

Large Print Guide

Section Two

Creativity



Design and Disability

Section Two Creativity

2.01

Where is disability in design?

In the past, the contributions of Disabled people have been erased from stories of design innovation. Society has often characterised designers as creative experts and Disabled people as passive users. But Disabled people have always been here, inventing, breaking, adapting and subverting the designed world and even reshaping time. These projects consider how Disabled communities create design networks and work collaboratively or individually to create new things.

Many aspects of the designed world neither consider nor include Disabled people. In 1997, disabled architect Ronald Mace developed the idea of 'universal design', arguing that good design should create access for as many people as possible. But many argue that the concept has become too broad and in the process Mace's original disability-first intentions that can benefit everyone, have been lost. By contrast, through repurposing or subverting the designed world, hacking and creating new design possibilities, Disabled makers are pushing back on the idea that design needs to 'fix' disability, instead creatively problem solving a world that was not designed for them.



2.03

Adaptive Hacks

How do you find the right accessible object for your needs? Providing a network of knowledge and support, Adaptive Hacks is an Instagram account run by Mary Slattery where followers collaborate to find solutions to an inaccessible world. Those with an access problem make a request, and Adaptive Hacks will help source suggestions, built on tried-and-tested disabled experience and expertise.

Mary Slattery
2021

Running time:
approximately 1 minute, 30 seconds

2.04

Design for Disability

'Design for Disability' is a project that reconsiders access products using a collaborative approach. Product designer Jessica Ryan-Ndegwa explores the unique perspectives of Disabled designers, especially when creating for fellow disabled people. Ryan-Ndegwa, who lives with cerebral palsy, designed the Button-Hook Hairclip for herself as a multifunctional tool to help with buttoned clothing. The Zip-Pull Dog Tag was made for a research participant to use zips more independently. It can be folded into a wearable necklace when not in use.

Zip-Pull Dog Tag
Stainless steel and magnets

Button-Hook Hairclip
Modelling clay in pink with
stainless steel wire

2017, United Kingdom
Jessica Ryan-Ndegwa
for Design for Disability Ltd

Both products made with the support of tutors
of the 3D department; designed and produced
at Kingston University London

2.05

Fidget Spinner

Although not designed for disabled people and originally considered to just be a distracting toy, the Fidget Spinner is now a popular 'stim' object. 'Stimming' or 'self-stimulation' is something that many neurodivergent people do to process and regulate sensory input, reduce stress and concentrate more effectively. The Fidget Spinner is just one example of how popular designs have been reappropriated by Disabled communities.

Christmas Concepts
Designed 2018, purchased 2024
Plastic
United Kingdom

When Cindy became disabled in her 70s, her life drastically changed. Everyday tasks became hugely challenging, but her clever yet simple adaptations, like attaching a wall hook to the screw-top lid of a beauty cream pot to open it more easily, gave her more control over her life. *Engineering at home* is a research project that archives Cindy's designs, which challenge and expand our ideas of engineering. These hacked prosthetics for eating ultimately became more useful to Cindy than her expensive robotic hand.

From top:

Cable tie purse; eyeliner holder; wall hook pot; silicone knife holder; silicone fork holder

Engineering at Home 2016 (reproductions 2017)

Plastic, silicone

United States of America

Cindy Wack Garni, Sara Hendren and Caitrin Lynch, with Greig Martino, Gary Martino, Henry Adorno (United Prosthetics)

V&A: CD.4-8-2024

2.07

'Kintsugi' shoe prototype and sketchbook

The 'Kintsugi' shoe was created by Open Style Lab fellows in 2024. The designer-client, Levi Waterhouse, a team member with dwarfism (specifically achondroplasia) was often forced to buy children's shoes with the wrong proportions for his feet. 'Kintsugi' references the Japanese tradition of repairing a broken object and in the process, creating something stronger and more beautiful.

Top: Shoe prototype and kit,
Bottom: shoe sketchbook,

2024

Leather, Plastic, Fabric; Paper; Resin

United States of America

Open Style Lab Fellows:

Levi Waterhouse, Hiral Parmar, and Laura

Caron-Parker, Open Style Lab and Open Style

Lab Board

Hackability Toolkit

2.08

Finding an adaptive wardrobe shouldn't mean starting from scratch. This toolkit allows any piece of clothing to be modified through tabs, loops and pocket hacks. The kit, which features adaptive tools like a needle threader with an ergonomic grip, was created by Open Style Lab, a disability-led non-profit organisation, during a 2019 summer research programme in New York.

Open Style Lab Board and 2019 Open Style Lab
Research Fellows

2019

Plastic, fabric, metal, paper, cardboard

United States of America



2.09

Unhidden Seated Wrap Trousers and Hi Lo Shirt

Unhidden was created in 2017 after its disabled founder, Victoria Jenkins noticed a gap for stylish, easily available adaptive clothing. Their ready-to-order capsule collection has been created with a number of key features. All trousers have elasticated waistbands and side zips for easy access to equipment like stoma bags and ports. Shirts undo quickly with poppers on the front and the sleeves to allow access for medical care.

Unhidden
2022

Cotton, elastane
United Kingdom

Slick Chicks adaptive bra and bikini briefs

2.10

Having the option to dress independently and feel dignified and confident in what we wear should be a universal right. Slick Chicks is an adaptive clothing company specialising in underwear, loungewear and activewear for people with limited mobility. Originally designed as post-partum surgery wear (the briefs have side fasteners, so you don't have to bend), the clothing has been embraced by Disabled communities, with many using it as a platform to discuss sex and dating.

Slick Chicks
2024
Cotton and spandex
United States of America

Truly inclusive design needs to be driven by a range of perspectives. Here we explore some of the different ways collaboration can create better design, from sharing expertise through networking, to disabled and non-disabled people teaming up across design processes. These projects exemplify the activist slogan 'Nothing About Us Without Us' and illustrate where Disabled people have been at the core of design innovation.



2.12

TechOWL videos

TechOWL (Technology for Our Whole Lives) is a service that offers disabled people help with the tools they need to be independent. Based in Pennsylvania it is part of a government programme set up under the America-wide Assistive Technology Act. To reach as many people as possible, the team, many disabled themselves, use social media to publicise their programme and educate people on assistive technology. In these videos, TechOWL explain who assistive devices might be for and how people can access them.

TechOWL
2023
United States of America

Running time: approximately 1 minute

3D Occupational Therapy

2.13

3D printing has opened up a world of possibilities in creating customised assistive devices, tailored to the specific needs of individuals. Occupational therapists and makers (many of them disabled people themselves), are collaborating to create adaptive designs that can be downloaded through open-source assistive technology, then tweaked, hacked and reproduced all over the world.

Makers Making Change
3D-printed adaptive nail polish holder
2018
Canada

Francesca Puglisi
Thumb book holder
2018
Italy

Print Lab
Drag pen
2024
United Kingdom

2.14

Xbox Adaptive Controller

The Xbox Adaptive Controller was the first of its kind designed to meet the needs of users with a range of physical abilities, manufactured at scale by a leading tech company. It was created in consultation with Disabled games communities, such as AbleGamers and SpecialEffect, who developed the user experience. Disabled gamers have used their own workarounds to access videogames for a long time, as most controller designs are based on limited assumptions about their users. The Adaptive Controller was designed with customisation and flexibility in mind.

Microsoft

2018

Plastic and electronic parts

United States of America

V&A: CD.39-2018

Adapted PlayStation DualShock 4 and Adapted Xbox 360 controllers

2.15

Grant Stoner is a videogames and disability journalist. When he flagged that his Xbox 360 controller was inaccessible, his brother, Hudson adapted it using nothing but an ice lolly stick and hot glue so he could play. Other frustrated users and small companies have responded similarly, creating a rich community of making and hacking. This is Grant's PS4 DualShock controller, customised for him by the company Evil Controllers.

Evil Controllers;

Microsoft and Hudson Stoner

2014; 2009

Plastic, electrical tape, wooden popsicle stick

United States of America

Grant and Hudson Stoner

2.16

Touchstream Keyboard Why Disabled Design Works for Everyone

It's hard to remember a time before touch screens, especially since the rise of smartphones in the 2000s. But this technology originated with an engineer who developed a touchpad, partly because of his severe hand pain. Wayne Westerman and his FingerWorks co-founder, John Elias created the Touchstream keyboard, which uses sensors to track movements like pinching, swiping and scrolling. Initially marketed to people with hand disabilities, in 2005 FingerWorks sold its invention to Apple. They incorporated its multi-touch features into the iPhone 1, revolutionising the tech industry and showing that Disabled design works for everyone.

Wayne Westerman and John Elias
2005
United Kingdom
V&A: CD.11-2024

Sonic Cucumbers

2.17

These otherworldly glass objects are musical instruments. They can be experienced both sonically and also by feeling the reverberations of the tiny glass beads inside them, opening up questions about how people experience sound and music using multiple senses. Made by Scotland-based artist Carrie Fertig, they were co-designed with Dangerous Signs performers based at the National Technical Institute for the Deaf in Rochester, New York.

Please play these instruments by gently rolling them!

Carrie Fertig
Borosilicate glass
2014
Scotland
Courtesy of the artist

2.18

Customised crutch with leopard print pattern and silver glitter cane

Mobility aids like crutches and walking sticks are used by all kinds of people. But standard issue mobility aids are designed as a one-style-fits-all, and for many people they feel plain and impersonal. Cool Crutches, co-founded by Amelia Peckham and Clare Braddel after Peckham's own spinal injury, create customisable walking sticks and crutches in an array of colours and sizes. Confidence, comfort and self-expression are at the centre of their design principles.

Please touch these objects!

Cool Crutches
2024
Metal, plastic
United Kingdom

Wheelchair handle grip spikes

2.19

In 2019, the activist Bronwyn Berg became so fed up with people touching her wheelchair without consent, she and her partner Hal Bennett made spikes to cover its handles. This sparked a conversation about Disabled people's autonomy, with many people sharing similar experiences of their consent being violated. These 3D-printed spikes, available for purchase online, offer a simple but powerful way for wheelchair users to take control.

WilbursFinest
2023
3D-printed plastic
United States of America

2.20

White Cane Why Technology isn't Always the Solution

'In some ways the humble white cane has proved to be unimprovable.' – Alex Lee
Technology is often seen as the answer to complex problems. But the white cane, designed in the 1920s is still a highly effective tool for Blind and low vision users. Non-disabled designers have tried to improve it, adding elements like GPS or robotics, without talking to users to understand that extras like this can be distracting and dangerous. In fact, the modifications that have stuck came from users, like this foldable example from the 1950s. It resulted from a simple request from a woman in 1945 who asked the National Institute for the Blind for a cane that would fit into a shopping bag.

Supplied by the Royal National Institute for the Blind, 1956–57

Metal body in four sections with braided rubber tubing interior, graphite tip, elastic cord at the top for carrying. United Kingdom

Alex Lee, tech and culture writer,
wellcomecollection.org

For Disabled people, time is experienced and organised differently. This could mean the extra time it takes to travel through a city or a government system, or the hours needed to arrange medical appointments and care. The feminist scholar Alison Kafer describes 'crip time' as 'the clock bending to meet disabled bodies and minds'. It can be about accepting a different pace to non-disabled norms, challenging conventions of productivity and resting in radical ways that would actually benefit society at large. It is time that is flexible and in some ways, liberating.

Ann Magill in collaboration with online
Disabled communities
2021

Digital object

United States of America

Assembled in London, UK; made in 2025

2.22

Drosophila Clock y

Drosophila Clock y by Sharona Franklin is a meditation on crip time, intimacy and domesticity. A set of silver teaspoons is arranged like clock hands, each holding pills and adorned with enamel images of the artist's daily antibody syringes. The artwork is both a reflection on how medication dictates the rhythms of Franklin's life, and an attempt to embellish a mundane yet sustaining process.

Sharona Franklin
2021

Silver, brass, aluminium, mixed metal, expired pharmaceuticals, wood, foraged bone, antler, photographs, enamel

Belgium, Courtesy of the artist and
LambdaLambdaLambda, Prishtin

Still ill: Corona Diary

2.23

In the early stages of the pandemic, illustrator Monique Jackson caught Covid-19. She was ill for over a year and felt baffled and isolated by her experiences as Long Covid was not well understood by doctors. This visual journey of digital drawings chronicled her symptoms and experiences with healthcare providers, which she shared in real-time on Instagram. Since starting the project, Jackson has harnessed her online platform to advocate for others living with Long Covid, front-line healthcare workers and those experiencing medical racism.

Please explore by scrolling through the tablet here.

Monique Jackson
2020-22
Digital images
United Kingdom



2.24

gōlī'ām khā la'ī'ām hana? (u taken ur tablets?)

The artist Yasmeeen Fathima Thantrey drew on and reclaimed her own archive of medical information to create this artwork. The continuous piece of printed silk, becomes a canopy, embellished with the artist's unflinching medical history. This highly personal piece reflects on how time is lost, given, taken and felt for marginalised disabled and sick people interacting with healthcare systems.

Please listen along or read using this transcript!

Yasmeeen Fathima Thantrey
2023
Synthetic material
United Kingdom

Running time: 24 minutes

Findings Triptych *Scattered, Inflammatory,* *Confluent*

2.25

Faced with the often incomprehensible language of medical reports, artist Kirsty Stevens developed a creative method of understanding what was happening inside her own body after a diagnosis of multiple sclerosis. These layered drawings are interpretations of her brain scans. Kirsty uses her creative practice to visualise the outwardly invisible impact of the condition on her brain, allowing her to make some sense of a process that is otherwise difficult to predict.

Kirsty Stevens
Layered mixed media on wax paper
Scotland
Courtesy of the artist
2023



2.26

Unpacking

Unpacking is a puzzle game where the player arranges the belongings of an unseen protagonist, slowly disclosing their story through intimate details. Objects like medication, hot water bottles and a cane reveal a subtle disability narrative. The game is an example of crip time in creative practice, encouraging slower, reflective play. It offers a unique approach to storytelling in videogames.

Have a go at playing!

WitchBeam

2021

United States of America

Visible App

2.27

Visible app supports people with energy-limiting conditions like Long Covid and chronic fatigue syndrome (ME/CFS). In contrast with common fitness apps, Visible tracks the user's activities and encourages them to pace themselves and manage their symptoms, helping them feel more in control of their illness. It is a subversive take on the usual health technology apps that come built into smartphones, inviting you to rest rather than regularly stand up and move.

Harry Leeming
2022
United Kingdom

Running time: approximately 1 minute

2.28

Saving Time

In 1913, the home economist Christine Frederick proposed a series of labour-saving devices that would revolutionise the home, making housework easier and a homemaker's life more productive. For disabled people, objects that are marketed as futuristic technological innovations, like meal replacement drinks or robotic vacuums, can collapse time in ways that create relief or opportunity. The Kenwood food processor was considered a space-age marvel when it debuted in 1979, but for many today, it is a simple integrated way to prepare quick, healthy meals.

The New Housekeeping

Christine Frederick

1919

Paper (reproduction, printed 2025)

United States of America

Robotic Vacuum Cleaner

Bagotte BG 600

2019

Plastic, metal

China

Food processor

Kenwood FP120

2024

Plastic, metal, electronics, moving parts

China

Huel

Designed 2015, purchased 2025

Plant-based protein ingredients,
vitamins, minerals

United States of America



2.29

Deaths by Welfare timeline

The Deaths by Welfare project documents the history of state violence against Disabled people in Britain since 1942. It shows the degradation of rights through the years, pointing to policies that have directly led to people's deaths. This timeline highlights the systemic impact of the welfare system, and disabled activism and resistance. Using lived experience and the voices of bereaved families, it builds solidarity and advocates life-affirming systems driven by disability justice.

Please explore the Deaths by Welfare timeline, by scrolling through the tablet here.

Content warnings and various access offers are available at the start page.

Arjun Harrison-Mann and Healing Justice
London, 2022, United Kingdom
Deaths by Welfare Project at Healing Justice
London, John Pring at Disability News Service,
Access Power Visibility, and Door in the Wall
Arts Access

Independent Living

2.30

Everyone wants to live how they choose, and with the ones they love. But for hundreds of years, and even now, disabled people have been institutionalised and denied the chance to live independently. This fundamental right has been hard fought for, and Disabled people have led the charge for revolutionary architectural and legislative change. In this section, design expertise meets lived experience. What does it mean to work, live and have fun on your own terms?

2.31

The Heart of the Home

The Heart Kitchen was a rehabilitation project for female cardiac patients, designed by the industrial engineer and home economist Lillian Gilbreth. In her work, Gilbreth applied the rationalising principles of time management to household chores. This demonstration kitchen has moveable furniture and reduced distances between surfaces built into the design, to spare exertion and allow homemakers to move efficiently and productively.

Lillian Gilbreth

1948

Paper

United States of America

Design for Independent Living

2.32

In 1969, the Berkeley-based professor Raymond Lifchez founded the first architectural design course with collaboration at its core. Students learned directly from the experiences of disabled people, who advised on project as clients. Lifchez and his fellow architect and lecturer Barbara Winslow, collaborated on this book, which highlighted the role of design education in achieving access equity, and encouraging a focus on process rather than solution.

Raymond Lifchez and Barbara Winslow
1979
Paper
United States of America

2.33

Eureka A4

The Eureka A4 was the first laptop computer for Blind people and people with low vision. A breakthrough in assistive computing, it offered access to a rapidly developing technological landscape. Its sleek, user-friendly design included a Braille keyboard, synthesised voice output, and tools for writing, making music, and personal organisation. It was embraced by a diverse and committed community of users, from children and working professionals, to megastar musicians like Stevie Wonder.

Robotron

1990

Plastic, metal, electronics

Australia

Centre for computing history,

Cambridge: CH32122

Handicapped Homemakers Project

2.34

In the 1950s, researchers at the University of Connecticut ran a study recording how disabled homemakers and their families adapted their homes through creative acts of engineering that remodelled existing designs. An educational manual resulting from the study tried to capture the replicable principles of these adaptations so they might be rolled out at scale. This proved extremely difficult however, as each individual customisation was so ingenious.

Photography by Jerauld A. Manter
1960s

Paper (reproduction, printed 2025)

United States of America

Courtesy of Handicapped Homemakers Project,
UConn Photograph Collection, Archives and
Special Collections, UConn Library

2.35

Grove Road Housing Project

In 1976, motivated by the desire for privacy, intimacy and freedom (none of which were offered by institutional care), the disabled campaigners Maggie and Ken Davis created the Grove Road Housing Project. This was the first independent living social housing project designed by disabled people, for disabled people. It challenged the idea that people who need care should live in institutions, and enabled wheelchair users and non-disabled 'supporters' to cohabit.

Maggie and Ken Davis
1976

Paper (reproduction, printed 2025)
Nottinghamshire, United Kingdom
RIBA Collections

Anti Bedroom Tax and Benefit Justice Federation Placard

2.36

Introduced by the UK Conservative Government in 2013, the bedroom tax means people get less housing benefits to help with their rent if their home is deemed 'larger than needed'. Bedroom tax disproportionately affects disabled people who need overnight carers or cannot share a bed with their loved ones. The bedroom tax still operates today, and up to 25% of claimants' housing benefits can be cut.

Anti Bedroom Tax and Benefit Justice
Federation
2014
Paper
United Kingdom
Lent by National Museums Liverpool,
Museum of Liverpool

2.37

Lois Curtis and the Olmstead Act

In 1999, the United States Supreme Court ruled in the landmark case *Olmstead vs. L.C.* that 'unjustified segregation of persons with disabilities constitutes discrimination'. The case's lead plaintiff, Lois Curtis (pictured here), spent most of her adult life asking to be removed from institutionalised care, and arguing for the law to change. The ability for her to live independently and with community support catalysed her artistic career.

2009

Paper (reproduction, printed 2025)

United States of America

ZUMA Press, Inc. / Alamy Stock Photo

Enby 2

2.38

The Enby (named after the acronym 'NB', short for 'non-binary') is an accessible, gender-free sex toy designed to suit all kinds of bodies. Wild Flower, the product's designers, created the innovative vibrator for people with limited mobility, as it is fully flexible and has a hands-free grip at its base.

Wild Flower
2021

Moulded silicone body, ABS plastic shell inside, various electronic components, PCBs and a vibration motor

Designed in New York, made in China
Boyajian Products LLC

2.39

*All my friends are
out of Spoons*

*(after Leah Clements, Carolyn Lazard
and Bella Milroy)*

For people who spend most of their time in bed or housebound, networks of care and human connection become essential to daily life. Jamila Prowse's work is built from six months of exchanging voice-notes with a group of disabled artists. Their chat is about their personal relationship to Spoons Theory – a visualisation describing the need to ration mental or physical energy in spoonfuls.

Jamila Prowse

2023

Textile banner, embroidery and appliqué, based on oral histories collated as part of Spoons

After Carolyn Lazard), 2023

United Kingdom

Squeeze Chair *(chaise longue)*

2.40

This chair was developed by artist Wendy Jacob with the autistic animal scientist and agriculturalist Temple Grandin, inventor of the 'Hug Machine'. It embraces the sitter between two red mohair arms, providing comforting sensory feedback for those who appreciate deep pressure stimulation. Its luxurious form subverts conventional pared-back medical aesthetics.

Wendy Jacob with Temple Grandin
1997

Wood, mohair, polyurethane, pneumatic system
with airbags, pump and hoses

United States of America

Collection of the artist

2.41

Sensory Leather Airline Seat

Air travel can be a sensorily overwhelming experience. Tayport-born Jamie O'Donnell has been rethinking aircraft seat covers with this in mind. His designs use innovative textural leatherwork techniques to provide sensory feedback and come in a range of calming colours. Jamie suggests that leather lends itself to accessible design, its association with luxury helping to provide a sense of dignity.

Please touch this leather surface, but don't sit on it!

Seat Cover from the *Duality* Collection
Muirhead, The Scottish Leather Group
Leather, BioPro foam
Scotland
2026



2.42

Prejudice and Potential

These digital projects challenge the ableist and often infantilising treatment of people with Down's syndrome by mainstream society. In 2024, CoorDown launched their advocacy campaign 'Assume that I can'. It was inspired by a speech to the United Nations by Marta Sodano, an Italian woman with Down's syndrome, which skewered the prejudicial low expectations she had received her whole life. The TikTok video by Open Future Learning uses comedy to poke at assumptions, riffing on the challenges people with learning difficulties can experience on a night out.

CoorDown

2023

Italy

CoorDown in collaboration with SMALL, New York and Indiana Production

Running time: approximately 1 minute

Open Future Learning

2024

Video

United Kingdom

Running time: approximately 2 minutes

For more information please visit:

openfuturelearning.org

2.43

Plastic Straw Why 'Positive' Change can Threaten Disability Rights

'Disabled people don't want to have to put their own care above the environment – but it seems no one is considering the impact of future legislative changes on our wellbeing.' – Penny Pepper

Since 2020 in England and 2022 in Scotland, it has been illegal to provide or sell single-use plastic straws. But for disabled people with high support needs, this can mean going without a drink in public, as single-use plastic straws are stronger, safer, more hygienic and flexible than their paper, metal or reusable counterparts.

Disability campaigners have successfully challenged the blanket ban in Wales, where plastic straws remain available for sale in pharmacies and on request in hospitality venues. Single-use items are often indispensable for disabled users, despite their environmental impact.

Joseph B. Friedman
1939 (patented), 2024 (this model)
Thermoplastic polymer polypropylene
United States of America

Penny Pepper, writer and disability rights activist,
The Guardian, 2018