Future Heritage

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Centraal Museum, Utrecht

Gianfranco Ferré Center. Digital Innovation for Creative and Cultural Industries in Fashion

Paola Bertola and *Federica Vacca, Design Dept., Politecnico di Milano*

Cultural institutions, historical archives and GLAMs (Galleries, Libraries, Archives and Museums), are often underutilized in fostering cultural exchange and community building due to conservative strategies. Although cultural heritage is an inseparable set of material and immaterial values, its tangible components are traditionally activated by strategies and processes of conservation, enhancement, and promotion. Conversely, the intangible (knowledge, techniques, processes, narratives, and meanings) is often "invisible" and not easily enjoyed by larger communities. The ever-increasing integration and pervasiveness of digital tools could provide cultural institutions with opportunities that feed the symbolic value of fashion artefacts and contribute to a widespread literacy on cultural, technical and productive culture. The potentiality offered by digitization could allow a larger audience to explore archival fashion artefacts beyond the constraints of their physical form.

Fashion archives can serve as prototypes for integrating digital technologies and enhancing cultural accessibility. By creating immersive and augmented environments, technology-enabled fashion archives can provide interactive experiences, co-creation of content, and social learning practices. These approaches not only foster cultural literacy but also contribute to social cohesion and reduce cultural divides by engaging a diverse audience.

In light of above, the paper aims to explore new modes of experiencing, researching, and studying fashion archives by exploiting the potentialities offered by digital technologies in the area of Cultural and Creative Industries (CCIs). In particular, it will present the *Gianfranco Ferré Research Center, Digital Innovation for Creative and Cultural Industries*, Politecnico di Milano which, with the goal of preserving archival memory and innovating its fruition model, integrates digital technologies through a design-led approach. It aims at developing research and experimental approaches in designing new scenarios that can make the tangible artefacts in archives and also the "invisible" heritage of related cultural contents, knowledge and techniques accessible through augmented and multi-channel fruition.

Paola Bertola is Full Professor at the Polytechnic of Milan, Department of Design, where he coordinates the Doctorate in Design. She is co-founder of the research collective Fashion in Process (FiP) and Faculty Member of the School of Design of the Polytechnic of Milan, where she teaches in the BA Fashion Design program and in the Master Product Service System Design Program. You are the Scientific Director of the Gianfranco Ferré Research Center. Her research focuses on creative processes, design management and branding, and design research within culture-intensive industries. She is the author of numerous international publications and a consultant in teaching and research activities for Italian and foreign institutions and companies. For her research activities she has twice received the Compasso d'Oro Award (2001 and 2011).

Federica Vacca is Associate Professor at the Polytechnic of Milan, Department of Design. She is co-founder of the Fashion in Process Research Lab, Faculty Member of the School of Design of the Polytechnic of Milan, where she teaches in the Fashion Design Program (BA) and is Deputy Director of the Gianfranco Ferré Research Center. She is the Scientific Coordinator of the advanced training course "Out of Fashion" relating to the themes of sustainable, ethical and conscious fashion and promoted by PoliDESIGN and Connecting Cultures. In 2011 you were named the Twenty-second Compasso d'Oro ADI-Young Design. She was Visiting Researcher at the Fashion Institute of Technology in New York in 2008 and Visiting

researcher and Professor at Philadelphia University in 2016. She is a member of the Editorial Committee of the "Fashion in Process" series, Mandragora Editrice, Florence.

Restaging Fashion: A vizualization prototype for vestimentary sources
Sabine De Guenther, Fachhochschule Potsdam

This presentation will show how a curated and dynamic narrative based on structured and semantically enriched data provides entry into collection databases. The methodological approach in dress research is to juxtapose a variety of fashion sources in the digital realm. Also, at the core of this approach is the consideration that the use of computer-based, interactive, and visual representations of abstract data increases cognition.

Restaging Fashion is an interdisciplinary project at the Urban Complexity Lab (University of Applied Sciences Potsdam), where researchers from the fields of art history, information science and interface design address the topic of fashion representation. In this project, selected images, garments and textual sources from the *Lipperheide Costume Library* (Berlin) and the Textiles collection of *Germanisches Nationalmuseum* (Nuremberg) were (3D-)digitized, described with Metadata and contextualized.

The chosen reference model CIDOC-CRM allowed for a detailed description of an object through an event-driven structure. To also represent art historical tentative observations or argumentation threads, we chose to create a prototype that provides access to the collection holdings through curated "entry stories". Here relationships between art works are shown in a graph-based environment. The user can either follow the dynamic narrative or dive deeper into the collection by using the graphs, which allow for a more intuitive or individual search.

Potentially, when employing a narration approach, researchers from various disciplines and cultural backgrounds could narrate a variety of stories with the available sources. This would lead the way to a more varied reading of the sources. The visualization code of the prototype, which will be provided under an open license alongside all digital objects and their

metadata, could also be reused on other types of linked data in humanistic research.

Dr. **Sabine de Günther** is an art and dress historian with an interdisciplinary approach and a focus on the methodology of dress studies. She examines dress and textiles, not just in terms of their aesthetic appearance but rather as markers of identity. Her most recent research project explored a collection of paintings from the *Lipperheide Costume Library – Fashion Image Collection*, Staatliche Museen zu Berlin, which earned her a PhD in Art History. She has a strong interest in Digital Art History, its methodologies and theories, digital research tools and all matters related to digital collections.

Linking Arctic Material Culture Heritage with future technologies: A 3D simulation of a Fish skin parka from the Anchorage Museum

Elisa Palomino, Smithsonian NMNH, and Jonathan Katz, independent researcher and illustrator

Recent events have pushed museums towards digital content, in parallel with a shift to online teaching by universities. This case study reflects on a collaborative experience disseminating Arctic fish skin cultural heritage between an MA student from the Royal College of Arts, an Anthropology Researcher at the Smithsonian National Museum of Natural History and members of the Alaska Native community.

During the Covid-19 lockdown, Jonathan Katz an RCA MA student developed Arctic narratives on how climate change affects their inhabitants. The restrictions pushed him to use 3D software to create fish skin samples and a digital replica of a 19th century Inuit fish skin parka from the Anchorage Museum. He worked under the guidance of Elisa Palomino, then Fashion Lecturer at University of the Arts supporting students in engaging with sustainability and currently Research Associate at the Smithsonian National Museum of Natural History, where she is conducting a study of fish skin artefacts with the Indigenous communities that created them.

To respond to the pandemic distance challenges, Elisa brought in a virtual setting the artefacts that curators from the NMNH and Anchorage

Museum had shared with her previously and the insights from consultations with Indigenous fish skin artists in Alaska. The project bought together communities from Washington, Anchorage and London finding new means to participate in heritage activities.

The research explores the opportunities for digital engagement with collections and distance collaborations between students, heritage institutions and Indigenous communities in Arctic cultural heritage. By capturing this case study and online teaching good practice, developing digitised collections through 3D software technologies together with Indigenous Heritage holders, we hope to offer support to museums, universities and Indigenous communities linking the resilience and innovations of the past with future technologies.

Elisa Palomino is a fashion designer, educator and Arctic fashion anthropologist with a PhD in Sustainable Fashion from the University of the Arts, London and a Thesis on Indigenous Arctic Fishskin Heritage. In 2019 she received a Fulbright Fellowship at the Smithsonian Arctic Studies Center, in 2022 a Kluge Fellowship at the Library of Congress and in 2023 a post-doc fellowship at the MPIWG Max Plank Institute for the History of Science. She created the EU Horizon 2020 project: FishSkin, developing fish skin as a sustainable material for fashion and the EU-funded project COSME WORTH: Fish skin in the luxury industry. Until 2023, she was a tenured Associate Professor of Fashion print at Central Saint Martins, London, pioneering the adoption of sustainable practices. Currently, as a Research associate at the Smithsonian NMNH in collaboration with indigenous communities, she has conducted research, written publications and developed educational programmes.

Jonathan Katz is an illustrator and visual storyteller. In 2021 he received his MA in Visual communication from the Royal College of Art, London, UK. Before moving to London, Jonathan lived in Kyoto, Japan where he worked as a freelance illustrator. On 2019-2021, he was collaborator with 'Fishskinlab', a project funded by EU Horizon2020, creating textile artworks produced on fish leather. For the past few years Jonathan has been experimenting with his practice as a narrative illustrator in the virtual world. In his work, Jonathan is passionate about handmade techniques, particularly the essence and the concept of craftsmanship. He believes that by

preserving the knowledge of traditional methods, real innovation begins. Currently, Jonathan explores how such techniques may be adapted to digital spaces and ways of making.

d_archive works to preserve fashion heritage, and make it accessible to everyone, everywhere they are

Martina Ponzoni and Daniele Scarante, d_archive

We intended to support students, fashion professionals and researchers by giving them the chance to observe 3D replicas of archives in an immersive way, regardless of their location, while also providing accurate information and technical material. By showcasing items that are usually stowed away and sharing the surrounding knowledge, we hope to drive our audience towards a deeper understanding and appreciation of fashion while learning and respecting the history of the craft. Our goal is to emphasize the enduring significance of certain fashion items by bringing them to light in a contemporary setting, bringing them closer to the current global creative community. We want to be an active part in the movement to make fashion more inclusive, supporting a more diverse and transparent industry, led by creatives driven by passion.

Martina Ponzoni is Co-founder & Ideator at d_archive. She is a 3D fashion specialist, with an accessories design background. She is Sessional Lecturer in the School of Fashion and Textiles at RMIT, Melbourne.

Daniele Scarante is Co-founder & 3D Fashion Lead at d_archive. He is former senior 3D design manager at Adidas, and head of academy at The Fabricant.

Virtual Textiles: Sites for Communicating Sensory Experiences in Museums
Kate Irvin, RISD Museum, and Joy Ko, RISD Virtual Textiles Research Group

As an integral part of the Rhode Island School of Design, a preeminent art and design university in the US, the RISD Museum has fostered 150 years of fruitful exchanges between the museum's collections and the school's community of makers, ensuring that students' visions for the future are guided and informed by close study of exemplars of cultural heritage. This paper presents examples of an ongoing collaboration between RISD's Virtual Textiles Research Group (VTRG), led by Joy Ko, and RISD museum's Curator and Department Head of Costume and Textiles, Kate Irvin, exploring ways of employing digital materials to enhance visitors' tactile understandings and sensory experiences of garments in a museum gallery setting.

This work stems from the recognition that so much of the emotional draw of garments and textiles involves the pleasures of wearing and touching them, encounters that are typically verboten in the museum context.. Using an array of tools—3D-scanning, procedural material design, apparel simulation, VR/AR—this project presents new avenues of research by embracing the virtual textile as a site to communicate sensory experiences of historic garments. Guided by an affective approach, rather than simply photo-realistic digital twinning, the virtual output aims to amplify museum visitors' haptic literacy by emphasizing sensory experiences connected to processes of making, the drape of fabric around a body, the varying textures and marks of wear, tear, and repair, thus dissolving the distance between viewer and the physical garment on display.

Garments in the South Asian collections were selected for their distinctive layered sensory properties, richness of hand, and embedded stories of cultural exchange and collaboration in their making. Examples such as digitally wrapping a sari as opposed to displaying a rectangular textile bring viewers closer to experiencing garments in their historic context while also setting up a portal for imagining how these textiles might exist in speculative and virtual environments.

Kate Irvin is Curator and Head of the Department of Costume and Textiles at the RISD Museum. Her most recent collaborative initiative, *Inherent Vice*, comprised a year-long exhibition (2022–2023) and academic project that reframes collections care as a reparative, empathetic act that embraces both literal and metaphorical cracks as opportunities for revealing and making room for neglected narratives. Previously she curated *Repair and Design*

Futures (2018–2019), another multidisciplinary exhibition and program series that investigated mending as material intervention, metaphor, and as a call to action. With Markus Berger, she co-edited a related book *Repair: Sustainable Design Futures*, published by Routledge in 2022. Other exhibitions and projects at the RISD Museum include: *From the Loom of a Goddess: Reverberations of Guatemalan Maya Weaving* (2018); *Designing Traditions Biennial: Student Explorations in the Asian Textile Collections* (2008-2018); *All of Everything: Todd Oldham Fashion* (2016); and *Artist/Rebel/Dandy: Men of Fashion* (2013).

Joy Ko is an artist and educator. Her teaching, research and writing explore the use of computation and digital technologies to augment and extend the creative process. In her studio, she renders walks in the woods, mixes memory with imagination, and keeps things moving forward by staying (more or less) still. Trained as a mathematician, she has found her way towards the intersection of mathematics, computation, art and design. She believes art and design has a unique role in guiding society: to anticipate changes, to explore these critically and to show many possible futures. Since 2010 she has taught at the Rhode Island School of Design (RISD) and contributed to multiple departments including Architecture, Textiles and Industrial Design. She helps lead the Virtual Textiles Research Group (VTRG).

Unlocking Fashion Heritage: Displaying Digital Museum Collections
Debra Knoop, ModeMuze

Since 2015, Modemuze (a growing network of currently eighteen Dutch and Flemish museums) has been working together to permanently present their fashion and costume collections online. Last year, the "Unlocking Fashion Heritage" project was launched to explore innovative methods for making fashion heritage and its craftsmanship widely accessible to creators, wearers, researchers, and enthusiasts. A total of 100 objects from the diverse collections will be unlocked through the use of various 3D techniques, which will be presented on Modemuze.nl in a 360-degree viewer or as a digital twin in our augmented reality fitting mirror. This presentation delves into various insights and reflections on (future) display

possibilities of digital museum collections: from traditionally narrated objects in museum exhibitions to mediated objects in a wide variety of digital or hybrid contexts. What is the potential of digital object-based storytelling, which challenges does it pose, and how does it change the way we curate, display and communicate fashion heritage?

Debra Knoop is the project coordinator of "Unlocking Fashion Heritage" for Modemuze, alongside Mila Ernst. She is a fashion and design historian and museologist, and she also works as a freelance curator, researcher, and art handler for various fashion exhibitions. Additionally, she lectures on historical and contextual fashion studies at the Amsterdam Fashion Academy. Knoop has written several blogs for Modemuze, and is currently researching the connection between fashion and menstruation.

KEYNOTE:

Physical and Digital Craftmanship in Fashion Education

Roger Gerards, AMFI

Digital Fashion design is hot and getting mainstream. Opposite to what one would think, the industry is realizing that in order to be able to understand and use digital design and product development tools, one need to have a full understanding of the traditional skills, moulage and other craft techniques. How this hybrid craftmanship is developing is very insightful. On top the discipline is installing and developing new types of labs, where qualities and behaviors of physical fabrics can be tested, translated and coded into to a digital twin, resulting in digital fabric libraries and other platforms with avatars and other material for sale.

Roger Gerards was appointed Head of Fashion Design at AMFI in 2022 and is member of the management team. Following his studies in Fashion Design from Artez in Arnhem and in Cultural and Social Anthropology at Radboud University in Nijmegen, Roger has worked in management functions at a senior level for educational institutions and fashion industry. Between 1994 –

2000 he was Head of Fashion at the department of Textiles and Architecture at the Royal Academy of Fine Arts in the Hague. Till 2006 he was Head of Education at Artemis Styling Academy in Amsterdam. Untill 2022 he was for four years the Managing Director of the Master Tailor Institute in Amsterdam. In the fashion industry he worked as designer, consultant, and creative director independently and within several fashion and interior brands. His professional career started with a textile design studio & agency for the fashion and interior industry. As consultant of the visual marketing agency Debockendekker he guided fashion brands in assortment and communication strategies. For 10 years, up to 2016, he was Creative Director for Vlisco Netherlands, a Dutch company of 4 brands in fashion/textiles products for the West African consumer. His expertise focuses on design processes, brand strategies and innovation and he is an ambassador in linking the industry with education.

AMFI - Amsterdam Fashion Institute

AMFI: Change makers of the fashion industry

AMFI is the largest fashion institute in the Netherlands, with a team of 100 expert fashion lecturers, AMFI coaches over 1500 students each year on all aspects of fashion. AMFI guides students to become the designers, branders or business developers of the future fashion industry and change it in a sustainable direction. AMFI is the only fashion institute in the Netherlands that covers the entire fashion chain; a future-oriented transdisciplinary curriculum with a strong foundation in technology, craftsmanship and creativity. With an educational focus on digitalisation, sustainability and inclusivity, AMFI is at the forefront of digital fashion design and sustainable, inclusive fashion. Located in Amsterdam, AMFI is part of the Faculty of Digital Media and Creative Industries (Amsterdam University of Applied Sciences) AMFI offers all its programmes and specialisations in Dutch as well as in English, welcoming international students from all over the world. Students graduate with a Bachelor of Science in Fashion & Textile Technologies.

5DCulture: can fashion heritage be(come) immersive?
Marta Franceschini, EFHA

5Dculture is a project co-funded by the European Union that aims at enriching the offering of 3D digital cultural heritage assets in the common European data space for cultural heritage and promotes their reuse in important domains such as education, tourism, and the wider cultural and creative sectors, aiming for socially and economically sustainable outcomes. The project will engage existing 3D datasets, focusing on fashion, archaeology, and architecture—central themes in Europe's vast cultural heritage. As part of the project, EFHA is responsible to exploring the creation of more engaging and immersive museum experiences with fashion heritage, working together with Centraal Museum and The Netherlands Institute of Sound and Vision (NISV) to find creative and engaging solutions to very specific curatorial issues: how to show accessories and garments that, for various reasons, cannot be physically displayed or moved from one location to another? Which techniques should we deploy to make fashion heritage accessible to a wide audience?

Marta Franceschini is a design historian and researcher. She holds a PhD in Design Sciences and has worked to various fashion exhibitions internationally. She collaborates with fashion archives, cultural institutions and universities and she is Head of Communications and Editorials of the European Fashion Heritage Association.

From Pattern to Polygon
Suzanne Mulder, Studio PMS and Centraal Museum

The presentation will focus on the work of Studio PMS, detailing the research process behind the project that the studio started in 2018 and resulted in the exhibition 'From Pattern to Polygon' at Centraal Museum Utrecht in 2021. For the exhibition, fashion collective Studio PMS pushed the boundaries of both the virtual and physical worlds. They took the fashion collection of the Centraal Museum as a starting point to have a new look at

the digital preservation and accessibility of fashion heritage. What opportunities do digital techniques offer to breathe new 'life' into crafts, knowledge, and collections?

Suzanne Mulder of Studio PMS uses the digital world as a blank canvas. She designs with an emphasis on making the design industry more sustainable and uses innovative techniques such as 3D modeling, holograms, virtual and augmented reality. Next to her work as co-owner of the digital design studio she teaches at several art academies and works as senior manager digitals fashion innovation and impact at Centraal Museum Utrecht.

Let's be wrong today: the importance of speculation for the future of fashion heritage
Izzy D'Arcy, London College of Fashion

Using three case studies of fashion curation from the past, present and future, this paper aims to look at the history of studying, archiving, and exhibiting sartorial objects to speculate on how our practice will evolve alongside technology. Utilising the pioneering work of Diana Vreeland as a historical touchstone, the contemporary contributions of curators such as Judith Clark, and the author's own hypothetical future career over the next five decades, this paper delves into the methodologies employed in the study, archiving, and exhibition of sartorial artifacts over the last fifty years to map out our potential future alongside the growing tools available in Web3, such as generative AI, augmented reality, digital twins, and the chance for globally accessible virtual libraries.

Isabelle D'Arcy is a graduate student at the London College of Fashion getting her master's in Fashion Curation and Cultural Programming. Her research is focused on how the development of tools such as generative AI and augmented reality can enhance practices within the museum and archive rather than replace them.

A Case Study of a Digital Exhibition on Fashion and Textiles in the Life and Work of the
Artist Steven Campbell

Mairi MacKenzie, The Glasgow School of Art

Dressing Above Your Station (*DAYS*) was a virtual exhibition that considered the life and work of the Scottish artist Steven Campbell from a fashion and textiles perspective. It examined the depiction of clothing and cloth in his paintings, what he wore, how he wore it and how that related to the broader context of Scotland as a textile producer between the late 70s and early 90s. Central to this exhibition was a collection of Comme des Garçons clothing purchased in New York in the early 1980s with a $10,000 credit note that Steven received in exchange for one of his paintings. Simultaneously, *DAYS* considered issues of Scottish stereotypes and the stranglehold of national costume in a nation's understanding of itself. Using digital technologies it explored, through Campbell's paintings and personal clothing, the ways in which such categorisation can be appreciated, embraced and subverted.

The venue for the exhibition was an exact, 1:1 scale digital model of a real exhibition space, Tramway, one of Glasgow's most successful arts venues. Employing photogrammetry, LiDAR, volumetric imaging, gaming technology and giga-pixel images, *DAYS* featured digital representations of Steven Campbell paintings, clothing and personal mementos as well as a recreation of the Comme des Garçons store on Wooster Street, New York where Steven purchased his collection of Comme clothing. An audio tour, narrated by Steven's wife, Carol, guided visitors around the space.

This paper will reflect upon the development of *DAYS*; the cultural importance of Steven Campbell's wardrobe; and how the digital realm afforded the curators an opportunity to question and recast notions of Scottishness. It will also consider how it navigated an issue often levelled at online exhibitions – that they can never satisfactorily capture the aura of the 'real' thing – as well as the importance of restraint in the seemingly boundless realm of digital technology: https://gold.dressingaboveyourstation.com/

Mairi MacKenzie is Research Fellow in Fashion History at The Glasgow School of Art, and a visiting lecturer at Liverpool School of Art and Design and Glasgow University. Mairi's current research is focussed upon social and

cultural histories of perfume; the history of dressing up and going out in Glasgow; and the relationship between clothing and identity in the life and work of the artist Steven Campbell. Her publications include *Dream Suits: The Wonderful World of Nudie* Cohn (Lannoo: 2011); Football, Fashion and Unpopular Culture: David Bowie's influence on Liverpool Football Casuals (Routledge: 2019); *The Inward Fragrance of Each Other's Heart* in 'The Rose in Fashion: Ravishing' by Amy de la Haye (Yale University Press, 2020); and Perfume and Fantasy: Scent in Popular Culture and Everyday Life (Bloomsbury: Forthcoming).

Climbing the highest point on earth – How Swiss footwear contributed to the first ascent of Mount Everest in 1953 on Google Arts & Culture
Charlotte Stachel, USI – Università della Svizzera italiana

The paper presents the full process of designing and implementing the digital exhibition *Climbing the highest point on earth – How Swiss footwear contributed to the first ascent of Mount Everest in 1953* on Google Arts & Culture. To the author's best knowledge, this paper is the first of its kind dedicated to the (i) development, (ii) production, (iii) promotion, and (iv) evaluation of an online exhibition in the form of a *Story* on Google Arts & Culture from a digital fashion communication perspective.

The collaboration between the author and the Archive of the Bally Shoe Factories in Schönenwerd (Switzerland) in choosing a suitable subject is presented, which makes use of historical records as well as digitalized artefacts. The paper then demonstrates how digital storytelling is applied to structure contents, and it describes obstacles that were encountered while gathering relevant material. The different strategies that were used to promote the digital exhibition via various channels are outlined, up to discussing analytics. The paper concludes that the elaboration of a *Story* on Google Arts and Culture is not only a matter of displaying and exhibiting educational and entertaining contents for a fashion brand's communication purposes. Instead, it may have a deep impact on archivists' strategies in collecting and preserving future items.

Charlotte Stachel is a Ph.D. candidate in Digital Fashion Communication at the Institute of Digital Technologies for Communication at USI – Università della Svizzera italiana USI (Lugano, Switzerland). In September 2022, she joined USI as a junior researcher and teaching assistant of the <u>MSc in Digital Fashion Communication</u>, a double degree by USI and Université Paris 1 Pantheon-Sorbonne (France). Her research project focuses on the digitalization of a brand's fashion heritage and its related digital and phygital communication practices. The research is conducted on the case of the Swiss fashion brand Bally and its related digital and phygital communication practices. Her position is funded by the Lifestyle Tech Competence Center (Lugano, Switzerland), of which USI and Bally are founding members. She holds a bachelor's degree in Communication and Media Research from the University of Fribourg (Switzerland) and a master's degree in Public Management and Policy with specialization in Public Communication and Management from the University of Bern and USI (Switzerland).

The Missoni Archive focuses on Digital innovation
Luca Missoni, Missoni Archive

History, Made in Italy and Fashion perfectly combine with Digital Technologies in highly innovative projects that involve the Missoni Archive, the place that gathers, valorize and communicates the Art and Fashion heritage of the brand. This project gives visitors the opportunity to live an immersive digital experience in AR, side by side with artefacts created in over 70 years of history. Besides being enchanted by the display of real products, visitors can experience a virtual dimension that gives them the opportunity to interact digitally, observing through their Smartphone all the details of the garments that have been reproduced with 3D technology, through several QR codes located in various areas of the Archive. A captivating opportunity to highlight the brand's iconography in a modern way. Furthermore, thanks to digital technology, visitors have the opportunity of virtually wearing selected garments through a 'virtual dressing room', mirrored on a large monitor. What's behind this innovative technology? The selected physical garments are recreated digitally starting from a 360° scan and - considering model, material, shape and volume – the images are processed in order to obtain the hyper-realistic 3D asset: Digital Twin.

Subsequently, each single 'Digital Twin' is also transformed into a try-on filter which, capturing the image and volume of the person in real time, allows it to be dressed and displayed on a large monitor. Since the beginning of digital photograph the Missoni Archive has been digitalizing images of fabrics, prints, garments, photographs, editorials... In the near future an Artificial Intelligence platform, following specific trainings on the Missoni iconographic dictionary, will feed the digital archive with shared tags, making it possible to classify automatically the whole archive database. This will improve both the archival function and consequently the research and development of the products.

Luca Missoni is the Artistic Director of the Missoni Archive, a communication and research tool to valorize the MISSONI Brand Heritage.

Tai and Rosita Missoni's second-born, he grew up artistically in the workshops of the factory. By the end of the 1970s he began working full time for the family company developing knitwear design, sparking interactions between technical advancements and the creative process: "I love discovering new potentials without compromising production, going beyond the results originally intended for a particular mechanism, to apply the art of our craftsmanship to the very outmost."

Formerly the creative director of the Men's and Sport Collections, since 2007 he is the Artistic Director of the Missoni Archive, which represents the most important reference for the heritage of a brand with 70 years of history, whose art values are preserved and valorized through the 'Ottavio e Rosita Missoni Foundation'.

He conceived and curated exhibitions as *MISSONOLOGIA* in Milan (1994), *Missoni Story* in Gallarate (1995), *OPERA* in Tokyo (1996), *Caleidoscopio Missoni* in Gorizia (2006), *Taller Missoni* in Madrid (2009), *Workshop Missoni* in London (2009), *Ottavio Missoni. Il Genio del Colore* in Slovenia and Croatia (2012), *MISSONI, L'ARTE, IL COLORE* in Gallarate (2015) and in London (2016), *Marc Chagall - Ottavio Missoni, Sogno e Colore in* Noto, Sicily (2017).

He is also a photographer and a star-gazer. For Luca Missoni photography has always been an essential part of his visual research. Passionate of Astronomy, the Moon is the protagonist of his artistic statement recently acknowledged with the publication of his book *Moon Atlas* by Damiani.