

Ivory and Irony

Constance R. Spotts, Iowa State University, USA
Faculty Mentor: Eulanda Sanders, Ph. D

Keywords: Africa, Plastic Waste, Elephants, Children's Wear

Contextual Review: In 1869, the production of billiard balls from ivory was threatening to exterminate the elephant population. A challenge was issued for a suitable substitute for ivory. The answer was celluloid, the first industrial plastic (Schifter, 2019 and Peake, 2018). Over the last 150 years, plastic evolution has reached to nearly every market with only 9% being recycled (Schifter, 2019). Africa, with its quickly growing population is predicted to add 3.5 million people per month for the next 28 years. This has created a large consumer market for prepackaged goods sold in supermarkets (Jambeck et al, 2018). The infrastructure to handle the increased plastic production and usage is lacking and lags the growth of the population creating a tangible environmental issue. Africa accounted for one eighth of the world's total mismanaged plastic (4.4 million metric tons out of 32 million metric tons) in 2010 (Jambeck et al, 2018). This mismanaged plastic (see Figure 1 for per capita waste) finds its way into the environment creating numerous, and often fatal, problems for wild life, including the elephants it once sought to save (Schifter, 2019). Elephants and other grazing animals eat plastic bags because they smell like the food in which it was wrapped. The plastic bags get stuck in their stomachs giving the feeling of fullness, thus the animals do not seek additional food and eventually starve to death (Two Oceans Aquarium, 2020).

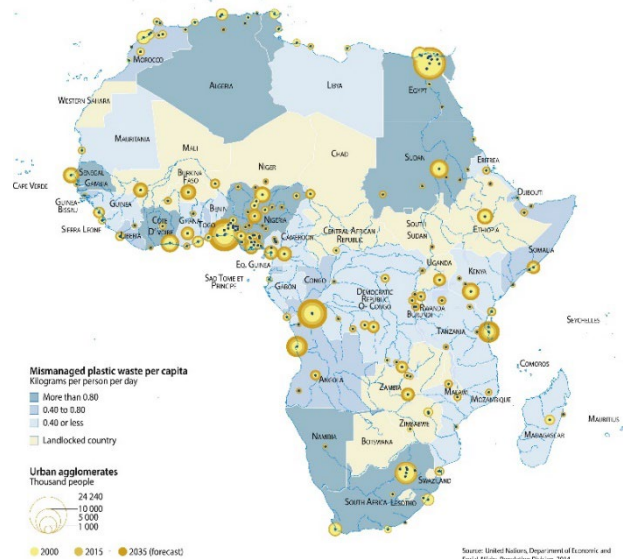


Figure 1. Mismanaged plastic waste per capita. (Jambeck et al, 2018)

Concept: Given the extent of the dangers of plastic, I wondered if a wearable art piece could be designed that brought the plastic plague back into discussion? The answer that surfaced was a toddler dress embellished with the endangered animal and the plastic that threatens them. The design not only needed to embrace the animal but the culture of Africa. The choice of a child's dress is twofold. Firstly, children are the next generation to act in saving the world and her animals. Secondly, the creativity of a young person's mind lends to the ability to wear creative garments without automatic disregard for them being too playful and bright.

Aesthetic Plan: The design centered around an elephant created out of its nemesis. Since the garment was child's wear, a playful caricature of an elephant was chosen. To achieve balance

with a profile caricature, sleeves were added – one as an ear and one as the water from the elephant’s trunk. In contrast to the subtle grey of the elephant, a batik representing an African sunset was chosen as the bodice and eight authentic African prints were chosen for the skirt. A simple silhouette of a high waisted, pleated toddler dress was chosen as to not compete for the overall attention of the message of the African elephant.

Process, Technique, Execution and Cohesion: After drawing the elephant’s profile to fit the bodice of the dress and transferring the sketch to plastic layers of plastic, a second layer was added to the first to achieve proper opacity. A grocery bag was used as reference to the bags that cause the issues for the elephants. Then a layer of cotton batting was added. A black cotton layer was used as the backing for all layers to be stitched together. Edges are trimmed, clipped and the head turned right side out. The resultant clean edged elephant, hand quilted over the original stitch lines, was added to the bodice and hand stitched in place. The bodice was added to the 16-panel skirt with typical garment construction. Eight additional grocery bags were cut into one-inch strips across the bag to create loops. The resultant loops were linked together to be crocheted as one long plastic yarn into the sleeves. See Figure 2 for details. The sleeves were



Figure 2. Grocery bag: folded, cut into strips. Loops joined into “yarn”

crocheted separating with a “K” size crochet hook and then couched onto the bodice with cotton thread. The tusk was created using a technique used by women in Uganda who are creating saleable items from single use, non-recyclable straws (Pajda, 2017). Using this technique provided additional cohesion to the design. Not only was the tusk made of plastic, it was done so using an African technique which starts by cleaning the straws with hot soaping water. Once cleaned, flatten by a knife or crisp edge, straws were woven, stitched, cut into the proper shape, and added to the bodice into a previously unstitched hole and machine stitched into place.

Design Contribution, Originality and Innovation: It was been seen that world causes are displayed using adult fashion. One example is SCAR-RED by Avila in 2018 which was designed to highlight heart disease in women. This design brings the cause on the bodies of the next generation - a generation that will have longer to understand how things came to be and how they can effect change. It is a wearable art piece that brings together the two parts of the problem, cause and effect. The overall design accomplishes what the designer intended perfectly, charmingly. By using authentic African fabrics and Uganda straw weaving with the use of plastic grocery bags as the subject matter, the design brings the issue of the elephant into full view for a discussion to be had by all viewers.

References:

- Avila, S. (2018). SCAR-RED, In *Proceedings of the annual meeting of the International Textile & Apparel Association, Inc.* (#75). Cleveland, Ohio: Monument, Colo.: ITAA.
- Jambeck, J., Hardesty, B. D., Brooks, A. L., Friend, T., Teleki, K., Fabres, J., Beaudoin, Y., Bamba, A., Francis, J., Ribbink, A. J., Baleta, T., Bouwman, H., Know, J., & Wilcox, C. (2018, October). Challenges and emerging solutions to the land-based plastic waste issue in Africa. *Marine Policy*. 96, 256-263. <https://doi.org/10.1016/j.marpol.2017.10.041>
- Pajda, A. (2017). Women in Uganda are turning plastic straw waste into art – creating jobs and cleaning the plant. Retrieved from <https://www.onegreenplanet.org/news/women-turning-plastic-straw-waste-into-art/>
- Peake, L. (2018, September 10). Plastic was invented to save the environment, so beware of the next solution. [Web log post]. Retrieved from <https://greenallianceblog.org.uk/2018/09/10/plastic-was-invented-to-save-the-environment-so-beware-of-the-next-solution/>
- Schifter, J. (2019, July 24). How was plastic invented? It all started with elephants. [Web log post]. Retrieved from <https://tipa-corp.com/blog/plastic-it-all-started-with-elephants/>
- Two Oceans Aquarium. (2020, July 15). The plastic problem: How does plastic pollution affect wildlife? [Web log post]. Retrieved from <https://www.aquarium.co.za/blog/entry/the-plastic-problem-how-does-plastic-pollution-affect-wildlife#:~:text=Why%20do%20animals%20eat%20plastic,then%20it%20must%20be%20food.>

