

# Concept

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## Fashion Design

### STUDY OF BODY SHAPES AND PHYSIOGNOMY

Ana Belén Santos – Orejón Peña<sup>1)</sup>

**Abstract.** This project was developed through an exhaustive study of pattern-making in fashion, focusing on the exploration of forms inspired by surrealist art. This artistic movement, renowned for its dreamlike and unconventional imagery, serves as a rich source of inspiration for creating innovative garments that challenge the traditional norms of design.

From a pattern-making perspective, various systems have been explored, ranging from traditional methods to cutting-edge techniques. Among the most recognised systems are the Martí system and the Isa system, both employing technical approaches generally adapted to the standard sizes set by the fashion industry.

In contrast to these conventional methods, ‘zero waste’ pattern-making has been implemented—an approach that uses geometric shapes to create versatile, multi-positional garments while minimising fabric waste. Made-to-measure pattern-making has also played a key role, involving precise tailoring to each individual’s body structure through bespoke patterns crafted to the client’s exact measurements.

The use of a scale mannequin has facilitated experimentation with different proportions and configurations, enabling the visualisation of how these surrealist-inspired shapes interact dynamically with the human form. Furthermore, various textile techniques have been employed to evaluate and reinterpret established volumes, including draping, pleating, and fabric manipulation, further enhancing the exploration of form and texture.

**Keywords:** Pattern making, textile techniques, abstract forms, surrealist art.

**Resumen.** Este proyecto se ha desarrollado a partir de un estudio exhaustivo sobre el patronaje en la moda, centrado en la exploración de formas que evocan al arte surrealista. Este movimiento artístico, conocido por sus representaciones oníricas, sirve como una rica fuente de inspiración para crear prendas innovadoras que desafían las normas establecidas del diseño convencional.

Desde la perspectiva del patronaje, se han explorado diferentes sistemas que abarcan desde los métodos más tradicionales hasta técnicas más vanguardistas. Algunos de los sistemas más conocidos son el sistema Martí o el sistema Isa. Ambos métodos siguen enfoques técnicos que se adaptan de manera general a las tallas estándar establecidas en la industria.

En contraste con estos métodos convencionales, se ha trabajado con el patronaje “zero waste” o de “cero residuos”. Este enfoque se basa en el uso de formas geométricas que permiten la creación de prendas versátiles y multiposicionales, todo mientras se evita el desperdicio de tejido. No podemos olvidar el enfoque del patronaje a medida, esta técnica implica una adaptación precisa a la estructura corporal de cada persona, utilizando patrones únicos basados en las medidas exactas del cliente.

El uso del maniquí a escala ha permitido experimentar con diferentes proporciones y ajustes, facilitando la visualización de cómo estas formas, que evocan las características del arte surrealista, pueden interactuar con el cuerpo humano de manera dinámica. Además, en la evaluación y reinterpretación de algunos volúmenes, se han empleado diversas técnicas textiles con el fin de reinterpretar formas ya establecidas. Estas técnicas incluyen el drapeado, el plisado y la manipulación de tejidos.

**Palabras clave:** Patronaje, técnicas textiles, formas abstractas, arte surrealista.

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## 1. INTRODUCTION AND OBJECTIVES

Beyond following the traditional lines of the body, we will explore how forms can be reinterpreted, reinvented and sometimes challenged altogether. This approach awakens a profound dialogue on the relationship between the body and clothing.

Among the most recognised pattern-making methods are the Martí and Isa systems. Both employ procedures that allow patterns to be adjusted to the standard sizes defined by the industry (García Ramos, 2016).

In contrast to these two techniques, we find “zero waste” pattern-making. This method uses geometric shapes to create multifunctional and highly versatile garments. Its main advantage lies in its ability to minimise material waste to the greatest extent possible (Rissanen & McQuillan, 2016).

On the other hand, made-to-measure pattern-making offers a personalised approach, as it adapts to the unique body shape of each individual. The patterns must be unique and created according to the precise measurements of each client (Aldrich, 2020).

In parallel, surrealism, an artistic movement that emerged in the 1920s, challenges the conventions of reality and explores the power of the subconscious and the imagination (Benjamin, 2013). The fusion between pattern making and surrealism, gives rise to a terrain where garments become three-dimensional canvases that create a unique expression.

We used as a model the methodology proposed by De Rocco (2022), which was based on textile manipulation as an expression of abstract art. “With a varied fusion of fabrics, the aesthetic of a garment is defined; with fabrics joined in layers, gathered, or folded, a multitude of avant-garde textures can be created.”

### 1.1. OBJECTIVES

- Challenge conventions and explore new forms in the patternmaking/fashion sector.
- To innovate and advance the industry by working with shapes that adapt to different types of body physiognomy.
- To extend the knowledge and study of shapes in fashion pattern making and craft/hand sewing.

- Explore new techniques in the construction of shapes and materials for clothing.
- Generate a fresh image based on a story concept to attract new users to the firm.
- To develop a private sales chain where the quality of the design, the study of shapes and manual craftsmanship are the key factors that identify the brand.
- Generate different advertising campaigns or private shows to present the new proposals and bring the user closer to a different experience where they are the protagonists of each proposal.
- Critically reflect on the process of designing and producing garments, bringing the user closer to the entire process of execution and development of the garment, adding value to the piece and its sustainability.

## 2. METHODOLOGY

The context of the present study is developed under the choice of the topic for the final degree project, once chosen; it began with an investigation on the study of shapes and evolution of pattern making together with the decontextualisation of the compositions of some works of the surrealist paintings.

Investigating different points such as the beginning and the history of pattern making together with the most common shapes that compose it, the designers who have most focused on this discipline. Following with an investigation on the compositions of some works of surrealist art such as Guernica (Picasso, 1937) and The Persistence of Memory (Dalí, 1931).

The colour palette has been selected after a study of the most predominant tones of these surrealist works. In the same way, the geometric shapes that reflect the moodboards give depth and volume to the garments.

After an extensive research process on various techniques and procedures, we have perfected several patterns, eliminating many of the errors previously detected. With these new patterns, we have created a mini strapless dress with side seams, which serves as a base to add the volume at the top. To achieve these volumes, we have used the moulage technique, which allows us to work with greater precision and detail.

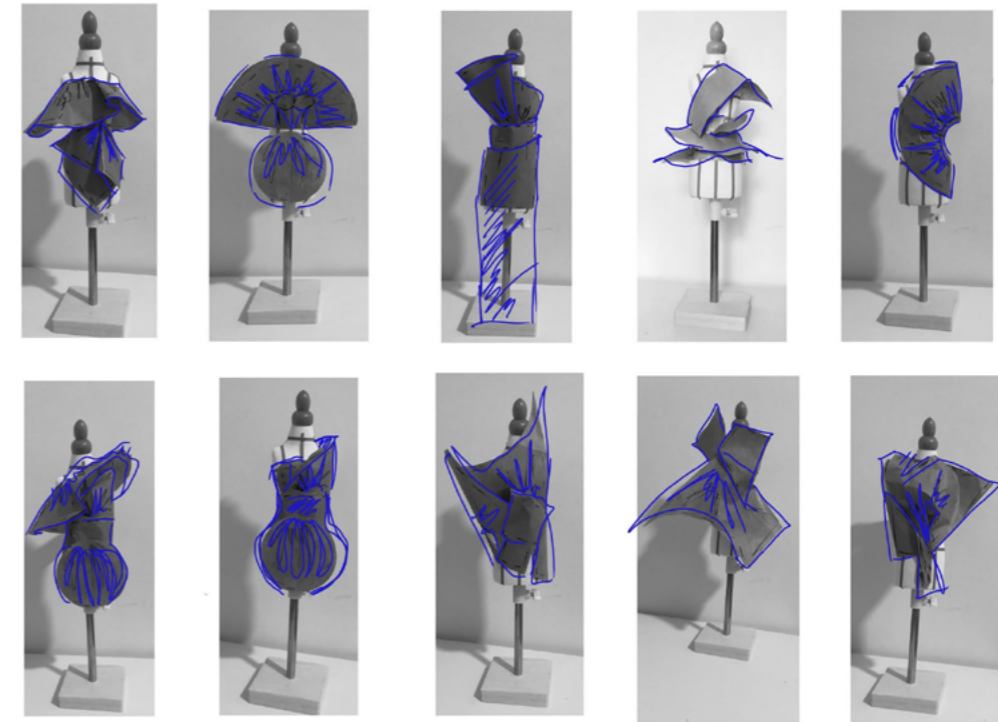


Image 1: Pattern experimentation, own elaboration.

In addition, the pattern for an asymmetrical dress has been designed, the most distinctive feature of which is its cross-shaped draping, ending in a bow at the back.

### 2.1. CHRONOGRAM

The process has been developed in several phases. First, brainstorming was carried out to clearly define the project concept. Next, extensive research was carried out, including the development of small scale patterns and the application of various techniques and textile tests. Finally, the collection was developed and the two garments were made together with the final accessory.

Some of the problems detected:

- Adjustments and alterations of garments from one size to another, due to their volume experimentation, can be complicated to scale the pattern by size.
- » **Solution:** Incorporate design elements that facilitate adjustments, such as zips or removable panels.
- Persistent Creases and Wrinkles Bulky garments can develop creases and wrinkles that

are difficult to remove, especially in fabrics such as taffeta.

- » **Solution:** Steam Iron: Use a steam iron to treat creases, applying steam at a safe distance to avoid damage to the fabric.
- Loss of Shape and Structure: Bulky garments may lose their shape and structure after washing, especially if the fabric is unsuitable.
- » **Solution:** Select fabrics with shape recovery properties, such as Duchesse satin or organdy, which maintain structure.
- Difficulties when washing bulky garments: Bulky garments can be difficult to wash due to their size and weight.
- » **Solution:** For this reason labels have been designed with detailed instructions for care and dry cleaning if necessary.
- Minutes before the start of the shoot, one of the models was unable to attend for personal reasons, which was detrimental to the fashion editorial.
- » **Solution:** Re-styling the model who was present.

### 3. RESULTS

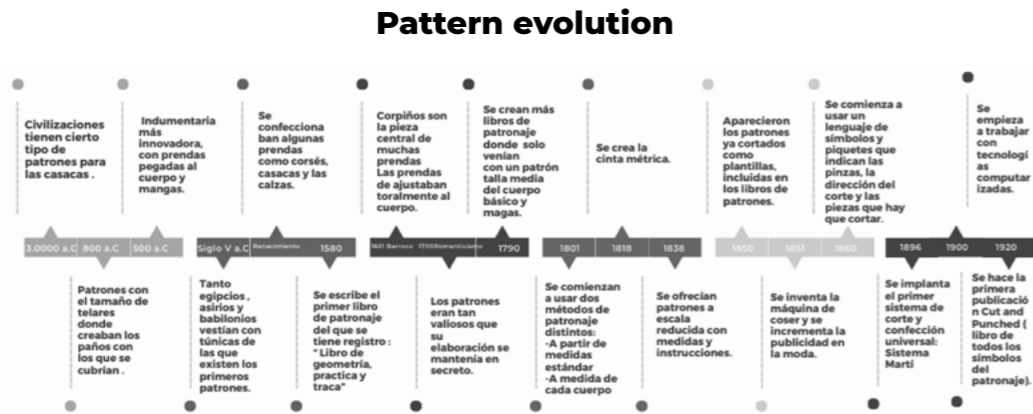


Image 2: Timeline, own elaboration.



Image 3: Own elaboration.



Image 3: Own elaboration.



Image 4: Own elaboration.



Image 5: Own elaboration.



#### 4. CONCLUSIONS

After carrying out the research and development of the garments, as well as carrying out various textile tests, we have achieved all the planned objectives, with a very satisfactory final result.

After going through various phases of research and experimentation, we can affirm that we have obtained very interesting patterns that will be implemented in the garments of future collections. In this sense, working with scale patterns has been of great help, allowing us to achieve greater precision in the adaptation to the body's anatomy.

#### 5. BIBLIOGRAPHY

- Aldrich, W. (2020). *\*Metric pattern cutting for women's wear\**. John Wiley & Sons.
- Benjamin, W. (2013). *El surrealismo*. Casimiro.
- Dalí, S. (1931). *La persistencia de la memoria* [Óleo sobre lienzo]. Museum of Modern Art, Nueva York, EE. UU.
- De Rocco, M. (2022). Slow Fashion y arte: Aplicación de la técnica del quemado en la manipulación textil. Colección skinnor. *Concept: Revista de investigación e innovación en diseño*, (1), 87-102. <https://doi.org/10.58534/2SVKNhlBBh-1-6>
- García Ramos, C. (2016). Método profesional de patronaje y escalado femenino para trazados manual geométrico e informático. Patrón XXI: Patrones de costura
- Picasso, P. (1937). *Guernica* [Óleo sobre lienzo]. Museo Nacional Centro de Arte Reina Sofía, Madrid, España.
- Rissanen, T., & McQuillan, H. (2016). *\*Zero waste fashion design\**. Bloomsbury Publishing.