

PARASULI PROJECT

UPCYCLING OF BEACH UMBRELLAS
FOR A SUSTAINABLE AND
PROSPEROUS FASHION.
HOW PROSPERITY-ORIENTED
THINKING REDEFINES FASHION
DESIGN THROUGH UPCYCLING AND
COMMUNITY COLLABORATION

MARIA CRISTINA FALSONE

Università della Campania "Luigi Vanvitelli"

mariacristina.falsone@unicampania.it

Orcid 0009-0002-6643-4963

Copyright: © Author(s). This is an open access, peer-reviewed article published by Firenze University Press and distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.
Data Availability Statement: All relevant data are within the paper and its Supporting Information files.
Competing Interests: The Author(s) declare(s) no conflict of interest

DOI: <https://doi.org/10.36253/fh-3171>

Abstract

The PARASULI project proposes an innovative redesign of beach umbrellas, transforming them into sustainable fashion products while integrating the concept of *prosperity thinking*. This holistic approach goes beyond traditional *design thinking*, embracing economic, social, and environmental dimensions to create an inclusive and sustainable future. *Prosperity thinking* redefines prosperity not merely as economic growth but as a balance between social well-being, environmental health, and respect for ecological limits. PARASULI applies these principles by transforming waste materials into unique garments through upcycling, promoting *zero-waste practices* and *circular economy*. The project's methodology is founded on the active involvement of the local community, not only in reclaiming materials but also in fostering a shared dialogue on sustainability and the cultural significance of the territory. An artisanal design approach was adopted, with local artisans playing a pivotal role in the production process. The garments were crafted using traditional techniques, ensuring both originality and high quality while reducing environmental impact through the use of recycled materials. A zero-waste philosophy guided the design process, repurposing surplus fabric to create modular accessories, such as detachable hoods. This project demonstrates the potential of fashion to go beyond profit to promote relational prosperity, redefining the interaction between design, economics, and community.

Keywords: *Upcycling, Independent fashion design, Relational prosperity, Interconnected future, Waste materials*

BACKGROUND AND THEORY UPCYCLING AND WASTE MATERIALS IN FASHION

Upcycling, unlike *recycling*, involves the creative transformation of waste materials into high-quality products without additional industrial processes (Early, 2015). The PARASULI project adopts this approach to repurpose discarded beach umbrella fabrics, extending their lifecycle (Fig. 01). Over the past decades, the textile waste crisis has emerged as one of the most pressing global environmental challenges. The fashion industry, with its fast consumption model and accelerated production cycles, annually contributes to a significant volume of textile waste. According to the 2017 report by the *Global Fashion Agenda* and the *Boston Consulting*

Group (BCG) *Pulse of the Fashion Industry Report*, it is estimated that approximately 92 million tons of textile waste are generated annually. This figure includes waste from production processes as well as discarded garments from consumers, often thrown away after minimal use. Contemporary designers are increasingly adopting upcycling techniques to transform discarded clothing and textile waste into high-quality new products, thus promoting a circular economy. This approach not only extends the useful life of materials but also fosters a cultural shift toward more conscious and responsible consumption models (Black, 2012). *Upcycling* enables the creation of unique and innovative products, stimulating designers' creativity while offering consumers items with added value—



Fig. 01

both aesthetic and ethical. This process serves not only as a practical response to the environmental challenges of the fashion industry but also as an opportunity to redefine concepts of luxury and sustainability within the sector. Creative processes play a critical role in the success of upcycling, as they require designers to overcome the 'waste' perception of materials and identify the intrinsic potential in each resource. This approach necessitates a combination of technical skills, imagination, and innovation, demonstrating how creative and innovative processes can convert discarded textiles into high-value products. Black's work (2012) underscores the importance of design not merely as an aesthetic medium but as a tool to promote sustainability and generate a positive impact on the environment and society. In an academic context, waste materials are defined as any substance or object discarded during production, consumption, or disposal processes that may still hold economic value or potential utility. Commonly studied waste materials include glass, plastic, metals, organic waste, and industrial byproducts. Research on these materials primarily focuses on recycling, reusing, or transforming them to reduce dependency on

virgin resources and limit landfill waste accumulation (Rissanen, 2016). *Upcycling* and *downcycling* represent two distinct approaches to waste material management. *Upcycling* involves converting waste into products of superior quality or new functionality, whereas *downcycling* entails recycling materials into lower-quality items. Both methods contribute to the circular economy, yet they differ in terms of long-term sustainability and environmental impact.

METHODOLOGY COMMUNITY ENGAGEMENT AND DESIGN METHODOLOGY

The PARASULI project was launched in November 2022 with a call to action directed at the non-profit organization Team *Spiagge Pulite*¹, which is committed to protecting local beaches in Agrigento, the project's place of origin (Fig. 02). The project operates on a local territorial scale, involving a collaborative network in a Sicilian area that allows the utilization of local skills and resources. This process highlighted the importance of collaboration in fashion projects. According to Kawamura (2006), fashion as a social process is not the result of a single individual's work but rather of a collective of people involved in its production. Collaborations can take various forms, including partnerships between designers, brands, artists, and even consumers, making them a crucial means for democratizing fashion. The collaborative nature of PARASULI materialized through partnerships with local artisans who contributed to the production of some collection pieces through tailoring processes; the active participation of users via social media, offering input and feedback at various project stages; the organization of an upcycling workshop in collaboration with the cultural and social association *Brualinu*² and a partnership with *Legambiente Sicilia* for the launch of a new circular economy initiative. The project was initiated as a way to promote collective environmental responsibility while supporting material collection efforts. After collection, the umbrellas are cleaned, dismantled, and assessed for quality and upcycling potential to create a collection of unique outerwear pieces, transforming discarded objects into sustainable fashion products. The methodology underlying the project is based on the idea of engaging the local community, not only to recover materials but

¹ Team Spiagge Pulite AMAgrigento, 2022, associazione nonprofit, Agrigento.

² BRUalinu. Benessere e Rigenerazione Urbana, 2023, progetto vincitore della 5. edizione del Premio Creative Living Lab, MIC.



Fig. 02

also to stimulate a collective reflection on sustainability and the value of the territory. The call invited actions on two levels: environmental protection through the recovery of discarded materials and the designer's contribution through the creation of a fashion product. Following the call, the designer was contacted by local participants who joined the initiative by contributing in various ways. Some provided the fabric from their own umbrellas, others raised awareness by actively participating in the search for discarded materials, and still others requested the customization of an outerwear garment. This initiative fostered participatory action, engaging the community in two key roles: as custodians of an environment to be protected and as contributors providing reusable materials for the creation of new design objects. This direct exchange established an authentic connection between the designer and the community, offering an opportunity for local empowerment. The project employed an artisanal design methodology: interactions with local artisans played a crucial role in the production phase. The garments were created using traditional artisanal techniques, ensuring high quality and originality while minimizing environmental impact

through the use of *recycled materials*. The designer's approach was oriented toward a zero-waste design methodology, utilizing surplus fabric to create interchangeable accessories, such as detachable hoods. From a single umbrella, one outerwear garment is created, and in 75% of cases, the surplus fabric is used to make an interchangeable hood. The rediscovery of artisanal and local values fits into a broader context of circular fashion, where material lifecycles are extended, and environmental impact is reduced. The design phase saw the development of a prototype for a men's *workwear-style jacket* (Fig. 03; Fig. 04). This model originated from the *Final Laboratory* of Fabio Quaranta in 2018 at the IUAV University of Venice and was later adapted to meet the practical and structural needs of umbrella coverings. The pattern was designed based on the shapes, weights, and densities of the available fabrics, creating a collection that represents not just a final product but also a visual and symbolic narrative connected to summer vacations, the recovery process, and the revitalization of materials that would otherwise have been discarded. This experience demonstrated how fashion can be a collective process where designers, artisans, consumers, and communities collaborate for a common cause. The methodology adopted—combining material recovery, artisanal production, and community collaboration—holds significant symbolic and practical value, offering a tangible alternative to traditional fashion through the creation of products that adhere to the principles of circular economy and environmental sustainability.

ROLE OF THE INDEPENDENT DESIGNER

THE INDEPENDENT DESIGNER AS AN AGENT OF CHANGE

Independent designers play a crucial role in fostering sustainable change, as they can experiment extensively with alternative techniques and materials. In the context of this project, reflecting on the role of the independent fashion designer—one that departs from the traditional notion—is essential. The designer is tasked not only with creating fashion pieces but also with working closely with the community and integrating ethical values into their practice. These reflections prompted the author to reconsider their role as a fashion designer and *to question the contribution a designer can make to a community*. To better understand this question, it is useful



Fig. 03



Fig. 04

to revisit the figure of the fashion designer, which was pivotal in its historical role up to the mid-20th century. As Kawamura (2006), notes the profession of a fashion designer, while not requiring specific qualifications or licenses, is deeply influenced by processes of legitimization and recognition within the fashion world. Today, the importance of a collaborative network surrounding the designer has grown considerably. The myth of the 'genius designer' working in isolation is being challenged. Contemporary reality demonstrates that a designer's success increasingly depends on their ability to navigate and manage the dynamics of a broad and complex circuit. Defining their role as a fashion designer was the first critical and challenging step in shaping the future perspective of the PARASULI project. In the chapter '*Hyper-local, Almost Global*' from the book *What If? Prove di Futuro Moda* (Vaccari et al., 2018), the role of fashion is explored in relation to provincial marginality, regarded as a new territory for creating authentic *Made in Italy*. Italy, with its network of provinces, represents a tangible, interconnected territory closely tied to artisanal knowledge. Guditta Tanzi was among the independent designers who participated in reflections during the *Fashion Futuring project* of 2020, led by Alessandra Vaccari. In 2019, Tanzi launched *Garbage Core*, a project that evolved from her thesis and which she decided to pursue as an independent initiative. The brand's concept centers on giving new life to second-hand garments through a design process that involves sourcing vintage clothing from markets and from the closets of friends and family, with a preference for *Made in Italy* pieces. Through moulage and deconstruction, she creates unique pieces that preserve traces of their previous wearers. The PARASULI project encourages reflections on new models of consumption and production. Though developed in a provincial context, it addresses a global issue. The project's vision is rooted in four key actions: *Research*, *Reactivate*, *Deconstruct*, and *Recompose*, with the aim of restoring value to what has lost it: giving new life to waste. The project seeks to reactivate synergies within a local territory and aligns with the concept of *placemaking*, as described by Namkyu Chun in their doctoral thesis *Rediscovering Fashion Designer* (2018). This idea involves creating, redefining, or enhancing a place through design and fashion by engaging people and local communities. This reflection begins by problema-

tizing a profession often reduced to aesthetic or commercial dimensions, instead highlighting the intellectual and design complexity that characterizes the work of fashion designers. Chun argues that the social contribution of fashion designers has become less clear in a fashion system dominated by profit and commodification. They particularly criticize the idea that fashion designers are merely creators of garments for mass consumption, emphasizing instead their potential as *placemakers*, or creators of spaces through their work (Chun, 2018). This horizontal perspective defines designers not as isolated figures producing for the market but as cultural actors who actively shape social reality through their work. Ezio Manzini, a pioneer in participatory design, underscores the importance of participation as a fundamental process for sustainability and collective learning (Manzini, 2003). Fashion designers, therefore, can play a crucial role in creating spaces that respond to social needs, emphasizing their potential contribution to community cohesion and participation. In this context, Alessandra Vaccari's reflections on *self-reliant fashion* are valuable. According to the author, self-reliant fashion is not just an act of self-production but a cultural movement that places the designer at the center as the sole author of the creative and production process, without intermediaries. Self-reliant fashion thus stands out for its strong value-driven approach, reflecting a commitment to a more equitable and sustainable production system (Vaccari, 2017). According to Kawamura, the fashion designer is a key player, though not the sole protagonist, in the fashion system. Their creative work is filtered and legitimized through a series of institutions and influential figures, including fashion magazines, influencers, and creative directors. These intermediaries help determine what is considered fashionable at any given moment, influencing the designer's stylistic decisions (Kawamura, 2006). Through their work, fashion designers convey symbolic messages, representations of identity, values, and beliefs. Their role, therefore, is to create not only physical products but also narratives that intersect with the social, political, and cultural issues of their time.

ANALYSIS AND DISCUSSION OF RESULTS

PROSPERITY THINKING AND ITS CONTRIBUTION TO DESIGN SUSTAINABILITY

Prosperity Thinking emerges as an evolution of *Design Thinking*, shifting from a purely human-centered approach to one that emphasizes environmental sustainability and social well-being. Unlike *Design Thinking*, which focuses on solving specific problems through creativity and empathy for the end user, *Prosperity Thinking* considers systemic impacts, including the planet as a key beneficiary of design practices. According to Tim Brown, *Design Thinking* fosters a culture of innovation and provides solutions that satisfy both user needs and business objectives (Brown, 2009). However, as Lucy Kimbell observes (Kimbell, 2011, pp.285-306), *Design Thinking* can become a superficial formula that fails to adequately address contextual specificities, risking an oversimplification of complex problems. This methodology often emphasizes immediate and local solutions without sufficient consideration of long-term effects and the resources required for effective implementation.

In response to these limitations, *Prosperity Thinking* evolves the concept of *Design Thinking* by integrating ecological sustainability and social well-being. This approach draws inspiration from Kate Raworth's Doughnut Model (Raworth, 2017), which defines a "green zone" of prosperity between a minimum threshold of social well-being and an upper ecological ceiling (Raworth, 2017). *Prosperity Thinking* adopts this model to outline guidelines for a design process that not only addresses human needs but also respects the ecological limits of the planet, aiming for a balance between social and environmental requirements. The contribution of *Prosperity Thinking* to sustainable design is evident in its holistic approach, which involves a range of stakeholders, including local communities, businesses, and designers, to generate solutions that do not compromise long-term sustainability. This approach, rooted in systemic innovation, has been explored in participatory design contexts, as seen in projects such as the *Future Food Institute and the Doughnut Economics Workshop*³. In parallel, circular fashion is a concept that extends the lifecycle of materials, challenging the traditional 'produce-use-dispose' model. PARASULI, which repurposes discarded beach umbrellas into durable jackets,

3 International Conference on Engineering Design (ICED21).

embodies the principles of circular economy and sustainable innovation. Circular fashion is one of the most tangible examples of applying *Design for Sustainability (DfS)*, which has evolved over the years to address environmental and social challenges. Initially, sustainability in design focused on product-based solutions, thanks to the pioneering contributions of figures like Victor Papanek and Buckminster Fuller. These pioneers introduced concepts of responsible and sustainable design, which have since evolved into more complex and systemic approaches. Over time, sustainable design has moved beyond individual products to include innovations at the level of complex systems, such as Product-Service Systems (PSS), Spatial-Social Innovations, and Socio-Technical Innovations, as described by Ceschin and Gaziulusoy (Ceschin & Gaziulusoy, 2016). Ezio Manzini developed the concept of Design for Sustainability, emphasizing the importance of participatory design that involves various social and technological actors. Design for Sustainability, therefore, represents a conceptual evolution that continues to develop in response to current environmental and social needs. Within the context of Design for Sustainability, the PARASULI project is a concrete example of applying circular economy principles to the fashion industry. By repurposing discarded umbrellas into durable jackets, PARASULI challenges the linear consumption model and promotes environmental awareness. PARASULI's approach goes beyond offering aesthetic solutions, aiming instead to educate consumers about a new model of responsible consumption, emphasizing the entire lifecycle of a product and the need to reduce ecological impact. In this context, Prosperity Thinking and Design for Sustainability intersect to promote an innovation model that not only meets human needs but also respects the planet's ecological limits, fostering sustainability and prosperity on a global scale. Circular fashion, as exemplified by PARASULI, becomes a catalyst for social and environmental change, pushing toward a more sustainable future not only in terms of design but also in consumer behavior and industrial dynamics.

CONCLUSION AND FUTURE PERSPECTIVES

THE CONTRIBUTION OF THE PARASULI PROJECT AND REDEFINING PROSPERITY THINKING

The PARASULI project is an emblematic example of applying *Prosperity Thinking and Design for Sustainability (DfS)* within the circular fashion sector. Based on a systemic approach, the project transcends traditional Design Thinking to adopt a holistic perspective that integrates economic, social, and environmental needs. In this context, PARASULI has transformed an environmental issue—disposing of discarded beach umbrellas—into an opportunity to create value through *upcycling* and *zero-waste practices*. Collaboration with nonprofit organizations, local communities, and independent artisans has been central to promoting a participatory design model, where the designer's role expands to include social mediation and collaborative network building. In line with Kate Raworth's *Doughnut Model*, this approach aims not only to reduce the environmental impact of the production cycle but also to redefine the concept of economic value, shifting the focus from profit to an idea of shared well-being. This process is not merely an aesthetic exercise but a strategy to foster greater environmental awareness and cultural change in consumption patterns. The involvement of communities and nonprofit organizations has been crucial in building a participatory network that reflects the principles of responsible and inclusive design, as emphasized by Ezio Manzini in his work on *participatory design*. Transforming waste into resources highlights how upcycling can contribute to a more resilient production system capable of balancing creativity, innovation, and sustainability (Manzini, 2003). However, the project also raises critical questions about the challenges of scalability and the long-term sustainability of such initiatives. While the artisanal approach ensures uniqueness and quality, it also imposes significant limitations on large-scale responsiveness, requiring a balance between exclusivity and widespread impact. Future perspectives for PARASULI necessitate further strategic development to consolidate the model and expand its reach. Firstly, it would be essential to broaden the network of partners to include private companies and educational institutions, strengthening the collection and transformation of materials while raising awareness among new audiences about the importance of sustain-

able design. Additionally, adopting innovative technologies to optimize upcycling processes could improve both the quality of regenerated materials and productivity, opening new market possibilities. However, to ensure the model's replicability and scalability, it would be crucial to develop a systematic framework that enables the project to adapt to different geographic and industrial contexts. The ability to measure the economic, social, and environmental impact of the initiative could attract external investment and foster the dissemination of similar practices. Finally, it remains essential to keep the relational dimension at the heart of the project, ensuring that expansion does not compromise the quality of interaction between designers, artisans, and communities. In this sense, PARASULI represents a living laboratory to explore the limits and potential of design as a tool for social transformation, paving the way for a future in which fashion and design are not just profit generators but also promoters of shared and sustainable prosperity. Overall, PARASULI invites a rethinking of the designer's role as an agent of change, capable of building not only objects but also relationships and systems that contribute to collective well-being and the preservation of the planet.

CAPTIONS

[Fig. 01] CANICATTIVA; PARASULI n°10; Editing and shooting by Giacomo Arrigo, Styling by Cristina Falsone, modelling by Paola Scordato; CANICATTIVA 2024. (2020-2024).

[Fig. 02] Cristina Falsone; Call to action per Team Spiagge Pulite, AMAGRIGENTO.

[Fig. 03] Cristina Falsone; Metodologia progettuale; CANICATTIVA 2023.

[Fig. 04] CANICATTIVA; PARASULI n° 8; Editing and shooting by Giacomo Arrigo, Styling by Cristina Falsone, modelling by Paola Scordato; CANICATTIVA 2024.

REFERENCES

Black, S., 2012. *The Sustainable Fashion Handbook*. Londra: Thames & Hudson.

Brown, T., 2009. *Change by Design: How Design Thinking Creates New Alternatives for Business and Society*. New York: Harper Business.

Ceschin, F., & Gaziulusoy, I. (2016). *Evolution of design for sustainability: From product design to design for system innovations and transitions*. Cham, Switzerland: Springer.

Chun, N. 2018. *Rediscovering fashion designers: Interweaving dressmaking and placemaking*. Helsinki: Unigrafia.

Earley, R., 2015. *Upcycling Textiles: Adding Value through Design*. Londra: Routledge.

Global Fashion Agenda, & The Boston Consulting Group., 2017. *Pulse of the fashion industry*. Global Fashion Agenda.

ICED, 2021. *Prosperity Thinking: Designing for human and*

planetary needs. *Proceedings of the International Conference on Engineering Design (ICED21)*, Gothenburg, Sweden, August 16-20, 2021.

Kawamura, Y., 2005. *La moda, Milano: Il Mulino*.

Kimbell, L., 2011. *Rethinking Design Thinking: Part I*. *Design and Culture*, 3(3), pp.285-306.

Manzini, E., (2003). *Design per la sostenibilità: Un approccio integrato*. Edizioni Ambiente.

Rissanen, T., 2016. *Zero Waste Fashion Design*. Londra: Bloomsbury Publishing.

Vaccari, A. e Franzo, P., 2018. *What If? Prove di futuro moda*. Milano: Edizioni Clima.

Vaccari, A., 2012. *La moda nei discorsi dei designer*, Bologna: CLUEB.