical works such as *Metamorphoses of liberal culture* [4] and *Terra-Pátria* [5] we dazzle a new phase for fashion, which we risk calling “Fashion of announced ethics.” This phase is based on four evidences of the Metamorphosis in progress listed by Lipovetsky [4] plus the historical foundation of Western democracy, reviewed by Morin and Kern [5], who call for the necessary social inclusion in progress.

## 2.2 Announced Ethics Fashion: Five Pieces of Evidence

According to Lipovetsky [4] the first evidence refers to the preservation of the environment, where the unmeasured exploration of the planet’s natural riches, typical of modern people, is replaced by awareness of environmental sustainability and preservation. Sustainable development aims to meet the needs of the present without compromising the ability of future generations to meet theirs. Morin and Kern [5] recall the manifestation of ECO 92, which took place in Rio de Janeiro, which recorded the vital need for humanity to safeguard the integrity of the Earth. According to the authors, despite the unilateral views of countries, considered in their sovereignty, there is a planetary entity to which we belong, there are properly global problems, which lead us to planetary consciousness. Thus intermittently but multiple times, the global mind develops.

The second evidence of metamorphosis is the crusade against corruption that reaches all levels. Corruption, possibly arising from the decline of basic institutions and the abandonment of absolute truths, generated a loosening of rules of conduct, allowing for an à la carte morality, which calls for limits. The control and denouncement of corruption has been taken over by the third power: the media, which in truly democratic countries, plays the primordial role for the preservation of respectability, for ethics in politics, business and education.

The third piece of evidence from the study by Lipovetsky [4] is the priority given to working conditions. The human factor brought to the center of the company. Collaborators are promoted, no longer cataloged as “human resources” or “labor”, from the era of serial production and the precariousness of labor laws. Business transparency in neoliberal societies requires an administration that thinks about and improves human relations, and respect for employees.

The fourth evidence is **communication and marketing focused on morally** based values, such as solidarity, green markets, corporate citizenship, honesty, finally, institutional transparency in its acts and contracts. The concern of companies is the relationship of love or dislike that their brand can awaken in their consumers [4].

Based on this review of the ideas of contemporary thinkers about the ongoing changes in the neoliberal economy, we consider it important to base sustainability and inclusion in Fashion that companies in the textile and clothing sector fulfill their homework, respecting and practicing the evidence of Fashion from announced ethics: preservation of the environment; crusade against corruption, humane conditions at work; morally based institutional values; and fraternity as the willingness to include the disabled and excluded in fashion. Finally, consider the gospel of Morin's fraternity: "save the planet, civilize the earth, realize human unity and safeguard its diversity". This spirit of the times, zeitgeist, is certainly contained in the theory of sustainability and inclusion of our Fashion and Design researchers.

### 2.3 Design for Sustainability

The area of action of design for sustainability has been expanded, beyond the development of products that cause less impact, but to different ways of promoting innovations that are limited to the creation of new technologies. In this way, social innovation and systemic innovation become part of the repertoire of contemporary design. In this context, publications have built conceptual frameworks to represent this evolution of design for sustainability [6, 7]. Despite the many similarities between the different frameworks related to the first levels related to the development of products and services, what constitutes the last level is still being discussed, as well as the role of design in it. While Santos *et al.* [7] highlight the promotion of lifestyles compatible with sufficient consumption, Ceschin and Gaziulusoy [6] raise other perspectives related to design for social innovation and design for systemic innovations and transitions [8].

Although there is a diversity of dimensions of sustainability, here the most common division is adopted: environmental, social and economic, since this subdivision contributes to the direction of strategies for its effectiveness, and which are interconnected and inserted in the third and most comprehensive strategy in which you intend to achieve; the following stand out among them: 1) Upcycling, which seeks to return a product or material to the production cycle while preserving its technical qualities. It consists of giving a new and better purpose to a material or product that would otherwise be discarded without degrading its quality and composition, maintaining a quality equal to or greater than that of its original. It should be noted that upcycling differs from recycling, as the latter requires chemical processes to restore new raw materials, while upcycling maintains its original structure. It is a strategy for transforming by-products, waste, useless or unwanted products into new products, offering several benefits including environmental, social and economic benefits [9].

Here we highlight 2) the Circular Economy, which is a form of restorative and regenerative economy in principle, also encompasses the previous strategy, upcycling. Its aim is to maintain products, components and materials at their highest level of usefulness and value by distinguishing between technical and biological material cycles. This approach seeks to “decouple economic development from the consumption of finite resources and eliminate negative externalities from the economy”. [10]. Also understood as a proposal for an economic model that integrates several schools and lines of thought, including Industrial Ecology, Life Cycle Engineering, Life Cycle Management and Performance Economics [12].

In turn, the Ellen MacArthur Foundation highlights the need for a systemic change in order to generate: long-term resilience; economic and business opportunities; environmental and social benefits [11].

Weetman [13] establishes an analogy between circular economy and nature, “where the waste of one species is the food of another, and the sun provides energy. The circular economy cycles through valuable materials and products, producing and transporting them using renewable energy.

Thus, when considering the life cycle of products, in the circular economy, resources are accounted for during the phases of their life cycle, from pre-production, use and post-use, when considering the useful life and optimization of their life cycle by acquiring new value chains and consequent productive efficiency and cost viability.

Finally, of extreme relevance, follows 3) Design for Sustainability, an expanded approach to Design, which also covers the strategies above; seeks to contemplate the main dimensions of sustainability (environmental, social and economic) in a balanced way, whether in the redesign of existing products, in the design of new products and services to replace current ones, in the design of intrinsically sustainable product-service systems, and even in the development of new scenarios of sustainable lifestyles. Here, design is supportive in the creation of effective solutions, contributing to the transformation of cultural profiles, industrial production and consumption in order to promote responses to real problems and effective changes [14].

Therefore, design for sustainability presupposes systemic thinking in addition to the creation of specific proposals and solutions that impact the various sectors of society.

### **3 Methodological Procedures**

For this research, a survey (systematic bibliographic review) was carried out along with the annals of the Colóquio de Moda, between the years 2009 and 2022. For this purpose, the survey (presented in the annexes) considered the research published in the WG in the form of a complete article and expanded summary. It should be noted that scientific initiation researches that were also included in the annals and that had been presented in that period were excluded. As a database, the website of the Annals of the Fashion Colloquium [15] was selected. Table 1 shows the procedures used.

**Table 1.** Methodological Procedures of the Systematic Bibliographic Review.

Database	Electronic Annals of the Fashion Colloquium, accessed through a Google search
Search String	site: <a href="http://www.coloquiomoda.com.br/anais/">http://www.coloquiomoda.com.br/anais/</a>
Keywords used	sustainability, sustainable fashion, inclusion
Inclusion criteria	Publication period: last thirteen years (between 2009 and 2022). Kind of publication: Article and expanded abstract
Exclusion criteria	Kind of publication: Scientific initiation article
Adopted filters	Filter: title and abstract analysis

Search source: Authors (2023).

From this previous survey, the works were organized in tables by year, where the titles were presented, as well as the name of the authors. Considering this organization, reading the titles and abstracts, the analysis process was carried out, as we will present below.

### 3.1 Data Analysis and Discussion

From the survey of 99 works (classified between WG articles and Oral Communication) and four round tables proposed during the thirteen years of WG on fashion, sustainability and inclusion in the Fashion Colloquium, the authors sought to identify the predominant themes in each year (Table 2) and draw a timeline (Fig. 1) that presents the evolution of research in Brazil during this period. Thus, based on the analysis of the titles and abstracts of the works, it was possible to identify, year by year, which were the themes most presented in the work group.

**Table 2.** Analysis of predominant themes.

Year	Authors	Quantity of works	Predominant themes
2009	Ross (2009) Serafim; Santos (2009) Manfredini Et. Al (2009) Schulte Et. Al (2009) Alexandre; Silveira (2009)	5	Identity, citizenship, social sustainability
2010	Schwambach (2010) Lima (2010) Martins; Daher; Pinheiro (2010)	3	Fashion, sustainability, inclusion, production

(continued)

**Table 2.** (continued)

Year	Authors	Quantity of works	Predominant themes
2011	Anicet; Bessa; Broega (2011) Carli (2011) Berlim (2011) Manfredini; Venzon; Rela(2011) Refosco Et. Al (2011) Silva; Broega (2011) Laschuk (2011) Almeida; Moura (2011) Lima; Garcia (2011) Borges Et. Al (2011) Moreli (2011)	11	Sustainable design, product sustainability, citizenship
2012	Queiroz (2012) Santos (2012)	2	Life cycle, sustainability
2013	Sampaio; Martins (2013) Carli; Peretti (2013) Brito (2013) Rodrigues (2013) Sóter (2013) Anicet; Rüttschilling (2013)	6	Life cycle, environmental impact, relationships between fashion and sustainability
2014	Rodrigues (2014) Manfredini; Venzon (2014) Navalon (2014) Ferreira; Martins (2014) Machado (2014)	5	Inclusive fashion, cultural identity
2015	Duarte (2015) Duderstadt; Santos (2015) Carli (2015) Abreu; Lima; Nobrega (2015) Maciel; Seibel (2015) Perini (2015) Manfredini; Venzon (2015) Lara; Carneiro; Fabri (2015) Martins; Paraguai (2015)	10	Sustainable actions, environmental impacts, upcycling, social innovation
2016	Perez; Santos (2016) Freire; Araujo (2016) Vallotto; Fabri (2016) Ferreira; Gomes (2016) Amaral; Vichy (2016) Nunes; Rocha (2016) Barbosa; Neira (2016) Silva; Nascimento; Ferreira (2016) Jordão; Broega; Martins (2016) Pessoa; Wanderley (2016) Chaves (2016) Aguiar; Wallace (2016) Perini (2016) Carli Et. Al (2016) Soares; Almeida (2016) Neiria (2016)	16	Teaching and learning, sustainable actions, consumption

(continued)

Initially, in 2009, the GT had the participation of five works, where it was possible to identify the presence of related themes, especially, sustainability in its social dimension,

**Table 2.** (continued)

Year	Authors	Quantity of works	Predominant themes
2017	Freire; Araujo (2017) Valente; Silveira; Dulci (2017) Carli (2017) Factum (2017) Camargo; Freire (2017) Freire; Araujo (2017) Perini (2017) Almeida (2017) Sampaio; Martins; Silva; Almendra (2017)	10	Crafts, waste, sustainability culture
2018	Dias (2018) Elman (2018) Pereira (2018) Aguiar (2018) Pimentel (2018) Hornburg (2018) Fernandes (2018) Massarotto (2018) Castro (2018) Castro (2018) Iamamura (2018) Anjos (2018) Puppim (2018) Franchini (2018) Ferreira (2018) Fernandes (2018) Martins (2018)	21	Handicrafts, experiments with materials and techniques, inclusion, extension
2019	Manfredini; Ross; Bressiani (2019) Freire; Pinheiro; Morais (2019) Silva; Teixeira (2019)	3	Brazilianness, culture, social innovation
2021	Costa; Broega (2021) Vieira (2021) Júnior (2021)	3	Circular fashion, inclusion
2022	Lima; Martins (2022) Faria; Barata (2022) Purpura; Mendes (2022)	3	Inclusion

Search source: Authors (2023).

extension projects of educational institutions that addressed the issue of citizenship and local identity. In the following year, in 2010, the three works addressed the culture of sustainability and the use of textile waste, linked to crafts and again to extension projects. In this sense, the works published in the first two years of the GT focused on generating income for a social group, especially for women.

In the year of 2011, the discussions proposed in the works brought Sustainable Design, addressing sustainability in products, through production techniques and product development processes that had less impact on the environment, considering the environmental dimension of sustainability and, again, citizenship, addressing, therefore, the social and environmental dimensions.



In 2012 and 2013, work began to study the life cycle of products, expanding discussions on the environmental impact of fashion product development and sustainability as a social issue in postmodern fashion design. It should be noted that here the focus of the works began to consider the fashion product as a tool to implement alternative techniques and processes, as well as, for the first time, the expansion of the life cycle of the products was considered.

Subsequently, between 2014 and 2015, the studies were able to bring the concept of inclusive fashion to the WG's discussions and again reinforce the possibilities of sustainable actions in fashion projects and the concepts of identity, especially linked to culture, social innovation and to the concept of upcycling. This year, inclusion appeared more prominently in the papers presented and, for the first time, the studies brought about the expansion of the product's life cycle, through a technique.

In the year 2016, studies began to address teaching and learning in sustainability, again bringing examples of sustainable actions in fashion projects and analyzing consumption. It is possible to point out that the works began to consider sustainability in fashion beyond the product, but contemplating consumption and teaching.

In the year of 2017 and 2018, most of the works discussed extension projects where crafts are used as an experience for using waste, experimenting with materials and techniques and enhancing inclusion. In this sense, they focused again on the social and economic dimensions, from the moment that crafts are used as a source of income and inclusion. The theme of inclusion was also reinforced by the round table, proposed by the WG coordinators that addressed the theme.

In the year of 2019, the works discussed about collaboration in projects, the Brazilianness, the appreciation of the local culture and the work of inclusion developed with immigrants from Haiti. This year, the social and cultural dimensions are now considered in the works. As a complement to the work of the WG, sustainable development was discussed in a round table.

In the year of 2020, the GT was not offered, as a result of the pandemic, but the coordinators proposed a round table entitled "Good Living" which discussed the socio-environmental problem based on the emergency issues brought about by the pandemic, which brought about the need to rethink our model of economy and civilization.

As of 2021, with the return of the WG after the covid-19 pandemic, work began to bring the concept of the circular economy, replacing the disposal processes, as well as the concept of sustainability linked to the use of more environmentally responsible techniques, but that did not consider extending the life of the product.

In the year of 2022, the works dealt with the teaching of sustainability in fashion design courses and experiences in modularity in clothing. This year, it was possible to observe that each work adopted a different theme, and that they ended up contemplating the three dimensions of sustainability. On the other hand, the WG proposed a round table that dealt with the "Bank of Textile Waste" initiative.

Therefore, it is observed that at the beginning of the WG, articles focused on social sustainability predominated, especially with an approach to handicrafts and also extension programs aimed at low-income or vulnerable women. Later, some also emerged with a focus on identity as a differential for sustainable fashion (slow fashion) and many cases were presented. As it matured, research on sustainability throughout the product's

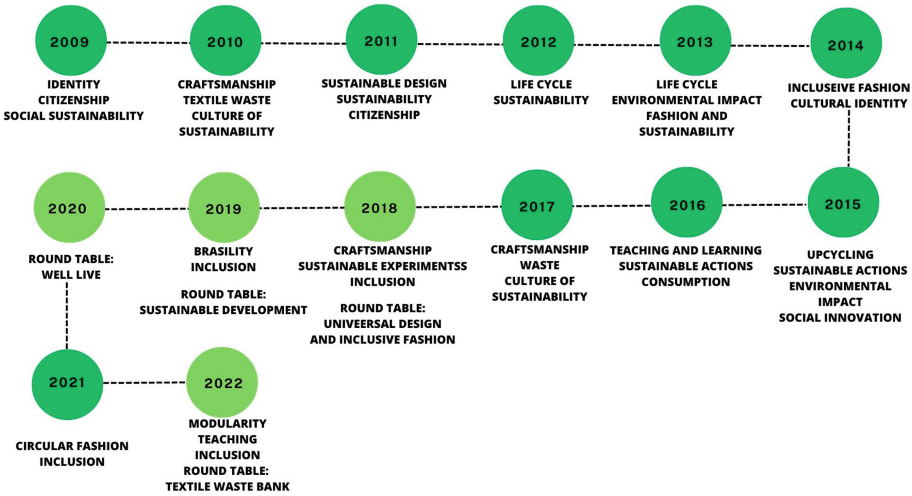


Fig. 1. Timeline. Search source: Authors (2023).

life cycle, sustainability in companies, cleaner and more recent production, replacing disposal with circular economy or reverse logistics proposals, emerged. Therefore, it is possible to affirm that there was a maturation of thinking about sustainability already in the product design, as well as signaling the emergence of the first works referring to inclusion.

#### 4 Final Considerations

The review carried out along with the works published in the Fashion, Sustainability and Inclusion Working Group of the Colóquio de Moda allows an overview of the evolution of research on related topics in the last thirteen years, especially in Brazil.

This survey is an important instrument for mapping and categorization of research on sustainability and inclusion of fashion, especially as the research considers the aforementioned congress, which documents, through its annals, fashion research carried out in the last 18 years.

In the field of teaching, there were advances in the environmental dimension and in the third level of maturity of design for sustainability, which deals with the development of intrinsically more sustainable products, and some progress in relation to teaching approaches, with recommendations for sustainability to be treated as a cross theme. However, it is still necessary to implement advances in the social and economic dimensions of sustainability, in addition to the inclusion of new possibilities for professional performance, such as service design and design education for sustainability, with emphasis on product-service systems and the promotion of new scenarios of sufficient consumption, equity and social cohesion.

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