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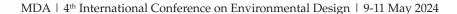
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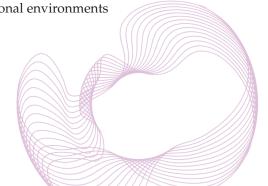
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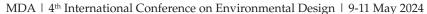
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Keywords: Art Direction Digital Fashion Made in Italy Artificial Intelligence

Abstract

The contribution explores the digital dimension of art direction for fashion in Italy, with the aim of understanding how the identity concepts of Made in Italy intertwine and reconfigure with the double transition. Thanks to an in-depth literature review, it will be investigated which technologies can concretely operate in the fashion context in favour of digital sustainability. The aim of this analysis is to take an initial stock of the state of the art through the analysis and review of publications and paper positions. It will review the most recent scientific analyses conducted about art direction, digital, VR, AR and A.I. with a focus on fashion. This contribution represents an important starting point for the development of new research in this field.

Introduction

In order to define the mechanisms that link art direction practices in the digital and sustainable spheres, in fashion communication in Italy, we can start from the concept of the mediatisation of fashion, which, as Agnès Rocamora writes:

Mediatisation means examining the ways in which fashion practices have adapted to and been transformed by the media. It does not mean focusing on the media themselves, but on the ways in which people and institutions in fashion have changed their practices for and with the media. (Rocamora, 2016, p. 509)

More than anything else, the digital is a new environment capable of encompassing all previous media and reconfiguring social and economic relations in both quantitative and, above all, qualitative terms. The digital completely and profoundly pervades every sphere of contemporary culture, economy and creativity (Barile, 2022, p.143). In recent years, the interest of fashion brands and online sales platforms in virtuality, gaming, NFT and the Metaverse has grown exponentially. However, the current debate on the Metaverse is suspended between the risk of a new bubble that could implode within a few years, or the emergence of a new 'metamedium' (Manovitch, 2013). In a 2019 report by the WGSN international trend analysis platform, it is predicted that the significance of a product will surpass purely physical criteria, indicating that the physicality of products is gradually

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losing importance (Mjasnikova, 2021). Another crucial aspect to be considered is the great debate on artificial intelligence, which not only concerns the idea that much of today's work will disappear in the next decade due to the Fourth Industrial Revolution, but also, and above all, the way in which our daily lives will be totally transformed by automation not only in physical activities, but also in cognitive ones. Communication plays, also in fashion, a key role in this balancing act between the value of the product and its digital and physical representation. The customer experience is optimised through the synergic management of channels and technologies, fostering design processes capable of organising, narrating and objectifying the offer system (Iannilli & Spagnoli, 2021). Brands engage in direct partnerships with technology or social media companies, (notably Facebook, Instagram and Snapchat) in luxury hubs strategically based in Paris to advise on ways to translate their visual environment online, to extend their digital visibility by scouting new models and internet celebrities, and to develop the statistical tools needed to measure their media effectiveness (Cappelli, 2018). This arrangement is illustrative of how technology companies and digital technologies are now underpinning the more traditional brand/media/fashion retailer business structure (Rees-Roberts, 2020). However, it would seem to emerge that the figure of the art director and his or her relationship with the digital aspect of fashion communication have not yet been addressed in detail and in depth. This study intends to understand, through a critical and synthetic analysis of existing studies, the current state of research related to digital art direction for sustainable communication in Italian fashion.

Digital art direction and sustainable fashion communication

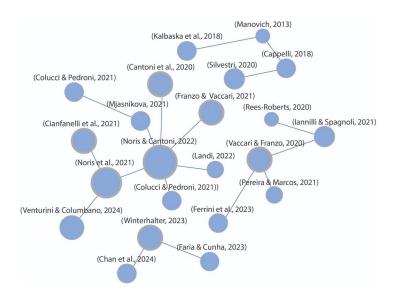
Art direction is the process of providing creative and visual guidance, encompassing digital communication projects that may involve photography, video, graphics, and other elements. In the realm of fashion, digital art direction focuses on crafting and conveying a brand's image through digital platforms such as websites, social media, and online advertising. Academic literature identifies several emerging trends in digital art direction for fashion. One of these is the increasing use of augmented reality (AR) and virtual reality (VR) to deliver immersive experiences to users. Other trends include the adoption of digital influencers and the integration of interactive storytelling into websites and advertising campaigns. The task of the art director is to define the visual essence of the brand as the set of aspects and sensations that characterise it, through consistency between the brand itself, its strategy and all the visual elements that compose it, kept constant over time. Furthermore, a good art director takes into account distinctive and original visual elements that can differentiate the brand within the competitive landscape. To initiate the creative process, art directors make use of advertising examples of previous brands and visual briefs, both to fuel their own creativity and to understand the visual preferences of the client. Finally, they rely on their aesthetic preferences and the emotions aroused to assess whether the meanings of each possible visual element match the brand identity; thus, the selection of visual elements does not follow predefined rules and is not a purely promotional action (Phillips, et al., 2014). The rise and experimentation of digital art direction practices certainly exploded during the initial spread of the Covid-19 pandemic, when companies in the fashion industry found themselves having to introduce new business and communication strategies towards digital in order to increase interest and satisfy the needs of their customers, so as to stimulate and increase sales both online, via eCommerce platforms, and in physical shops (Noris

& Cantoni, 2021). The entire fashion scene, including companies, brands, designers, magazines and photographers, has started to consider the possibilities offered by digital technologies to discover new ways of relating, both personally and professionally. The lockdown period has clearly highlighted how the intimate and private domestic space has been transported to the screen, taking on a new public dimension, as well as making the opposite seem true (Vaccari & Franzo, 2020). A relevant example of digital art direction for fashion, born in Italy during the Covid -19 period, was the Sunnei Canvas project, launched in July 2020 by the brand Sunnei, founded in Milan in 2014 by Loris Messina and Simone Rizzo. This project offered a platform where digital avatars wore and presented some of the brand's most iconic unisex garments, including accessories, footwear and bags. This example supports the idea of expanded design, where the retailer becomes a co-designer of the collection, influencing creative choices that move from the digital to the physical. It is assumed that in the future it will be possible to buy and try on digital clothing, with reduced costs due to the lack of materials and logistical expenses, and convert them into physical products if satisfied. Another element influencing art direction practices is the advent of artificial intelligence, which is already today, and will increasingly become, a very powerful medium at the disposal of fashion companies for the analysis of images and the development of communication campaigns as well; at present, many e-commerce brands in the fashion industry process images that are collected via user account panels. Thanks to the categorisation of the images, trend products with key trend components are subsequently identified. In order to be sure that a product is truly trending, the volume of images found with the product itself is then analysed to ensure the reliability of the data (Silvestri, 2020), the same strategy can apply to art direction.

Systematic literature review: research question and methodology

In order to try to delimit a perimeter and a state of the art of digital art direction and sustainable communication practices for fashion in Italy, in this analysis we have chosen to select research articles published in the last 15 years, related to research carried out in Italy or abroad, linked to the topic of fashion communication in Italy. Through the academic databases of Google scholar and Scopus, a series of interconnected articles and scientific contributions were selected. [Figure 1].

Fig.1 Visual map of the contributions analysed for the literature review



An attempt was made to answer the following research question: what are the methods and tools to build, through the digital dimension of art direction, the communication of the future related to sustainable fashion products?

In the contribution Fashion communication: Between tradition and digital transformation, an editorial in the academic journal Studies in Communication Sciences (Kalbaska et al., 2018), dedicated to Fashion Communication, the authors offer us a heterogeneous view of the topic, exploring fashion from the perspective of communication. They highlight how communication and its media have become intertwined with fashion and its related industries and practices, and how the recent digital transformation has impacted fashion, making way for new communication possibilities and business models. For the authors, new business models in the fashion industry, supported by technology and immediate user demand, have revolutionised the timing and pace of communication, even altering the dynamics of fashion shows. Moreover, the Internet has promoted hybridisations between communication and commerce, giving rise to powerful new players in the fashion market (Kalbaska et al., 2018). Among the relevant technological trends in the field of fashion communication, the text mentions data analysis (big data) and artificial intelligence, which are widely used to deepen the understanding of users' purchasing behaviour, profiles and habits, but also the development of the creative process. For Kalbaska, Sádaba and Cantoni, we could consider three different levels at which fashion interacts with information and communication technologies (ICTs) - which can be referred to, in one word, as e-Fashion or 'digital fashion': ICTs used to design, produce and distribute fashion products; ICTs, which have an impact on marketing and sales; and ICTs used in communication activities with all stakeholders and which contribute to co-creation in the fashion world. An interesting contribution to understanding technologies for fashion communication activities is that of An Exploration of Digital Fashion in Pandemic Italy: Districts, Designers, and Displays (Franzo & Vaccari, 2021), which, through the analysis of a series of experiences, seeks to verify whether fashion has played a role as a tool of resistance and redemption from the health emergency, also thanks to digital technologies, supporting desirable - rather than unsustainable - futures. Within the contribution, the authors also question how fashion can be shown and sold outside the physical reality. In Metamorphic Fashion Design. Nature Inspires New Paths for Fashion (Cianfanelli et al., 2021) an attempt is made to analyse how the digital proper can increasingly consolidate itself as a tool for new innovative trajectories within the fashion system. This research project intends to propose a new form of communication for fashion excellence with the possibility of extending this experimentation to the Made in Italy system. The paper uses the experience of the Metamorphic Fashion Design project born during the pandemic period within the Master's degree courses in Fashion at the University of Florence and is inspired by the very concept of natural metamorphosis, to reflect the dynamics and mechanisms in garment design. Another interesting article to understand the transformations in fashion communication towards a digital horizon following the pandemic is Mediatized Fashion: State of the art and beyond (Colucci & Pedroni, 2021). Fashion for Colucci and Pedroni is profoundly influenced by mediatisation and digitisation, which transform the way brands interact with their audience. Both mass-market brands and renowned fashion houses are increasingly relying on digital to advertise, reach their targets, sell and retain customers. Consumers are immersed in a digital environment, navigating e-commerce and social media on their path to purchase. Retail has been redefined by the digital presence, creating an omni-channel experience and concepts such as 'phygital', combining the

physical and digital experience. For Colucci and Pedroni, fashion today has been moved from its traditional spaces, the shops and printed magazines, to the digital environment, where it is present in fashion blogs and Instagram profiles. The boundaries between the editorial and commercial spheres have now blurred and new media have reshaped the spaces of fashion. Online media and blogs have helped to change magazines, making them more visual and interactive than ever before; computer and tablet screens become tools for fashion information and for the creation of fashion content, right up to the development of shops with digital mirrors and their integration with websites and apps. To better understand the variety of disciplines involved in the study of digital fashion communication, the contribution Digital fashion: A systematic literature review. A perspective on marketing and communication (Noris et al., 2021), aims to develop a comprehensive picture of the field of digital fashion in order to describe and classify it. The purpose of this classification is to provide an overview of the current state of digital fashion and to assist academics and practitioners in exploring such a diverse and rapidly evolving field. The research was conducted on the databases Eric (Education Resources Information Centre), Springer Link and Scopus. These databases were selected for their focus on technology and digital, Eric for its importance in the field of education for the fashion industry, Springer Link for its social aspect and Scopus for identifying the maximum number of articles and validating the presence of research articles in multiple databases. The keywords used were 'fashion' and 'digital'. Three categories were identified from the analysis: C&M - Communication and Marketing; D&P - Design and Production; C&S - Culture and Society. The Communication and Marketing category encompasses processes that relate to the execution of marketing and communication activities and their impact on consumers; The Design and Production category, understood in its broadest sense, refers to the creation and implementation of elements/processes, tangible and intangible, devised by humans or machines and that contribute to the advancement of the fashion industry. Finally, the category of Culture and Society encompasses the areas in which digital fashion interacts with and contributes to culture, education and societal development. The study shows that digital fashion is increasingly attracting the interest of academics and practitioners, particularly in the Communication and Marketing category, in which the largest number of publications were identified. However, the research has some limitations, starting with the fact that the categorisation was carried out considering each identified main topic as mutually exclusive. Therefore, according to the authors, future studies could consider this aspect to further develop the categorisation, also examining the implications and relationships between the different levels. In Digital Fashion Communication: An (Inter) cultural Perspective (Noris & Cantoni, 2022), the authors argue that the digital transformation has reduced the distances between nations, enabling global communication in fashion. However, they noted that cultural misunderstandings have been amplified, generating crises in the industry. They pointed out that what is culturally acceptable to one audience may not be to another, highlighting the need for cultural localisation or translation. Examining these crises and reflecting on their causes indicated that the new digital media ecosystem requires considerable effort to manage different cultures and approaches. Furthermore, the authors observed how fashion, an integral part of popular culture, is becoming a place where culture is discussed, defended and re-evaluated between different parties. In Extended reality (XR) in the digital fashion landscape (Faria & Cunha, 2023), the two authors point out that augmented reality is opening new doors for companies in the fashion industry, offering them an unprecedented opportunity to engage their customers. This has prompted brands to invest more and more in the technology, with revenue forecasts promising exciting results. According to Faria & Cunh, the use of AR/VR technologies allows brands to enrich customer experiences and explore new ways to tell their stories, thereby increasing their brand value. The use of XR environments allows for a high level of measurability, offering marketers crucial data to tailor customer buying experiences. However, the adoption of XR entails high costs and technical implications that could affect consumer perception. Furthermore, designing for XR is more intricate than for web and mobile devices, requiring more in-depth knowledge in several areas. The text advises those wishing to become interested in immersive technologies to focus not only on the technology, but also to conduct in-depth research and constantly consider consumer needs when designing experiences. In order to achieve digital excellence in XR, it is crucial, according to the authors, to add value and place quality as a long-term priority. The aim of this article is to deepen the understanding of XR in the context of fashion, identifying themes that could guide future work. The authors hope that this research will stimulate and encourage practitioners and researchers to fully explore the potential of XR in fashion and its communication. Another element that emerges in the study of digital fashion communication are NFTs (non-fungible tokens), in the contribution How Do Luxury Brands Utilise NFTs to Enhance Their Brand Image? (Ferrini et al., 2023), the structure of the proposed research idea aims to discover how NFTs are used to enhance the image factors of luxury brands and what additional opportunities managers working within these brands associate them with. Here we observe a deliberate choice towards qualitative research, a method that shows a commitment to deeper analysis. We opt for the reactive qualitative interview method, which encourages active participation on the part of interviewees, prompting them to provide detailed and in-depth answers. This approach encourages an open dialogue, allowing participants to offer vivid examples and detailed explanations that enrich the discussion. In essence, it is a choice that promises to bring to light a deeper understanding of the topic at hand. The study, however, has some potential limitations according to the authors. One obstacle lies in the still limited exploration of the research topic, highlighting a significant lack of academic studies on NFT with regard to luxury brands. Furthermore, the recruitment of interview participants follows very specific criteria, making the extension of the study sample difficult. Paolo Landi in his contribution How Digital Technology Influences Information about Fashion (Landi, 2022) points out that the transformation of materialism in consumer society is evident. For Landi, although the new social networks always offer additional shopping opportunities, the focus is no longer just on the possession of goods, but on the pursuit of a satisfying life. At present, it seems to be relegated to a secondary role, as clothes and accessories are considered mere objects derived from a disorganised flow of information that is difficult to control. Landi argues that the economy is undergoing a rapid transformation towards digitalisation, and major companies in the fashion industry are undergoing a complete branding process that leads them to focus increasingly on financial aspects. In this context, interest in dematerialisation through the adoption of blockchain technologies is emerging. Through the use of NFTs (non-fungible tokens), it is possible to register artefacts as 'unique and authentic', creating a parallel market within the still developing world of cryptocurrencies. This parallel market will potentially play a significant role in the future, especially with the advancement of the metaverse, which represents the next level of social networks. In the metaverse, virtual reality will allow users to interact via avatars, create objects or properties, participate in remote events and actions, and even experience teleportation simultaneously. In this context, another interesting contribution is Metaverse and Its Communication. The Future is Here (Winterhalter, 2023); the author examines the definitions and concepts of the

metaverse and analyses their meaning and impact, studying digital art and fashion and identifying their criticalities. Her study shows how fashion companies have invested enormous capital in a metaverse in order to generate profit, increase consumption and collect user data for profiling purposes. In the study 'Fashioning'the metaverse: A qualitative study on consumers' value and perceptions of digital fashion in virtual worlds' (Venturini & Columbano, 2024), the factors that drive fashion consumers' use of the metaverse, both for commercial and leisure purposes, are examined. A qualitative method was adopted in the research to identify five context-specific consumer values, namely 'utilitarianism', 'social identity', 'personhood', 'hedonism' and 'personal values'. The results of this study contribute to extending the application of TCV (theory of consumption values) in the context of digital technologies in the fashion industry. The analysis indicates that the top five values in the metaverse emerge for both work and leisure purposes, with social and epistemic values predominating. Among the participants, 11 mention social values (7 for leisure, 4 for work) and 9 mention epistemic values (5 for leisure, 4 for work). No significant differences were found between the age, gender or nationality of the participants, but the limited sample size reduces generalisability. In summary, the metaverse appeals for transversal values, although its adoption is influenced by context of use and individual motivation. In the recent article The adoption of digital fashion as an end product: A systematic literature review of research foci and future research agenda (Chan et al, 2024), an attempt is made to summarise the current state of digital fashion by analysing academic literature, industry publications and relevant sources. The result of the research reveals that the current literature is not up to date with the latest developments in digital fashion and lacks manuscripts related to its adoption, although the authors clarify that only articles with management/marketing perspectives were included (excluding design and technical articles). In addition, this text offers a useful methodological orientation for the analysis of digital fashion as an end product, assisting scholars in the formulation of their study project and pointing directions for further investigation. The authors highlight how, with the growth of the virtual economy and 3D technologies, digital fashion is evolving from a mere tool to an autonomous end product. This evolution is influencing the focus of fashion research, focusing on 3D virtual technologies and emphasising the importance of digital fashion as an end result. Finally, in Post-digital fashion: the evolution and creation cycle (Pereira & Marcos, 2021), an analysis of the creation cycle of post-digital art highlights the importance of fashion artefacts as artistic and not just commercial expressions. These artefacts, both tangible and intangible, often simulate textiles or wearable clothing, although they do not necessarily represent the human body. The creative process starts from the artist's vision and involves multidisciplinary teams. The post-digital artefact merges art with utility. Similar to digital media art, post-digital fashion artefacts offer enriching sensory, emotional and intellectual experiences, exploiting technological innovations to create new aesthetics. Not limited to digital materials, these hybrid artefacts manifest themselves in tangible and virtual forms, adapting to both physical spaces and online exhibitions. This new wave of creativity challenges traditional boundaries, pushing towards a new era of artistic expression that evolves between the digital and the material. This approach, as illustrated in the post-digital art creation cycle, emphasises the crucial role of artistic intentions in contemporary fashion, promoting the fusion of art and design in the digital age. The latter aspect is crucial in art direction practices for the fashion industry.

Discussion, limits and further research

The study of the scholarly literature selected here, through a qualitative analysis, highlights a significant gap regarding the topic of digital art direction for fashion and the practices that art directors adopt to promote sustainability through digital. This lack of explicit contributions on this topic suggests the emergence of a new and interesting field of investigation. In the contemporary fashion landscape, digital art direction is becoming increasingly relevant as digital technologies play a key role in the creation, promotion and distribution of fashion products. However, despite the growing importance of digital art direction, there is a dearth of studies specifically exploring its link to sustainability. Sustainability has become a central theme in the fashion industry, with growing awareness of the environmental and social impact of traditional industrial practices. Art directors, as key figures in shaping the image and narrative of fashion brands, play a crucial role in promoting more sustainable practices within the industry. However, this review of selected scientific literature reveals how specific contributions exploring how digital art direction can be employed to promote sustainability in the fashion industry are lacking, if not non-existent. This represents a significant opportunity for future research. Exploring the role of digital art direction in promoting sustainability could open up new perspectives and innovative approaches to address the environmental and social challenges of the fashion industry. One possible area of study could be the examination of visual communication strategies used by art directors to convey sustainability-related values and messages through digital channels. This could include the analysis of advertising campaigns, social media content, websites and other forms of visual communication used in digital fashion. Furthermore, it could be interesting to explore how digital technologies can be used to improve the traceability and transparency of the fashion supply chain, enabling consumers to make more informed decisions about their purchasing choices. In the near future, art directors could play a key role in developing innovative digital tools that facilitate this transparency and encourage more sustainable practices by fashion brands. Another area of interest could be the development of digital business models that foster sustainability. In addition, it could be useful to explore how digital art direction can help educate consumers on the sustainability of fashion and the actions to be taken to reduce environmental impact. This could include the development of educational and informative content on topics such as ethical production and conscious consumption. Finally, the analysis of the scientific literature of the last ten years highlights the importance of interdisciplinary approaches to address the challenges of sustainable fashion. Art directors, together with sustainability experts, digital technologists, designers and other industry professionals, could work together to develop innovative solutions that integrate creativity, technology and social and environmental responsibility. In conclusion, the absence of explicit contributions on digital art direction for fashion and sustainability in the scientific literature represents a significant research opportunity. Exploring this field could lead to new knowledge and practices that contribute to a more sustainable and responsible fashion industry.

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