

# Upcycling as a Tool for Participatory Critical Reflection



Lucia López Rodríguez

**Abstract** In recent years, there has been an increase in the integration of upcycling as a strategy to minimize the volume of textile solid waste, which has motivated alternative ways of producing clothing, as well as new business models. Although the common factor of this type of undertaking is the approach to upcycling as a technique of remanufacturing garments, many of these proposals take it as a mean of critical reflection towards the contemporary ways of making and consuming fashion. In this way, the simple production and sale of garments ceases to be the central activity and other actions such as co-design, open source platforms, user participation in production processes and critical reflection of the structures of fashion, become part of the main purpose. This chapter presents three cases of clothing upcycling ventures in Latin America (12NA in Chile, COMAS in Brazil and Estampa Crítica #TEXTOURGENTE in Uruguay), which works through the intersection of design, art, social projects and education. In all three cases, user participation in garment making is nodular, generating critical audiences that detach from the passive role of the postmodern consumer. In this type of projects, the integration of the local community becomes relevant and technical knowledge is not exclusive property of the designer or the brand. Instead, what is relevant, is the dissemination of tools that contribute to collective awareness and the reduction of the environmental impact associated with the fashion industry.

**Keywords** Upcycling · Textile Waste · Participatory Fashion Practices

## 1 Upcycling as a Waste Minimization Strategy

The dominant business model in the fashion system is characterized by the constant and massive production of garments, which leads to over-consumption and its consequent generation of waste [1]. To address the environmental impact related to the

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L. López Rodríguez (✉)

Escuela Universitaria Centro de Diseño, Facultad de Arquitectura, Diseño y Urbanismo  
Montevideo, Montevideo, Uruguay  
e-mail: [lucialopez@fadu.edu.uy](mailto:lucialopez@fadu.edu.uy)

volume of discarded clothing (pre or post-consumer), the industry has adopted different strategies based on the waste hierarchy, which was popularized in the late eighties and prioritizes waste prevention, minimization, reuse, recycling, and finally, as last resort, land filling [2]. Although it is globally recognized that preventive actions precede other alternatives such as reuse, remanufacturing or recycling, it is the latter that have had a greater implementation, especially recycling. Within the reuse strategies, upcycling has gained approval in recent years, especially in small-scale business and fashion projects, avoiding the consumption of new materials and the use of resources associated with textile finishes. Since the introduction of Upcycling as a concept in the nineties by Reiner Pliz, its use has been expanded and extended beyond the recycling of materials. At present, said term embraces different ways of transforming waste into new products of higher value. In the case of fashion upcycling, the textile material may come from cutting waste, end of rolls, other post-industrial textile waste, or discarded clothing, either pre or post-consumer. The cases that are presented in this chapter, show different examples of clothing upcycling, transforming fashion waste into new garments.

## 2 Upcycling as a Resistance Movement

Integrating reuse, remanufacturing or recycling strategies is crucial to minimize the global impact of fashion. However, because the technological processes and technical tools respond to the ideological system in which they are embedded, the mere incorporation of them is not enough to generate a paradigm shift. The search of a more sustainable future implies rethinking our modes of production and consumption, resisting and de-structuring the linear logic of “take, make and dispose” and incorporating new ways of making fashion based on a global systemic vision [17]. Among the many options that seek to tackle current socio-environmental problems are Slow Fashion, Circular Fashion, Green Fashion, Eco Fashion, Ethical Fashion, and others. If we look at the wide range of initiatives that pursue sustainability, we find that many of them share a holistic awareness of the environment, considering its ecological, social, cultural, political and economic dimensions. This multidimensional perception, allows different practices such as art, design, education, politics and science to merge, and, on the other hand, allows to emerge new concepts that were not previously attached to fashion, such as participation, community, activism and empowerment.

It is in these settings, in which the actors of the fashion universe begin to question: How could fashion practices define our living? From which platforms should we start to act for a deeper and rhizomatic transformation? The systemic vision of the world, spread by Lynn Margulis [3] and later by William McDonough [17] in the design field, allowed us to visualize ourselves as part of an interconnected whole, a global unit where the part affects the whole. This theory, in which organisms coexist in a balanced interdependence, has led many designers and other actors to question the environmental impacts caused by over-consumption and the disconnection of the

fashion system. Therefore, the upcycling movement, which gains wider visibility each year, not only addresses the environmental problem of fashion from its ecological dimension, but also does so with a strong emphasis on the social, cultural and political dimensions.

This type of upcycling (which I will refer to as *participatory upcycling*), expands beyond its technical nature, embracing other practices of political, educational and reflective nature. As seen in many of the projects and business ventures in Latin America, although the reduction of the volume of textile waste through upcycling is part of its core activities, this is not the central one. There seems to be a clear interest in disseminating values associated with sustainability and conscious consumption, as well as in making the upcycling technique accessible. This dissemination is pertinent, considering the fact that the great impact of fashion is relative to its large scale, consequence of the massive consumption of products. Due to this, in order to achieve a positive impact, it would be necessary that as many actors (including consumers) as possible to become participants and become involved in the cause, transforming upcycling into a tool for participatory critical reflection. To accomplish this goal, different enterprises and fashion brands are implementing workshops, courses, educational projects, co-organizing activist actions, and generating synergies through collaboration with external actors such as suppliers, NGOs, foundations and other public and private institutions.

In this sense, taking as reference the ideas of the artist and educator Joseph Beuys, fashion could act as a catalyst for social change [4]. This would imply an important shift in the role of fashion brands, designers, manufacturers, consumers and fashion itself. It would imply taking an activist and formative position, a position of active exchange, where fashion values acquire a more humane character, defined by the contemplation of those who make it, as well as those who wear it. As the author Otto Von Busch [5] states “We can use fashion as a workshop for collective enablement where a community shares their methods and experiences. Liberating one part of fashion from the phenomenon of dictations and anxiety to become instead a collective experience of empowerment through engaged craft.”

Having mentioned the above, we can say that *participatory upcycling* is characterized by using the teaching of upcycling as a means for collective critical reflection on contemporary ways of making and consuming fashion. This requires, on the one hand, reaffirming the participatory nature of fashion practices and, on the other hand, conceiving garments as a political object. Participatory instances are necessary to define the political sense of fashion, since it is not possible to let go of the social responsibility attached to our work [6]. The simple fact of rethinking and resignifying an object devoid of meaning (waste) through upcycling, allows us to reflect on the value system and the hidden externalities of conventional fashion. In regard to this point, the case examples addressed in this text recognize that clothing must act as a bearer of social values, and therefore each garment becomes the materialization of the human interactions and processes behind it. This means that the value of the garment will be, not in its materiality or in the status it represents, but in the care of the processes and the people who created it [7]. Hence, in *participatory upcycling* the value of clothing is widened; the global network that involves the creation of a

garment and its perceived obsolescence becomes a topic of discussion. Aspects such as how it was made, who made it, where and why it would be necessary to remanufacture it, become relevant. Each garment is seen as a set of human decisions and recognizing that human dimension acknowledges “the agency of all people involved, doing justice to their active role of engagement and capacity to act” [8].

### 3 Participatory Processes in the Field of Fashion

In recent years, a greater involvement of users (or other actors) in production processes has been observed. Under a broad perspective, we can consider as *participatory practices* those that somehow involve external actors in the production, creation and/or design of a product life cycle. The type of participation can be specific, such as in mass customization where the user selects a characteristic of the product (color, texture, etc.), or it can involve more complex and profound actions such as co-creation or co-design workshops, in which the participants jointly develop products, services and experiences.

Although user participation in design processes has been widely used as a marketing strategy to strengthen ties between the consumer and the brand [9], this study focuses on cases where participation requires a deeper involvement and a critical reflection of contemporary production and consumption models. The authors López-Navarro and Lozano-Gómez [1], affirm that the most reflective participatory processes act as enhancers of value “favouring sustainability and meeting individual human needs rather than market demands. This approach seeks to integrate consumers into the value creation chain, in an effort to forge emotional involvement with the brand’s philosophy of sustainability beyond the act of consumption. Thus, it stimulates users’ personal involvement in generating satisfaction, breaking the cycle of passive acquisition of clothing and creating garments that are meaningful to the user.”

#### 3.1 Beyond Materiality

In the late twentieth century the practice of design began to change, going beyond the creation of things and expanding to design experiences, services and processes [10]. In the three cases of participatory upcycling present in this chapter, the results do not focus only on the transmission of technical knowledge or on the final product, but on the mobilizations that are generated through the human exchange and on the future ability of the participant to transform what has been learned and reproduce it in their daily lives. In this type of process, the quality of the experience depends on the impact generated through the interaction between the different agents, and on the stimulation of the individual, both cognitively and emotionally [9]. For this reason, it is important that the contents shared in the workshops could be able to juxtaposed

with the participants' emotional, social, and environmental interests. In this way, what has been learned is stored in memory, creating a value that can be transmitted through other future experiences. Translating Borriaud's ideas into fashion, it could be said that in *participatory upcycling* the essence of fashion practice would lie in the relationships between subjects and their environment, and the work of each individual or collective would become, "a bundle of relations with the world, that in turn, would generate other relationships, and thus to infinity." [11].

### ***3.2 New Role for Consumers, Designers and Producers***

In participatory fashion and processes, the user performs an active role, breaking the "one-way information flow from designer to consumer" [6] of conventional fashion, in which the consumer has almost no intervention on what is consumed. The user is transformed into what Fletcher [6] calls the *user-maker*, a connected and engaged individual, capable of driving social change. Just as Joseph Beuys [4] stated that we are all artists, we could say that participatory design is based on the idea that we can all be designers, recognizing the potential of each individual and creating initiatives that involve a wide range of members of the community.

In addition to this, this exchange also generates a new role for the designer or producer, since to his/her creative role is added the role of facilitator in order to arrange the joints for a mutual exchange and collaborative learning space. The designer ceases to be the central figure that makes the decisions and becomes "... an orchestrator and facilitator, ...an agent of collaborative change. It is not the divine creator of the original and new, but a negotiator, questioning and developing design as a skill and practical production utility" [5]. By displacing the figure of the designer as a generator of objects, towards a role of producer of situations, we can once again find a parallelism between fashion and art, remarking the art displacements in the twentieth century when merging the artist work and social practice. As art critic Claire Bishop [12] said: "... the artist is conceived less as an individual producer of discrete objects than as a collaborator and producer of situations; the work of art as a finite, portable commodifiable product is reconceived as an ongoing or long-term project with an unclear beginning and end."

### ***3.3 Education and Game-Like Tools***

To improve participation, it is helpful to approach educational strategies. Numerous pedagogical tools are practical resources to exchange experiences and knowledge and facilitate collective creation. Whether in an upcycling workshop or in another similar activity, play is one of the best strategies to maintain a fluid involvement and strengthen the bond between the different actors. Trough tactic games, becomes easier

to introduce technical design tools, and as a result, learning emerges [13, 14]. Game-like tools facilitate active participation, expanding the possibilities of creativity. It also diminishes the tensions that ignoring certain technique aspects could produce on individuals. Dissolving hierarchical structures in this type of process is important so that participants feel comfortable and creativity emerges without hindrance. For this, exploratory stages are necessary, because it is in these where each participant feels that their contributions are both free and relevant, and that the final products will be the result of the evolution of collective contribution. Free exploration, deconstruction, and role play are some of the tactics used in upcycling workshops so that through the game, participants surrender to the experience [13].

### 3.4 *Sharing Knowledge*

As we know, fashion brands and designers have always been very reserved about sharing the know-how of their production processes. However, participatory practices imply, to a certain extent, the liberation of the knowledge acquired over the years, since the very purpose of disseminating upcycling as a practice requires it. Although this may not be an easy task for many designers, sharing knowledge, as well as collaboration, allows for instances of exchange and mutual growth. In the three cases of *participatory upcycling* presented in this chapter, it is observed a critical position towards exclusive knowledge and exclusion as a mode of distinction in fashion. In many cases, information is shared through workshops and web platforms, opening up possibilities for expansion and globalizing audiences. In order to make learning easier, many designers have chosen to create open source pilots, a kind of step-by-step guide to remanufacture garments. One of the most noteworthy references, is the work of fashion designer and researcher Otto Von Busch, who created a web platform with free access to numerous remanufacturing methods. His project, “The ReForm manuals” is part of what he calls the “recyclopedia”, a compilation of “cookbooks” for remanufacturing. These technical guides, called “manuals” by Von Busch or “recipes” by Agustina Comas, are also shared with users in face-to-face workshops. This instances allows technical knowledge to be easily shareable, but also intervened by the workshop participants. This is one of the most interesting points since it allows a round-trip exchange: the information is offered by an original source (ex: the designer), then it is processed by the users, who appropriate it and transform it, to later nurture the creativity of the original source. The design process is enriched and invigorated through this dialogue. Sharing knowledge also opens up a range of possibilities to generate synergies and collaborations with other actors and stakeholders, such as government entities, educational institutions, manufacturers, other public or private organizations, and even other fashion brands or projects.

## 4 Upcycling Aesthetics: An Aesthetic of Contents

Garment aesthetics is a necessary quality to seduce users as it acts as a “social attractor” [6]. At the same time, defining it carefully is key to intelligently materializing the message that we want to transmit. Therefore, the essence of the values contained in the textile object is reflected through the aesthetics that we build. But, what code determines the aesthetics of these type of projects? Is there a common factor? Possibly, to answer these questions a more exhaustive investigation needs to be made, finding clues in the texts of Nicolás Borriaud [11] in which he refers to *Relational Aesthetics*, such as that aesthetic that takes as its basis “the sphere of human interrelationships and their social context, more than the affirmation of an autonomous and private symbolic space”. However, at first glance, it is observable that the aesthetics of some upcycling ventures, beyond the imprint of each designer, responds to the technical characteristics of the construction methods and the inherent values of the upcycling movement.

### 4.1 *The Details of Discarded Garments as an Aesthetic Resource*

There are several ways of remanufacturing or upcycling garments, but all of them face the same challenge: how to work with the material optimizing production scheduling. There are very few cases in which it is chosen to unstitch the garment pieces because the labor time it takes increases the costs. One way to solve this is to keep the original seams, enhancing and using them as visual components in the new garment. For the same reason, it is proposed to preserve the trimmings (buttons, zippers, brooches, etc.) and other textile finishes. This way of taking advantage of the material, while maintaining some of the characteristics (details) of the original garments, helps to reduce the environmental and economic impact of garment production (Fletcher 2014). But beyond this, another significant reason to keep these details is the symbolic value that they carry. In some way, by conserving them, the persons who made them are present in the new upcycled garment. By maintaining these constructive vestiges, the reminiscence of the work already done, stored in the memory of seams and finishes, is displayed. Maintaining these characteristics in upcycling processes becomes a way to value the work done by others, enhance it and appreciate it as a generator of value. It is to make a hidden treasure that was discarded visible again, rejecting the fast fashion dictum that conceives garments as disposable objects of no value. In this way, preserving the details of the garments used as material input engenders an aesthetic language that helps to identify upcycled garments per se.

## 4.2 *Quality*

Just as upcycling seeks to reduce the flow of textile waste through remanufacturing, another equally important objective is to generate high-quality garments so that they can be used as long as possible. For this to be possible, it is necessary to select clothing of good quality finishes and materials. However, while garments sold by upcycling brands usually have an excellent technical quality, those made in participatory workshops does not have to aim at the same level of demand. In the workshops, the quality of the garment is partially displaced in favor of educational and learning processes. The fact of making, being an active part of the production and reflecting on one's fashion practices are the main objective. In addition to this, the involvement of the user in manufacturing could make him/her aware of the time and technical knowledge that a garment requires to be made, valuing the labor and human time dedicated to its creation.

## 4.3 *Less But Long-Lasting*

The materials used in upcycling are very heterogeneous since the flaws of the clothing used as raw material may vary widely. To find the best way to take advantage of materials, designers spend a lot of time exploring different typologies. This extensive labor time is one of the main barriers to mass production of upcycled garments, so upcycling brands are characterized by having small collections, integrated by a few models and reduced quantities of each. Many times, the model can be repeated but the result may be still a unique piece since the original garments have different characteristics, such as color, or fabric patterns. In the cases presented below, aesthetic obsolescence and constant product variation is rejected, and therefore the garments do not lose value after one season. These business models respond to the paused times of slow fashion, in which the proposal is that consumers do not have several models of each garment, but few garments that are treasured. In these systems quality prevails over quantity.

## 5 **Participatory Fashion Upcycling: Cases in Latin America**

Below are three cases of entrepreneurial designers from Chile, Brazil and Uruguay that work with upcycling as a tool for participatory critical reflection. Although the three examples share in common the previously mentioned *participatory upcycling* characteristics, each one addresses them from their particularities. The information presented here was obtained in the last two years, through interviews, dialogues and the author's personal experience in the respective workshops of each case.



**CASE I: 12NA Docena.**


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 Headquarters: Valparaíso—Chile
 

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 Materials: Post-consumer garments
 

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 Upcycled garments: >10.000
 

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 Working since: 2004
 

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**Description:** 12NA is a textile upcycling platform created by Mercedes Martínez (AR) and Mariano Breccia (AR). Their work covers different areas, like production of garments and accessories, co-creation educational workshops, production of artistic events and upcycling consulting services for other companies and institutions. Their work seeks to create interest in reflecting on ways of doing things. They also have been working for the last 5 years to make upcycling a movement, specially in Latin America. To achieve this, in addition to the activities they carry out, they have developed a community web and offer a residency program for artists and designers with an interest in textile recycling and sustainable development. 12NA's work is focused on the community, so most of their activities are open to the public, involving different audiences from the region. Local identity is a deeply worked concept that can be seen in products such as *Punchaw*, a remanufacturing method created from the basic structure of the *poncho*, a typical South American garment. Their apprehension for the local values is also seen in the vocabulary they use; although they sell their collections world widely, they are one of the few cases that use the word *upcycling* translated into Spanish (*supra-reciclaje*).

**Why participatory processes and critical reflection:** For Martínez y Breccia, the incorporation of co-creation workshops occurred naturally from the birth of the brand. They believed that it was essential to be able to share their knowledge with other people, so that together they could reflect on how the ways of dressing and consuming fashion affect our society. Martínez reaffirms the importance of “opening processes to new generations, because we are committed to expanding change. For us, education is a commitment and activism is a mission of social transformation”. Today, the 12NA collective does not conceive design as an exercise that is practiced alone. Each of their designs is the sum of accumulated collective experiences, faced in the workshops, residences and other activities: “design is collaboration, you never work alone”.

**Shared knowledge:** The exercise of sharing methods and work and “letting the ideas go” has become important for the growth of the brand. The designers believe that it is vital to return to collaborative work and re-learn how to co-create in order to challenge yourself as a designer and as a human being. For them, losing the fear of not being in control “is a difficult exercise, but once one you learn to get away from the ego and indulge in the process, the result is always surprising.” In recent years, designs such as *Punchaw* and *Bolso Origami* have been reinterpreted and appropriated by several designers in the region, and these pieces have become successful garments in their collections. Another objective of the brand, is to recover

other ancestral ways of production, in which authorship was not a notable component but rather that knowledge was shared among the community, and the competition did not exist as we know it today. These type of collaborations are promoted through Community events organized by 12NA (such as the Circular festival in Chile) and the [suprarecycling.org](http://suprarecycling.org), a web platform that aims to network all upcyclers in Latin America.

**Game-like tools as a strategy:** Games are always present in 12NA workshops, from dice games to dynamics that remind us of a dance round, or trying a thousand ways to put on a garment. For them, the game allows us to relax and let emotions flow, allowing us to “learn from emotion”. According to Breccia, playful activities, are the most effective way of integrating knowledge, since it invites us to surprise and to see elements of our daily life from a different perspective. Since their inception, they have kept in mind that the enjoyment of activities minimizes prejudices and stimulates the creativity of the participants. One of their first projects was *Deconstructjoy*, a series of clothing remanufacturing videos in which the deconstruction process is an “eternal exploration game that offers infinite possibilities” (Fig. 1).

**Upcycling aesthetics:** The selection of products for the brand’s collection implies a careful selection of vintage or other high-quality post-consumer clothing. The quality of the original materials, both of the fabrics and the clothing, is essential to be able to create products (or pieces, as they called them) of high value and long durability. In 12NA the details of the garments are kept in the produced pieces, cutting the garments in strategic places to preserve original visible seams, prints or trimmings. It is because of this, that they do not unstitch the garments, as Martínez mentions, their tool is the scissors and not the seam ripper. Their work process seeks to “rescue the *ki* of garments”, since they consider that the original garments have an energy



Fig. 1 Workshop “Para que usarías una máscara”. Festival Circular, Chile, 2019

and value that deserves to be enhanced and recovered. In this way, 12NA's garments are loaded with details, different patterns and multiple textures from the original materials. In its pieces, parts of sportswear coexist with pieces of suits, generating an urban and unique proposal that differentiates them. Since they work with limited stocks, although the designs can be repeated, each piece is unique and eclectic. Scale production is a challenge for the brand, and to be able to do it many times they must accumulate similar garments for long periods, months or even years, to be able to make only dozens of the same design (Figs. 2 and 3).

## CASE II: COMAS.

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Headquarters: São Paulo—Brazil

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Materials: Pre-consumer garments

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Upcycled garments: >3.000

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Working since: 2008 (In-Use / Previous brand), 2015 (COMAS)

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**Fig. 2** *Punchaw* garment: Traditional local textile + leather jacket



**Fig. 3** *Punchaw* garment: Traditional local textile + sportswear garment

**Description:** COMAS was created by the fashion designer Agustina Comas (UY), based on her concern about the enormous number of pre-consumer garments that were discarded annually in Brazil. The brand works mainly with men's shirts that are rejected by local factories due to defects such as flaws, stains, fitting problems, among others. For the designer, these garments are not waste but high-value resources, since the fabrics and clothing are of high quality. Although the remanufacturing of garments is one of the main objectives of the brand, the diffusion of upcycling as a movement and the creation of awareness are just as important. The brand, in addition to selling its collections, offers upcycling educational workshops and training and consulting services to companies that want to incorporate remanufacturing into their production systems.

**Why participatory processes and critical reflection:** Prior to the creation of her brand, Comas began to give workshops in order to bring participants closer to the environmental problems caused by deadstock clothing in Brazil, and to share different methods and approaches to upcycling. According to the designer, participatory processes are part of the essence of her entrepreneurship, since the workshops generate "a virtuous cycle of exchange, a source of creative energy that allows the revival of garments that were previously devoid of meaning." From collaborative work, new ideas are generated and that permit us to get out of the limitations of

individual knowledge to generate something new, which will then be processed and transformed later by the participant, and also by the brand team. Hence, the fruit is the method, the exchange, and the things learned, and clothing are the materialization of all these processes. Beyond workshops designed for the general public, COMAS works collaboratively with other brands, textile factories and manufacturing workshops to facilitate the incorporation of upcycling on a large scale for other companies. It has also articulated production centers with seamstresses from different communities, with the aim of enhancing collective learning and the projection of micro-enterprises.

**Shared knowledge:** In order to systematize and accurately scale the upcycling of garments, the COMAS team created the *Upcycling de Raíz* (Upcycling of Root) method, a set of steps and tools that enable garments to be quickly and easily transformed into new products. In each workshop, along with this method, different “recipes” that guide the participants in the step-by-step process of making garments, are presented. But the most interesting aspect is that the recipes themselves act as a starting point for users to reconfigure and modify them, obtaining new results. Being able to open and release knowledge is an exercise that is also nutritious for Comas, and as she mentions: “it is crucial to learn how to release what you think is your own, because actually, it is not. We have been taught to be selfish and to believe that ideas should not be communicated because they could be copied, but we must understand that each designer was formed by taking and transforming things from others. The feedback that is collectively obtained from the workshops is the richest and we must continue in that direction”.

**Game-like tools as a strategy:** In COMAS workshops, games are used as an instrument to unleash creativity. Game-like tools are part of the first two steps of the *Upcycling de Raíz* method, and those steps are: *Pensar con el Cuerpo* (Thinking with the Body) and *Gimnasia Cerebral* (Brain Gymnastics). These games consist of taking a garment and exploring all its possibilities to find new functions, that is, to question: what happens if the sleeves are used as pants? What happens if we put a shirt inside out? In this way, we forget about the original function of the garment and the participants begin to think with the body, to let the body look for new ways to occupy that garment. By doing the physical exercise of reformulating the limits of the garments, we are doing a brain gym, to “build the New from what has already been designed.” It’s about letting our imagination run wild through free exploration and losing our fear of being wrong (Figs. 4 and 5).

**Upcycling aesthetics:** COMAS aesthetic is minimalist, and is subject to the simplicity of the noble materials the designer works with. The classification of the male shirts focuses on materials such as linen, cotton and denim, and uses the palette of its menswear suppliers, covering colors like white, earth colors and the range of blues, representative of denim washing. The maximum conservation of the details of the original shirts, (collar, box plate buttons, pockets, cuffs, etc.) make its products highly recognizable. COMAS’s garment construction method is based on the principles *Conservar la energía utilizada* (conserving the energy used) and *Preservar el*



**Fig. 4** Workshop COMAS. Participants: Fashion Industry Workers



**Fig. 5** Workshop COMAS. Exploration and testing of cutting sweatpants

*conocimiento congelado* (preserving frozen knowledge). Through these principles they seek to value the energy already used in the original clothing, that is, “if someone has already taken the trouble to sew, to make a stitching, to use resources and take time to dye the textile, why not respect it and preserve it?”. Another fundamental principle of Comas’ work is the consideration of *El defecto como efecto* (defect as an effect), which means that elements considered as “flaws” become an opportunity to give the garment a unique character. In this way, we could transform a stain into a print, or a patch into a graphic detail. This vision, which is developed by the designer in mending workshops, is related to the *visible mending movement*, which reflects on the obsolescence of fashion and overconsumption, making repairs of garments visible. What is intended is not to hide the mends, but to transform them into an aesthetic component and show the noble act of repairing a garment to extend its useful life (Fig. 6).



Fig. 6 COMAS Upcycled Denim Escher Shirt

### CASE III: Estampa Crítica #TEXTOURGENTE

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Headquarters: Montevideo—Uruguay

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Materials: Pre and Post-consumer garments

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Upcycled garments: >200

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Working since: 2018

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**Description:** In 2018 I created the project *Estampa Crítica #TEXTOURGENTE* (Critical Printing #TEXTOURGENTE), a nomadic upcycling workshop that seeks the exchange and collective reflection on urgent issues that affect our living, and pretends to answer the question: which is the urgent text that must be stated in our community? The project also seeks to reactivate our human ties to fashion, reinforcing the political nature of our garments, using them as a textual support, and conceiving clothing as an active agent and a communicating object. The workshops are organized as follows: first, a controversial discussion topic is chosen to be raised in a particular group of people (students, professionals, or members of a community). The chosen topic must be of high interest for the participants and needs to be communicated beyond the group in order to create social awareness. Then, from the reading of literature, narratives and dialogue, participants share ideas and write short texts that then are printed on a disused garment. The printed garments will be worn by the participants in their daily life, communicating the message and spreading it. In this way, a new meaning is given to the garment, and the user becomes an active consumer, or as Kate Fletcher would say, a *user-maker*.

**Why participatory processes:** From the beginning, upcycling was used in the workshop as a tool to promote participation and involvement, since collective reflection is the main axis of the project. The exchange with and between the participants has been a fundamental aspect of the workshop, a quality that defines and shapes it. In this way, the workshop adapts to what may emerge from each context (a new topic of discussion, variety of participants and locations, diverse textile waste, etc.), some of these aspects could remain indefinitely, while others are specific to each workshop. As an example, it is worth mentioning that, initially, the social and environmental impact of fashion was the topic node of the project, discussing issues such as overconsumption or fashion obsolescence. However, as different groups of participants got involved, it became evident that what was considered as urgent changes according to the particularities of each context. In consequence, it was decided that the theme of the workshop would vary, giving rise to the different needs of the participants. This enriched the range of possibilities of the workshop, addressing issues such as migration, inequality, or others of social or ecological nature, and exploring territories in Chile, Argentina and Uruguay.

**Shared knowledge:** A common characteristic in these *participatory upcycling* workshops is that prior knowledge is not necessary. As previously mentioned, the workshop focuses on two activities, on the one hand, the dialogue (critical reflection)



and on the other, the upcycling of garments. Upcycling is a means to materialize the first, therefore it is important that the technical aspects associated with printing or garment making do not act as a limiting factor. To make sure of this, I opted for a much simpler and faster stamping method than screen printing: a roll stamping method using masking tape as a reserve. Once the text to be printed has been defined, each participant “writes” it on the garment by sticking the masking tape. This is a very simple thing that allows participants to feel safe without fear of “making mistakes”, and even more importantly, allows each participant to reproduce or alter the method to be used or taught in other instances. Each stamp is unique and although they are similar graphically, the variations are infinite, enabling the groups to be encouraged in each instance by the variety of results. The other relevant aspect regarding the generation of knowledge, is that this does not derive only from the facilitators, but from the group reflection and its multiple perspectives.

**Game-like tools as a strategy:** Something I have learned in the first workshops is that in instances of collective reflection one of the most complex points is to ensure that a fluid and expressive dialogue is generated quickly in the group. Game-like tools are a key piece in this cases since it motivates participation and encourages the action of the participants, breaking the static and the possible distance between the actors. In this manner, different playful strategies, often adaptations of popular children’s games, are used in order to generate trust, relax the dialogue and compose the texts (Figs. 7 and 8).



Fig. 7 Workshop #TEXTOURGENTE. Participants: Fashion Industry Workers



**Fig. 8** Workshop #TEXTOURGENTE. Participants: Fashion designers and students

**Upcycling aesthetics:** In the case of *Estampa Crítica* #TEXTOURGENTE the strongest aesthetic component is given by the printing method used. The grayish or black background generated by the textile ink in contrast to the text (which maintains the original color of the fabric) predominates as a graphic element. In this case, a central aspect is that the text (the message) is the protagonist and for this reason many times the garments are not intervened at a formal level, but are only printed, hiding flaws or stains of the garments with tapes or decorative ribbons. As in other cases, the aesthetics change depending on the material with which we work. For example, making upcycling from medical uniforms will generate an aesthetic different from that generated from garments donated by a sportswear brand. The details of the original garments are also kept “alive”, showing the origin and valuing the previous existing work. In some cases, the print carefully seeks to enhance the details, like seams and buttons, by increasing their contrast and making them even more visible (Fig. 9).

## 6 Final Thoughts

The current fashion system is based on a linear production model, characterized by a high consumption of resources and a high generation of waste. In recent years, garment upcycling has gained popularity as a strategy for minimizing the volume of textile solid waste. Despite the fact that upcycling is recognized as a technical



**Fig. 9** Exhibition of upcycled garments made after workshop in Centro de Exposiciones SUBTE, Uruguay, 2019

method, it is observed that many of the fashion initiatives that address it respond to a socio-environmental motivation, using the teaching of upcycling as a tool for participatory critical reflection, in order to generate social change.

This generates a very important transformation since it implies that the field of action of fashion magnifies, expanding the universe of concepts that define it as such. Some of the most notorious shifts in fashion are: the incorporation of education into the company's core activities, involvement in activist actions, the inclusion of users (or other actors) in the production process, and the fusion of the role of the designer and the role of the facilitator [5]. This chapter shows three cases of clothing upcycling entrepreneurial designers in Latin America that incorporate these shifts, showing a strong interest in participatory design and in the activation of the critical capacity of individuals.

Expanding the practice of fashion towards collaborative and participatory actions, allows generating new synergies and exchanges between the different agents that make up its universe, and also enable it to be intertwined with other disciplines and areas. We can ask ourselves how these interactions will derive in the coming years, perhaps giving rise to a more equitable and human-centered fashion. A kind of fashion that does not focus on materiality but on the values it represents. According to Fletcher [6] "participatory design and individual and social action will probably define an important component of sustainable fashion and textiles activity into the future", it is our decision to activate this vision in our daily actions. Today, participatory community-based art is already a recognized dimension of contemporary art [12]. Will fashion follow a similar path and become an agent of social change in the near future?

## References

1. López-Navarro M, Lozano-Gómez C (2013) Co-creation Experiences as the Basis for Value Creation in the Sustainable Fashion Industry. In: Kandampully J (ed) *Customer Experience Management: Enhancing Experience and Value through Service Management*, Kendall Hunt, Dubuque, p 133–152
2. Hultman J, Corvellec H (2012) The european waste hierarchy: From the sociomateriality of waste to a politics of consumption. *Environ Plan A* 44(10):2413–2427
3. Margulis L (1998) *Symbiotic Planet*. Basic Books, New York, A New Look on Evolution
4. Bodenmann-Ritter C (ed) (1975) *Joseph Beuys*. Verlag Ullstein GmbH, Berlín, Jeder Mensch ein Künstler
5. Von Busch O (2008) *Fashion-able. Hacktivism and Engaged Fashion Design*. Dissertation, University of Gothenburg.
6. Fletcher K (2008) *Sustainable fashion and textiles. design journeys*. Earthscan, London
7. Lopez L (2019) The intangible expansion of the textile object. Available via Lablaco J <https://journal.lablaco.com/sustainability/the-intangible-expansion-of-the-textile-object/>
8. Bruggeman D (2018) *Dissolving The Ego Of Fashion*. Publisher Artez Press, Arnhem, Engaging With Human Matters
9. Pardo D, Prado V (2018) Involving customers trough co-creation: An approach from the fashion industry. In: *Information Resources Management Association USA. Fashion and Textiles: Breakthroughs in Research and Practice*, IGI Global, USA, p 69–98
10. Suri FJ (1990) IDEO: The experience evolution: developments in design practice. *The design journal* 6(2):39–48
11. Borriaud N (2006) *Estética Relacional*. Adriana Hidalgo, Buenos Aires
12. Bishop C (2012) *Artificial hells: participatory art and the politics of spectatorship*. Verso Books, London
13. Brown T (2008) *Serious play* (video file). Available via TED Ideas Worth Spreading. [https://www.ted.com/talks/tim\\_brown\\_on\\_creativity\\_and\\_play?language=es#t1679423](https://www.ted.com/talks/tim_brown_on_creativity_and_play?language=es#t1679423) Accessed 06 May 2020
14. Lee Y (2008) Design participation tactics: the challenges and new roles for designers in the co-design process. *Co-Design* 4(1):31–50
15. Cumming D (2017) A case study engaging design for textile upcycling. *J Textile Des Res Practice* 4:113–128
16. Lopez L (2020) *Desplazamientos del Sistema de la Moda*. In: Alonso S (ed) *Plaza Mario. Proyecto CasaMario Reside en Centro de Exposiciones Subte: Programa Público*. CasaMario Ediciones, Montevideo, pp 284–301. Accessed 15 Dec 2019
17. Mc Donough W, Braungart M (2002) *Cradle to Cradle: Remaking the way we make things*. North Point Press, New York