PATHS OF TRANSFORMATION:
SHAPING THE FUTURE OF ITALIAN FASHION

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Abstract

This article examines the ongoing transformations within the Italian fashion system through the findings of the national research project *ResHaping made in ITAly (RHITA)*, focusing in particular on the activities of the University of Florence Research Unit in Milestone 3 (M3). It interrogates the contemporary conditions under which Made in Italy can be reproduced and reformulated. Drawing on a critical review of the literature and a qualitative methodological design based on case studies, the research identifies three emerging transformative trajectories: circular systems, phygital scenarios, and informal education. The analysis shows that these trajectories do not operate additively, but rather through a relationship of co-determination: circularity requires informational infrastructures that make materials traceable and regenerable; the phygital dimension stabilizes and mediates such information through digital devices; and informal education enables its operational translation and the transmission of the skills necessary for their practical implementation. Through six case studies selected across production, services, and training, the article highlights the tensions among standardization, material variability, and situated knowledges that characterize contemporary Made in Italy. The contribution advances a systemic reading of the transformation of the Italian fashion sector, interpreting Made in Italy as a dynamic device in which material, information, and learning are continuously negotiated.

INTRODUCTION

Structured as a journey that was at once fluid and labyrinthine, *The Glamour of Italian Fashion 1945–2014* presented itself as one of the first major museum surveys devoted to Italian fashion from the post-war period to the present, constructing a genealogy of Made in Italy's contribution to fashion culture (Stanfill, 2015). In the Victoria & Albert Museum exhibition, this genealogy was anchored in a lexicon of quality and style – luxurious materials, textile expertise, regional manufactures – and, more generally, in the Italian industry's ability to convert territory and manual skills into an international brand (Victoria and Albert Museum, 2014). Taking the Florentine fashion shows of the early 1950s as the inaugural turning point, the exhibition traced trajectories of change through devices of visualization and mediation, including a digital map of spinning mills, workshops, and production clusters, before closing with a series of video interviews designed to address the trends set to redefine and shape the future of fashion in Italy. It is precisely in the shift between museological canonization and the documentation of ongoing transformations that the exhibition made a threshold legible: while establishing an identity lexicon of Made in Italy, it simultaneously made evident the emergence of constraints that today call its future into question: offshoring of production, environmental pressures, digital infrastructures, and new forms of supply-chain coordination. Moving within

this threshold, the article examines selected results of the national research project *ResHaping made in ITAly (RHITA) – Circular models for the heritage and manufacturing production of Italian fashion through digital inclusivity and conscious innovation*, which enabled the analysis of a range of practices, lexicons, and tools in response to specific transformations in Italy's fashion sector, bringing to light three trajectories of change: circular systems, phygital scenarios, and informal education. More specifically, circular systems are understood as reorganizations of practices oriented toward regeneration and sustainability; phygital scenarios as modes of integration between material and digital dimensions; and informal education as a set of learning practices that connect training contexts and production spaces, contributing to the dissemination of new skills within the sector and society. The contribution further emphasizes that these three categories do not operate by addition, but through interdependence: what enables one dimension may introduce constraints in another.

METHODOLOGICAL APPROACH

This contribution is situated within the national research project *RHITA* and focuses specifically on the activities carried out by the University of Florence Research Unit within Milestone 3 (M3): *Re-Shaping Fashion for Made in Italy*. The primary goal of M3 was the reformulation of the cultural and productive landscapes of Italian fashion through the integration and reinterpretation of the qualitative and quantitative data collected in the earlier phases of the project. M3 functioned as an analytical and modelling hub, connecting territorial investigations of production chains, human capital, and training pathways in order to outline an operational model capable of describing and orienting the transformations currently underway in fashion in Italy. From a methodological standpoint, M3 activities combined tools of critical and historical analysis with practices of structured and semi-structured empirical inquiry. These included the characterization of production chains across different regional contexts, the analysis of sustainable production practices, and the documentation of human capital through reporting activities. These materials were subsequently systematized through processes of data integration and modelling, with the aim not so much of producing an exhaustive mapping of the sector as of identifying recurring configurations, tensions,

and emerging trajectories. The first phase of the research involved a review of the literature in Italian and English, using Scopus, Web of Science (WoS), and Google Scholar as primary databases. Their combined use made it possible to cover a broad spectrum of academic sources and specialist literature: WoS and Scopus provide access to high-quality peer-reviewed journals with broad disciplinary coverage, while Google Scholar makes it possible to intercept additional contributions (e.g., conference proceedings, book chapters) that are not always indexed by traditional databases. This combination, recommended in rigorous literature review methodologies, makes it possible to mitigate the coverage limits of individual databases and to broaden the retrievability of relevant contributions (Falagas et al., 2008; Haddaway et al., 2015). Alongside indexed sources, non-indexed sources (grey literature) – institutional reports, project documents, and professional publications – were also included in order to integrate contextual data and operational perspectives, reducing publication bias and improving the completeness and timeliness of the state of the art (Paez, 2017). In line with literature review guidelines, ex ante search and selection criteria, as well as inclusion/exclusion criteria, were defined (Snyder, 2019), ensuring transparency, traceability, and replicability of the process in accordance with systematic review protocols in the social sciences and management (Tranfield et al., 2003; Petticrew & Roberts, 2006). The research identified three transformative trajectories of the fashion system in Italy, adopted as working hypotheses to be examined against empirical materials:

1. circular systems: examines the introduction of circular practices aimed at strengthening sustainability;

2. phygital scenarios: addresses the growing integration between physical and digital dimensions in design and production processes;

3. informal education: focuses on the diffusion of innovative educational models that foster dialogue among learning environments, production spaces, and society.

Following the literature review and the identification of the three transformative trajectories, the research adopted a qualitative

methodological design based on case studies. The aim was not to test predefined hypotheses, but rather to deepen and articulate these trajectories through the observation of practices, organizational arrangements, and operational infrastructures concretely activated in different contexts. For each trajectory, two case studies were selected, identified through a preliminary mapping of production chains, services, and relevant actors, supported by a qualitative documentary analysis of publicly available and organization-produced materials (e.g., sustainability reports, technical sheets, certifications, websites, press kits, and project documentation). Documents were treated as data and analysed through iterative thematic content analysis to triangulate interview accounts and to substantiate process descriptions with verifiable traces (Bowen, 2009), alongside exploratory contacts with key stakeholders. Selection prioritized cases capable of representing different roles along the value chain (production, services, training), characterized by an adequate level of organizational maturity, here defined as the presence of sufficiently formalized and repeatable processes, routines, and coordination mechanisms enabling innovations to be implemented and stabilized in an observable and describable manner (Cohen & Levinthal, 1990; Lockamy & McCormack, 2004) and by sufficiently structured processes to be observed and described systematically. Additional selection criteria included the availability of verifiable data, informational accessibility, and openness to critical discussion. The case studies were investigated through semi-structured interviews with key representatives of the organizations involved, complemented by documentary and communicative materials produced by the same actors. Interviews (conducted online and audio-video recorded) followed a shared interview guide to ensure comparability, while retaining flexibility through probing questions to elicit trajectory-specific practices and issues (Kvale & Brinkmann, 2015; Galletta, 2013).Cross-case comparison made it possible to highlight recurrences, divergences, and tensions, progressively refining the conceptual boundaries of the three trajectories and supporting their definition as emerging analytical constructs. For the circular systems trajectory, the cases of Beste (including Beredo project) and DIFE were analyzed. Beste is a manufacturing company based in the Prato textile district1, engaged in developing practices for the regeneration of pre-consumer textile waste through the Beredo project, which integrates circularity, industrial symbiosis, and upstream supply-chain redesign. DIFE is an operator specialized in the management of industrial waste, including the treatment of textile waste, and represents a crucial intermediate node between production and recycling infrastructures, enabling observation of the role of service actors in activating circular strategies. For the phygital scenarios trajectory, the cases of FutureClo and Temera were selected. FutureClo is a Small and Medium-sized Enterprise (SME) founded in 2021 that operates according to a phygital logic, integrating advanced digital design and physical manufacturing and reversing the traditional sequence of the design process, in which the digital object precedes the material one. Founded in 2009, Temera is a company specializing in the implementation of RFID technologies along the luxury fashion supply chain, with a focus on traceability, anti-counterfeiting, and informational integration, offering an infrastructural and process-oriented perspective on the interaction between physical and digital dimensions. For the informal education trajectory, the cases of Lanificio Paoletti and ITS MITA Academy were analyzed. Lanificio Paoletti is a manufacturing firm founded in 1795 that, alongside production, develops practices of public openness and situated learning along its production line, transforming the factory into a temporary space for the transmission of knowledge. ITS MITA Academy is a foundation active in higher technical education for the fashion sector, operating as an institutional node capable of connecting schools, universities, companies, and local territories, and promoting training models oriented toward the integration of learning and production. Subsequently, the interview corpus was subjected to an exploratory lexical analysis using a reproducible Python workflow. Transcripts were pre-processed through lowercasing, punctuation removal, tokenization, and filtering via an extended stopword list; term-frequency tables were then computed and exported to support traceability and cross-trajectory comparison. In line with established approaches in computational text

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1   Prato is one of Italy's major textile districts and has a long-standing association with fibre recovery and recycled-wool production ('cardato'), making it a relevant territorial context for observing circular practices in textiles.

analysis and computer-assisted qualitative inquiry, these outputs were used as an auditable heuristic to inform close reading and thematic interpretation – highlighting recurring terms and salient lexical clusters – rather than as a stand-alone validation procedure (Abram et al., 2020; Macanovic, 2022). Comparable text-mining pipelines have also been adopted in fashion-related research to map patterns in textual corpora and support interpretive claims about industry discourse and fashion narratives (Choi et al., 2021). Taken together, the six case studies were used to deepen and articulate the three transformative trajectories, enabling observation of different operational configurations and supporting a qualitative analysis of the transformations currently unfolding in the Italian fashion system.

TRANSFORMATIVE TRAJECTORIES

The Italian fashion industry did not emerge as the simple linear evolution of a tailoring tradition; rather, it took shape as a systemic response to a condition of profound historical discontinuity (Paulicelli, 2015). As White (2000) has shown, the *miracle* of Italian fashion is rooted in the rubble of the post-war period, when the need for economic reconstruction propelled the industrialization of artisanal know-how. In this phase, Made in Italy crystallized not only as a label of origin, but as a distinctive production model grounded in what Becattini (1979) termed the industrial district: a socio-economic system characterized by the interpenetration of local communities and firms. The strength of this model lay in *flexible specialization* and in a geographical polycentrism that turned regional identities into global competitive advantages (Merlo, 2003). Yet this arrangement – based on tacit knowledge and fragmented supply chains – has, in many cases, become a form of structural rigidity when confronted with contemporary challenges.

The current twenty-first-century scenario presents striking isomorphisms with the post-war reconstruction period of the previous century. If, from 1945 onward, Italy was marked by the transition from a wartime economy to a consumer economy, the post-pandemic era is now urgently demanding a shift toward an economy of sustainability and the digital. We are facing what the literature describes as a twin transition, in which the digital revolution and the ecological imperative act as disruptive forces that render earlier value logics obsolete. The historical parallel suggests that, just as in the post-war period, the sector cannot now survive through mere marginal adjustments. What is required is an ontological restructuring of the concept of Made in Italy (Savi, 2023; Dellapiana, 2022).

The traditional narrative, focused exclusively on aesthetics and heritage, appears inadequate today (Barucco, Bulegato & Vaccari, 2020). As theorized by Rinaldi and Testa (2014), excellence must now integrate the ethical and environmental dimension as a non-negotiable prerequisite, transforming sustainability from a regulatory constraint into a driver of strategic innovation. The three transformative trajectories identified by the RHITA research – circular systems, phygital scenarios, and informal education – are situated within this landscape and aim to systematize approaches and practices.

CIRCULAR SYSTEMS

The first transformative trajectory, defined as circular systems, develops out of the debate on the circular economy in the fashion sector. In recent years, the literature has produced a broad and consolidated body of work, largely centered on closing material loops and optimizing environmental impacts through strategies such as recycling, waste reduction, product life extension, and the adoption of Life Cycle Assessment methodologies and environmental metrics applied to materials and processes (D'Itria & Colombi, 2024; Niinimäki et al., 2020). This orientation has enabled significant advances in measurement and in technical–operational solutions, often focused at the level of the product or the individual firm (Vezzoli et al., 2022). Alongside these approaches, part of the literature advances a more radical reading of circularity, understood not as a set of corrective practices but as a reformulation of the fashion system's operating logics (Cianfanelli, 2025). From this perspective, circularity is associated with a rethinking of the values that guide design, production, and consumption (Fletcher & Tham, 2019), as well as with the application of Systemic Design frameworks capable of intervening in organizational models and supply-chain relations, particularly in the context of SMEs (Barbero & Ferrulli, 2023). Despite these contributions, the literature points to a recurring limitation: circularity continues to be treated primarily as a technical problem – concerning materials, processes, and treatment technologies – while the dimensions of governance, coordination,

and infrastructuring that make such practices actually feasible and scalable remain less explored (Luible & Braumann, 2025; Whitty, 2021). Within this framework, the circular systems trajectory is taken as one of the ways through which the RHITA dispositif contributes to making matter legible, comparable, and transformable. Circularity is interpreted here as a systemic transformation that entails the reorganization of regenerative practices, evidentiary criteria, and distributed responsibilities, capable of reconfiguring the productive, organizational, and cultural arrangements of Made in Italy. From this standpoint, attention shifts from punctual solutions to the material and immaterial conditions that enable – or hinder – the integration of circular economy principles across the entire product life cycle. An effective circular transition requires the co-design of products, services, and infrastructures, as well as the realignment of incentives, skills, and practices toward durability, reuse, and intensified use. Circularity thus becomes observable not only in material choices and end-of-life strategies, but also in a constellation of infrastructural, relational, and regulatory factors that define the practical margins of regenerative practices.

This reading is corroborated by the analysis of the case studies of Beste2 and DIFE3, which make it possible to observe circularity as an operational configuration distributed along the supply chain. The Beste case shows how the continuity of material flows can be ensured within the same value chain through the Beredo project. The vertical integration of competencies and infrastructures enables the company to manage all phases of the process internally – from waste collection to regeneration and finishing – thereby ensuring high quality standards, flow traceability, and operational transparency. In this sense, Beredo is not merely a closed-loop recycling system, but a form of organizational innovation that strengthens the resilience and autonomy of the production system. The practices activated – from the recovery of high-value fibers to the creation of new textile compounds, and up to the reuse of waste in alternative sectors such as paper manufacturing – configure Beredo as a laboratory of systemic innovation and a model potentially replicable for other Made in Italy firms. The DIFE case, by contrast – an operator

specialized in industrial waste management – allows observation of a segment often marginalized in analyses of circularity: the collection, sorting, and classification of pre-consumer waste. The interview highlights in particular the strategic importance of flow traceability and the quality of incoming deliveries, understood as indispensable conditions for ensuring the functioning and compliance of recycling chains with the required environmental and technical standards. DIFE acts as an intermediate node between production and treatment infrastructures, contributing to the construction of operational and informational connections without which circular strategies would remain difficult to implement.

Taken together, the two cases show that circular innovation depends not exclusively on technological solutions, but on a set of infrastructural, regulatory, and relational conditions that enable cooperation among actors and the stabilization of practices. From this perspective, circular systems emerge as a transformative trajectory capable not only of reducing environmental impacts, but also of redefining roles, responsibilities, and forms of value within the Italian fashion system.

PHYGITAL SCENARIOS

The second transformative trajectory, defined as phygital, is situated at the point where fashion increasingly becomes both an object and a process mediated by data, interfaces, and representational systems. The term phygital refers to hybrid configurations in which physical practices and artefacts remain central but are continuously augmented by digital layers (data, interfaces, simulations), reshaping design, production, and value regimes in fashion (Iannilli & Spagnoli, 2021; Vergine et al., 2019).Recent scholarship examines this shift through the introduction of technologies that redefine the phases of design, prototyping, production, and market relations: Digital Twins and iterative prototyping (Casciani, 2023); identification and traceability systems based on RFID and data management; applications of artificial intelligence for conceptual generation and the handling of complex information (Särmäkari & Vänskä, 2022); as well as immersive environments and modes of access that restructure experience, communication, and the symbolic value of the fashion product (Hajahmadi et al., 2024). Within this framework, some contributions show

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2   Online interview conducted on March 4, 2025.
3   Online interview conducted on March 6, 2025.

how digitalization reconfigures supply chains and business models by shifting points of control and redefining the timing, standards, and skills of work (Casciani, Chkanikova & Pal, 2022). More recent research focuses instead on the cultural and identity implications of these transformations (Wallin, 2025), questioning the role of artificial intelligence in redefining authorship, creativity, and professional subjectivities (Quartu, 2024), as well as the theoretical frameworks that connect the phygital condition to post-digital and posthuman perspectives (Smelik, 2021). Here too, however, the literature tends to assess digital transformation primarily in terms of efficiency (Bertola & Teunissen, 2018), optimization (Bottani et al., 2023), and cost reduction (Denaro, 2023), while its relationship with the historical, material, and cultural conditions that have traditionally generated value in Italian fashion remains less thoroughly investigated.

Within this trajectory, Italian fashion and Made in Italy take shape as a continuum in which materiality does not disappear, but is constantly augmented, rewritten, and hybridized by the digital. Dematerialization does not coincide with abandoning the physical; rather, it entails replacing part of material production with symbolic, iterative, and informational processes through which value, authenticity, and belonging are redefined, also via new forms of certification, narration, and remediation of the manufactured object. This interpretation is borne out by the case studies of FutureClo4 and Temera5, which allow two complementary articulations of the phygital scenario to be observed. In the FutureClo case, the interview highlighted a creative workflow that begins with the dematerialization of the fashion product: design takes shape through parametric avatars, digital textures, and digital twins that precede the garment's material existence. Only at a later stage is this immaterial dimension translated into the first physical prototype, which is not discarded but integrated into a collaborative process of oversight and optimization. This methodological inversion does not represent a break with Italian manufacturing tradition, but rather a reworking of it: the digital does not replace artisanal knowledge, but enters into dialogue with it, generating reciprocal contamination

4   Online interview conducted on March 24, 2025.
5   Online interview conducted on March 12, 2025.

between material and immaterial competences. As the interview suggests, 3D design practices are orchestrated by pattern-makers and designers working within a hybrid logic, capable of shaping the digital domain and translating it seamlessly into the physical one, thereby reinforcing the identity of Made in Italy. In this context, 3D files and renderings do not function as merely representational tools, but as productive agents participating in the garment's generation. The digital twin does not simulate the object; it co-produces it, transforming the traditional relation between original and copy. Yet this inversion does not subordinate the physical to the digital; rather, it establishes an ontological co-dependence between the two dimensions, which define and strengthen one another. The Temera case, by contrast, makes it possible to observe the phygital scenario from an infrastructural and process-oriented standpoint. The company adopts an approach based on mapping production flows, which precedes and guides technological customization, reversing the traditional technology-first logic. Through informational integration, the fashion artifact is extended into the digital domain and becomes a communicative node capable of conveying data, certifications, and traceability. As CEO Arcangelo D'Onofrio emphasizes, the phygital transformation entails the material object acquiring the capacity to communicate, establishing an ongoing dialogue with users, firms, and control systems. In this sense, the garment no longer exists solely in its materiality, but as an interface between tangible and intangible, between physical experience and information. Taken together, the two cases show that the phygital scenario cannot be reduced to technological innovation alone: it configures a cultural and organizational transformation that redefines competences, roles, and forms of value. The hybridization of physical and digital, when anchored in responsibility toward materiality and in the specificities of Made in Italy, opens onto new forms of qualified work and value creation, preventing digitalization from translating into a new immaterial consumerism or into technological exclusion.

INFORMAL EDUCATION

The third transformative trajectory concerns informal education and, more broadly, the ways in which the fashion sector generates, updates, and transfers competences in contexts that cannot be traced exclusively to institutional channels of

education and training. Scholarship on fashion education has often focused on formal institutions and academic models (Lupano & Vaccari, 2014), privileging schools, universities, and structured programmes as the primary sites for knowledge transmission. More recent research, however, has begun to foreground hybrid and distributed practices in which learning and production intertwine in non-linear ways: laboratories, industrial districts, territorial networks, and collaborations among research, industry, and professional communities (Carini, Mazzucotelli Salice & Cornaggia, 2025; Franzo & Moradei, 2021).

In this direction, several contributions emphasize the role of situated learning and the urban and territorial dimension as a diffuse educational infrastructure (Faiferri, Bartocci & Pusceddu, 2017), while others propose a reconfiguration of industrial districts into more advanced forms, in which culture and manufacturing operate as interconnected systems (Sacco & Tavano Blessi, 2005). In the background, the notion of a learning economy has long highlighted how the competitive advantage of productive systems depends on the capacity to combine heterogeneous competences in environments that are not fully formalized, characterized by continuous learning and interaction among diverse actors (Lundvall & Johnson, 1994). Within this framework, informal education is understood here as a situated and hybrid learning regime in which sites of production and sites of education increasingly overlap. Laboratories, districts, research–industry collaborations, learning-by-doing practices, apprenticeship, and forms of work-integrated learning constitute operational educational infrastructures capable of responding to the growing technological, cultural, and organizational complexity of the fashion sector. This trajectory does not merely address a training deficit; it redefines the very conditions of knowledge production, recognizing value in experience, practice, and the relational dimension of learning. This interpretation emerges clearly from the analysis of the case studies of Lanificio Paoletti6 and ITS MITA Academy7, which represent two distinct yet complementary configurations of informal education. Lanificio Paoletti offers a paradigmatic example of how a production space

can be transformed into a learning environment. Alongside full-cycle production of yarns and fabrics in carded wool, the company has progressively integrated contemporary tools and languages while preserving traditional knowledges. As the interview indicated, starting in 2013 the mill began periodically opening its premises to the public through the initiative La Via della Lana, organizing guided tours, exhibitions, seminars, and educational activities involving designers, artisans, students, and local communities. In this context, the factory becomes a temporary incubator of knowledge, where production processes can be directly observed and collectively discussed. This openness aligns with a broader phenomenon observable in Italy: the reconfiguration of fashion production sites, often located in peripheral or district areas, as non-conventional learning environments (Franzo, 2022). These spaces host not only sector professionals but also citizens, tourists, and consumers, fostering greater awareness of the environmental, social, and cultural implications of fashion production.

The second case study, ITS MITA Academy, represents an institutional configuration of informal education. A foundation active in Tuscany in the field of higher technical education for the fashion sector, ITS MITA stands out for its active collaboration with the University of Florence, which has made it possible to combine a strongly professionalizing educational offer, designed to bridge the gap between formal schooling and the skills required by companies, with research and experimentation activities. Operating in a region historically devoted to textile and leather manufacturing, the institute has contributed to building an educational and productive ecosystem connecting upper-secondary schools, universities, companies, local authorities, and institutional stakeholders. The result is a region-wide distributed laboratory in which students, teachers, university researchers, professionals, and firms collaborate through experiential learning practices, interdisciplinary experimentation, and knowledge exchange. Students gain access to advanced technologies, explore themes related to sustainability, innovation, and circular design, and develop competences that are immediately transferable to the labour market. In this sense, ITS MITA acts as a catalyst for educational innovation, promoting active and contextualized pedagogical models capable of responding to

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6   Online interview conducted on April 1, 2025.
7   Online interview conducted on March 25, 2025.

the transformations currently reshaping the fashion system. Despite the differences in their configurations, both cases demonstrate the capacity to redefine roles and operational boundaries, functioning as dynamic platforms for learning. Rooted in strong technical know-how and in a structured relationship with the territory, Lanificio Paoletti and ITS MITA operate as *crafts of combination* (Lundvall & Johnson, 1994), spaces in which heterogeneous competences converge and are translated into forms of collective knowledge. From this perspective, Italian industrial districts, often described as being in productive decline, emerge as privileged contexts for experimenting with new educational pathways, transforming into advanced cultural hubs.

ANALYSIS AND CONCLUSIONS

Read separately, the three strands examined offer only partial responses to the transformations underway in the Italian fashion system: circularity tends to focus primarily on material dimensions and environmental metrics; the phygital tends to privilege the adoption of technologies and process optimization; informal education places the transmission and hybridization of knowledges at its center. The central issue that emerges from the research, however, concerns not only what changes, but which regimes of truth and which operational rationalities take hold when circularity, the phygital, and informal learning are named and activated as inevitable horizons of transformation. It is at this juncture that the RHITA research has made otherwise implicit connections legible, showing how the interdependence among the three trajectories takes on a structural character. The circular systems trajectory, when regenerated material re-enters the supply chain in a stable way, repeatedly encounters a recurring problem: matter requires a continuous informativity, understood as memory of the material, process history, end-of-life possibilities, and reuse potential, which it does not intrinsically possess. In this sense, the phygital trajectory becomes a necessary condition for making such information visible, stabilized, and transferable, transforming the tangible into a site of mediations that render it verifiable and legible. Informal education enters this relation as a condition of practicability and translation. Practices of regeneration, sorting, separation, quality verification, and the adoption of new procedures require situated competences that are often not fully codifiable and are learned and transmitted through practice. At the same time, the stabilization of phygital mediations requires operational data literacies, including reading indicators, filling in technical sheets, using standards, and ensuring interoperability, which can rarely be acquired exclusively through formal channels. Where the phygital tends to formalize and stabilize information, circularity demands ongoing work of material interpretation and operational adjustment. It is precisely at this threshold that a tension characteristic of Made in Italy becomes visible: what makes matter traceable and comparable, namely standards, informational schemas, and classifications, may come into friction with material variability and the heterogeneity of production contexts, especially where value has historically been tied to processes, competences, and knowledges that exceed full standardization. From this perspective, the three trajectories cannot be understood as a simple sum of circular practices, phygital tools, and informal education experiences, but as a continuous negotiation among evidentiary requirements, design mediations, and operational capacities.

Further evidence supporting this reading emerges from the lexical analysis of the interviews. Even in the absence of a single identical term running across all cases, a recurring core of words can be identified that cuts across multiple trajectories and signals a shared terrain of problematization: companies (Temera, ITS MITA, Lanificio Paoletti, DIFE, Beste), research (ITS MITA, Lanificio Paoletti, Beste), product (FutureClo, Lanificio Paoletti, DIFE), and world (FutureClo, ITS MITA, Lanificio Paoletti). This core can be interpreted as an index of the stabilization of a field of sayability (Foucault, 1969), within which the transformation of Made in Italy is articulated as an issue situated at the intersection of organization, competences, and materiality. Alongside this shared base, each trajectory produces specific lexical condensations. In the phygital, terms linked to technological mediation and physical–digital reconfiguration recur, with a more systemic lexicon in Temera (supply chain, market, luxury) and a more design-oriented one in FutureClo (digital, design, 3D, physical). In circular systems, by contrast, a vocabulary of material management and operational constraints becomes concentrated, in which the lemma waste runs through both Beste and DIFE together with terms such as management, rules, and technologies/solutions. In informal

education, finally, a lexicon of hybridization between enterprise, work, and training prevails, with bridging terms such as companies, research, training, process/production, and with a strong material anchoring in the Lanificio Paoletti case (wool, fabrics, product). Taken together, these recurrences and lexical differences reinforce the contribution's central hypothesis: the three trajectories do not operate additively, but through co-determination. They share a minimal lexicon that makes a common discussion of Made in Italy's transformation possible, while simultaneously producing specializations and misalignments that make visible the tensions through which RHITA attempts to render such transformations practicable, verifiable, and transferable. In this sense, the value of the proposed model lies not in defining closed solutions, but in making observable the material, informational, and educational conditions through which the Italian fashion system is redefining its horizons of the future. From this perspective, Made in Italy emerges neither as a heritage to be preserved nor as a model to be optimized, but as a system in continuous transformation, whose capacity for the future depends on the dynamic negotiation among matter, informational mediations, and situated learning practices.

ACKNOWLEDGMENTS

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