

22



FASHION AND
TEXTILE DESIGN
AMBIVALENCES



PAD. Pages on Arts and Design

International, peer-reviewed,
open access journal
founded by Vanni Pasca in 2005

Editor-in-Chief

Marinella Ferrara
Politecnico di Milano, Italy

Advisory Board

Tevfik Balcioglu
Arkin University, Kyrenia, Turkey

Murat Bengisu
Izmir University of Economics, Turkey

Isabel Campi
Design History Foundation, Barcelona, Spain

Eduardo Corte Real
UNIDCOM/IADE, Lisbon, Portugal

Antonio da Cruz Rodrigues
Universidad Lusofona, Lisbon, Portugal

Soumiya Mikou
Moroccan Design Association, Casablanca, Morocco

Ely Rozenberg
RUFA, Rome University Fine Art, Italy

Mireia Frexia Serra
Gracmon, Universitat de Barcelona, Spain

Andreas Sicklinger
Università di Bologna, Italy

Fedja Vukić
University of Zagreb, Croatia

Managing Editor

Chiara Lecce
Politecnico di Milano, Italy

Editorial Assistant

Giorgia Bonaventura
Politecnico di Milano, Italy

Editorial Board

Giuseppe Amoroso
Politecnico di Milano, Italy

Helena Barbosa
University of Aveiro, Portugal

Stefania Camplone
Università di Chieti-Pescara, Italy

Roberto De Paolis
Politecnico di Milano, Italy

Cinzia Ferrara
Università degli Studi di Palermo, Italy

Francesco E. Guida
Politecnico di Milano, Italy

Ashley Hall
Royal College of Art, London, England

Elif Kocabiyyik
Izmir University of Economics, Turkey

Lia Krucken
Creative Change, Brazil and Germany

Carla Langella

Università degli Studi della Campania Luigi Vanvitelli, Italy

Giuseppe Lotti

Università di Firenze, Italy

Tomas Macsotay

Pompeu Fabra University, Spain

Nicola Morelli

Aalborg University, Copenhagen, Denmark

Alfonso Morone

Università Federico II, Napoli, Italy

Raquel Pelta

Universidad de Barcelona, Spain

Daniele Savasta

Yaşar University, Izmir, Turkey

Alessandro Squatrito

Politecnico di Milano, Italy

Rosanna Veneziano

Università degli Studi della Campania Luigi Vanvitelli, Italy

Li Zhang

Beijing Information Science and Technology University, China

Publishing Consultant

Vincenzo Castellana, Architect, Italy

Art Direction

Francesco E. Guida

Web Site

Pietro Forino

Correspondents

Amina Aguezmay (Morocco), **Hèla Hamrouni** (Tunisia),
Vesna Kujovic (Montenegro), **Can Özcan** (Turkey),
Ana Perkovic (Croatia), **Filip Roca** (Montenegro),
Azadeh Sabouri (Iran), **Marco Sousa Santos** (Portugal),
Pascale Wakim (Lebanon)

Reviewers

Murat Bengisu, Cristina Carvalho, Roberto De Paolis,
Annalisa Di Roma, Claudio Gambardella, Solen Kipoz,
Vittorio Linfante, Gianni Montagna, Gabriele Monti,
Carla Morais, Maria Antonietta Sbordone, Benedetta Terenzi,
Davide Turrini

PAD

via Festa del Perdono 1 – 20122 Milano – Italy
via Roma 171 – 90133 Palermo – Italy
info@padjournal.net – editors@padjournal.net

Publisher**Aiap Edizioni**

via A. Ponchielli 3 – 20129 Milano – Italy
aiap@aiap.it – www.aiap.it

PAD © ISSN 1972-7887

#22, Vol. 15, June 2022

www.padjournal.net

0. EDITORIAL #22

Fashion and Textile Ambivalences

by Gianni Montagna & Maria Antonietta Sbordone

006

I. NEW/OLD ADVANCES

Fashion Heritage and the Value of Time. The Dual Role of Archives for Sustainable Acting

by Margherita Tufarelli

018

Analysis of Emotional Experience related to Sensory Perception of Woven Textiles based in the UK

by Gina Nadal Fernandez

042

Smart Tags as a Tool for Circular Economy in the Textile and Fashion Chain

by Adriana Yumi Sato Duarte, Regina Aparecida Sanches, Rayana Santiago de Queiróz & Fernando Soares de Lima

069

II. NEW/OLD PRODUCTION AND CONSUMPTION APPROACHES

Sustainability in the Prato Textile District: Vanguard and Tradition

by Debora Giorgi, Renato Stasi, Margherita Tufarelli & Maria Claudia Coppola

087

Product & Textile Design Interventions on Circular Sustainable Systems. Enabling Coherent Projects that Preserve a Balance within their Context

by Jose Luis Gonzalez Cabrero & Ana Margarita Ávila Ochoa

110

Unlocking Competitive Advantages in Sustainable Namibian Fashion through IK, Indigenous Materials and Design

by Beata Hamalwa

129

III. NEW/OLD FEATURES

Scenarios: Strategic Tools for a Reflective Fashion

by Maria Claudia Coppola & Elisabetta Cianfanelli

155

Strategies for Sustainability and Circularity: a New Value Chain for the Fashion Industry

by Rosanna Veneziano, Francesco Izzo & Michela Carlomagno

177

Fashion-Oriented Bio Textiles: the New Speculative Aesthetics of Biocouture

by Chiara Scarpitti

201

IV. PROJECTS & DOCUMENTS

Interview to Mauro Vismara (MAEKO)

by Gianni Montagna & Maria Antonietta Sbordone

225

V. BIOGRAPHIES

About the Authors

236



NEW/OLD FEATURES

Scenarios: Strategic Tools for a Reflective Fashion

Elisabetta Cianfanelli

Università degli Studi di Firenze
Orcid id 0000-0003-0241-1826

Maria Claudia Coppola

Università degli Studi di Firenze
Orcid id 0000-0003-3776-9860

Keywords

Sustainable Strategies, Fashion Futures, Scenario Thinking, Narrative Building, Forecasting.

Abstract

Future has always been an essential dimension to fashion. However, recent practices in trend forecasting seemed to pull the future itself away from fashion, generating a tricky paradox where external issues – given by global challenges – and internal tensions – outlined by relentless market rhythms – clashed feeding fashion's unsustainability.

The pandemic event marked a point from which the next steps towards the future have to be thought of carefully. Thus, fashion firms need to develop new approaches to tackle global challenges, heightening their awareness of change and sharpening their visions thanks to a more reflective attitude towards distant futures.

By analyzing how the fashion industry has been mastering the short-term horizons lately, the contribution aims to investigate the role and the responsibilities of forecasting practices in fashion, especially when it is intended to inform and give consistency to marketing strategies. Broadening the interpretation of forecasting through the lens of future studies, the paper aims to further the discussion on the potential paradigm shift to a fashion forecasting, where scenarios as tools to re-direct and re-tune social and environmental sustainability could offer support in the construction of new systemic strategies while building social narratives.

1. We Went Way Too Far

The pandemic has disrupted society and markets, forcing governance models and industrial systems to face an urgent transformation. Such urgency resonates particularly in the fashion industry, in which several topic moments - ranging from Alessandro Michele (2020)'s digital diaries and his “we went way too far” confession to the open letters from fashion designers all over the world - unveiled a shared awareness about the ills of fashion system, exacerbated by the health emergency and its humanitarian, ecological and economic consequences (Niinimäki et al., 2020). However, while the shock suffered by the fashion system is enormous, the call for a more sustainable fashion appears to be still mainly addressed with an industry and user-focused approach, examining narrow questions regarding how industry may shift practices or how users may engage with fashion differently.

Indeed, several scholars have advocated the need for more sustainable fashion even before current times (Birtwistle & Moore, 2007). Despite its limited reaches, the trend for a fairer fashion was gradually supported by many forms of activism - ranging from the “fashion revolution” (Ditty, 2015) to the *Anti-Fashion Manifesto* (Edelkoort, 2015) -, aimed at raising awareness about the necessary reformulation of fashion's industrial models. The growing interest in what is addressed as “sustainable fashion” implies the need to deal with a broader, systemic issue which cannot be genuinely achieved without a systemic understanding (Tham, 2015) and taking into account recent radical shifts in consumers' expectations towards a more transparent and responsible fashion (Amed et al., 2020).

Therefore, beyond the activist agendas shared by both fashion designers and consumers, addressing the common goal of sustainability means coping with a high degree of complexity. In this sense, longer-term approaches should be preferred in place of short-term and overly deterministic ones in order to heal the interplay between society and markets. In other words, addressing the core issues of fashion's unsustainable production and consumption rather than its symptoms calls for a shift in focus towards the meaning of future in fashion and the activities, the *futureing* that goes with it.

Today, sustainable, responsible and transparent fashion gains strength and depth, becoming more and more pressing as the pandemic harshly shortened the time span for such transformation. Narrow questions to be answered in quick times: fashion – as well as many other human activities – is going through a process of paradigm shift that appears to be extremely hard since it seems to be “stuck in a self-reinforcing cycle of short-term thinking” (Fisher, 2020, p. 10): actually, short-term thinking showed to be the most efficient way to respond to a world shaped by turbulence, uncertainty, novelty and (Ramirez & Wilkinson, 2016). This framework appears to be quite significant for the fashion system, whose constant and natural exposure to contradicting demands led it towards anticipatory and forecasting approaches to manage the most immediate dimensions of future, so that it progressively shrunk into a near-time reality (Frohm & Tucholke, 2020). Recently fashion has undoubtedly been mastering forecasting as one of its core strategies in terms of optimization and risk management (Lantz, 2018).

Today such practices turn to be in a critical spotlight, generating a tricky paradox, in which external issues – given by global challenges – and internal tensions – outlined by relentless market rhythms – clash, pulling future *tout court* away from fashion.

Nevertheless, as long as uncertainty surrounds almost every aspect of life and work, favoring the rise of dynamism and new opportunities, fashion firms need to develop new approaches to tackle this very uncertainty, heightening their awareness of change and sharpening their visions thanks to a more reflective attitude towards distant futures.

This contribution aims to investigate the role and the responsibilities of forecasting practices in fashion, especially when it is intended to inform and give consistency to marketing strategies. By broadening the interpretation of forecasting through the lens of future studies, this paper aims to further the discussion on the potential paradigm shift of future thinking through scenarios as tools to re-imagine, re-direct and re-tune social and environmental sustainability, offering support in the construction of new systemic strategies while building social narratives.

2. Fast Action is not Reaction

Fashion's need to respond to increasingly volatile desires and needs slowly led marketing to engage vigorously in its processes, not without side effects (Edelkoort, 2015) on the whole system - here understood as both an industry and a force of change and creativity.

Managing everchanging desires led to a natural focus in trend forecasting, which quickly became a widespread practice to

achieve an anticipatory and, thus, a more competitive positioning. Such behavior kept fashion designers from focusing on broader horizons, thus disregarding creative narrative building. If from a commercial perspective this meant having strategic cycles too focused on short time frames, from an artistic perspective fashion designers lost their aura and their top-down influence.

Traditionally, fashion trend forecasting was done by fashion designers themselves through a human-based process (DuBreuil & Lu, 2020), where the artistic, cultural and societal viewpoints on current events were the main way to sense or predict future trends and create something original and unique. Creativity was at the core of such processes, but it would soon be looked at as “ ‘opinionated guesswork’ due to designers’ tendencies to rely on their ‘gut feel’ to predict trends” (Frohm & Tucholke, 2020, p. 1). The growing unreliability of inspiration-led practices established another dedicated profession, trend forecasters: in fact, they slowly acted as tastemakers and cultural intermediaries (Lantz, 2018), assisting fashion designers with more structured techniques based on the increasing availability of data inputs about commercial trends and consumers’ behaviors. Here, latest technological evolution exerted massive pressure, offering powerful tools to enhance trend forecasting practices: new technologies facilitated trend information gathering (Silva et al., 2019; Park et al., 2016), impacting even on how trend information would have been generated and used. As the efforts gradually headed towards more accurate predictions, the fashion system seemed to gradually lose interest in longer-term forecasts: keeping up

marketplace – enhanced by digital capitalism – was mandatory to survive and until pre-Covid-19 era the fashion system gained more profitable knowledge from short or micro-trend forecasting. By exerting their highly influential power with both clients and consumers, trend forecasters soon became fashion’s *insurance companies*, leading to the establishment of giant agencies – WGSN, for example – in the field offering an essential support to fashion systems to anticipate trends in a fast-changing world, where fast reaction means survival.

Even though fashion is naturally “forward-thinking” and traditionally depicted as an experimental agent of change, its recent focus was actually much more restricted to a product-side innovation (Ünay & Zehir, 2012). Indeed, trend forecasting practices have been traditionally used to inspire design novelty (Evans, 2004; Cachon & Swinney, 2011; Abecassis-Moeda, 2016) within the development of fashion products. However, the extremely compressed timelines destined to materialize new concepts and visions translate into a collection of items aimed at selling the newest trends themselves. Hence, full circle: trend forecasters track new needs, fashion systems intercept them developing new products and just a few moments after the release trend forecasters track down new needs.

Today trend forecasting is perceived to be an essential service for fashion companies, as it is a useful driver for commercial competition in the fast-paced fashion market. The extreme production-consumption rhythms and the relationship between technology and demand management deepened to the point that the interest is no more “particularly in trend forecasting,

but rather in demand forecasting” (Frohm & Tucholke, 2020, p. 7) often linked to self-fulfilling prophecies (Lantz, 2018). Such shifts have been lately submitted to serious criticism, as the forecasting discipline marked itself with an inherent unsustainability: clothes live more than trends, in a way that in times of climate change the forced obsolescence of fashion products collides against the pillars of sustainability.

This resonates particularly with some studies accurately reported by Frohm and Tucholke (2020), which have already questioned trend forecasting as a limited and self-referential practice, causing several issues on entire ecosystems. Micro-trend forecasting or even demand forecasting assess the domination of marketing and commercial departments in fashion systems: the short-term approach in trend forecasting aims solely at-risk reduction as long as it has been strictly applied in marketing strategies, resulting in the thickening of fashion management myopia. Indeed, the role of trend forecasting is so influential that it can significantly determine the future of fashion (Blaszczyk & Wubs, 2018), but it needs to reconsider the need to focus on value creation more than product creation, focusing on building narratives imbued with singular and original views on society and its future shapes. Even though sustainability has been recognized as a trend itself (Frohm & Tucholke, 2020), it should be treated as a cultural paradigm shift in which trend forecasting engages in promoting ethical and more responsible values. Thus, trend forecasting as a discipline will probably need to shift to something else, starting from acknowledging its responsibility in the cycle of creation-destruction of trends and its relation to sustainability.

3. Transitioning through Scenario Thinking

Today the future in fashion appears to be split in two: on one side, fashion designers and their imagination remain the most powerful source to tell stories and build narratives through self-expression, even though they would not find place in the current fast-paced market; on the other side trend forecasting is not sufficiently consistent to draw longer-term strategies nor narratives, but it excels in responding reactively to fashion's fast-changing market.

It is worth underlining that trend forecasting is not the exclusive dimension talking about the future within fashion: as stated before, the future itself is an essential dimension in the whole fashion process. The dreaming pulse about what will happen in society has always been and still remains the core inspiration to fashion designers: by expressing their statements, fashion designers would talk about societal ups and downs, ills and treasures, allowing people to seize the future through their products and creations.

Such dimension is extremely close to speculative thinking, which today gains popularity as the pandemic event marked a point from which the next steps towards the future have to be thought of carefully. Speculative thinking is usually found in fiction and draws upon the need to explore realities of different natures: if trend forecaster needs to reflect on their responsibility about the un-sustainability of their practices (Frohm & Tucholke, 2020), such responsibility must align with current global challenges, advocating sustainability *tout court* as a core driver of change. However, as long as fashion undergoes the commodification perspective, it is perceived as inherently

incompatible with sustainability. This resonates with what design theorist Tony Fry (2009) calls “de-futuring”: coming from capitalistic environments, both design and fashion engaged in the articulated machinery of production-consumption cycles, producing the un-sustainability of this world, thus depriving it of future. Conversely, assuming “sustain-ability” (Fry, 2009) as a paradigm shift, would mean acquiring new skills to support people, social life, cultures, imaginaries and the environment, thus achieving the *futuring* effect, the creation of the future for a recovering world. Fry (2009) also points out that future cannot be understood as a reality independent of our existence: future cannot be known, but futures can be built, approached through the actions made in the present. This has been quite clear for trend forecasters, who lately ended up in exerting influence to sell the trend itself as a way to gain control over the future. However, they failed in promoting sustainability, engulfed by the market-driven machinery (Tham, 2010).

There are some approaches coming from future studies that could help fashion in “re-directing” (Fry, 2009) futures, that means challenging established ways of thinking, working and making combined with the production of both new designed objects and new design practices (Vaccari & Vanni, 2020). Thus, the practice of futuring can be understood as a way for fashion designers and forecasters together to explore alternative scenarios for the future.

Scenarios are key tools to this contribution, as they seem to be the balance and connecting point between creativity-inspired future approaches and market-driven future approaches.

A framing is needed here: scenarios – scrolling through the several definitions from future studies literature – can be outlined as stories constructed around how specific drivers of change will move in certain directions (Bradfield et al., 2005), resulting in a number of narratives usually divergent from each other. Here divergency offers a meaningful foundation since divergent techniques pertaining to strategic foresight practices – such as scenarios – do not aim to result in predictions: in contrast with trend forecasting aims, the ultimate purpose of scenarios “is not to be right, but to be ready” (Phillips, 2019, p. 22) to tackle those futures. In this sense, scenarios challenge the constraints imposed by present structures, mental models and behavioral patterns, adopting an exploratory and anticipatory attitude (Godet, 2000). As a result, the greater the variety of inputs converging into the process, the better the narrations’ adherence to the whole system: such operations will require the deep engagement of as many actors as possible to achieve successful results. This kind of practice facilitates genuinely holistic thinking about possible futures, combined with reflexivity, flexibility and democratic engagement with the values (in)forming those futures.

Literature offers few examples through which it is possible to read a growing interest in such tools: *Fashion Futures 2030* was an inspiring project led by London College of Fashion in collaboration with the Centre for Sustainable Fashion in 2019. The aim of the project was depicting what the world and its fashion might look like in the next ten years: by adopting two critical trends – care for sustainability issues and technological advancement – the project adopted the orthogonal matrix

method to explore four different scenarios resulting from the intersection of the selected trends. The four narratives (Figures 1, 2, 3, 4) talk about the relationship between fashion, nature and human action in not-so-distant futures, opening space for further discussions and reflections about alternative paths of action and development for fashion.

It is clear how such narratives could benefit from the original human-based forecasting, generating values, hopes and fears into visions about the future. This resonates with the perspective considering scenarios as strategic conversations (Van der Heijden, 2011), which are the expression of a collective vision not just on the “content of the future,” but, practically, on its foundational values, aspirations, and expectations, enabling participants to negotiate their interests. In fact, the *Fashion Futures 2030* experience was firstly presented as a co-design workshop at Copenhagen Fashion Summit (2019), proving how scenarios could be effective tools, whose adoption in fashion could foster a “re-directed” imaginative design, product development, long-term strategy building and personal development in understanding and raising awareness on the climate emergency and social injustice, brought to life in recognisable and understandable ways by storytelling media.

4. Participated Values to Get Unstuck

As long as scenarios seem to play a central role in upcoming practices of narrative building in fashion, they gain equal emphasis from a management-strategic perspective too.

The need for long-term-oriented forecasting instead of a product-oriented one intercepts a remarkable metamorphosis, in which trend forecasting enriches with scenario approaches.

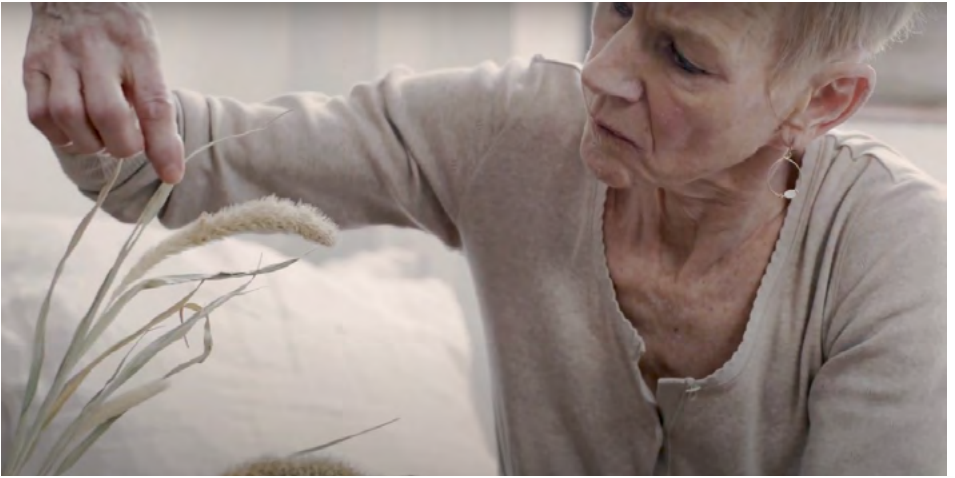


Figure 1. *Fashion Futures 2030 Scenario 1 – Living with Less.* In the first scenario clothing is treasured and kept for a long time, as well as passed down within family and friend groups. London College of Fashion, 2019.



Figure 2. *Fashion Futures 2030 Scenario 2 – A story from Hyper Hype.* In *Hyper Hype* fashion is fast, frivolous and cheap. New styles are released every day via digital runway shows and adverts by multi-brand conglomerates. London College of Fashion, 2019.



Figure 3. *Fashion Futures 2030 Scenario 3 – A story from Safety Race.* This narrative talks about a fashion driven by identity politics, heavily flavored by ethnic traditions to overcome environmental collapse. London College of Fashion, 2019.



Figure 4. *Fashion Futures 2030 Scenario 4 – A story from Chaos Embrace.* In this last scenario everyday fashion is centered around well-crafted, utilitarian garments that are kept and worn for long periods of time. London College of Fashion, 2019.

As Van der Heijden (2011) notes, “the ultimate purpose of scenarios is to create a more adaptable organization, which first recognizes change and uncertainty, and secondly uses it creatively to its advantage”. To do so, scenarios need to be informed by both statistical data and different perspectives coming from all over the system, so that it could be possible to build several points of views and, thus, develop a holistic interpretation of such data and mathematical trends. For this reason, scenarios are increasingly believed to be the tools par-excellence of future techniques since they naturally encourage collective participation (Andreescu et al., 2013). In fact, since scenarios are tools which stem from a grounded necessity of collaboration – among decision-makers, designers, stakeholders, shareholders, and experts from various fields (Schwartz, 2012) –, they are at the same time able to promote the conditions to encourage that same collaboration by triggering heterogeneous discussions about alternative paths of development (Godet, 2000; Andreescu et al., 2013).

Thanks to designers channeling creativity towards a human-centered perspective made of negotiated values, fashion stakeholders could express their own creativity, applying tacit and explicit knowledge not only in product strategies but also in the development of larger-scale programs. Thus, the fashion industry – along with its rich and plural ecosystem – is offered a new viable path to innovation by encouraging the participation in strategy formulation by all the players in the supply chain, from manufacturers to designers, from suppliers to logistic providers and, last but not least, to consumers. This framework recalls Tham’s (2015) hypotheses about trend

forecasting next shift, placing it in a tighter collaboration among trend forecasters and fashion designers in order to promote attitudinal changes where fashion and sustainability converge into the generation of new competitive knowledge: as a consequence, scenario thinking is a process about learning, negotiation, and sharing of new values producing new meanings.

In these terms, scenario thinking implies a proactive approach, which stands out as an antidote to reactive approaches. According to Kahane's (2012) theory about "transformative scenario planning," actors could engage even with greater levels of complexity thanks to its foundational processes. Specifically, the scholar distinguishes between adaptive attitudes, which ask actors to force a transformation over a given situation, and transformative attitudes, where actors transform a situation by mainly transforming themselves: working together "cooperatively and creatively to get unstuck and to move forward" (Kahane, 2012, p. 18), participants might be able to take action individually in their sector, but only if they collectively align towards a shared direction of change.

[...] by proxy. It must start in the individual. Yet, we cannot be holistic on our own. We must imagine together [...] in a place for risky and playful exploration, [...] where] an agile dance between micro and macro perspectives, and operational and strategic design take place. Scenarios then rank in fashion forecasting as strategic tools that can synergize products, systems, and even narrative paradigms. (Tham's, 2015)

5. Towards a Fashion Forecasting

Today fashion appears in need to imbue its industrial paradigms with more consistent visions about what will come after the pandemic in terms of social narratives and lifestyles to achieve a fast action rather than a quick market-driven reaction to address emergency and sustainability issues. Such “future-thinking” would benefit from an interpretation of fashion future as a way forward to shape and envision a better world, stemming from an ethical dimension that slowly translates into a moral obligation for fashion itself. Thus, fashion thinking could entwine with *futureing* practices in order to embrace all the layers of reality to overcome the global challenges of the XXI century.

Scenarios for fashion thinking seem to respond to the need of a new mythopoesis, which offers an alternative to dominant narratives deriving from current commercial framework. By assuming the “what if” posture, fashion could return in the realm of metaphors, launching an epistemological leap into a new mission for fashion. Scenarios satisfy the need to explore possible futures and develop critical views about its various shapes. Future-making practices in fashion would stem from a constructive turbulence, where scenario narratives do not run out in simple nor linear projections, but they draw articulated fictions and frictions to inspire and provoke fabulous narratives about human *happenings* and *becomings*.

Scenarios articulate as multifaceted tools able to connect and reconcile trend forecasting practices informed by mathematical models and data science with the much more imaginative

and creative practices typical of traditional techniques aimed at pre-sensing societal needs and desires. Potentially, big data tools could outline some fashion forecasts, reveal patterns, trends, and predictions in consumer preferences by leveraging the breadth and huge data available today even from alternative sources like social media. Such information will give powerful insights, starting from which a human interpretation is mandatory for them to make sense. Here, the quantitative dimension of scenarios meets its qualitative counterpart, relying on human-based forecasting practices to envision such data and the trend-scenarios outlined with a filter of interpretation – that could be compliant or consolidating, provoking, or warning. Thus, would lead to the building of new narratives, in which fashion designers could position their product strategy and upcoming creations, while consumers would engage in a coherent present, wearing products imbued with values and meaning.

An evolution of trend forecasting is thus achieved, as it embraces a broader dimension of future by drawing information from different sources, engaging with new actors and raising awareness on the dangers of an unsustainable world.

The contribution has been showing how forecasting practices have been seen under a different light depending on the *object* which was meant to be forecasted: from the classic *trend* forecasting to the *micro-trend* forecasting, down to the *demand* forecasting. This step is fundamental because it makes evident how vision in fashion – and the space for it to unfold properly – shrunk dramatically, in a way that it would have been almost impossible to face moments of emergency or

prepare for multi-layered global challenges. Thus, it would be worth promoting a *fashion forecasting*, which consists in an active practice of reimagining dressing and clothing as a tool of radical expression, resistance, and future building.

Even though fashion forecasting as an approach is receiving increasing attention in the field of fashion design under different designations, a more structured development of such approaches is still lacking in literature. However, some workshops – similar to the one previously reported – seem to embrace this theoretical and operational path to collaboratively construct an imaginative garment that confronts the issues shaking the world right now. Despite the limited literature, fashion forecasting could provide a great contribution in re-directing and re-tuning social and cultural interpretative models, in which sustainability – as a social, economic and environmental goal – drives a shift in the future forms of fashion thinking and making, dressing and stating.

References

- Abecassis-Moedas, C. (2006). Integrating design and retail in the clothing value chain. *International Journal of Operations & Production Management*, 26(4), 412-428. <https://doi.org/10.1108/01443570610650567>
- Amed, I., Balchandani, A., Berg, A., Hedrich, S., Jensen, J. E., & Röllkens, F. (2020). *The State of Fashion 2020. Coronavirus Update*. Business of Fashion and McKinsey & Company. https://www.mckinsey.com/~/_/media/mckinsey/industries/retail/our%20insights/its%20time%20to%20rewire%20the%20fashion%20system%20state%20of%20fashion%20coronavirus%20update/the-state-of-fashion-2020-coronavirus-update-final.pdf
- Andreescu, L., Gheorghiu, R., Zulean, M., & Curaj, A. (2013). Understanding normative foresight outcomes: Scenario development and the ‘veil of ignorance’ effect. *Technological Forecasting and Social Change*, 80(4), 711-722. <https://doi.org/10.1016/j.techfore.2012.09.013>
- Birtwistle, G., & Moore, C. M. (2007). Fashion clothing—where does it all end up? *International Journal of Retail & Distribution Management*, 35(3), 210-216. <https://doi.org/10.1108/09590550710735068>
- Blaszczyk, R. L., & Wubs, B. (Eds.). (2018). *The fashion forecasters: A hidden history of color and trend prediction*. Bloomsbury Publishing.
- Bovone, L. (2016). Cultura materiale e nuovi valori: il caso della moda etica. *Sociologia della Comunicazione*, 50, 102-115. DOI: 10.3280/SC2015-050010.
- Bradfield, R., Wright, G., Burt, G., Cairns, G., & Van Der Heijden, K. (2005). The origins and evolution of scenario techniques in long range business planning. *Futures*, 37(8), 795-812. <https://doi.org/10.1016/j.futures.2005.01.003>
- Cachon, G. P., & Swinney, R. (2011). The value of fast fashion: Quick response, enhanced design, and strategic consumer behavior. *Management science*, 57(4), 778-795. <https://doi.org/10.1287/mnsc.1100.1303>
- Ditty, S. (2015). *It's time for a fashion revolution* [White Paper]. Fashion Revolution. https://www.fashionrevolution.org/wp-content/uploads/2016/04/FashRev_Whitepaper_Dec2015_Spanish.pdf

DuBreuil, M., & Lu, S. (2020). Traditional vs. big-data fashion trend forecasting: an examination using WGSN and EDITED. *International Journal of Fashion Design, Technology and Education*, 13(1), 68-77. <https://doi.org/10.1080/17543266.2020.1732482>

Edelkoort, L. (2015). *Anti_fashion: a Manifesto for the Next Decade*. Trend Union.

Evans, M. (2004). A Design Approach to Trends and Forecasting. In J. Redmond, D. Durling, & A. de Bono (Eds.), *Futureground - DRS International Conference 2004*. Design Research Society. <https://dl.designresearchsociety.org/drs-conference-papers/drs2004/researchpapers/130>

Fisher, R. (2020, October 21). Humanity is stuck in short-term thinking. Here's how we escape. *MIT Technology Review*. <https://www.technologyreview.com/2020/10/21/1009443/short-term-vs-long-term-thinking/>

Fox, R., Grail, M., & Peng, A. (2018). *Geek meets chic: Four actions to jump-start advanced analytics in apparel*. McKinsey & Company.

Frohm, P., & Tucholke, K. X. (2020). *The trend forecasting paradox? An exploratory study of the compatibility of trend forecasting and sustainability* [Master thesis dissertation, University of Borås]. DiVA - Digitala Vetenskapliga Arkivet. <http://www.diva-portal.org/smash/get/diva2:1450343/FULLTEXT01.pdf>

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

Godet, M. (2000). The art of scenarios and strategic planning: tools and pitfalls. *Technological Forecasting and Social Change*, 65(1), 3-22. [https://doi.org/10.1016/S0040-1625\(99\)00120-1](https://doi.org/10.1016/S0040-1625(99)00120-1)

Kahane, A. (2012). Transformative scenario planning: changing the future by exploring alternatives. *Strategy & Leadership*, 40(5), 19-23. <https://doi.org/10.1108/10878571211257140>

Lantz, J. (2018). *The Trendmakers*. Bloomsbury Publishing.

Michele, A. (2020, May 29). Notes from the silence by Alessandro Michele. *Numéro Magazine*. https://www.numeromag.nl/notes-silence-alessandro-michele#_

Niinimäki, K., Peters, G., Dahlbo, H., Perry, P., Rissanen, T., & Gwilt, A. (2020). The environmental price of fast fashion. *Nature Reviews Earth & Environment*, 1(4), 189-200. <https://doi.org/10.1038/s43017-020-0039-9>

Park, J., Ciampaglia, G. L., & Ferrara, E. (2016). Style in the Age of Instagram: Predicting Success within the Fashion Industry using Social Media. In *Proceedings of the 19th ACM Conference on computer-supported cooperative work & social computing* (pp. 64-73). Association for Computing Machinery. <https://dl.acm.org/doi/pdf/10.1145/2818048.2820065>

Phillips, F. (2019). *What About the Future? New Perspectives on Planning, Forecasting and Complexity*. Springer.

Ramirez, R., & Wilkinson, A. (2016). *Strategic Reframing: The Oxford Scenario Planning Approach*. Oxford Publishing.

Schwartz, P. (2012). *The art of the long view: planning for the future in an uncertain world*. Currency.

Silva, E. S., Hassani, H., & Madsen, D. Ø. (2019). Big Data in fashion: transforming the retail sector. *Journal of Business Strategy*, 41(4), 21-27. <https://doi.org/10.1108/JBS-04-2019-0062>

Tham, M., (2015). *The futures of futures studies in fashion*. In K. Fletcher, & M. Tham (Eds.), *Routledge Handbook of Sustainability and Fashion* (pp. 283-292). Routledge.

Tham, M., (2010). *Lucky People Forecast: a systemic futures perspective on fashion and sustainability* [Doctoral dissertation, University of London]. DiVA - Digitala Vetenskapliga Arkivet. <https://www.diva-portal.org/smash/get/diva2:791050/FULLTEXT01.pdf>

Ünay, F. G., & Zehir, C. (2012). Innovation intelligence and entrepreneurship in the fashion industry. *Procedia - Social and Behavioral Sciences*, 41, 315-321. <https://doi.org/10.1016/j.sbspro.2012.04.036>

Vaccari, A., & Vanni, I. (2020), Fashion Futuring: un modello di produzione sostenibile nella moda. In A. M. Barucco, F. Bulegato, & A. Vaccari, (Eds), *Remanufacturing Italy. Il Made in Italy nell'epoca della postproduzione* (pp. 48-60). Mimesis.

Van der Heijden, K. (2011). *Scenarios: the art of strategic conversation*. John Wiley & Sons.

V

BIOGRAPHIES

Ana Margarita Ávila Ochoa

Industrial Designer specialized in the textile area. Master in History of Urban Art. Full-time Professor and Researcher at Facultad del Hábitat, Universidad Autónoma de San Luis Potosí, and a member of the research group Design & complex thinking, where he develops design research oriented towards Evolution of thoughts, theories and concepts of Design.

aavilaochoa@fh.uaslp.mx

Michela Carlomagno

PhD student in Environment, Design and Innovation at University of Campania Luigi Vanvitelli.

Before she studied Design and Communication at University of Campania Luigi Vanvitelli - Department of Architecture and Industrial Design (DADI) and successively she finished her studies with a Master's degree in Design for Innovation at Department of Civil Engineering Design Construction and Environment (DICDEA) in March 2018.

She is interested in the investigation of innovative approaches to the conceptualization of new vision of design, especially on food design, cosmetic product and communication.

michela.carlomagno@unicampania.it

Elisabetta Cianfanelli

Architect and Industrial Design Specialist, is Full Professor at DIDA (Architecture Department) of University of Florence (Italy), Design Campus section. President of the CdLM in Fashion System Design, and scientific director of the DIDA Lab REI (Reverse Engineering & Interaction Design).

Her research interests are related to the world of Small and Medium Enterprises concerning the development of new products and technologies applied to design and production.

elisabetta.cianfanelli@unifi.it

Maria Claudia Coppola

PhD student in Design at University of Florence, DIDA (Department of Architecture), Design Campus section. Her research combines design approaches, future studies and digital media to foster deeper civic engagement and inclusion. In addition to her studies, she supports Professors at DIDA in managing educational and training activities, communicating with students and tutors.

Outside of the academic environment, she is a designer enjoying philosophy and politics readings from all over the world, with a strong attention to their related languages, be they carved in stone or posted on social media.

mariaclaudia.coppola@unifi.it

José Luis González Cabrero

Mexican Industrial Designer, master in Product Design from Politecnico di Milano. He is currently a Design Researcher and Professor at Facultad del Hábitat, Universidad Autónoma de San Luis Potosí, and a member of the research group Design & complex thinking, where he develops design research oriented towards territory & aesthetics.

info@gonzalezcabrero.com

Gina Nadal Fernandez

Gina Nadal Fernandez is a final year PhD student in the Design Department at Manchester School of Art, Manchester Metropolitan University. Her doctoral research is by practice, and investigates how emotional experience can be designed into digital jacquard woven textiles during a co-design process by using digital coding.

She takes a multidisciplinary approach that embraces design theory, textiles, digital coding, consumer behaviour and mass customisation in her weaving practice using a TC-1 loom and natural yarns.

Gina has presented her research at the PhD by Design workshop at the Design Research Society Conference 2018, at the Global Fashion Conference 2018 and 2020. She is also a member of the Textile Society and Design Research Society. She holds a master's degree in Fashion Graphics from Manchester School of Art, Manchester Metropolitan University that looked at the relationship between digital jacquard textile practice and emotional value using digital coding.

georgina.nadal-fernandez@stu.mmu.ac.uk

Debora Giorgi

PhD, Architect, she is a Design Researcher at the Dipartimento di Architettura DIDA of the University of Florence. Since 1991 she works on Sustainable Local Development and the social implications of the project starting from the Cultural Heritage. For over 20 years she worked in projects in Ethiopia, Algeria, Tunisia, Morocco, Yemen, Jordan, Haiti, with the most important national and international donors as WHC - UNESCO, UNCCD, European Commission. Since 2011 she has been collaborating with the DIDA UNIFI especially in projects around Maghreb countries and in the social field promoting Social Design projects and workshops using co-design methodologies. She is professor of Service Design at DIDA UNIFI, professor of Design for Cultural Heritage in the License Course in DesignS at Ecole Euro-Méditerranéenne d'Architecture Design et Urbanisme de l'Université Euro-Méditerranéenne de Fès EMADU – UEMF in Morocco and visiting professor in some universities in Mediterranean countries.

debora.giorgi@unifi.it

Beata Hamalwa

Beata Hamalwa founded Fashion Design Diploma at College of the Arts, Windhoek, Namibia, and Fashion Design Certificate at City Varsity, Cape Town, South Africa, and co-founded the Heroes Primary School - all became imperative in employment creation. Her versatile educational background from Poland, Namibia and South Africa in arts and fashion design has provided a valuable foundation for her career in several art training programmes. She holds a Master of Technology in Design. Her Master's thesis, titled 'Beadwork and its impact on contemporary fashion in South Africa,' investigates the cultural wealth contribution to decolonizing fashion. She believes that modern arts and trends do not imply the demise of indigenous culture. Her latest endeavour is to investigate the possibility of sustainability in the current fashion industry in Namibia, which led me to PhD research at the Cape Peninsula University of Technology. As an artist, Hamalwa has showcased at premier fashion events in Namibia, Portugal, Germany, France, Poland, the United Kingdom, South Africa, Botswana, and Reunion Island.

beatkash@yahoo.com

Francesco Izzo

Full Professor of Strategic Management of Innovation at the University of Campania Luigi Vanvitelli, where he teaches also Strategic Analysis. He has been Dean of Department of Economics from 2017 to 2020. He is member of the Entrepreneurship and Innovation Ph. D. teaching board. He has been visiting professor of Innovation Management at the University of Naples Federico II. His research interests include innovation strategy, international strategy of SMEs, innovation in creative industry, cultural entrepreneurship. He is author of a large number of scholarly publications on these topics. He is member of Valuation Committee of University L'Orientale. He has been head of Valuation Committee of the Stazione Zoologica Anton Dohrn, a public research organization in the fields of marine biology and ecology, from 2010 to 2016. He served as a consultant to Ministry of Innovation, collaborating at programs about regional innovation systems, academic spin-off and venture capital, and member of the Steering Committee of Council of Ministers for the program High-Tech for Southern Italy.

francesco.izzo@unicampania.it

Regina Aparecida Sanches

Degree in Textile Engineering at University Center of FEI (1987), Master in Mechanical Engineering at State University of Campinas (2001), Ph.D in Mechanical Engineering at State University of Campinas (2006) and Postdoctorate in Design at University of Lisbon (2016).

She started her academic career in 1995, was the coordinator of the undergraduation course in Textile Engineering at University Center of FEI (2001 to 2006), was the coordinator of the undergraduation course in Textile and Fashion at University of Sao Paulo (2010 to 2012), was the coordinator of the Master's Degree in Textile and Fashion at University of Sao Paulo (2012 to 2016).

She has been a professor at the School of Arts, Sciences and Humanities since 2006 and has been an associate professor at the University of São Paulo since 2011. She researches in the areas of textile materials, knitting technology and textile design.

regina.sanches@usp.br

Rayana Santiago de Queiroz

PhD student in the Textile Engineering course at the University of Minho (Portugal), master (2013) and graduated (2009) by the Textile and Fashion course at the University of São Paulo.

Since 2012 acts as a researcher at the Technical Textiles and Protection Products Laboratory of the Institute for Technological Research, where has been working especially on the following topics: vegetable textile fibers, natural dyes, comfort, characterization and performance evaluation of technical textiles.

rayanasq@ipt.br

Adriana Yumi Sato Duarte

Undergraduate (2009) in Bachelor of Textiles and Fashion from the University of São Paulo, Master (2013) and PhD (2017) in Mechanical Engineering from the State University of Campinas (Unicamp). Conducted a period of Internship of Doctorate Sandwich Abroad (SWE) - Science without Borders Program (2015-2016) at Fachgebiet Datenverarbeitung in der Konstruktion (Dik), Technical University of Darmstadt, Germany.

She has experience in Mechanical Engineering with an emphasis on Mechanical Design and in Textiles and Fashion with an emphasis on product design methodology, sustainable product development, Brazilian natural fibers, knitting technology and Industry 4.0. She is currently Assistant Professor II at Nossa Senhora do Patrocinio University and Coordinator of the Fashion Design Course.

adriana.duarte@ceunsp.edu.br

Chiara Scarpitti

Chiara Scarpitti, designer and PhD, is Researcher at the Department of Architecture and Industrial Design of the University of Campania "Luigi Vanvitelli". Since 2006 she has been working in the field of design and jewellery at an international level, obtaining numerous awards and exhibiting her works in museums and galleries including Triennale Design Museum in Milan, MAD Museum of Art and Design in New York and HOW Design Center in Shanghai.

Member of the Board of Directors of AGC - Association for Contemporary Jewellery, she taught jewellery design at IED Moda in Milan and at the Academy of Fine Arts in Naples.

In 2018 she has published the monograph "Multipli Singolari. Contemporary jewellery beyond digital" with ListLab, Barcellona, in double edition (ita/eng), and in 2020 "Oggetti pensiero. Storie di design, organismi e nature plurali" with Lettera Ventidue, Siracusa. Her theoretical research is characterized by a speculative hybridization between digital technologies and manufacturing excellence linked to contemporary design and fashion.

chiara.scarpitti@unicampania.it

Fernando Soares de Lima

Degree in chemistry from the University of Mogi das Cruzes (2004), Master in Industrial Processes from the Technological Research Institute of the State of São Paulo (2013) and Chemical Production Engineer from Faculdades Oswaldo Cruz (2017). He is currently responsible for the Technical Textiles and Protective Products Laboratory and for the Shoes and Protective Products Laboratory of the Technological Research Institute of the State of São Paulo.

He mainly works on the following topics: technical fabrics, characterization tests and performance evaluation of textiles and PPE's, weathering and microencapsulation applied to textiles.

nandosl@ipt.br

Renato Stasi

Renato Stasi has been involved in the creation of clothing and accessories collections for the fashion segment for almost thirty years, as a designer and responsible for the development of the collection, he has worked for several companies including the LVMH Group, Redwall, Hettabretz. He is an adjunct professor at the DIDA - UNIFI Department of Architecture, in the CDL in Industrial Design and CDLM Fashion System Design. Lecturer at IED, where he is the coordinator of two three-year courses. He has carried out supplementary teaching activities at the Politecnico di Milano for several years.

He has held seminars and workshops in various universities. Stasi is Coordinator of the Steering Committee of the Master's Degree Course in Fashion System Design of the University of Florence - School of Architecture - DIDA.

renato.stasi@unifi.it

Margherita Tufarelli

Designer, PhD in Design. Currently a research fellow at DIDA (Department of Architecture) of the University of Florence (Italy), Design Campus section. The PhD thesis, with the title "future heritage and heritage futures. An exploration on meanings of the digitized Cultural Heritage" aimed at investigating the role that the digital archives of Cultural Heritage can have in the contamination between the culture of the past and contemporary creativity. Her research interests concern the heritage/creativity sphere within the digital evolution; thus, the application, impact and opportunities that lie in the relationship between digital technologies and cultural heritage. She is currently working on a research project titled "Living archive. Disseminating and reusing the Fashion cultural heritage" founded by Regione Toscana.

margherita.tufarelli@unifi.it

Rosanna Veneziano

Architect, Ph.D. in Industrial, Environmental and Urban Design, Assistant Professor of Industrial Design at the University of Campania Luigi Vanvitelli - Department of Architecture and Industrial Design (DADI). Since 2002 she carries out an research activity on design oriented strategies for the local production development.

Since 2008 she coordinates (with P. Ranzo e M.A. Sbordone) the Design for Peace Lab activities. The creative lab was established following the draft agreement signed by the Province of Naples - Councilorship to Peace and International Cooperation - and the Department with the purpose of sharing experiences and best practices in the field of international cooperation and the management of humanitarian emergencies.

She teaches from 2013 to now Social Design and Design for Cosmetic - Design for Innovation Degree Course at University of Campania 'Luigi Vanvitelli'.

rosanna.veneziano@unicampania.it



AIAP CDPG, the Graphic Design Documentation Centre. Working to collect, catalogue, archive, enhance and promote any documents related to graphic design and visual communication. These documents (originals as well as layouts of projects, books, posters, prints, catalogues, correspondence, photographs) help to rewrite the history of graphic design in Italy and to support research and educational activities, as it is the CDGP's intention to make these documents widely available.



**A HEART
BEATS
WITHIN
AIAP.
FIND IT OUT.**



AIAP CDPG
centro di documentazione
sul progetto grafico

AIAP
via A. Ponchielli, 3
Milano
aiap.it – @Aiap_ita



PAD. Pages on a and Design

International, peer-reviewed,
open access journal
ISSN 1972-7887

#22, Vol. 15, June 2022

www.padjournal.net



AIAP

associazione italiana design
della comunicazione visiva