

Feature

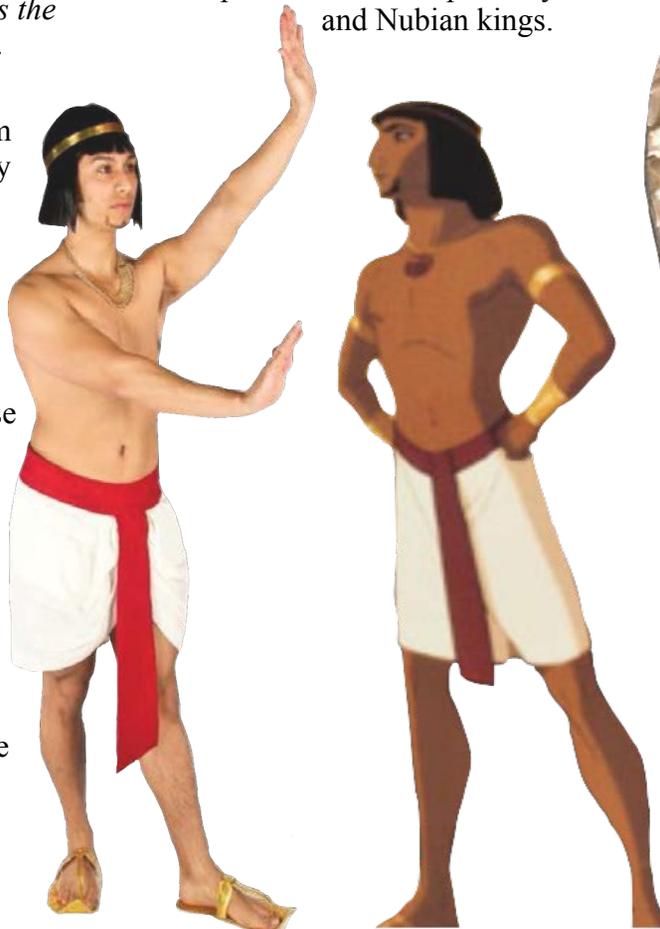


Embellishing *The Prince of Egypt* Bethany Padron

One of the costumers for the award-winning Costume-Con 31 "The Prince of Egypt" masquerade entry describes the embellishment techniques she used.

The Prince of Egypt is Dreamworks Animation's 1998 film adaption of the Old Testament story of Moses and the Hebrew Exodus from Egypt. The award-winning music and lively characters are what makes it a great movie to cosplay. What started as a simple costume recreation quickly bloomed into a much larger exercise in reproducing Ancient Egyptian garment-making techniques, including dyeing, shoemaking, and distressing.

Finding the historical context for the The Exodus was my first task. The Seder Olam Rabbah (ca. 2nd century CE) determines the commencement of the Exodus to be 2448 AM (1313 BCE) so, I settled on three costumes from Egypt and Midian dating between 1550-1069 BCE in the New Kingdom.



The first costume was "Prince Moses" kilt, apron and shoes. While this costume looked simple, the ring and the shoes were incised with Egyptian imagery. "Moses" shoes appear in one scene and are an all gold copy of grave-goods (not meant to be worn by the living) with tooled leather insoles depicting the presentation of captive Hyksos and Nubian kings.



Milo Martinez as "Prince Moses." (far left) Photo: Don Searle. Character from *The Prince of Egypt*. (left) Image: Dreamworks Animation. Embossed sandals, worn by Milo Martinez. (above)

The second look for “Moses” is his Midian shepherd outfit which is a green linen tunic, a large woolen cloak and wool cheche scarf. “Tzipporah,” “Moses” wife, wears a linen dress and apron with earrings and arm bands. I dyed these natural wool and linen garments to match the film.



“Moses” (left) and “Tzipporah” (right) from *The Prince of Egypt*. Image: Dreamworks Animation. Milo Martinez and Bethany Padron (center) as “Moses” and “Tzipporah”. Photo: Don Searle.

To achieve the colors used in the film I researched dye techniques that would have been used in the era and dyestuffs that would have been available from the Nile and across the Sinai Peninsula. I tested on both the linen and the wool; henna, tumeric, saffron, coffee, madder root and indigo dyes. In order for organic dyes to graft to the fibers, the fabric must be treated with a “killing” agent or mordant, to loosen the fiber and make it porous.



Mordants from the era are urea and alum. Alum is a naturally occurring reagent in Egyptian soil. I cobbled this mordant from household chemicals, softener salts with limestone and sandstone paving rocks to imitate Egyptian soil content. Urea is a refined byproduct of kidney function. I followed my horses for two weeks to



Bethany's horses provided 5 gallons of urine for urea.

acquire about five gallons of urine, which rendered down to one liter of mordant. I boiled test swatches in each mordant.

In the end, many of the colors were not saturated or not color-fast and I resorted to modern fiber reactive and acid dyes. The madder root had a great color but I could not get a compatible volume of it for the coat. The saffron and tumeric blend on the wool however, worked excellently for the yellow wool trim.

After dyeing was complete, I moved on to sewing. Extant tomb garments showed un-dyed thread was most often used, so I tested using the handkerchief weight linen fiber from the kilt and apron to construct the garments but it was too fine to hold up. I purchased coarse linen bookbinding thread and left most of it un-dyed.

For sewing, I made a bone needle (right) based on a MET exhibit out of deer bone shards, provided by my dogs. It was sanded down to a point and the eye was carved out with an iron awl. After breaking and re-boring the eye a few times, I realized the needle gauge was too large to use except



Swatches in urea mordant.



Swatches in alum mordant.



Madder (foreground) and...



Henna (foreground) and tumeric/saffron dye pots.



Deer Bone Shard and sanding tools.



Sanded needle with broken eye.



Egyptian needle, MET collections.



Detail of hand stitching.



Vegetable-tanned leather soles with suede insoles.



on the wool garments, so I switched to complementary sized blunted steel needles for the rest of the project. Hand sewing techniques have not changed overmuch from documented examples of New Kingdom garment finds. I used a back-stitched seam, simple hem, rolled and whipped hem and flat felled seam on all the garments.

I then set out to make two more pairs of shoes. “Moses” shoes are slip-ons, as seen in the burning bush scene and “Tziporah’s” thongs with a medallion. I used vegetable-tanned leather for the soles and covered the insoles with suede to hide a foam insert. Using the iron awl, I poked holes in the perimeter and stitched all the layers together with sinew. I then needed a glue to seal the sole stitches and outermost sole layer.

I had tested making natural glue from rawhide dog chews and keratin chips harvested from horses by first soaking the pieces in water for three days and then boiling them down to a syrup consistency. This glue was not entirely successful,



Making glue from dog chews and keratin chips.



Close up of completed Midian sandals.

probably due to the fact that I ended up burning it slightly. To ensure durability I supplemented this glue with it's modern equivalent, Eco-Flo tanner's bond, a water based hide glue.

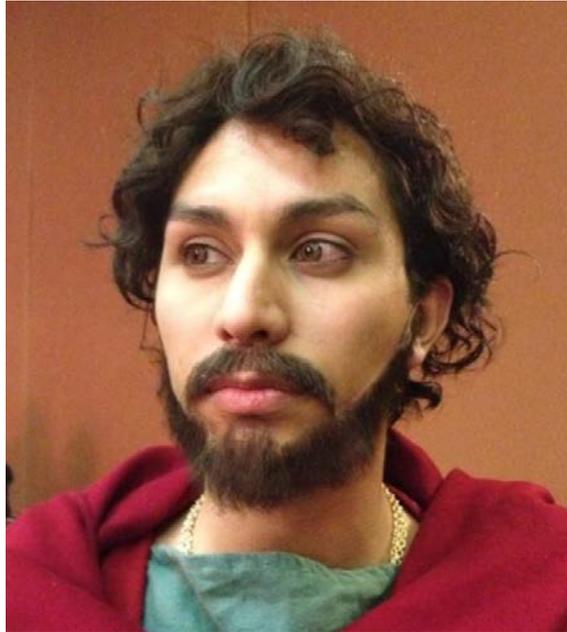
The last layer of detailing was to achieve an aged look for the garments. The first round of distressing was a four day brine soak in rock salt to mimic human body sweat after which, I used wringing, washing and beating to mimic the wash techniques of the era. I then stained the linen garments with tea and coffee.



Brine soak to achieve aged look for garments.

Next, I used sandpaper, sandstone, clay and pumice to rake the hems and cuffs. The final round was an oil based softener wash with calcium chloride for a well worn look and feel.

Despite my sincerest efforts, I still had to rely on some modern conveniences to complete the looks for Costume Con 31. Milo wears a human hair false beard and goatee and two wigs as "Prince Moses" to facilitate the quick change that was part of our presentation. "Tzipporah's" synthetic wig has [Fosshape](#) cones sewn in, to create the shape of her film hair and to lighten the weight of it.



The *Prince of Egypt* project took a whole lot longer than I ever expected when I put it on my do list. Even simple animated costumes can have appreciable, often hidden detail. However, it stretched my patience (for hand sewing) and my skills both technical and performance in a truly rewarding way.



Synthetic wig with Fosshape cone to shape hair.

My special thanks to Jolene Wells for quick-changing and Kristen Moffitt and Anne Catelli for hand-holding. Photos by Don Searle Photo, Sheila McClune, Dreamworks Animation, Milo Martinez and Bethany Padron.

Bethany Padron has fostered a love of costuming in theatre and is the Costume Studio Manager for the University of South Dakota. Her research interests include costume crafts, non-traditional materials, and appendages. She holds a BA in Technical Theater from Creighton University and a MFA in Costuming Technology from the University of North Carolina School of the Arts.