

## Towards the Development of an Apparel Design Framework for Circus Costume

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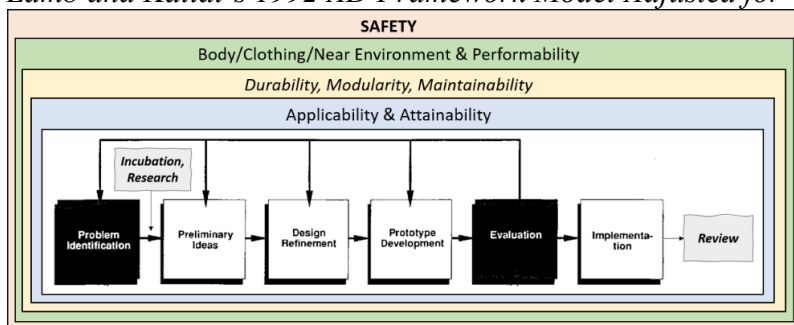
**Overview:** Training and performance attire for intensive physical activity requires particular attention to functional design, and in the case of circus arts these garments carry the additional and essential consideration of safety, especially in conjunction with the use of an apparatus or physical interactions with act partners. Circus performers are artists and athletes, executing extraordinary physical feats while wearing garments that allow for movement, provide for safety, and simultaneously meet the aesthetic needs or themes of the show. Knowledge of apparel development for circus arts is traditionally held within the community or by specially trained designers and technicians who work closely with performers. As the essential safety and functional specifications required for circus costume are not widely documented or readily available to apparel and performance design programs and industry, there are precious few apparel designers with the knowledge and skills to create circus attire. This paper is presented as part of a larger dissertation research project developing foundational resources and information on the topic of safety and function in apparel for circus arts and is intended as a starting design framework for the development of circus apparel. Given the considerable lack of information or knowledge in the field of apparel regarding development of these garments, there is an urgent need for guidelines and frameworks on the design and production of performance attire for circus. By combining elements of existing apparel design frameworks, it is possible to locate necessary design considerations and processes for circus costume development. These frameworks are 1) Stokes and Black's (2012) work on clothing for adolescent girls with disabilities, which is based on 2) Lamb and Kallal's (1992) functional, expressive and aesthetic (FEA) model of consumer needs and accompanying apparel design framework, and 3) a costume design framework by Jablon-Roberts and Sanders (2019) on garments for historically set theatrical productions. These three frameworks are particularly important because they stem from rigorously researched works involving design practices targeting people with specific needs ranging from safety and function to aesthetic storytelling.

**Existing Frameworks:** Within the entertainment industry, many designers follow practices that align with Jablon-Roberts and Sanders' (2019) costume design process framework centering on three themes (*applicability, attainability, and performability*), and four factors (*incubation, research, role-playing, and historical manipulation*) underpinning iterative approaches, all focused on live entertainment productions with historical settings. Of these, historical manipulation and role-playing may not always be necessary for circus and thus are discarded in the present research. Lamb and Kallal's (1992) FEA model of consumer needs and accompanying apparel design framework (see figure 1) is an established and often-used resource for scholars across apparel design disciplines (Orzada & Kallal, 2021). This framework was utilized in Stokes and Black's 2012 research on apparel for adolescent girls with disabilities. Interestingly, their result of body/garment/near environment interaction (BGN) in context with safety and the consideration of assistive devices make their interpretation of the FEA model

particularly relevant to the field of apparel design for circus arts; broadly interpreted, the circus artist who works with an apparatus has specialized design considerations for BGN, with the added difficulties associated with extreme movements of the body through space or in interaction with others. In Figure 1, the original FEA apparel design framework by Lamb and Kallal (1992) is altered to include Jablon-Roberts and Sanders' (2019) concepts of *incubation* and *research* as an additional step taking place after Problem Identification and before Preliminary Ideas, allowing for time to ruminate and explore the phenomena or design prompt prior to ideation. Inspired by Sparks and Oliver's (1996) addition of a final Evaluation step, in the present model a *review* is placed to permit feedback after Implementation, as given by an external party such as the audience, or internal party such as the wearer, whose lived/worn experience may necessitate design refinements only made apparent after execution of the event or show.

### Figure 1

Lamb and Kallal's 1992 AD Framework Model Adjusted for Circus Apparel Design



These steps are framed within a nested series of situational and design-focused considerations: Jablon-Roberts and Sanders' (2019) *applicability* and *attainability* present the relevance and logistical concerns as immediate considerations, followed by proposed additional steps of *durability*, *modularity*, and *maintainability*, design considerations relevant to materials selection and garment construction, modular design including fastening styles and locations as mentioned by Stokes and Black (2012), and maintenance aspects such as laundering, repair, or alteration. The next set of situational and design considerations combines Stokes and Black's (2012) BGN and Jablon-Roberts and Sanders' (2019) *performability*. BGN is an essential design consideration for circus artists, particularly as the circus body wearing costumes or training attire moves through space and in interaction with an apparatus or human partner. The *performability* of the clothes worn by the circus body during this interaction impacts the ability of the artist to execute act movements through factors such as mobility and range of motion. All situational and design factors are bounded by the overarching emphasis on *Safety*, as described by Stokes and Black (2012) in relation to function and as echoed in interviews conducted by the researcher. This combination of apparel design frameworks includes a multi-step process centered within situational and design-focused considerations that features *safety* as most important. This introductory work on the development of an apparel design framework for circus costume draws on established systems in related fields and establishes a groundwork for further foundational research in this area.

## References

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