

2022

Design Catalog

International Federation of Home Economics



IFHE

REVIEWS OF DESIGN

IFHE Textile & Design Acting Chair:

Rachel J. Eike, Iowa State University, USA

A total of 18 pieces were accepted through the peer review process for showcasing in the 2022 World Congress of the International Federation for Home Economics (IFHE). Each design was blind-reviewed by at least 2 reviewers and assessed on:

- (a) Conceptual Review & Concept,
- (b) Visual Impact and Aesthetics,
- (c) Process, Techniques, & Materials, &
- (d) Cohesion & Contribution

In this international Textile and Design juried exhibition review, 21 submissions (9 students; 12 professional) were received across all display categories (dress form, wall mounted, or table display), yielding an acceptance rate of 86%.

Congress themes present in the 2022 Textile and Design digital catalog include: Gender Equality, Responsible Consumption & Production, Clean Water & Sanitation, and Good Health & Well Being.

2022 IFHE T&D Reviews:

- Amy Dorie, USA
- Anagha Vaidya Soocheta, Mauritius
- Armine Ghalachyan, USA
- Beatrice Bcube, Nigeria
- Chew MoyHua, Malaysia
- Christiane Pakula, Germany
- Dawn Michaelson, USA
- Ela Dedhia, India
- Heba Gamal, Egypt
- Helen Maguire, Ireland
- Jennifer Harmon, USA
- Jung Lee, USA
- Katherine Allen, USA
- Katheryn McSweeney, Ireland
- Melinda Adams, USA
- Mi Young-SON, South Korea
- Sarah Wirth, New Zealand
- Shu-Hwa Lin, USA
- Simone Hunziker, Switzerland
- Ursula O'Shea Ireland
- Vishaka Karnad, India
- YheoYoung Lee, South Korea

Textile and Design reviewers were recruited through the IFHE newsletter and from the 2020 T&D review for inclusion in the 2022 blind juried process.

All accepted Textile and Design submissions were presented in-person or virtually as part of the 2022 World Congress exhibition and are featured through this digital catalog.

When citing creative scholarship from this digital catalog, please reference author, 2022 year, page number of design, and html link for the catalog, found on the IFHE 'publications' page:

<https://www.ifhe.org/initiatives/publications>

Thank you to the [Fashion Merchandising and Apparel Design program](#) at Georgia Southern University for donating dress forms for the live exhibition.



Every four years the International Federation for Home Economics (IFHE) hosts a World Congress. IFHE is the only worldwide organization focused on Home Economics. It is an International Non-Governmental Organisation (INGO), having consultative status with the United Nations (ECOSOC, FAO, UNESCO).

**The theme of the IFHE 2022 World Congress is
*Home Economics: Soaring Toward Sustainable Development***

IFHE-US and Family and Consumer Sciences colleagues from across the United States are excited to be your host. Plans include a pre-Congress for educators, plenary speakers, research presentations, exhibits, opening and closing ceremonies, a welcome dinner, and a banquet. New at this Congress is the Learning Day on the Move, which incorporates educational and technical excursions in and around Atlanta, including the University of Georgia-Athens.



More information about the XXIV World Congress, held September 6-10, 2022 in Atlanta, Georgia, USA can be found at the following weblink:
<https://web.cvent.com/event/ecodcde7-3a47-494c-ba86-269439400fa3/summary>

Join each other again



Waste and pollution issue is serious problem in fashion industry, and we are seeking new philosophy through renewable fashion design with aesthetic meaning. The design value on the aesthetical meaning beyond just recycling materials. This aims zero waste and reuse of wasted materials with aesthetic meaning, diversity in our society. Wasted fabric and leather as of scratching and discoloring were rebirth through cutting and sewing with hand knitting. Knitting yarn was also reused from factory and another knitting design. We visited several factories to collect wasted fabric, leather, and yarn, after then, developed pattern to design a dress. After checking the available area to use, we cut fabric and leather to join them. Rectangle shapes from wasted leather and fabric swatches connected with knitting structure. Plain structured hand knitting from recycled yarn was used both sides-front and back. To show the diversity and connection, we arrayed the rectangle shapes with color and material variation, and then sewed them for the front side. The back side of the dress was used as mixed materials-leather and wool-blend fabric. Cutting, weaving, and sewing process show us the possibility of reunion of diversity in our society. Through the meaning-making process, we could reconsider vulnerable people how they are impactful in our society through caring and loving, and we promoted the possibilities of home economics as circular economy through fashion design.



Re-Seen



Re-Seen was inspired by the painting “Surrendering” by Patricia Hill (2010). Influence was drawn from those who have been forgotten or overlooked in society, labeled as ‘invisible’ persons, also referred to as *marginalized persons*. Second-hand garments (five male business button-down shirts with convertible collars) that were first deconstructed and then reconstructed into a thoughtful sustainable and socially-focused piece. Using quilting techniques, the design reflects the struggles of invisible persons through the aesthetic principles of rhythm, balance, and lines. Contrasting line types created interest: curved lines of the center circle medallion (symbol of self-destruction and rebuilding), vertical lines of the deconstructed strips hanging off the bodice, and the additional angles of the 26 “disappearing four patch” blocks on the skirt. When creating a garment aimed to spark discussion connected to a social issue, special mindfulness was given to each design decision to create a cohesive concept of work. Each angle, shape and each construction technique were purposefully placed to tell a part of the story. The center closure was both interesting and part of creative scholarship. *Re-Seen* utilized the pre-existing buttons and buttonholes of the second-hand shirts to create the center closure. Research of past repurposed creative scholarship has shown that collars and cuffs are often too small for new pattern pieces to be cut and thus unused, however, *Re-Seen*, incorporated them in a new and useful way that other sustainable fashion designers and scholars may consider in future repurposed creations.

Nautical Rescue

Millions of plastic bottles are discarded and do not biodegrade for thousands of years. Furthermore, 15 million tons of textiles, such as t-shirts, are discarded every year in the United States alone. Therefore, used t-shirts can be converted into cross-body bags to carry reusable plastic bottles whereby extending the life of the textile t-shirts and plastic water bottles. This no-sew zero-waste eco-friendly design helps eliminate waste with the purpose to repurpose. Furthermore, this research expands upon previous no-sew t-shirt designs as a sustainable alternative to contributing to landfill waste.

Virginia Rolling, Georgia Southern University, USA

Chaos with Electronic Waste

Technological innovation constantly fosters to launch a new type of electronic equipment. It is commonly appreciated at the beginning but after a few years of its lifespan, it becomes quickly outdated, generating electronic waste (e-waste). This e-waste is causing another environmental concern by producing a huge solid waste. This wearable art piece was intended to portray the dark side of technological innovation occurring in our society and voice up sustainability awareness through abundant e-waste to the public. This experimental design was particularly the outcome of contextualizing e-waste as a wearable visual element through connecting with societal chaos. With sustainability awareness in mind, the design inspiration was derived from the entangled electrical cords. Yarns and electronic cords have the same traits being long and thin in shape, but yarns are softer to touch human body; thus, becoming the core material to use for this design, considering its wearability. Using hand-operated knitting machine techniques, the textiles showcase the visual expression of the chaotic mass with e-waste to the public. The knitted textiles used for this design portray abundant e-waste residing in landfills, which bring public awareness for the responsible consumption and production. The design is not only for showcasing aesthetically pleasing 3D structured wearable art but also for bringing the public awareness to environmental concerns that are deriving from discarded electronic devices we use every day in our current technology-driven society. This design addresses dynamic interrelationships of human beings with human-built, societal, and natural environments through disruptive technological innovation.

Boowon Kim & Young-A Lee, Auburn University, USA



Re-Surfaced Bauhaus on Canvas: Upcycled Wall Art



Systemic Action and
Sustainable Consumption & Production

The purpose of *Re-Surfaced Bauhaus* was to look to discarded textiles as a resource for adding three-dimensional surface designs techniques to a Bauhaus-inspired digitally printed graphic for wall art décor development. The challenge was to employ a variety of surface techniques, using the additive repurposing approach, to merge the craft of making with modern digital textile printworks. In *Re-Surfaced Bauhaus*, using discarded textiles from a university sewing production studio textile collection bin allowed for the upcycling of these once-destined-for-landfill small scraps of materials to be repurposed through surface design application. The complexity and variety of the surface design techniques compliment the original Bauhaus-inspired lines and shape that make up the graphic base of the wall décor. Balanced composition of the abstract design paired with complimentary surface techniques further emphasis the art movement of modernism and craft. Selective textile scraps, in a variety of fiber contents, fabrication structures, and weights, executed the techniques: reverse applique, circular 3D stuffing, directional stitching, fabric weaving, yarn tufting, shaped appliques, miniature darting, and hand embroidery stitching. *Re-Surfaced Bauhaus* continues to build upon other repurposing design work of the lead author while expanding sustainable design scholarship to include creative surface design technique application. The output of this creative scholarship aimed to serve as a conversation piece around responsible textile production and consumption while also showcasing merged areas of technology, surface design, and sustainability.

Rachel Eike & Damon Eike, Iowa State University, USA

Rock Finder: Equity and Sustainability for Preschool Girls

Girls experience inequality starting at birth by just being born into a society that values boys more (Babcock & Laschever, 2003). Societal institutions including the apparel industry continually reinforce this despite consumer frustration (Robinson, 2018). The purpose of this design ensemble was to create empowering playwear for preschool aged girls which provides functional features that address the needs of their physical activities and accommodates their skill level in a sustainable way that will not negatively impact their future.

Rock Finder demonstrates what is missing in retail assortments today providing an example of clothing that accommodates girls' physical activity needs through the inclusion of functional design characteristics that are equivalent to that already being granted to boys. When girls are equipped with clothing that allows them to be equally independent and prepared to fully engage in play, their quality of life is improved and gender equality is advanced.



‘Skeletons’ – No bones about it!

Fashion designers have long used the traditional technique of embellishments to create unusual surfaces and to amplify designs. More recently designers have broken new ground by introducing uncommon materials developed by innovating production processes and finished materials to create a new generation of natural fabrics. Leaf skeletonizing is a process that occurs spontaneously in nature. The artwork presents ‘A TREATISE’ on the art of producing skeleton leaves - made by removing the leaf tissue from varieties of leaves without damaging the intricately framed veins, producing a lace-like appearance. The leaves are amalgamated with natural flowers preserved for a vibrant colorful mood. Leaves from the Sacred Fig tree (*Ficus religiosa*) as it is worshiped and seen around Hindu temples are used. These delicate leaf membranes are used as a collage for embellishing garments and creating jewelry. They are dyed and combined with Job’s Tears seeds for a textured effect. The creation of garments embellished with these natural resources adds to the uniqueness of this collection. It attests techniques involved in flower preservation and making of leaf skeleton. It shows how simple ecofriendly processes such as retting the leaves can be used to recover the skeleton.



Anagha Vaidya Soocheta & Navrasha Chaytee, University of Mauritius, Mauritius

Supporting Responsible Apparel Consumption through Design: Integrating Multiple Aspects of Consumer-Perceived Quality to Promote Long-Term Apparel Use



The overarching goal of this creative scholarship was to incorporate multiple aspects of consumer-perceived quality into an ensemble to promote responsible apparel consumption through long-term use. Designers' choices of materials and construction methods impact quality factors of durability, function, performance, and ease of care (Gwilt, 2013). Thus, meeting these needs through materials and construction method selections was a major goal. An additional goal was to design garments that could create multiple outfits, thereby increasing their usefulness. Color is an important design element in creating emotional connections to products (Norman, 2007), and specific colors are associated with specific feelings. Motifs in textile patterns can also contribute to mood (Gordon, 2011). Therefore, floral patterns and specific colors were incorporated in the garments to provide the user with positive feelings. Bright pinks are associated with happiness and energy (Eiseman & Hickey, 1998). Green provides feelings of peace and calm (Feisner, 2014). White is connected with peacefulness and empowerment (Feisner, 2014). Yellow connotes cheerfulness, happiness, vitality, hope, and optimism (Feisner, 2014). The author created the peony print by painting an original watercolor using the chosen colors, scanning it, and digitally manipulating it into a textile print. The peony motif was selected for its association with prosperity (Field & Scoble, 2014), further providing emotional benefits to the wearer. Construction methods were selected for garment durability. This aesthetic experience integrated with quality construction methods achieves the design's purpose of creating a holistic impression of quality for consumers, promoting garment longevity and sustainability.

Ellen McKinney, Iowa State University, USA

Forest Seasons



Forest Seasons was commissioned as an art cloth to cover a plinth and serve as the base of a display of a bird's nest with stone eggs. The goal of the design was to create a forest of trees to hold the nest aloft, with the seasons of the year flowing around the trees painted with acid dyes onto the 45"x45" 8mm habutoi silk. The choice of silk for the table covering, was partly based on the ease of laundering the resulting colorfast fabric, something more challenging with other types of art cloth. The large size of the piece required painting to be conducted in phases, with careful planning so that the resist and then the dye could dry completely before the silk was repositioned in the painting frame. The rice-based resist used to paint the trees was tinted with black dye that was diluted as the "year" progressed to give the trees standing in the winter and early spring seasons a more silvered appearance, resembling the fading of bark. The edges of the silk are hand-rolled following steaming using silk thread. The resulting design is a unique piece that captures the feelings of optimism and enthusiasm felt in a forest that is continually progressing towards the next season, sheltering younger trees, and even a small natural fire that presages renewed fertility

Gwendolyn Hustvedt, Texas State University, USA

Fiber to Attire

The project Fiber to Attire embodies the gradual shift towards more sustainable clothing, through both purchased materials and individual craftsmanship. As the world strives to become more sustainable, the unsustainable products created previously will still exist. Rather than dispose of such products entirely and add to landfills, why not let them serve their purposes as sustainably as is viable? With this impact in mind, the objective was to create a wearable garment from the ground up, from purchased natural fiber, to hand spun yarn, to woven textile, to attire using tools and materials accessible to a college student in the United States. The inspiration stemmed from the unique fiber used in the project. The fiber is a 50/50 blend of Polwarth wool and eucalyptus fiber infused with pearl powder during the hardening stage of the closed-loop viscose fiber process. Resulting in a natural fiber containing nutrients, amino acids, antibacterial properties and is biodegradable. This pearly Polwarth was spun on a spinning wheel to a worsted weight two ply yarn used as the weft, sprinkle dyed by hand alongside purchased silk yarn used for the warp, woven on a rigid heddle loom in a plain weave and the resulting textile was sewn into a wearable coat using an altered pattern. With the right tools, knowledge, and time, it is possible for everyone to take steps towards sustainable clothing handcrafted from products that already exist. Each small step makes a difference and many steps taken together will help us soar towards sustainability.



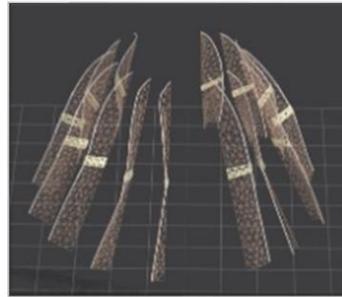
Rose Window of the Notre Dame de Paris



This design project aimed to explore bridging apparel design, architecture, and upcycling. The concept was inspired by the aesthetic of the rose window on the Notre Dame de Paris. To promote environmental awareness by reducing waste, the dress was made with three used suede men's jackets and six men's neckties using laser cutting and engraving technologies. The silhouette of the dress was inspired by the *Pointed Arch* in the ribs of the Notre Dame cathedral. The laser cutting motifs adopted the pattern of the rose window at the southern transept extension of the cathedral. This design integrated laser cutting beams and digital pattern making in the design process. It provides apparel designers an alternative source for developing unique textiles and enables designers to create engineered patterns. The processes of sourcing the inspirations demonstrate an innovative way of incorporating historical and cultural affairs into wearable art design.

Ling Zhang & Li Jiang, Iowa State University, USA

Dancing Mimosa



The purpose of design was to create an interactive transformable garment for expressing biodiversity understanding with wearers' aesthetic pleasure. We explored transformable garment to express the value of biodiversity through the nature's organic, Mimosa leaves' movement. We followed bionic design process, has been used on diverse engineering design and health device design by analyzing movement and shape of nature's organism, to embody aesthetically effective transformable garment using SMA (Shape Memory Alloy) and 3D CLO program. The leaves react as self-protection process, but human being can enjoy seeing the movement with understanding biodiversity. We tried to express the harmonious aesthetics including technologies, sustainable value of biodiversity. After analyzing the algorism of Mimosa leave's movement, we find out appropriate materials, shape, and location to embody technologies. Since the movement depended on number and length of SMA, watt, ampere, and charging time, we searched out the appropriate location on the body to activate SMA sustainably through CLO program. It has significant value on reducing wastes and time using with CLO program, recycling materials, and applying biodiversity based on bionic design process. This design could expand usage of SMA not only for functionality and usability but also for expressing aesthetical meaning of biodiversity through analyzing the movement of natural organism. This can give holistic pleasurable satisfaction to wearer by interactive expression toward integrated sustainability. It also shows the integrated aspects in transformable garment with understanding environmental situation. We can apply this process with other nature's organism to transformable fashion design in the future.

Systematically Styled for Successful Sustainability – S⁴

The fashion industry is looking for ways to reduce the negative impacts it has on the environment. Environmental damage is caused by the use of harmful dyes, reduced timelines of fashion cycles, and textile waste generation both pre- and post-consumption. This product is useful to brides who are environmentally conscious and want to make an impact while also having a special dress for their wedding day.



The purpose of this textile and design project was to create a wedding dress that can be modified to extend the lifecycle of a wedding gown. Sustainable design methods included size-adjustability, modular design, design for disassembly, and natural dyeing. A small tie belt allows for size-modification, disassembly instructions allow for design modifications, and natural dyeing instructions allow for color modification of the garment. When the garment life has ended, production methods allow for easy deconstruction, leaving large pieces of fabric that could be used for other projects or routing through proper textile recycling streams. Exploration of these sustainable design processes could lead to modifications in the existing production processes encouraging garment design with planned life cycle extension and recycling.



Stephanie Hubert, University of Arkansas, USA

Responsible Consumption & Production
Biodiversity & Transformability

Transitions

Wedding dresses are symbolic of a significant life transition in marital status and are costly garments to produce for single use. Therefore, this collaborative creative scholarship project repurposed a wedding gown into a future mother-of-the-bride dress, and even further, a grandmother-of-the-bride handbag in order to extend the product life of such a precious textile. This research extends upon previous research on upcycled wedding dresses and demonstrates how the original owner of the textile can enjoy their wedding garment beyond their special day



Virginia Rolling & Addie Martindale, Georgia Southern University, USA

Cultural Commodification and Combo with Functional Adire (Tie/Dye) of Yoruba Nigeria



Yoruba indigenous textiles - *Aso Ofi* (Cloth woven on narrow loom) and the *Adire* (Tie/Dye fabric) are basic cultural textiles of the Yoruba worn mainly during occasional or cultural outings (Adesanya, 2014). While *Aso Ofi* is purely produced from the interlacing of warp and weft yarns at right angles on the loom, the *Adire* basically involves a decorative process where various resist mediums of: tie/dye, batik, and printing in different forms are used for coloration to create variety and ingenuity of aesthetics. Several locally produced commodities like *Aso Ofi* and *Adire* need expansion to aid technological advancement that would encourage self-reliance and break the unhealthy rivalry its experiencing with foreign textiles in order to sustain the culture of Yoruba clothing through improved patronage.

The design being showcased here: '*Full Length Female Combo*' is a product of multimedia design *Adire* that was embellished with the 'seer-sucker' design of *Aso Ofi* in Awosika (2016). This product is apt at this time when the challenge of the influx of imported synthetic textiles into Nigeria and the mono economic dependence on the oil sector had resulted into impoverished conditions of citizens. A great need for diversification into indigenous technology of *Aso Ofi* weaving and *Adire* -dyeing to fast track their growth potential and provide job opportunity for people along the value chain of cultural textiles to reduce poverty.

Cultural Commodification: Versatility with Functional Combo from Yoruba Indigenous Textiles

Indigenous textiles technology of cloth dyeing has played significant roles in stabilizing the economy of many Yoruba families until it became saturated with heavy flooding of imported synthetic textiles which endangered their indigenous counterpart. Though weaving and dyeing, crafts were described by Akinbileje (2014) as closed-door hereditary professions usually passed from generation to generation through informal apprenticeship. Urgent interventions need to be worked out to rekindle hope in the indigenous Primary Textile Sector (PTS). One of such interventions is the: *'2-Piece Tie/dye Long Skirt and Blouse'* developed from the adaptation innovation theory of Kirton (2009).

The purpose of *'2-Piece Tie/dye Long Skirt and Blouse'* was to introduce innovations that could make the indigenous textile industry. *'2-Piece Tie/dye Long Skirt and Blouse'* is a mono-technique design in which 4 yards of 100 percent cotton white Voile material was used. The voile fabric was laid on a flat table and 'pleated into 1-inch width along the 4 yards length and tied at intervals of 2 feet apart'. Two different dye baths were prepared and used for colouration of the textile: Brown and Army Green colour. At the completion of the *Adire* production, the product was cut into the 2-piece outfit using a Size 12 body measurement of an adult female after sketching the desired style on a pad and cutting the pieces with the lining material. Additional ornamentation with gem stones was applied on the surface of the *bodice* to complete and compliment the overall aesthetics.



Bridget Awosika, Adeyemi Federal University of Education, Nigeria

Heritage Oneshirt

The Heritage Oneshirt was developed as part of a larger slow fashion project called the Oneshirt Project (www.oneshirt.hustvedt.us). The purpose of the Oneshirt is to serve as a permanent garment style that can be easily handmade and that suits the particular needs of the wearer. Each wearer would have their own style of Oneshirt, but once the style is resolved, it can be the only style worn by the maker for the rest of their life. The use of the base Oneshirt pattern for a bunad (Norwegian traditional dress) inspired garment necessitated adjusting the base pattern by the addition of a yoke, since the current Oneshirt features bias cut “wings” that wrap over the shoulder to provide movement comfort. The large, deep pockets for keys, wallet and phone, a central feature of the utility of the Oneshirt that eliminates the need for a purse in most instances, were retained, making the garment silhouette a hybrid of heritage and 21st century utility. The embroidery method, using wool and linen sourced in Norway and modeled on a skjorte (shirt) in the digital archives of the Øst-Telemark Museum, resembles needlepoint but also uses Gobelin type stitches for the linear portions around the filled areas. The final product can be worn over a simple skirt or leggings for occasions where ethnic inflected dress is appropriate, while still being able to be tucked under a vest and skirt when more traditional appearance is desired.



Gwendolyn Hustvedt, Texas State University, USA

Sawda: A Traditional Felt Saudi Abaya Made from Local Wool



Sawda is a traditional felt Saudi abaya (ankle length outer garment) produced from an organic local sheep's wool to support sustainable fashion and responsible production. The fashion industry causes environmental harm, and it has been suggested that reducing the consumption of non-renewable materials and textile disposal will reduce its environmental impact. One of the renewable materials that is under-exploited in Saudi Arabia is wool. Thus, the main challenge of this design was to create stitch-free felt pattern made from chemical free 100% natural local wool. The idea of the design was inspired by the nature of *Sawda* Mountain, the highest peak located in the southwestern region of Saudi Arabia, to offer Saudi women an eco-friendly, distinctive, traditional, and socially accepted outer garment. The raw wool was cleaned using organic soap, and dyed using natural dyes (i.e., turmeric, henna, roselle, and natural green food coloring). This design project contributes to sustainable consumption and production methods by using the felt techniques, and sustainable practice. *Sawda* was created from organic local wool, which makes it a recyclable, high-quality, and long-lasting product. This design provides an application of using biobased materials and under-exploited local resources to help the fashion industry become less dependent on non-renewable fiber sources and reduce its environmental impact.





Cover artwork in the 2022 Digital Catalog created by
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