



## Adapting Accessibility - Creating Vintage Inspired Fashion Accessible to Individuals With Limited Mobility

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### Design Mentor Statement

For the last three years, I have served as this student's honors mentor, supervising the students' development as a researcher and designer. This design is one of a three ensemble collection based on the students IRB approved research study to understand the apparel needs of women who use mobility aids. Over the last three years the student has been dedicated to learning as much as they can about accessible and adaptive clothing design conducting an extensive literature review and conducting interviews with women who use mobility aid. The design process for this ensemble was guided by the desires and needs of the women that the student interviewed. Much attention was given to the functional needs and the aesthetic needs which included the development of unique fabric prints that celebrate ability diversity. All of these aspects and a consideration for how this ensemble is unlike any adaptive garments currently available for purchase lead to my enthusiastic sponsorship of this student and their work.

### Design Statement

*Statement of Purpose:* One in 7 people in the United States has a disability related to mobility (CDC, 2020), equal to 44 million people. Despite being the largest disability minority group, there is sadly more clothing available for dogs than people with disabilities (CDC, 2020; Ryan, 2018). Ready-to-wear designers lack training on working with individuals with disabilities (Kosinski et al., 2018). The adaptive clothing that is available is marketed as medical equipment and does not satisfy the market of people with disabilities (Na, 2007).

This garment is part of a larger collection based on interview data from 13 women who use mobility aids. The purpose of this design was to rethink current adaptive fashion and create an accessible jumpsuit inspired by 1940s workwear that addresses the needs of people with disabilities. Access to necessities, independent donning and doffing, and adjustability to increase comfort are among top priorities. Many traditionally female garments include the largest pockets on the back of pants, but this is not useful to those in a constant seated position (Story, Mueller, & Mace, 1998). In fact, bulky seams on pressure points can cause sores for those using mobility aids (Rutledge, 2017). Due to differences in dexterity, independent donning and doffing (taking clothing on and off) can be a challenge (Stokes, 2010). Seated position fit can have large variances from standing position, so garments must have allowances for either circumstance (Sarcone, 2017). The goal of this garment design was to create a fashion forward look that is comfortable and adjustable to those with disabilities so that this population feels included in an industry that is currently not accommodating (Freeman, Kaiser & Wingate, 1985-1986; Sarcone, 2017).

*Aesthetic Properties:* Vintage fashion has been found to be used by women to construct a “distinctive look” and stand out amongst current trends (Armstead, 2018). Adapting Accessibility was inspired by 1940s women’s workwear which pushed the boundaries of creativity, femininity, and utility due to the rationing of World War II (Shrimpton, 2015; Reddy, 2020). New styles were needed to accommodate the new class of working women in engineering and manufacturing (Kay & Storey, 2018). My objective was to bring attention to disability in a positive way and to empower wearers to embrace their disability identity. Adapting Accessibility reengineers the current take on adaptive clothing (Figure 2). People with disabilities are extremely dissatisfied with the current selection of adaptive clothing, specifically in aesthetics and accommodation of needs (McBee-Black & Ha-Brookshire, 2018; Morris, 2019). The waistline sits at the natural waist in order to reduce strain around the abdomen when sitting. The full length pants and sleeves have adjustable snap cuffs to assist with independent donning and doffing and adjustability. Each cuff can be lengthened, tightened, or rolled up to style the garment differently and accommodate different mobility aids, like prosthetic limbs.

The custom designed print is reminiscent of polka dots but incorporates the wheels of a wheelchair as part of its motif (Figure 1). I used elements representing disability in the print to draw attention to mobility aid usage. Those that use mobility aids see their use as freedom, while people without disabilities see it as restriction. This print starts a conversation about accessibility and fashion. Each pattern piece was cut at different angles to maximize the interest from one print. Both the lining and outer garment were created with the same motif, but two different colorways were utilized. The lining fabric was used on the outer shell in the cuffs, pockets, and visible hood lining.

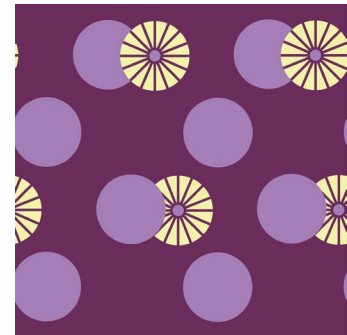


Figure 1

*Process, Technique, and Execution:* Adapting Accessibility was created using flat-pattern pattern making methods. This ensemble can be donned and doffed in a seated position with side opening snaps and adjustable wrist and ankle cuffs. This garment is fully lined and features a removable hood to protect the wearer from weather while not adding bulk to their outfit. There are six fully accessible pockets on this garment. Two leg pockets are sized for small cards, like an ID or credit card. The larger leg pockets can hold multiple small items, like a small wallet or phone. The chest pockets can fit a set of keys or standard sized cell phone. The waistline of the garment is adjustable with an attached belt that can be snapped in the front or back. This also allows for styling options and adjustability based on seated or standing position. The sleeves include a gusset at the armpit to increase arm mobility when navigating in a wheelchair. The outer fabric is a durable cotton twill, with the full lining created in cotton sheeting. Seams were trimmed, encased in the lining, and topstitched to prevent bulk. This allows the garment to withstand heavy use while remaining comfortable (Figure 2).



Figure 2

*Cohesion, Originality and Innovation:* In this garment, I was able to reimagine adaptive clothing to create an accessible garment that practices design methods that are accommodating to those with disabilities without sacrificing aesthetic appeal. Repositioning and rethinking closures, adding additional pockets, and adding adjustable elements can allow for independence in dressing for different levels of mobility. In addition, I wished to empower those with disabilities by bringing attention to their needs through the print. It allows the wearer to showcase their mobility aid use, which allows them freedom with their disability.

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