

# THE METAVERSE AS AN OPPORTUNITY FOR THE DEVELOPEMENT OF FASHION DESIGN

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## Abstract

This paper refers to the relationship between the fashion system and digital transformation, focusing on fashion streetwear and the Metaverse's digital worlds. The analysis goes briefly tracing the main stages of the evolution of the digital worlds in recent years, highlighting the points of contact and the contaminations with the material world, which are outlining new connections and unprecedented developments. The image and language of fashion clothing, generally material, maintain its strong communicative value even in the digital world, through the figure of the avatar.

The Metaverse is able to create new opportunities for fashion and suggesting future developments that have a strong impact on the lives of young people, increasingly blurring the boundaries between the real and virtual worlds.

**Keywords:** Metaverse, Streetwear, Fashion, Communication, Avatar

## The Metaverse and Digital Worlds

The paper aims to explain the relationship between fashion system and digital transformation. In particular, the research tries to understand the possible development of fashion streetwear inside the Metaverse.

The analysis regarded the last decade's period when society is characterized by digital applications. The digital has been mostly developing since 2019, during the lockdown, and now its diffusion widely supports people in their life routine, also representing an opportunity for economic growth. Besides, in the contemporary scenario, the continuously changing communication channels are more and more focused on virtual ones.

The relationship between Design and Digital society has been recently redefined by the blurred design (Grimaldi, 2014), a new vision of the discipline that has been changing since it was born.

This branch of the discipline, operating inside the digital field, has been modified and the bi-dimensional dimension is overlapped by a series of possibilities: multilayer data and interaction opportunities progressing and pervading every form of communication and most of the other design fields.

Today, new technologies contribute strongly to improve our life, relationships and performance.

The new digital society, based on web connections, and data sharing, is centered on new relations and immaterial spaces.

Inside this dynamic generative and changing scenario, the design practice for relations is fundamental for new forms of development. Semantic and informative products, virtual spaces, and services allow to elaborate new places of complex interactiveness.

The Collins English Dictionary defines the Metaverse: "A proposed version to the internet that incorporates three-dimensional virtual environments. A three-dimensional virtual world, especially in an online role-playing game. The universe as portrayed in a given work of fiction"

According to these definitions, the Metaverse can be described as a parallel three-dimensional virtual environment for social connections and, also for entertainment, where avatars can move and interact with each other, and more "The metaverse is the convergence of two ideas that have been around for many years: virtual reality and a digital second life". (Chen, 2022)

Currently, virtual worlds can be easily accessed

through consoles, computers, and smartphones but for a real immersive experience, it is necessary to access through Augmented (AR) and Virtual Reality (VR) technologies, representing the next frontier to live full Metaverse experiences.

Nowadays, the Metaverse is however at the beginning of its development, simply representing a concept, a new way of realizing social interaction and communication.

The idea of the virtual world is not new in the human mind and, it has been evolving for many years according to the development of technological innovations, appearing in the Eighties decade with text-based role-playing games multiuser. In literature, the post-cyberpunk current, the evolution of the Cyberpunk one of the Eighties, proposes the concept of virtual reality in the novel *Snow Crash* by Neal Stephenson for the first time in 1992, from which the name Metaverse derives (Nover, 2021). Thus, the diffusion of the idea of parallel virtual worlds, where people meet to play, to work or socialize has been spreading since the Nineties. An example of the first kind of virtual worlds was the *Worlds Chat*, an application of a three-dimensional digital space where virtual users could navigate having sound and spatial experiences, which was successfully launched in 1995. Successively, virtual worlds were proposed by multiplayer online games such as, among the most popular: *Second Life* in 2003, *Roblox* in 2004, *Minecraft* in 2009 *Fortnite* in 2011.

The diffusion of these virtual worlds goes hand in hand with the development of technology and the web. In our days the Metaverse proposes digital spaces offering alternative places to live experiences, meet people, play games, work, and do shopping using cryptocurrencies and Non-Fungible Token (NFT). Moreover, the virtual worlds give the occasion to create new business opportunities, defining new kinds of professions for the next future.

Nowadays, the success of the Metaverse is growing while in the past decade, people and technology development were not ready to understand and use it. Currently, two main factors determine the success of the Metaverse: the first is the level of popular diffusion and daily use of the web, and the second is the fact that the main users of new applications (such as social networks, Multiplayer video games...) are the digital natives, Generation Z and Alpha. For them, the use of digital technologies is part of their daily routine and of their lives. For these reasons, it is possible to say that contemporary society is ready for living experiences in the new digital spaces.

## Generation Z and Avatars

Young people of Generation Z, the first digital native generation, are socially open-minded focusing, for instance, on such as civic engagement, race equity, and environmental protection, (Combi, 2020) in accordance with the 2030 Agenda for sustainable development. They prefer to be actively involved in the field to carry out their ideas and values. Social networks and the Metaverse appear to be the more suitable channel at their disposal to be constantly connected and operative.

The Metaverse offers a lot of development perspectives by providing new virtual spaces where avatars can live new experiences, especially using Augmented (AR) and Virtual and Virtual Reality (VR) technologies. According to this way, new scenarios and open opportunities for development are created at disposal of innovative users.

Nowadays, young generations are continuously connected to the web communicating with each other through social media, like in the past young people used phone calls and SMS to communicate. As a consequence, in the actual scenario, the virtual worlds of the Metaverse can represent, especially for new generations, a natural place to communicate, and live sharing immersive experiences, also giving them opportunities for learning and for business.

As the Metaverse is a very engaging immersive special social media, the avatar, defined in the Collins English Dictionary, as... "An image that represents you on the screen in an online game or chatroom" and also "...a movable image that represents a person in a virtual reality environment or in cyberspace" is an essential part of it and the avatar's appearance is a way to present yourself to the virtual community. "The avatar becomes both an extension and a model." (Günzel, 2022), "... that is to say, the inclusion of the player's bodily representation in the virtual environment through the avatar" (Di Letizia, 2020).

In the real-world people communicate their ideas and values also through their own looks and "apparel", likewise in virtual worlds, the avatars communicate using their appearance, made of virtual skins. According to these thoughts, fashion, as a communicative expression of the body, finds new spaces of expression with new rules in the Metaverse, giving life to new application methods. Thus, the link between Metaverse and Fashion is very close. Since it is established that fashion is a privileged channel used by young people to communicate their ideas, values, thoughts,

emotions, and moods as it was for the subcultures that followed one another from the Sixties to our days, this can also be applied to the digital world. Thus, young people need to show themselves adequately even in the Metaverse, in part by imitating the real world even if absolutely with different constraints.

The analysis aims to evaluate the relation between fashion and the figure of the avatar intended as the image or the extension of the real people in the virtual space.

Streetwear represents the sector of fashion adopted by younger generations to communicate and it is differently characterized according to the scenario and the historical period of reference. In 2023 streetwear is a kind of informal style of clothing

full of social values. The contemporary asset of the streetwear system uses mainly digital applications as channels to communicate values to Generation Z. The streetwear phenomenon, appeared for the first time at the end of the Eighties in the USA and in particular in California where young people started to mix different kinds of casual and sportswear clothing taking them from basketball, skateboarding, and surfing, and at the same time, taking inspiration from social values expressed by rap and hip hop music and graffiti art movement. Before the beginning of the web, the channels to pass streetwear ideas were mostly the streets, pubs, and discos. Furthermore, music bands and movie actors influenced younger generations by representing real examples to imitate in the



Fig. 01

way they dress up and behave. In the Nineties decade Kurt Cobain of Nirvana group, is an example of this trend, representing the Grunge subculture and streetwear (Giraldi, 2020). The communication channels changed with the advent of digital innovations. Today in the digital age, young people's reference spaces, are not only the physical streets, squares, clubs, or gyms but mainly virtual ones on the web. Among the virtual places offered by the Metaverse, the videogames represent an opportunity for young people to live exciting experiences and at the same time, they are an interesting scenario for fashion. During the lockdown for Covid emergency, videogames became the favorite place to meet people, live pleasure experiences, and socialize from home. The diffusion of the use of video games has facilitated the creation of a connection between video games and fashion. The collaboration between these two different sectors was born because the appearance of the characters to be more realistic needed to be like that of real people and the clothing helped this need.

An example of this trend is the collaboration of Vivienne Westwood with Final Fantasy XV, in which Lunafreya's wedding dress is a model of her couture collection Gold Label. The dress, like in the real world, adds many tailoring details, giving importance, and suggesting a particular mood in the virtual world of the game.

Alike, the avatars of the users need to personalize their look to represent themselves in a realistic way but the basic customization offered by the game is often not enough. For this reason, video games offer a shop where gamers can buy different skins. Nowadays these skins are more and more designed by fashion designers or they reproduce real fashion streetwear collections. In this regard, Mark Zuckerberg underlined the importance of the image of the avatar, especially for young generation, "...Avatars will be as common as profile pictures today, but instead of a static image, they're going to be living 3D representations of you, your expressions, your gestures that are going to make interactions much richer than anything that's possible online today. You'll probably have a photo-realistic avatar for work, a stylized one for hanging out, and maybe even a fantasy one for gaming. You're going to have a wardrobe of virtual clothes for different occasions designed by different creators and from different apps and experiences". This vision has been progressing, offering new opportunities for the development of the fashion system (Adegeest, 2022)

## **Fashion Communication**

Among the others, social networks represent some of the most popular virtual spaces where people meet other people, and share experiences, ideas, pictures, videos, and thoughts. These spaces are easier to reach from everywhere and at every time than real ones because, it is not necessary to physically go to a place to meet other people, but is enough to have only a smartphone.

Until the 2000s young people used to prepare themselves to meet others, choosing their outfits carefully in relation to the place and the occasion of the experience to live.

In virtual spaces, young people still take care of their images using digital tools. For example, there is a large diffusion of photo editing and retouching applications that offer a wide number of filters easy to use even by a nonprofessional public.

Everyone is able to transform images and videos to appear at their "best" on any occasion, even if, fortunately, the newest Bold Glamour extreme filter of Tik Tok has been changing this trend for few months.

These digital communication channels assume great importance also for the streetwear fashion sector which, until a few years ago, considered the street as the place of origin of new behaviors and trends.

In the late Seventies, for instance, the journalist Bill Cunningham used to take shots of common people wearing original outfits while walking on the streets of New York City and Paris. Then the photos were published in the New York Times to reach the public. Thanks to spontaneous shots "from the street", common people became protagonists, showing a new way of being and generating followers. For this reason, Bill Cunningham could be considered a pioneer of today's influencers (Giraldi, 2022). Moreover, in 2005, the web became another new communication channel for the diffusion of streetwear directly from the street thanks to the success of the Sartorialist blog. The blog published common people like fashion models and as a consequence, these people have become real influencers.

This blog is also responsible for a change in fashion communication and in fashion photography that no longer limited to being the image of reality. If at the beginning the picture of common people were spontaneous they soon began to be studied and retouched.

Thanks to the introduction of the possibilities



Fig. 02

offered by digital photo retouching techniques many fashion companies started to use extremely refined shots to communicate their brand values to their public.

Today streetwear, as a fashion sector born by the younger generation, finds its favorite channel of communication in social networks such as Instagram, Tik Tok, and YouTube, which are also used for shopping. Through social media, the fashion streetwear passed from being for only a small group of young people to a wide public of reference.

As a matter of fact, social networks have radically changed habits and consumption, offering a variety of options for the realization of ideas and content, promptly exploited by the market, in the continuous search for new advertising and communication channels (Hancock, 2021). In particular streetwear fashion brands such as, among others, Stussy, Off White, or Supreme (Fabbri, 2022) choose social media and virtual places as main channels to communicate to Generation Alpha and Z.

A few years ago Generation Z redefined the today aesthetic of streetwear according to new values mainly connected to the idea of sustainability, giving new meaning to the concept of beauty, searching for authenticity, against the idea of fake esthetics, following the movement of #body positivity, promoted by young African American women in the USA in about 2010.

From one side social media are used by fashion streetwear companies to communicate with the younger generation and on the other side the younger generation use social media to communicate their ideas generating a circular movement of mutual influence

Furthermore, regarding the idea of planet protection and sustainability, in digital scenarios the use of social media represents many advantages as digital fashion by saving on real products and avoiding the production of waste.

For several years now, virtual avatars, electronic images created to represent people on video games,

social networks, and in general on digital spaces have become very popular and everyone who uses social spaces has one or more of them.

The avatar is not only a virtual person, it is the sign of a person, it stands for a person.

From this perspective, the avatar has been assuming a real strategic role in the fashion industry for a few years. The users of digital spaces create their own avatar and customize the image by buying digital clothes and accessories.

Fashion is a research discipline and an applicative field very suitable to experimentation and innovation, particularly referring to those offered by digital technologies.

On one hand, digital fashion is to be considered a natural extension of the real one, made possible with the application of filters and retouching on pictures and sharing on social media. On the other hand, regarding the digital spaces in the Metaverse, Artificial Intelligence (AI) Virtual Reality (VR), and augmented reality (AR) are offering new

experiences to the public.

Some actual examples of these applications are the virtual visits to showrooms and the participation in fashion shows with or without VR glasses.

### **Digital Fashion Shows and Digital Influencers**

Nowadays, through the new technologies, many fashion shows are designed and realized in a virtual way as fashion models. They are avatars able to move and to interact autonomously with other avatars thanks to Artificial Intelligence.

In the Metaverse, the worlds are virtual as their inhabitants, in the form of avatars, who lives parallel lives in the real world.

Even if in the virtual world there are fewer constraints and therefore more opportunities to detach from real-world habits, there are still many similar figures between the two worlds. One of these is the influencer, who is the key point of fashion communication.



Fig. 03

Inside the new immaterial world, the influencer has become virtual one. A very popular example is Miquela Sousa, also known as Lil Miquela, a fictional character generated by Computer-Generated Imagery (CGI). She has been an account on Instagram since 2016 and now she has more than three million followers.

Lil Miquela is also a fashion model collaborating with famous brands such as Supreme, Prada, Chanel and Calvin Klein. She is virtual but appears in photos with real VIPs like the famous model Bella Hadid. Miquela is also a singer of very successful singles with millions of plays on Spotify. She took part in the Milano Fashion Week in July 2020 a totally digital edition, caused by Covid 19 restrictions. Miquela, Noonouri, Daisy, Imma, Shudu are some of the virtual influencers with millions of followers on Instagram, who have been collaborating with the most important fashion houses for a few years. All of them are fashion avatars who were created specifically to convey advertising messages in digital worlds.

After the first digital edition of the Milano Fashion Week in emergency, other phygital edition followed as other events such as that of Christian Louboutin which used the digital channel to present the collection Spring Summer 2021 during the Paris Fashion Week, by staging Loubi World, and collaborating with the Zapeto app, combining virtual reality and gaming. In Loubi World, the user can create an avatar version of himself/herself experiencing exclusive parties. Moreover, the user can earn coins for shopping of virtual products. In 2018 Alessandro Michele foresaw the importance of digital fashion realizing a fashion show for Gucci inspired by the cyberpunk literature of the Eighties and pointing out the human fear about the cyborg and the concept of hybridization.

Furthermore, a golden virtual dress designed by Dolce & Gabbana sold at auction for more than one million dollars in 2021 to confirm this trend.

Today the digital is not only an alternative channel of fashion communication but it also represents a new way of realizing fashion. The avatars are used like models and influencers but, at the same time, the avatar-users, living experiences in the virtual spaces, are the customers of virtual apparel, especially in the Metaverse whose users are the youngest people of Generation Z

The fashion companies are trying to establish themselves in the digital world: in 2021 Nike opened Nikeland on Roblox, in the same year Ralph Lauren launched the Winter Escape on

Roblox, Balenciaga started an in-game clothing collaboration with Fortnite where the players could buy clothes of his collection both for the in-game characters and to wear in the real world and, Moncler proposed the collection of digital reactive clothes, in collaboration with Fortnite, inspired by the collection 6 Moncler 1017 Alyx 9SM designed by Matthew Williams.

Moreover in 2022 Tommy Hilfiger streamed the New York Fashion Week show on Roblox, launching the collection Disco Drip on Open Sea on Web3, a new collection of NFT Non-Fungible Tokens to underline the link between fashion and cryptocurrencies.

Finally, always in 2022 the collaboration between Nike and RTFKT produced the AR Genesis Hoodie, a new kind of garment with innovative functions. It is produced in both material and digital versions for avatars. An NFC chip and a QR code embedded in the hoodie are able to interact with the AR creating new visual experiences

This product represents a new typology of clothing able to create unexpected connections between different worlds.

What the above described really happened and new development are in progress. Virtual and real spaces have many points in common, material and digital worlds mix themselves and their lines appear more and more blurred.

## Conclusion

Nowadays the boundaries between the real and virtual worlds are blurring more and more and, especially the younger generations live astride parallel worlds. For them sometimes it is difficult to understand the line between the material and intangible world.

From the new possibilities offered by the fewer constraints of the digital world, new opportunities, ideas, products, and applications arise and consequently also new professions emerge.

The 5G fast communication technology, the further developments of AI, the GPT chat, and the other continuous applications of the technological innovations of the digital world continuously open up new, even unexpected, development prospects. Generation Z and Alpha are called to make their contribution both as recipients of new applications and of immaterial fashion and also as new designers. Therefore, it is predictable that in next future we will see further developments in



digital fashion and streetwear as a communication channel for the new values of young people will also establish itself in the Metaverse generating new forms of communication clothes and accessories.

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## References

- Adegeest, D.A., (2022, January 20). Revenue benefits for brands designing for the metaverse. Fashion United. <https://fashionunited.uk/news/fashion/revenue-benefits-for-brands-designing-for-the-metaverse/2022012060749>
- Combi, C. (2020 December) You Don't Know Me. Podimo podcast series produced by Mermade. Producer: Rhyanna Coleman. Audio Engineer: Jon Scott. <https://audioboom.com/channels/5036169>
- Chen, B. X. (2022, January 18) What's All The Hype Around The Metaverse. New York Times. <https://www.nytimes.com/2022/01/18/technology/personaltech/metaverse-gaming-definition.html>
- Di Letizia, R. (2020) What is it like to be an Avatar? The Phenomenology of Immersion in Computer Games. [https://www.academia.edu/12022366/What\\_is\\_it\\_like\\_to\\_be\\_an\\_Avatar\\_The\\_Phenomenology\\_of\\_Immersion\\_in\\_Computer\\_Games](https://www.academia.edu/12022366/What_is_it_like_to_be_an_Avatar_The_Phenomenology_of_Immersion_in_Computer_Games)
- Fabbri, F. (2022). La moda contemporanea. II. Arte e stile dagli anni Sessanta alle ultime tendenze. Torino, Einaudi.
- Giraldi, L. (2022). Fashion Design Streetwear: a medium to Communicate ideas from subculture, The Culture, Fashion and Society Notebook, Pearson Education Resources Italia, Milan.
- Grimaldi, P. (2014), Blur design. Il branding invisibile. Con un piccolo testo per imprenditori e consulenti. Fausto Lupetti, Bologna.
- Hancock, Joseph H., II. (2021). Diversification in Fashion Markets, Street Styles and Cultural Change . Bloomsbury Berg Fashion Library. Bloomsbury, London 2021.
- Günzel, S., Sternagel J., Mersch D (2022). Tracing the Avatar. An Afterword in Klevjer, R. What is the Avatar? : fiction and embodiment in Avatar-based singleplayer computer games . Transcript Verlag, <http://dx.doi.org/10.14361/9783839445792-012>
- Nover, S. (2021, November 15) The meaning of the 'metaverse,' and all the terms you need to understand it. <https://qz.com/2089665/everything-you-need-to-know-to-understand-the-metaverse/>

## Figure Captions:

- Fig.01: Lightning, the heroin of Final Fantasy XIII, testimonial for Louis Vuitton in Spring Summer Collection 2016.
- Fig. 02: The virtual influencer Lil Miquela with Bella Hadid for Calvin Klein campaign July 2019 on lilmiquela Instagram account.
- Fig. 03: The collection of digital reactive skin Moncler for Fornite, November 2021.