

RHITA GLOSSARY:

DESIGNING A LANGUAGE INFRASTRUCTURE FOR THE FUTURE OF FASHION

RAFFAELE LA MARCA

Università degli Studi della Campania
raffaele.lamarca@unicampania.it
Orcid 0009-0009-5181-5545

ANNARITA BIANCO

Università degli Studi della Campania
annarita.bianco@unicampania.it
Orcid 0000-0002-7400-4173

MICHELA MUSTO

Università degli Studi della Campania
michela.musto@unicampania.it
Orcid 0000-0003-0700-8024

Abstract

The contribution proposes the creation of a glossary that adopts a critical approach to questioning the role of the twin transitions — digital and green — in the Made in Italy fashion ecosystem. The aim is to build a dynamic semantic infrastructure capable of reducing terminological ambiguities, aligning heterogeneous actors, and making explicit the cultural implications of the socio-technical transformations currently underway. The identification of conceptual clusters was guided by a methodological approach that integrates desk research and qualitative document analysis, in line with the three areas of investigation of the RHITA project: the technological dimension, economic models, and human capital. The resulting lexicon represents a mediation between knowledge and needs, developed across heterogeneous contexts — universities, SMEs, artisans, designers, and government institutions — and guides both the architecture of the Web 3.0 platform and the co-design processes activated. The contribution highlights how the formalisation of a shared language, including within the field of design, can support collective sense-making practices, inter-actor coordination, and sustainable innovation, thereby configuring an interpretative framework that critically connects research and practice in the Italian fashion system.

Keywords: *Design Vocabulary, Fashion Ecosystems, Knowledge Infrastructures, AI-enabled Platforms, Fashion Value Chains*

INTRODUCTION: WHY A GLOSSARY FOR THE FUTURE OF FASHION PLATFORMS

Digital platforms have become key infrastructures in the contemporary fashion system. They operate as critical infrastructure, mediating knowledge, connecting actors, and deeply influencing how innovation, sustainability, and cultural heritage are perceived. However, the vocabulary used to describe these transformations is often unstable, generic or borrowed from other fields without critical adaptation. Terms such as innovation, digital, intelligence, or openness circulate widely, but their meanings vary by context, generating ambiguity rather than shared understanding. The RHITA Glossary addresses this need by

proposing a shared vocabulary that integrates technological transformation, cultural heritage, territorial specificity and human capital without simplifying or flattening the complexity of the phenomenon.

While words shape the way problems are framed, which actors are included and which futures become imaginable, language is treated as a matter of design in itself. From this perspective, the glossary cannot be conceived as a static vocabulary, but as a cognitive infrastructure that supports interpretation, dialogue and collaboration within the Italian fashion ecosystem. Each entry addresses concepts already active in contemporary debates, reformulating them through a design-oriented perspective. Meanings are understood as temporary

and evolving, and evaluated for their ability to guide reflection and action rather than prescribe solutions. In this way, the glossary is enriched through interdisciplinary collaboration, clarifies the project's epistemological positioning, and connects research and practice through definitions that are both theoretically grounded and accessible to designers, SMEs, artisans, and institutions. Conceived as a future-oriented compass, the glossary helps users navigate complexity and uncertainty without resorting to oversimplification. The proposed definitions not only clarify concepts, but also open up alternative scenarios for rethinking roles, relationships and responsibilities in contemporary fashion, strengthening the integration between academic research and strategic industrial practices. In this sense, RHITA becomes a conceptual and operational laboratory where language, knowledge and technology combine to design sustainable innovation.

METHODOLOGY

The development of the glossary was grounded in a methodology based on qualitative documentary analysis, oriented toward the critical reconstruction of emerging lexicons in the field of the socio-technical transformation processes shaping the fashion ecosystem. The glossary was developed as the outcome of a process of thematic coding and conceptual engineering aimed at constructing a semantic infrastructure capable of supporting processes of alignment and coordination, conceiving language as an active design variable in the redefinition of the interpretative and operational frameworks of the sector. The methodology responds to the need to elaborate a shared lexicon capable of functioning as a semantic interface among the different entities involved in the project. In a context characterized by high disciplinary and professional heterogeneity, terminological convergence becomes a preliminary and necessary condition for the activation of cooperative processes and for the construction of a common epistemic base.

This operational approach entailed a systematic desk research of primary academic sources, selected according to their theoretical and disciplinary relevance, with particular reference to scientific publications, monographs, and articles published in peer-reviewed journals in the fields of entrepreneurship, fashion studies, and technologies applied to fashion. The analysis adopted a critical-

interpretative stance, aimed at identifying recurring semantic structures, cultural inflections, and areas of lexical slippage that characterize the current transitional phase.

The conceptual clusters structuring the glossary were identified through the analysis of the three spheres into which the RHITA project is articulated: the technological dimension, relating to digital infrastructures, enabling technologies, and computational tools; the economic dimension, concerning business models, platform strategies, and value-generation processes; and the sphere of human capital and local culture, including skills, tacit knowledge, and territorial dynamics. The identification of these clusters derives from a process of thematic coding that highlighted the recurrence of semantic nuclei consistent with these three areas of project articulation. Within this corpus, particular attention was devoted to contributions addressing digital platforms and artificial intelligence systems, considered as operational infrastructures that redefine the modes of production, use, and validation of knowledge within the fashion sector.

The lexicon extracted from these sources was analysed in relation to the role of platforms as coordination devices and of AI as an interpretative mediation agent of the structural elements underpinning the architecture of the RHITA platform itself. The glossary thus configures itself as a situated linguistic infrastructure, designed to support a fashion ecosystem that seeks to rethink itself through a conscious reformulation of its interpretative categories.

GLOSSARY

AI-BASED INTERPRETIVE AGENT

In the RHITA project, the AI-based interpretive agent is conceived as an artificial intelligence device oriented towards interpretation and sense-making (Weick, 1995), understood as a process through which actors construct meaning from complex and constantly changing contexts. The agent does not operate on a predictive basis, but develops through situated and culturally mediated processes emerging from the interaction between heterogeneous data. In this sense, artificial intelligence is not intended to replace human judgment, but to support the construction of shared understanding within the system.

Integrated into RHITA's Web 3.0 platform, the agent takes the form of a digital Oracle, a cognitive intermediary that does not anticipate outcomes but facilitates the critical exploration of knowledge produced within the collaborative ecosystem of Made in Italy fashion. Its epistemic function lies in its ability to make the project's information heritage interrogable, fostering connections between data, experiences and practices that would otherwise remain fragmented. Emphasising understanding rather than optimisation, the interpretative agent operates according to a non-hierarchical logic, making visible latent relationships between territories, production chains, design practices and knowledge. The Oracle guides the user along open paths, suggesting to potential users — designers, SMEs, artisans, students and institutions — ways of reading and critically connecting case studies, without imposing opaque value criteria (Kaur et al., 2022).

This is a model of augmented intelligence, in which technology is designed to amplify the cognitive and interpretative abilities of people within complex socio-technical systems (Norman, 2013), allowing them to compare scenarios and develop greater awareness of their design and production choices. By enabling a situated exploration of shared knowledge, the AI-based interpretative system contributes to the construction of a dialogical and collaborative fashion network among users. Artificial intelligence is an infrastructural element for sustainable and inclusive innovation (Floridi, 2019) capable of supporting reflective and learning processes.

CULTURAL INTEROPERABILITY

Cultural interoperability refers to the ability to interact and collaborate effectively across different institutional and territorial contexts, without negating the cultural specificities that characterise each segment of the Made in Italy fashion supply chain. Unlike established concepts of interoperability, which have historically focused on technical compatibility and standardised data exchange, RHITA adopts a perspective that integrates social and epistemic dimensions. In this framework, collaboration does not depend exclusively on the alignment of systems but rather on the possibility of constructing shared meanings based on situated practices and different interpretive frameworks (Heath et al., 2002) Cultural interoperability recognises that knowledge

and production processes are deeply rooted in the contexts in which they emerge and develop. Consequently, cooperation requires mechanisms that mediate these differences, making them legible and negotiable.

Within the RHITA ecosystem, the Web 3.0 platform and the widespread Fashion Living Lab operate as relational infrastructures that support this mediation, fostering the encounter between local knowledge, specialist skills and shared strategic visions. Through these tools, cultural interoperability translates operationally into the possibility for SMEs, artisans, designers, and institutional stakeholders to co-design innovations while maintaining links to their own knowledge heritage. The sharing of practices, methodologies, and productive narratives occurs within learning networks reminiscent of the communities of practice described by Wenger (1998), in which knowledge develops through participation and collective experience. This structure enables the integration of artisanal tradition, local production, academic research, and technological experimentation into a dynamic and adaptive system. This approach also enables the scaling up of innovations developed at the interregional level, while maintaining the cultural identity of Made in Italy and building a collaborative value chain without standardisation, thereby strengthening the resilience of local supply chains in a global context (Manzini, 2015).

DIGITAL INCLUSIVITY

Digital inclusivity refers to the concrete possibility for all players in the fashion supply chain to engage with complex technological environments without these environments becoming factors of exclusion or implicit selection (Eubanks, 2018). Within the RHITA framework, this principle takes on structural relevance, as the project recognises that the digital transformation of Made in Italy cannot be considered just a technological process. On the contrary, the introduction of advanced technologies risks amplifying existing inequalities between actors with established resources and skills and more fragile entities, such as micro-enterprises and artisan workshops. For this reason, digital inclusivity is addressed as a design and cultural issue, rather than a technological one (van Dijk, 2020).

Within RHITA, the Web 3.0 platform is conceived as a mediation device that makes Access is not

intended as the simple availability of digital resources, but as the actual ability to understand them and integrate them into one's own production processes. In this sense, knowledge sharing takes place through collaborative methods that redistribute skills and capacities for action among the various actors, promoting more active and informed forms of participation (Benkler, 2006). This approach responds to findings in the literature on the relationship between SMEs and digital innovation, which identify a lack of skills, difficulty in interpreting the value of technologies, and a perception of uncertainty as key factors that exclude them from innovation processes (OECD, 2021).

Digital inclusiveness in RHITA, therefore, manifests as guided experimentation and peer comparison. From this perspective, digital inclusiveness is an enabling condition for a fair and sustainable transition. The actors in the supply chain are not reduced to the role of passive users of predefined solutions but become subjects capable of consciously orienting their technological choices in relation to common productive and social objectives. In line with European strategies for a fair digital transition, RHITA interprets digital inclusiveness as a necessary condition for innovation in the fashion sector to be lasting and truly shared.

DATA MINING MODELS

Within the RHITA project, data mining models refer to a set of analytical practices through which heterogeneous data are explored to reveal recurring relations, latent configurations, and patterns of meaning within the fashion system that would otherwise remain opaque to descriptive observation alone. The data involved extend beyond quantitative indicators and include qualitative, narrative, and contextual materials gathered through territorial mappings, interviews, living archives, Living Lab observations, and documentation of production practices. Their heterogeneity reflects the composite nature of fashion systems, where cultural, social, and technical dimensions are tightly entangled (Bowker & Star, 1999).

In RHITA, and particularly within the activities developed in M3, data mining supports the integration and modelling of data related to Italian fashion supply chains across different regions. The extracted relations function as interpretive

resources that help articulate connections between human capital, production practices, educational assets, technologies, and territorial conditions. Data extraction thus accompanies the construction of open and revisable interpretive frameworks. This approach is supported by STS perspectives that understand data infrastructures as situated and contingent arrangements, shaped by practices of use and interpretation (Granovetter, M. S., 1973). Analytical models help reveal recurrences and discontinuities across territories, surface latent connections between actors and practices, and inform matchmaking and co-design activities within the RHITA platform. Data mining operates as a sense-supporting technology, embedded in processes of collective interpretation and dialogue, contributing to rendering the complexity of the fashion system intelligible and sustaining a plural and situated understanding of Made in Italy fashion system (Suchman, 2007; Kitchin, 2014).

EMBODIED HERITAGE

Embodied heritage means that the fashion system's heritage is a dynamic form of knowledge, constantly renewed by practice and the lived experience of human capital. Sensitivity to the use of materials, technical skills, and cultural values is incorporated into manufacturing and everyday practices, transmitted through creation, teaching, and professional experience. This perspective aligns with approaches that define heritage as a cultural practice continuously produced and renewed through use and interpretation (Smith, 2007). Therefore, tangible and intangible evidence represent operational resources whose value is realised through use.

What Polanyi defines as *tacit knowledge* also plays a fundamental role in fashion production and design (Polanyi, 1966). Although this type of knowledge cannot be fully captured through documentary evidence (artefacts, drawings, production machinery) alone, its transmission is ensured by secondary and university education courses that facilitate its transfer from experts to younger generations. Embodied heritage, therefore, brings to the fore forms of expertise that are inseparable from their respective contexts of production (Haraway, 1988). In the context of RHITA, embodied heritage facilitates connections between generations, disciplines and local manufacturing traditions. Human capital mappings and their

audio testimonials allow historical know-how to inform contemporary design and manufacturing challenges, such as sustainability, circularity, and digital transformation, without reducing heritage to nostalgia or mere symbolic value.

The digital platform supports this process by expanding access and visibility; however, it is not intended to replace direct learning and engagement. Without these elements, heritage risks becoming decontextualised and inert. Embodied heritage is therefore based on relationships, mentorship and shared practice as essential conditions for the circulation of knowledge (Sennett, 2008). Considering heritage as embodied, RHITA frames preservation as an active, future-oriented process, supported by continuous use, transmission and transformation by individuals and practices.

EMERGING CONNECTION

Emerging connection refers to the formation of relational configurations within fashion ecosystems. The term highlights relational emergence as a design condition where connections are cultivated through shared practices and situated collaboration. Different actors, knowledge, materials, and technologies become part of one unique system, in which they are interconnected beyond their predefined roles. Within the project RHITA, these situated connections operate as a socio-technical infrastructure that facilitates the recombination of heterogeneous competencies. Designers, SMEs, artisans, researchers, and institutions encounter one another through platforms, living labs, and shared projects that allow latent complementarities to surface. Innovation is thus understood as a relational process, arising from interaction rather than from isolated actors or standalone technologies (Hargadon & Sutton, 1997). As these connections intensify, established separations between production, research and education begin to loosen. Cross-sectoral encounters introduce forms of relational proximity that resemble what Granovetter (1973) identifies as *weak ties*: relations that are neither fully stabilised nor marginal, yet capable of opening unexpected pathways for collaboration and knowledge circulation. In fashion ecosystems marked by fragmentation and asymmetry, such ties acquire strategic relevance through their generative uncertainty. RHITA frames emerging connection as an open and interpretive practice. The platform creates conditions for encounters

that users can negotiate and reinterpret over time. Matchmaking becomes a reflective process oriented toward possibility and mutual learning, supporting collaborative futures grounded in relational diversity rather than efficiency or scalability alone.

EUROPEAN NETWORKS

European networks, within the conceptual horizon of RHITA, take shape as relational spaces in which exchange precedes alignment. They operate through encounters among heterogeneous fashion, design and research ecosystems, enabling practices, tools and perspectives to move across territorial boundaries while remaining anchored to the contexts from which they emerge. What circulates is rarely a finished model; more often, it is a fragment of experience, a method, a way of framing a problem that becomes intelligible through comparison and translation. Such networks function as socio-cultural infrastructures that sustain learning and applied knowledge-sharing through participation. Knowledge develops in use, through exposure to other ways of organising production, research and design practice, and through the productive friction generated when these differences meet. This dynamic resonates with situated learning approaches, in which understanding grows within communities of practice rather than through abstract transfer (Lave & Wenger, 1991). European networks increasingly operate as operational environments in which shared research agendas, experimental programmes and collaborative projects are articulated across institutions and territories. Common research calls, transnational labs and thematic clusters enable issues such as sustainability, digital manufacturing and cultural heritage to be explored collectively, while remaining open to contextual variation (Callon, 1986).

For Italian fashion actors engaged in RHITA, participation in these networks opens a field of relation in which digital transformation and heritage are approached through confrontation with other European trajectories. Knowledge circulates as embodied experience and contextual judgement, shaped by local histories of making, but also through structured moments of comparison with enterprises, service providers and innovation hubs. European networks create occasions for encounter between SMEs, designers, researchers and industrial partners, allowing

affinities and complementarities to emerge through direct interaction rather than through formal classification, sustaining forms of connection that allow fashion ecosystems to remain open, porous and relational, without converging toward uniform trajectories.

HYBRID MANUFACTURING

The term Hybrid Manufacturing refers to production processes that integrate traditional craft manufacturing with advanced digital technologies, generating hybrid production systems in which human manual skills and technology coexist and mutually reinforce one another (Golsteijn et al., 2014). This notion reflects a design tension between preserving local knowledge rooted in territories and introducing innovative tools to expand the expressive and operational capabilities of micro and small fashion businesses (Bertola & Teunissen, 2018). The idea of “hybrid” should not be understood as a simple combination of heterogeneous techniques, but as a complex socio-technical configuration in which materials, processes, knowledge and digital technologies enter into a continuous and non-hierarchical dialogue. From this perspective, hybrid manufacturing fits within a paradigm of material-digital co-construction, in which design emerges from the interaction between embodied skills and computational systems.

In contrast to a techno-centric view of digital manufacturing, hybrid models challenge the notion that automation replaces human labour, proposing instead a blend of technologies within existing processes. The hybrid nature of manufacturing also implies a redefinition of design roles: the designer is no longer just a creator, but a facilitator of technical assemblies between analogue and digital inputs, and at the same time, the craftsman takes on the role of a disciplinary and cognitive node within an augmented production system, in which tacit knowledge – made up of gestures, timing and material resistance – becomes a critical resource for innovation (Sennett, 2008). In this sense, hybrid manufacturing is not only a technical-productive model but also a cultural and political device that redefines the value of making, time, and work within contemporary creative economies.

SENSE-MAKING

Sense-making unfolds as a situated practice through which complexity becomes intelligible by

tracing relations, recurrences and displacements across heterogeneous elements. Meaning takes form within action, as actors attend to signals, experiences and fragments of information while positioning themselves inside evolving socio-technical environments. Understanding grows through partial readings, pauses, and recalibrations, sedimenting over time through use rather than through abstraction or formalisation (Weick, 1995). Within the project RHITA, sense-making is woven into the very conditions through which knowledge is accessed and navigated. Data, case studies, technological options and territorial practices are encountered as constellations, whose significance emerges through juxtaposition and movement. Users advance by following resonances, inconsistencies and thresholds of relevance, allowing interpretation to proceed through exploration and proximity. Indeterminacy remains operative, sustaining attention and inquiry rather than requiring premature resolution.

As interpretive trajectories unfold, meaning is continuously negotiated in relation to prior experience, embodied expertise and situational concerns. This dynamic aligns with constructivist and communication-based approaches that frame understanding as an activity shaped by context, purpose and positionality (Dervin, 1998). Knowledge stabilises temporarily as working orientation, only to be re-opened when new relations or constraints intervene. Similar processes have been described within studies of organisational learning, where sense-making operates as an ongoing adjustment between expectation and experience (Argyris & Schön, 1978). In fashion ecosystems, where cultural values, economic pressures and technological choices intersect unevenly, sense-making supports forms of orientation attentive to specificity and change. Within RHITA, it enables reflective engagement with design and production decisions, allowing actors to situate their choices within broader relational fields. The platform developed within the project functions as a cognitive infrastructure that amplifies this interpretive capacity, sustaining meaning as something that emerges through relational engagement, comparison and situated judgement rather than through simplification or linear explanation.

INDUSTRIAL SYMBIOSIS

Industrial symbiosis is a complex, systemic form of collaboration in which industries from unrelated sectors operate as interconnected ecosystems rather than isolated supply chains. In the context of the fashion system, industrial symbiosis denotes a deliberate and cooperative approach to circular production, where companies, institutions, and users share materials, energy, water, by-products, knowledge, and infrastructure to co-create value and reduce systemic environmental impacts. These collaborations are primarily driven by the creation and circulation of shared knowledge within networks, which generate synergies, rather than by the mere exchange of physical resources (Lombardi & Laybourn, 2012). Consequently, material flows are facilitated by relational dynamics, trust, and collective learning, rather than by efficiency gains alone. While industrial symbiosis may benefit from geographical proximity and territorial embeddedness, such proximity is not essential; the critical factor is the ability to coordinate actors across organisational and sectoral boundaries.

The RHITA ecosystem promotes industrial symbiosis, facilitating cyclical resource flows where the waste and surplus of one industry become inputs for another. Within this context, improvements in eco-efficiency are viewed as a result of collaboration, rather than its primary goal. Furthermore, eco-innovation—which includes technological, organisational, and social aspects—acts as a critical enabler (Lombardi & Laybourn, 2012; Chertow, 2000; G.U., d.lgs. 152/2006, art. 184-bis). This approach signifies a transition from considering circularity as a mere guiding principle to implementing it as an operational practice. From a design and supply chain perspective, industrial symbiosis requires the deliberate design of products and processes for durability, disassembly, and component standardisation, thereby enabling reuse, remanufacturing, and the preservation of functional value prior to recycling (Sbordone et al., 2022). At the inter-firm level, this translates into closed-loop supply chains and symbiotic practices where waste and by-products are requalified as secondary raw materials, supported by traceability systems, technical specifications, and quality controls that minimise downcycling (Tonin, 2025).

OPEN-ENDED DESIGN

Open-ended design is a non-linear approach

to design that avoids defining objectives and final results in advance. Design is understood as an open process that can change direction in response to new knowledge, constraints, and relationships among the actors involved. This non-teleological approach considers uncertainty not as a problem to be solved, but as a proper condition for learning, adapting and changing. In this sense, design is framed as a generative practice embedded in the complexity of social, cultural and productive systems. Therefore, its value lies not in providing stable answers but in tracing connections and guiding action over time, outlining trajectories that allow projects to evolve as contexts and surrounding conditions change (Heskett, 2002); thus, decisions remain provisional rather than definitive (Schön, 1983). From a systemic perspective, open-ended design aligns with approaches that consider design as an enabling framework for social and cultural transformation. In this sense, rather than operating as an optimisation tool, design acts as a practice capable of navigating complexity, creating the conditions for different actors to participate, adapt and generate value over time (Manzini, 2015). RHITA adopts this approach to challenge static, linear models: rather than producing a single future, it supports multiple trajectories shaped by local constraints, cultural practices, and emerging forms of knowledge that cannot be fully anticipated (Escobar, 2018). Design becomes a way of dealing with complexity, enabling processes that remain sensitive to difference rather than closing it off. In practice, open-ended design shifts the designer's role from problem solver to facilitator. What is designed are not outcomes, but trajectories, structures, relationships, and processes that others can evolve, adapt, and extend over time, thereby allowing new solutions to emerge.

SITUATED AND OPEN KNOWLEDGE

Situated and open knowledge refers to ways of knowing that are made accessible yet remain rooted to the social, cultural, and territorial conditions in which they're created. This view challenges the idea of knowledge as universal, instead seeing it as a practice that's closely connected to the network of relationships in a specific context (Haraway, 1988). This approach, while considering the global context, avoids simplification and homogenisation and integrates the local and global dimensions. In the context of fashion and the RHITA project,

this includes craft traditions, the manufacturing skills of specific districts and educational contexts. These forms of knowledge are based on proximity to certain materials specific to places, supply chains and communities.

Openness does not indicate a loss of context, but rather the deliberate design of processes that allow knowledge to circulate beyond its original sphere without losing its specificity. It is therefore understood as an enabling condition for the exchange of knowledge, disciplines, and points of view, capable of generating new connections without flattening differences. Drawing on open design approaches, RHITA treats knowledge as an infrastructural resource composed not only of artefacts, but also of methods, decision-making processes and learning paths that can be shared, adapted and reactivated in different contexts (van Abel et al., 2011). This circulation is supported by communities of practice, where knowledge develops through participation and evolves as it moves across different and interconnected professional and educational environments (Wenger, 1998). Intergenerational exchange plays a central role in this process: mentoring, collaborative experimentation and education enable the transmission and transformation of experience-based knowledge over time, ensuring continuity while allowing for change. Against this backdrop, open and situated knowledge supports fashion ecosystems that can innovate without flattening aesthetics, traditions or meaning.

SLOW INNOVATION

Within the conceptual framework of RHITA, slow innovation defines an orientation towards change that recognises time as a structural variable of the project, necessary to accompany the transformation of fashion supply chains. It is an innovation paradigm that opposes the dominant logic of accelerated innovation, often oriented towards immediate scalability and short-term performance, and instead proposes an approach that values the complexity of processes and the sedimentation of knowledge. As Steen (2021) observes, innovation that ignores social and cultural dynamics risks producing technically efficient but fragile solutions that cannot be permanently integrated into existing systems.

In the field of design and fashion, slow innovation is part of a broader movement of sustainable design and slow design, which connects value

creation with ethical and sustainable practices (Fletcher, 2010). The principles of slow fashion, for example, emphasise an approach to fashion that reflects a slower pace of production and consumption, emphasising quality, durability, transparency and cultural significance over the speed of production typical of fast fashion (Clark, 2008). In this sense, slow innovation not only recognises the value of time in the creative and production processes, but also the need to deeply integrate social and environmental dimensions into innovation models and to reflectively evolve design practices. RHITA adopts this extended temporality as a condition for fostering progressive learning processes within micro and small enterprises. In line with Rosa's (2013) analysis, which highlights how systemic acceleration reduces individuals' capacity to assimilate change, the project favours paths that enable actors to develop stable skills and renegotiate established practices and new sensibilities. In this sense, slow innovation does not represent a renunciation of development, but a strategy to make innovation compatible with long-term sustainability and with the transmission of knowledge that constitutes the distinctive value of Made in Italy (Ingold, 2013).

CONCLUSIONS

The glossary, as a conceptual framework, served as a design tool to structure the architecture of the RHITA platform and to guide the organisation of its content, informing the selection, articulation, and interconnections of terms across heterogeneous fields. By taking language as infrastructure, each section becomes an operational translation of the conceptual categories developed in the lexicon. The one dedicated to Shaping Made in Italy, for example, visually represents the concepts of embodied heritage and situated, open knowledge within the national territory, highlighting how skills, production traditions, and educational pathways are rooted in local contexts while remaining capable of evolving along new trajectories. Discussions with companies, master craftsmen, designers, and curators enabled a sharper focus on the principles of slow innovation and industrial symbiosis, giving tangible form to emerging connections. Circularity, collaboration between businesses and universities, digitalisation, and regulatory redefinition thus emerge as relational nodes within a system in transformation. The projects, developed through a participatory,

design-driven approach, also operate within the framework of open-ended design, proposing experiments that connect heritage, technologies, hybrid manufacturing, and sustainability, thereby configuring the project as a process rather than a definitive outcome.

Finally, the Oracle conversational agent enables dialogical exploration of the content and extends and dynamises the platform's infrastructural function. The interaction goes beyond the mere gathering of information; it establishes connections between users' questions and the constellation of Italian fashion realities, activates sense-making processes, and ensures semantic consistency even in the personalisation of the experience.

Designing a lexicon constitutes a fundamental moment of reflection in defining shared futures. As Haraway reminds us, "it matters what stories make worlds, what worlds make stories" (2016, p. 12): words do not merely describe processes; they render them recognisable, legitimise their emergence, and guide their development. The glossary, therefore, stabilises a field of emerging meanings, enabling different actors (companies, artisans, institutions, researchers, designers) to converge without erasing their specificities, translating them instead into a shared design resource. The RHITA project experience emphasises that the sustainable transformation of the fashion system cannot be entrusted exclusively to technological tools or regulatory frameworks; it entails a cultural choice, within which the sharing of a common language constitutes a space for imagination and for envisioning the future of Made in Italy fashion.

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REFERENCES

- Argyris, C., & Schön, D. A. (1978). *Organizational learning: A theory of action perspective*. Addison-Wesley. <https://doi.org/10.2307/40183951>
- Benkler, Y. (2006). *The wealth of networks: How social production transforms markets and freedom*. Yale University Press.
- Bertola, P., & Teunissen, J. (2018). Fashion 4.0: Innovating fashion industry through digital transformation. *Research Journal of Textile and Apparel*, 22(4), 352–369. <https://doi.org/10.1108/RJTA-03-2018-0023>
- Bowker, G. C., & Star, S. L. (1999). *Sorting things out: Classification and its consequences*. MIT Press.
- Callon, M. (1986). Some elements of a sociology of translation. In J. Law (Ed.), *Power, action and belief*. Routledge.
- Calvert, S. (2011). *Knowledge infrastructures: Intellectual frameworks and research challenges*. Deep Blue.
- Chertow, M. R. (2000). Industrial symbiosis: Literature and taxonomy. *Annual Review of Energy and the Environment*, 25(1), 313–337.
- Clark, H. (2008). Slow + fashion—an oxymoron—or a promise for the future...? *Fashion Theory*, 12(4), 427–446. <https://doi.org/10.2752/175174108X346922>
- Decreto legislativo 3 aprile 2006, n. 152. (2006). *Norme in materia ambientale* (art. 184-bis). *Gazzetta Ufficiale della Repubblica Italiana*.
- Dervin, B. (1998). Sense-making theory and practice. *Journal of Communication*, 48(3), 36–50.
- Escobar, A. (2018). *Designs for the pluriverse: Radical interdependence, autonomy, and the making of worlds*. Duke University Press.
- Eubanks, V. (2018). *Automating inequality: How high-tech tools profile, police, and punish the poor*. St. Martin's Press.
- Fletcher, K. (2010). Slow fashion: An invitation for systems change. *Fashion Practice*, 2(2), 259–266. <https://doi.org/10.2752/175693810X12774625387594>
- Floridi, L. (2019). Establishing the rules for building trustworthy AI. *Nature Machine Intelligence*, 1(6), 261–262. <https://doi.org/10.1038/s42256-019-0055-y>
- Golsteijn, C., van den Hoven, E., Frohlich, D., & Sellen, A. (2014). Hybrid crafting: Towards an integrated practice of crafting with physical and digital components. *Personal and Ubiquitous Computing*, 18(3), 593–611. <https://doi.org/10.1007/s00779-013-0684-9>
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360–1380. <https://doi.org/10.1086/225469>
- Haraway, D. J. (1988). Situated knowledges: The science question in feminism and the privilege of partial perspective. *Feminist Studies*, 14(3), 575–599.
- Haraway, D. J. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.
- Hargadon, A., & Sutton, R. I. (1997). Technology brokering and innovation. *Administrative Science Quarterly*, 42(4), 716–749. <https://doi.org/10.2307/2393655>
- Heath, C., Luff, P., & Svensson, M. (2002). *Configuring awareness. Computer Supported Cooperative Work (CSCW)*, 11(3–4), 317–347. <https://doi.org/10.1023/A:1021247413718>
- Heskett, J. (2002). *Toothpicks and logos: Design in everyday life*. Oxford University Press.
- Ingold, T. (2013). *Making: Anthropology, archaeology, art and architecture*. Routledge.
- Kaur, H., Adar, E., Gilbert, E., & Lampe, C. (2022). Sensible AI: Re-imagining interpretability and explainability using sensemaking theory. In *Proceedings of the 2022 ACM Conference on Fairness, Accountability, and Transparency* (pp. 702–714).
- Kitchin, R. (2014). *The data revolution: Big data, open data,*

data infrastructures and their consequences. SAGE.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511815355>

Lombardi, D. R. & Laybourn, P. (2012). Redefining Industrial Symbiosis. *Journal of Industrial Ecology*, 16: 28–37. <https://doi.org/10.1111/j.1530-9290.2011.00444.x>

Manzini, E. (2015). *Design, when everybody designs: An introduction to design for social innovation*. MIT Press.

Norman, D. A. (2013). *The design of everyday things* (Revised and expanded ed.). Basic Books.

OECD. (2021). *The digital transformation of SMEs*. OECD Publishing. <https://doi.org/10.1787/bdb9256a-en>

Polanyi, M. (1966). *The tacit dimension*. Doubleday & Company.

Rosa, H. (2013). *Social acceleration: A new theory of modernity*. Columbia University Press.

Sbordone, M. A., Pizzicato, B., Montagna, G., & Seixas, S. (2022). Fashion confronting unrelated sectors: The ideal model of manufacturing symbiosis between industrial systems. *ModaPalavra e-periódico*, 15(35), 70–85. <https://doi.org/10.5965/1982615x15352022070>

Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.

Sennett, R. (2008). *The craftsman*. Yale University Press.

Smith, L. (2007). *Uses of heritage*. Routledge.

Steen, M. (2021). *Slow innovation: The need for reflexivity in responsible innovation (RI)*. *Journal of Responsible Innovation*, 8(2), 1–18. <https://doi.org/10.1080/23299460.2021.1904346>

Suchman, L. (2007). *Human-machine reconfigurations: Plans and situated actions*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511808418>

Tonin, S. (2025). Dalla teoria alla pratica: Operativizzare l'economia circolare attraverso l'ecologia industriale. In R. Fagnoni, P. Costa, & A. Vacanti (Eds.), *Ecosistemi materiali: Narrazioni e tecnologie per la circolarità nei sistemi produttivi locali*. Antefirma Edizioni. <https://doi.org/10.57623/979-12-5953-231-2>

van Abel, J., Evers, L., Klaassen, R., & Troxler, P. (2011). *Open Design Now*. Bas van Abel. <https://opendesignnow.org/>

van Dijk, J. (2020). *The digital divide*. Polity Press.

Weick, K. E. (1995). *Sensemaking in organizations*. SAGE Publications.

Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511803932>