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Application of the French Pattern Construction System to the 'Artheia' Evening Gown Goddess Theme

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Abstract

Evening gowns are costume made piece that require precise pattern construction to achieve an elegant, proportional, and aesthetically appealing form. This study aimed to describe the application of the French pattern system in creating the evening gown "Artheia" with the theme Goddess and to assess its feasibility through expert judgment. This practice based research was conducted over four months, covering the stages of exploration, design, realization, and evaluation. This French pattern system was applied to the bustier and mermaid silhouette to ensure accurate fit, stable structure, and proportionality. Evaluation by three experts judgement was conducted on six indicators, design (93.33%), size (86%), sewing technique (77%), aesthetics (88%), performance (89%), and distinctiveness (93%), with the majority of indicators classified as very feasible. The results indicated that the "Artheia" gown meets professional quality standards. Based on study, it can be concluded that the French patternmaking system was effective in producing couture style evening gown and could serve as reliable method for pattern construction in both the fashion industry and fashion education.

Keywords: Evening gown, Pattern construction, Goddess

INTRODUCTION

Evening gowns are included in category of haute couture characterized by their exclusivity, as they are specially made by order and not produced on a mass scale. Evening gowns present a semi formal, elegant, and exclusive impression, both in terms of design and material selection.¹ Evening gowns are also identical with open silhouette, luxurious details, and elegance of their use.² These characteristics are adapted into the design of "Artheia", one of the gowns in the *Majestic Deity* collection. This collection adopts the theme of a Goddess, representing a graceful and dignified figure that radiates a feminine aura. This theme serves as the foundation of the design process, with "Artheia" becoming an interpretation of this concept in the form of an elegant and character rich evening gown.

Based on this concept, the gown is constructed with a mermaid silhouette enhanced by a fullness tail variation, and a combination of navy and mocca tones symbolizing emotional depth and serenity. The upper parts features a structured bustier designed to define the body's contours. A bustier is a hybrid between a bra and corset, constructed without shoulder straps to shape and tighten the waist

¹ Adella Florencia, "Penerapan Teknik Pleated Pada Busana Pesta Evening Gown," *TEKNOBUGA: Jurnal Teknologi Busana Dan Boga* 9, no. 1 (2021): 33–46, <https://doi.org/10.15294/teknobuga.v9i1.24927>.

² Agustini, "Dari Mitologi Kerajaan Yunani," *Jurnal BOSAPARIS: Pendidikan Kesejahteraan Keluarga* 9, no. November (2018): 222–33.

and bust area, creating a slimmer appearance.³ The use of bustier requires systematic pattern calculations to ensure that every curve, dart, and cutting line form the intended silhouette. To meet these needs, this study employed a French pattern construction system, an approach that follows anatomical precision and produces more proportional contours. This method was chosen based on internship experience and its suitability for supporting the complex structural requirements of a bustier.

Globally, haute couture practices such as those applied by Maison Christian Dior demonstrate that construction precision is the foundation of couture fashion creation. Dior considered couture as an art form through artification, emphasizing the importance of technique and meticulous craftsmanship.⁴ The opinion that couture quality relies heavily on the accuracy of pattern cutting and construction. Precise pattern construction is an important factor in producing proportional and comfortable fashion and suitable design. It was confirmed with previous finding showing that accurate pattern construction significantly determined the proportional and design comforting of evening gowns.⁵

Numerous previous studies have explored how pattern construction affected the quality and form of the final design. Research indicated that the Porrie Muliawan system improves shape accuracy and enhances construction quality, particularly in dart placement and body silhouette. These findings highlighted the importance of selecting the right pattern system to produce pieces that are proportionate of the wearer's body.⁶ Other studies similarly explained that combining pattern drafting and draping techniques increases production efficiency and improves final product quality, especially for complex designs such as evening gowns.⁷ Research on corset dressmaking revealed that integrating corset construction with draping techniques allows designers to shape silhouettes and position brocade applications more aesthetically. Dewi and Wahyuningsih demonstrated that integrating pattern drafting and draping technique results in evening gowns that fit better, are more efficient to produce, and possess greater aesthetic value.⁸ These studies emphasize the importance of accurate as pattern construction as the basis of fashion production.

Research on additional pattern systems also showed that difference in pattern construction affected the final fashion product. A comparison of bow dress pattern magic using the Meyneke dan Dressmaking foundational patterns revealed significant differences, in which the Meyneke system producing a more fitted fashion.⁹ Meanwhile, another study analyzing fitting factor between draping

³ N., & Yuniati, M Anburika, "Pembuatan Bustier Dan Analisis Hasil Jadi Bustier Di Butik Alben Ayub Andal," *Jurnal Penelitian Busana & Desain* 3, no. 2 (2023): 33–39, <https://journal.unesa.ac.id/index.php/jpbd>.

⁴ Federica Antonaglia And Juliette Passebois Ducros, "Christian Dior: The Art Of Haute Couture," *Palgrave Studies In Practice: Global Fashion Brand Management*, 2020, 113–39, https://doi.org/10.1007/978-3-030-26121-4_5.

⁵ Ariyana Damayanti Nimas Oktaviani Putri, "Pembuatan Gaun Pesta Malam Menggunakan Teknik Pola Draping Dan Pola Konstruksi Making Evening Party Dresses Using Draping Pattern Techniques and Construction Patterns" 13, no. 2 (2021): 1–16.

⁶ R. Suhartini A.Y. Permatasari, "Penerapan Konstruksi Pola Sistem Porrie Muliawan Pada Pembuatan Busana Pesta Malam Dengan Tema Catchy," *Fashion* 1 (2025): 128–37.

⁷ Ghoswatun Nisa, Erna Setyowati, And Musdalifah, "Efektivitas Penggunaan Pola Kombinasi Dalam Pembuatan Busana Pesta Siswa Tata Busana SMK Syafi ' I Akrom Pekalongan," *Teknoba* 2, No. 1 (2015).

⁸ Inas Mutiara Dewi And Urip Wahyuningsih, "Teknik Pembuatan Corset Dress Pada Koleksi Busana Pesta Di Alben Ayub Andal," *BAJU: Journal Of Fashion & Textile Design Unesa* 1, No. 2 (2020): 108–17, <https://doi.org/10.26740/Baju.V1n2.P108-117>.

⁹ Ikhsani Alfi Wijayanti, Siti Nurrohmah, And Musdalifah Musdalifah, "Perbandingan Hasil Pembuatan Bow Dress Pattern Magic Menggunakan Pola Dasar Sistem Meyneke Dan Dressmaking," *Fashion And Fashion Education Journal* 11, No. 2 (2022): 79–84, <https://doi.org/10.15294/Ffej.V11i2.15003>.

patterns and the Atelier de Itja Achmad system found that while both achieved excellent fit, draping tended to be more accurate in areas such as bust circumference, front width, and side seam alignment. In contrast, the Atelier de Itja Achmad system performed better in shoulder width and armhole circumference but showed issues of inaccurate dart placement and wrinkles around the neckline.¹⁰

Based on previous research, it was clear that each pattern system has characteristics that influence shape, proportion, and fitness. Studies consistently showed that accuracy in pattern construction is major factor determining the quality of the final design. However, no research has specifically examined the application of the French pattern construction system to evening gowns an apparel category characterized by complex details and no study has evaluated the resulting quality through expert assessment. This gap highlighted the need for the present study.

Therefore, this research aimed to describe the process of applying the French pattern construction system in creating the “Atheia” evening gown and to analyze the gown’s feasibility based on expert evaluation. Thus, this study not only focused on the technical process of pattern application but also evaluated the quality of the resulting design. The findings were expected to provide a more comprehensive understanding of the effectiveness of the French pattern construction system in evening gown development and support its advancement as method for producing professionally standardized couture pieces.

METHOD

This study employed a practice based research approach, in which the production process serves as the primary source for generating knowledge. Teunissen stated that practice based research functions as a bridge between theory and practice, where the process making enables the emergence of new understandings regarding techniques, aesthetics, and fashion functions.¹¹ Similarly, Valle - Noronha emphasized that practice based research in the field of fashion is reflective approach that positions the processes of creation and design analysis as essential components in the development of knowledge.¹² This approach was chosen because it aligns with the objective of the study, namely to apply the French pattern construction system in the creation of the “Artheia” evening gown.

This project was conducted over approximately four months, beginning from the planning stage through the completion of the final work and documentation. All phases of activities were carried out in stages and adjusted to the lecture schedule and consultation sessions with the supervising lecturer. The research locations include the university environment a personal studio as the main place for exploration, design, and realization of works. Additionally, the Raymond Leonard boutique is used as an internship and observation site to support the understanding of professional fashion construction practices.

The research flow in this study consisted of four main stages, exploration, design, realization, and evaluation. These four components were interrelated and continuous in practice – based research. The exploration stage involved examining the characteristics of evening gowns, developing stage a moodboard, and analyzing materials and motifs. The design stage included sketch development and model body measurements. The realization stage comprised pattern construction, manufacture of toile, sewing, fitting, and finishing. The final evaluation stage involved observing the completed product, conducting expert assessment, and analyzing product feasibility. The complete research flow is illustrated in Figure 1.

¹⁰ . U Fadliyani S, “Analisis Fitting Factor Pola Draping Dan Pola Sistem Atelier De Itja Achmad Pada Gaun,” *Eprint Fakultas Teknik Universitas Negeri Makassar*, 2019.

¹¹ José Teunissen, “The Transformative Power Of Practice-Based Fashion Research,” *Fashion Knowledge: Theories, Methods, Practices And Politics*, 2022, 15–26, https://doi.org/10.1386/9781789385182_1.

¹² J. Valle-Noronha And Namkyu Chun, “Practice-Based Research In Fashion: A Literature Review,” *14º Colóquio De Moda*, 2-6 September 1 (2018): 1–15.

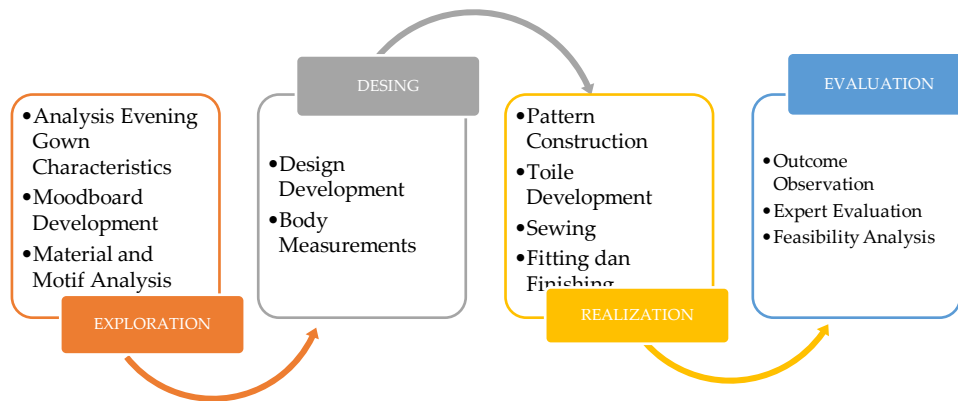


FIGURE 1. Research Process Flow

The exploration stage was carried out establishing the conceptual and visual basis for fashion design. The exploration activities included a literature review on the characteristics of evening gowns, visual analysis of the Goddess theme, selection of the color palette and identification of suitable material such as bridal satin, organza, and songket. At this stage, a moodboard was also developed as a medium for organizing visual ideas based on shape, motif, color, technique, and material concepts. Developing a moodboard helps guide the creative process, clarify the design's visual identity, and maintain conceptual consistency throughout the design stages.¹³ The moodboard used in this study is presented in Figure 2, featuring key visual elements such as Goddess figure inspirations, color palette, fabric textures and silhouette references that represent a graceful and dignified character.



FIGURE 2. Moodboard of Majestic Deity

¹³ Qurrahta Laila Fitri, Nofi Rahmanita, And Mirda Aryadi, "Feminine Romantic Style Dengan Aplikasi Songket" 3, No. 1 (2023).



FIGURE 3. Desain Final “Artheia”

The design stage aimed to produce a fashion design based on the findings from the exploration phase. The activities include creating sketches, selecting the final design, and preparing technical drawings that illustrate the construction detail of the piece. In addition, body measurements of the model are taken as the basis for drafting the pattern using the French patternmaking system. These measurements include fundamental body dimensions, arm measurements, and skirt length according to construction needs. The measurements results serve as a reference for developing the basic pattern and modifying it according to the “Artheia” design. Final design used as the basis for creation process can be seen in Figure 3.

At this stage, the design is realized as a fashion product. The process begins with drafting the pattern using the French Patternmaking system, continued with making toile from fabric calico to evaluate the proportions and fashion structure. The toile is then fitted, then made adjustments to perfect the pattern until the desired silhouette is achieved. The finalized pattern is then applied to the main fabric and goes through a process of cutting, sewing, lining and finishing by applying including hand stitching finishing in certain areas. The realization stage final with the addition of decorative accents according to the design. The final result of the “Artheia” evening gown can be seen in Figure 4.



FIGURE 4 Final Result “Artheia”

The final stage is the evaluation, which aims to assess the quality of the “Artheia” gown based on expert appraisal instruments. Data collection was carried out through direct observation of the finished piece and assessment by three expert judgment. The instrument used was an observation sheet containing statements related to six evaluation indicators; design, size, sewing technique, aesthetics, performance, and distinctiveness. Each statement was answered by the panelist using “yes” or “no” responses, with “yes” assigned a score of 1 and “no” a score of 0. These scores were then converted into percentages to determine the eligibility level of each aspect.

All findings were then analyzed using descriptive quantitative methods through the calculation of panelist percentage scores, which were subsequently classified into categories of feasibility. Descriptive quantitative analysis is a method used to present and summarize numerical data so that the main characteristic of the data can be clearly understood.¹⁴ Table 1 presents the feasibility categories by Arikunto, as cited in the study by Supriyatna and Fauzi,¹⁵ and serves as the basis for interpreting the panelists assessments of the quality of the “Artheia” gown.

TABLE 1 Feasibility Criteria

No.	Percentage	Category
1	81 – 100 %	Highly Feasible
2	61 – 81 %	Feasible
3	41 – 60 %	Moderately Feasible
4	21 – 40 %	Less Feasible
5	0 – 20 %	Not Feasible

Sources: Arikunto, 2009 in Suptiyatna and Fauzi, 2023

RESULTS AND DISCUSSION

The Creative Process of Producing the “Artheia” Gown

The design process of the “Artheia” evening gown in the Majestic deity collection began with

¹⁴ Sudirman, *Metodologi Penelitian 1*, Media Sains Indonesia, 2023.

¹⁵ Ahmad Fauzi and Alam Supriyatna, “Implementasi Metode Prototype Pada Perancangan Sistem Informasi Pengajuan Prakerin,” *TeknoIS : Jurnal Ilmiah Teknologi Informasi Dan Sains* 13, no. 1 (2023): 88–100, <https://doi.org/10.36350/jbs.v13i1.167>.

exploring sources of inspiration until the final product “Artheia” was realized. A source of inspiration can be understood as any form of stimulus that drives the creation of a work. Inspiration may arise from various aspects of life, including traditions, philosophies, natural environments, or meaningful events.¹⁶ The perspective served as the basis for identifying the source of inspiration for “Artheia”, where the graceful, dignified, and assertive nature of a goddess is translated into the primary inspiration for creating the moodboard for the Majestic Deity collection.

Based on the *Majestic Deity* moodboard, a design concept was created that combined softness and firmness. Elegance was represented through minimalist drapery details, while authoritative and firm nature is manifested through the sturdy fashion structure of the bustier and mermaid tail. This concept became the basis for development of the “Artheia” fashion design to align with the Majestic Deity moodboard. The concept was then processed into the final design, the mermaid silhouette was chosen because it can shape the curves of the body elegantly and proportionally, with layered volume in the tail and contrasting colors that increase the dramatic effect and strengthen the proportions. The upper part of the gown features a firm structured bustier. The use of songket fabric adds texture and a luxurious cultural touch.

The tucking ballen drapery accent it added as a soft element to strengthen the feminine character of the gown, arranged diagonally from the shoulder to the waist, creating a dynamic visual flow. The sleeves use thin textured tulle material, presenting a puff sleeve shape that fall lightly at the wrists. This sleeve silhouette adds an ethereal and elegant impression, consistent with the goddess theme. Bead embellishments play an essential role in enhancing the visual appeal of the gown. The beads were applied diagonally across the bustier, following the direction of the drapery, and additional bead embellishments were placed on the neckline and cuffs to emphasize texture and provide a glamorous touch without appearing excessive.

Overall, the “Artheia” design successfully combines firm structure, rich textures, and graceful details. The combination of *songket*, bridal satin, drapery, sheer sleeves, and bead embellishments makes this gown a strong representation of a goddess in luxurious and dignified evening gown creation.

Results of Applying the French Pattern Construction System to the “Artheia” Gown

The application of the French patternmaking system in the “Artheia” gown focused on developing the bustier pattern, which is the main element in shaping the body silhouette and supporting the mermaid skirt structure. This system was selected because it produce a precise pattern that fit the body well and has a stable contour. The process began with body measurements of the model to construct the basic pattern, followed by the development of the bustier pattern at the bust, waist, and hip areas. This basic pattern was also used to construct the mermaid silhouette.

During the bustier construction process, the darts and panel lines are refined using a French curve to achieve smooth, accurate, and well-defined contours. The darts were drafted according to the measurement formulas of the French pattern system, ensuring stability and lift in the bust area. The bustier panels were shaped to follow the body’s contours down to the mermaid skirt, subsequently, the pattern was divided by adding a diagonal line from the hip to the side bust, separating the bodice and the skirt into panels as shown in Figure 5. This technique allows different fabric to be applied to each panel while creating a structured asymmetrical effect. Through this pattern division, the junction between the bodice and the skirt can be aligned with precision, ensuring accurate placement and preventing dimensional inconsistencies.

¹⁶ Putu Indah Purnami Juli, Gede I Sudirtha, and Made Angendari Diah, “Pengembangan Busana Pesta Dengan Sumber Ide Tradisi Aci Tabuh Rah Pengangon,” *Jurnal BosaParis: Pendidikan Kesejahteraan Keluarga* 14, no. 1 (2023): 29–38, <http://10.0.93.79/jppkk.v14i1.58835>.

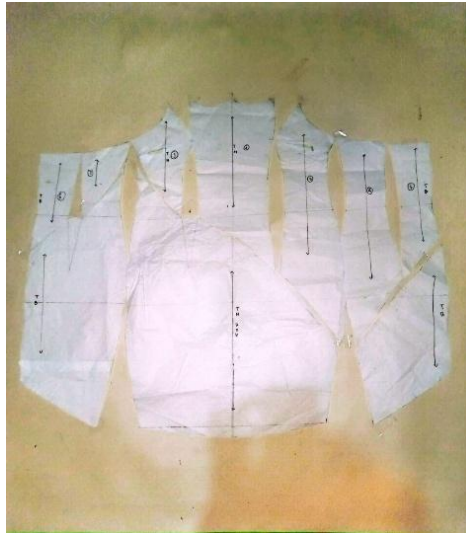


FIGURE 5 Bustier and Skirt Pattern Break

The next stage involved creating a toile using clinco fabric to evaluate the accuracy of the construction. The first fitting indicated that the pattern followed the model's body contours well, although several adjustments were required at the waistline and drapery flow to align with the final design. Documentation of the toile can be seen in Figure 6.



FIGURE 6 Toile "Artheia"

Overall, the results indicate that the use of the French patternmaking system contributed significantly to achieving the final form of the "Artheia" gown. This method not only produced a neat, precise, and easy-to-use patterns, but also improve the technical quality of the clothing in terms of fit and structural stability in accordance with haute couture standards. Thus, the French pattern system has proven effective in realizing design that require high precision and detail, such as the "Artheia" evening gown. The final appearance of the gown as showcased at the PKK UNNES 2025 exhibition is presented in Figure 7, which displays the visuals of the dress form the front and side.



FIGURE 7 Fashion Show

Expert Assessment Results on the Feasibility of the “Artheia” Gown

The feasibility assessment of the “Artheia” evening gown was conducted by three expert panelists who evaluated six indicators: design, sizing, sewing techniques, aesthetics, performance, and distinctiveness. The assessment employed an observation sheet, and the obtained scores were converted into percentages using Equation (1).

$$\text{Percentage} = \frac{\text{Score Obtained}}{\text{Maximum Score}} \times 100 \% \quad (1)$$

Next, the average value of the three panelists was calculated using Equation (2):

$$\text{Average} = \frac{P1 + P2 + P3}{3} \quad (2)$$

The assessment results were then classified into feasibility categories based on Arikunto criteria.¹⁵ The overall assessment of the “Artheia” gown indicates that it received positive responses across most evaluated indicators. In general, the gown was categorized as highly feasible. A detailed analysis for each indicator is presented below.

Design

The design indicator assessment was conducted to evaluate the extent to which the “Artheia” gown met the standards of color harmony, shape, creativity, and alignment with the Goddess theme. This indicator consists of six sub-indicators. All three panelists scored each evaluation item, and the results for the design indicators assessment are presented in Table 2.

TABLE 2. Design Indicator Assessment Result

Panelist	Percentage
Panelist 1	93,33%
Panelist 2	93%
Panelist 3	93,33%
Average	93.33 %
Criteria	Highly Feasible

Sources: Authors, 2025

Based on Table 2, the design indicator received a very high score from all panelists. Panelist 1 and 3 gave the same score percentage 93.33%, while panelist 2 gave a score percentage of 93%. On average, the design indicator reached a score of 93.33%, included in the highly feasible category. The result indicate that the panelists assessed the “Artheia” design as meeting the sub-indicator criteria of color composition, line, shape, proportion, and detail. All aspects were deemed consistent and aligned with the applied concept. The design was considered effective in enhancing the wearer’s character and representing the elegant image intended in the gown’s conceptualization.

According to Hidayati, fashion design concept is realized through the arrangement of elements of line, shape, color, texture, and the application of design principles.¹⁷ The experts panelists findings indicate that the “Artheia” design consistently fulfils all of these elements, resulting in a harmonious appearance that reflects an elegant character that aligns with the Goddess theme. This finding aligns with Vera’s statement that the quality of a fashion design can be observed through the suitability of visual composition and the harmony of details with the chosen theme.¹⁸ Thus, the design indicator is classified as highly feasible because it reflects a strong, aesthetic and well-conceived concept in the design.

Size

The size indicator assessed the accuracy of body measurements on the wearer. It consisted of six sub-indicators covering fit accuracy, the alignment of pattern shapes on the body, and precision of design components. The results are presented in Table 3.

TABLE 3 Sizing Indicator Assessment Result

Panelist	Percentage
Panelist 1	83%
Panelist 2	87%
Panelist 3	87%
Average	86%
Criteria	Highly Feasible

Sources: Authors, 2025

Based on Table 3, the size indicator achieved an average score of 86%, placing it in the highly feasible category. These results show that the French patternmaking system can produce a good fit on the wearers body. During the fitting process, the bust, waist and hips were evaluated according to the wearers body proportions. The panelists stated that the pattern shape was accurate and followed the body contours precisely. Although a few minor adjustments were still needed in certain areas, the overall assessment indicated that the “Artheia” gown met good fitting standards and was deemed suitable to be worn.

These findings align with theories stating that pattern accuracy determines the quality of fit, as the pattern serves as the foundational template that must correspond to the body to ensure comfort and proportional appearance. Previous research also emphasize that the accuracy of a patternmaking system significantly affects the precision of key fitting points and overall comfort of the wearer.¹⁹

¹⁷ Nurul Hidayati et al., “Analisis Konsep Desain Pada Pembelajaran Desain Busana,” *Jurnal Desain* 11, no. 1 (2023): 159, <https://doi.org/10.30998/jd.v11i1.16495>.

¹⁸ Gera suartini Vera, I Gede Sudirtha, and Made Diah Angendari, “Penerapan Hiasan Payet Pada Busana Pesta Berbahan Batik Motif Merak Abyorhokokai,” *Jurnal BOSAPARIS: Pendidikan Kesejahteraan Keluarga* 12, no. 3 (2021): 88–96, <https://doi.org/10.23887/jppkk.v12i3.37470>.

¹⁹ Siti Mariah and Zianasti Krisjayusman, “Komparasi Fitting Factor Pola Konstruksi Praktis Dengan Pola So-En Pada Busanawanita Model Blazer,” *Seminar Nasional PTBB* 19, No. 1 (2024): 1–6, <https://Journal.Uny.Ac.Id/Index.Php/Ptbb/Article/View/83368/23071>.

Accordingly, the sizing indicator confirm the successful application of the French patternmaking method in supporting proper fit and proportionality

Sewing Technique

The sewing technique indicator assessed construction quality and workmanship neatness. Sub-indicators included seam accuracy, stitch neatness, finishing quality, and cleanliness of workmanship. The results are shown in Table 4.

TABLE 4 Sewing Technique Indicator Assessment Result

Panelist	Percentage
Panelist 1	90%
Panelist 2	60%
Panelist 3	80%
Average	77%
Criteria	Feasible

Sources: Authors, 2025

Based on Table 4, the sewing technique indicator shows considerable score variation among panelists, ranging from 60% to 90%. With an average score of 77%, this indicator falls into the feasible category. This suggests that the overall sewing quality met the feasibility standard, although several aspects such as seam accuracy, finishing neatness, and sewing cleanliness still require improvement to achieve couture level quality.

The variation in assessment reflects differing perceptions regarding the technical construction. According to Paramita dan Marniati, sewing quality is a crucial factor in fashion product evaluation, representing the precision of techniques, seam stability, and the neatness of final workmanship element that demonstrate professional craftsmanship. They further emphasize that stitch accuracy, balanced thread tension, and clean finishing are essential indicator of high-quality construction.²⁰ Therefore, although the “Artheia” gown was deemed feasible, this indicator highlights areas for refinement to elevate the construction toward couture standards.

Aesthetic

The aesthetic indicator measured the visual quality of the “Artheia” gown. It consisted of six sub indicators. The assessment result are presented in Table 5.

TABLE 5 Aesthetic Indicator Assessment Result

Panelist	Percentage
Panelist 1	86%
Panelist 2	77%
Panelist 3	100%
Average	88%
Criteria	Highly feasible

Sources: Authors, 2025

Based on table 5, the aesthetic indicator received high scores, with an average of 88%, indicating a highly feasible category. Panelist 3 gave a perfect score of 100%. The result show that “Artheia” gown has a strong visual impact. The color selection, ornamental detail, and overall harmony were seen as effectively reinforcing the goddess theme. The gown displayed balanced proportions and decorative elements that enhanced elegance without excessive embellishment.

The aligns with Revan’s perspective, which states that aesthetic quality in fashion design is

²⁰ Fauziah Kartika Paramita and Marniati, “Teknik Menjahit Busana Penganten Jombang Putri Arimbi Berkerudung,” *JPBD: Jurnal Penelitian Busana & Desain* 3, no. 1 (2023): 51–62.

determined not only but outward appearance but also by the designers ability to harmonize color, texture, silhouette, and details to create a proportional and captivating visual composition.²¹ The “Artheia” gown successfully embodies these principles through material choices and ornament arrangement that contribute to a strong design identity.

Performance

The performance indicator assessed how the gown behaved when worn, including comfort, structural stability, and its ability to maintain its shape. The result are presented in table 6.

TABLE 6 Performance Indicator Assessment Result

Panelist	Percentage
Panelist 1	90%
Panelist 2	83%
Panelist 3	93%
Average	89%
Criteria	Highly feasible

Sources: Authors, 2025

Based on table 6, the performance indicator reached an average score of 89%, classified as highly feasible. The “Artheia” gown demonstrated strong performance when worn. with structural stability that allowed it to maintain its shape without compromising elegance.

The panelists noted that the gown remained stable on the body, retained its form, and did not restrict the wearer’s movements. These findings align with Moedjiati and Sulastiami, who explain that performance during wear is influenced by pattern accuracy, construction techniques, and fabric drape.²² These factors enhance comfort and help maintain structural integrity throughout use. The “Artheia” gown successfully met these performance aspects.

Distinctiveness

The distinctiveness indicator assessed the gown’s uniqueness, visual appeal, and characteristic design identity. Sub indicators included originality, conceptual uniqueness, and overall visual impression. The results are shown in Table 7.

TABLE 7 Distinctiveness Indicator Assessment Result

Panelist	Percentage
Panelist 1	97%
Panelist 2	87%
Panelist 3	97%
Average	93%
Criteria	Highly feasible

Sources: Authors, 2025

Based on Table 7, the distinctiveness indicator obtained an average score 93%, placing it in the highly feasible category. This indicates that the “Artheia” gown possesses strong visual appeal, a unique silhouette, and distinctive detailing. The gown excels not only technical aspect but also in its ability to

²¹ Revan Aprianto, Vivi Radiona Sofyani Putri, and Suryawati Suryawati, “Penilaian Estetika Busana Pesta Berbahan Denim Dengan Teknik Draping,” *Practice of Fashion and Textile Education Journal* 3, no. 2 (2023), <https://doi.org/10.21009/pftej.v3i2.24823>.

²² Yenny Moedjiati and Sulistiami, “Kenyamanan Gaun Dengan Menggunakan Pola Meyneke Untuk Wanita Berbadan Gemuk Di Surabaya,” *Bugaris* 1, no. 1 (2024): 15–22, <https://doi.org/10.36456/bugaris.v1i1.8943>.

present an original and memorable design identity.

This finding align with research indicating that decorative and aesthetic elements in evening gowns enhance design identity and distinctiveness.²³ Other studies also emphasize that creativity, innovation, and unique form are essential factor that differentiate one fashion work form another.²⁴ Accordingly, the “Artheia” gown successfully presents a unique design identity that distinguishes it from typical evening gowns.

Based on the analysis of all six feasibility indicators, it can be concluded that the “Artheia” evening gown aligns with the established quality standards. Each indicator provides insight into the success of the design and construction processes while also identifying areas requiring refinement. The expert assessments serve as strong evidence that the “Artheia” gown is feasible and suitable for publication as a final creative work.

CONCLUSION

The application of the French patternmaking system in the construction of the “Artheia” evening gown proved effective in producing precise proportions, stable body contours, and an aesthetic that aligns with the Goddess theme. This system enabled the accurate development of the bustier and mermaid silhouette, facilitated fitting adjustments, and ensured the structural stability of the design. As a result, both the technical and the visual presentation of the couture piece were significantly enhanced.

The feasibility assessment conducted by expert panelists further confirmed these findings. Most indicators that the “Artheia” gown successfully met the required standards of feasibility and quality. This reinforce that the French patternmaking system is a reliable and effective method for constructing complex, detailed evening gowns, particularly in the development of structured bustiers that demand precision and stability.

Based on these results, this study recommends that future developments explore more complex design variations and refine finish techniques to achieve an even higher level quality. Furthermore, the application of the French patternmaking system can serve as a valuable reference in fashion construction education and profesional practice, supporting the creation of haute couture characterized by high precision, structural integrity, and exceptional aesthetic value.

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²³ Resi Sepsilia Elvera et al., “Fashion Design Perception: A Comparative Study of Manual and Digital Methods,” *Juwara: Jurnal Wawasan Dan Aksara* 5, no. 1 (2025): 149–58, <https://doi.org/10.58740/juwara.v5i1.411>.

²⁴ Asril Ayu Lestari, Astuti Pendidikan, and Tata Busana, “Eksplorasi Decorative Trims Pada Busana Evening Gown,” *NUSRA: Jurnal Penelitian Dan Ilmu Pendidikan* 5, no. 3 (2024): 1314–23, <https://doi.org/10.55681/nusra.v5i3.3126>.

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