

# Universal Design and Libraries

## A Transatlantic Perspective

Challenges & Opportunities

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# Content

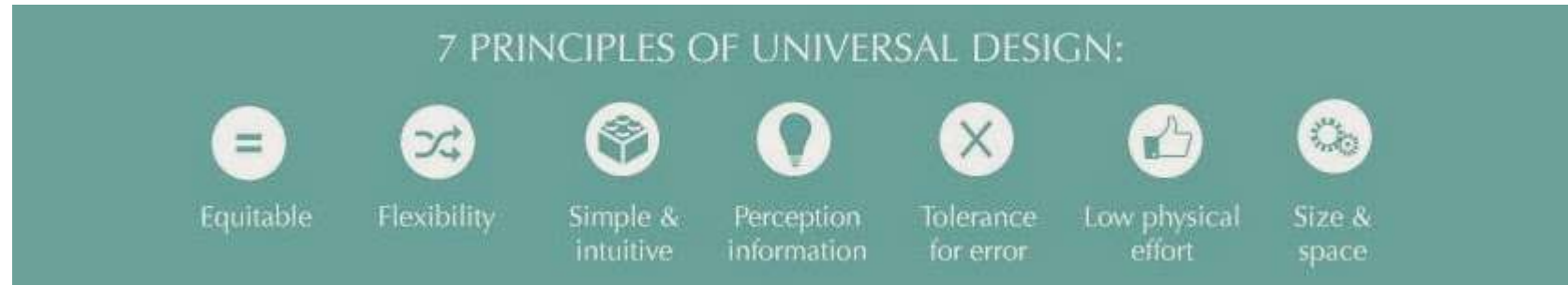
Part 1: Introductory Remarks on UD and Libraries

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# Universal Design?



- Accessibility not additional but part of the concept
- Holistic approach
- Enhancing access without lowering standards
- UDL = Universal Design for Learning



### traditional design

- focus on functionality for a majority of users
- special arrangements for special needs
- preclusive

### accessibility

- providing access as an extra function or feature
- additional support for special needs
- (partly) inclusive

### Universal Design

- accessibility and usability for as many as possible
- special precautions only if inevitable
- comprising

# UD and Libraries

- Libraries make information accessible for their communities
- Accessibility is an important and complex issue for libraries
- UD still plays a minor role in curricula of library schools
- There are guidelines for accessibility in many countries and internationally
  - Example is the Americans with Disabilities Act (ADA)
  - European Accessibility act proposed by the EU Commission
- No comprehensive UD strategy for libraries yet

# UD issues for libraries

- Print material limits accessibility for some individuals
- Electronic resources tend to emulate print in terms of accessibility
- Broad variety of target groups in public libraries
- Academic libraries presuppose certain information access skills
- Tradition of "one size fits all" solutions
- Professional education and on the job training must consider UD

# Advantages in adopting UD in libraries

- Librarians are trained to work with different user needs
- Strong ethos of service to the public/the community/users in general
- Librarians provide information to all their varied constituents
- Libraries are early adopters of technology

# Library Buildings



# Standards and Guidelines

- Many countries have specific standards guidelines for library spaces
- Many municipalities or institutions also create specific space requirements
- IFLA Guidelines
- ISO TR 11219-2012 on library buildings
- Accessibility, way-finding, working space
- UD not mentioned

# Building Navigation and Orientation

- Navigation through library buildings can be a problem
- Multiple choices concerning format to assist navigation
- Clear and easy signage systems (fonts, icons, colours, and size) are critical
- Electronic guidance systems
- Overview maps in print

# Service desks

- Used to serve literally as barriers in former times
- Still not accessible for many people
- Height
- Possibility to roll-under
- Speech intelligibility





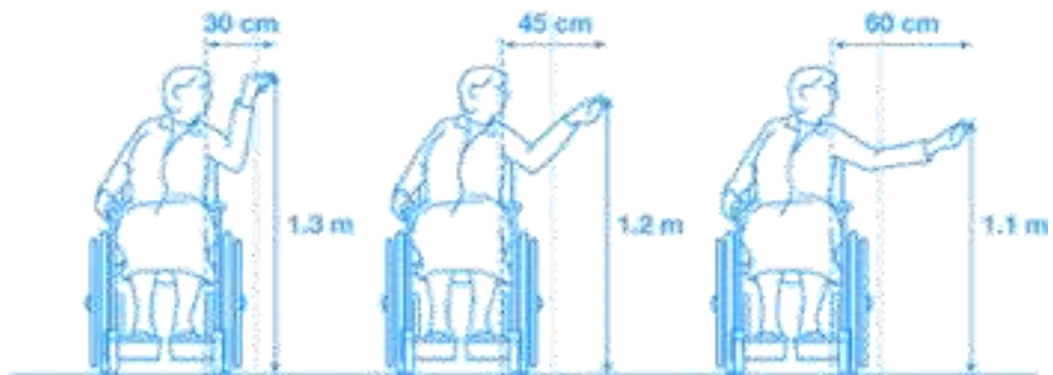






# Shelving

Reach in cm	Maximum height in metres
30	1.3
45	1.2
60	1.1





- Traditional library shelves are barriers
- e.g. wheelchair users, vertically challenged people
- Accessible shelving needs 70 % more space
- Reduction of open shelf collections because of more digital books provides new opportunities



# Learning and study environments

- Traditionally mono-functional, modular spaces
- Highly standardised furniture
- Separate spaces for special needs
- Non-inclusive concepts
- Rigid designs and access, sometimes proscribed



# The Good News: Multifaceted spaces and new opportunities

- Trend towards multifaceted space
- Diverse environments for all stages of learning and study
- Users can create their own settings in a given layout
- Furniture differentiated and flexible
- Low-distraction environments necessary (Nall 2015) as well as more participative areas
- Flexible furniture may cover tactile guidance and other orientation aids

# Power outlets





Collections & Technology

# Access to collections

- True access to all types of library collections is complex and at times controversial
- International issue that includes copyright implications
- Marrakesh Treaty to Facilitate Access to Published Works for Visually Impaired Persons and Persons with Print Disabilities (2013)
- Access to collections also relies on accessible online catalogs and databases

# Print collections

“The inability of people with print disabilities to access the world’s resources of written knowledge and culture has great flow-on effects in hindering their full participation in society.”

Harpur & Suzor 2014

- Print collections are still important sources of information
- Print collections continue to be major barriers both physically and intellectually
- Librarians are experienced in assisting people, including those with print disabilities
- Many libraries offer services for people with reading difficulties
- Print collections require a significant amount of physical space



# Marrakesh Treaty

- Access to published works for persons who are blind, visually impaired, or otherwise print disabled
- unable, through physical disability, to hold or manipulate a book or to focus or move the eyes to the extent that would be normally acceptable for reading
- right of reproduction, of distribution, and of making available works in accessible format copies
- right of public performance to facilitate access to works
- EU and its members are struggling about competences
- Ratification is pending in the US Senate

# Digital Collections

- Not all digital formats are accessible for everyone
- Access starts with search and retrieval process
- Born digital or digitalised?
- Online formats tend to be less accessible (Harpur & Suzor 2014)
- Most academic publishers use PDF-Files for download
- Digitalisation must include OCR processing
- The UD technology for digital collections is out there but far to little implemented
- Offers considerable opportunity for access

# Self-service opportunities

- Growing service model
- Includes:
  - Book check-out
  - Technology loans
  - Vending machines for supplies
  - Increasingly vending machines for food

# Self-service pros and cons

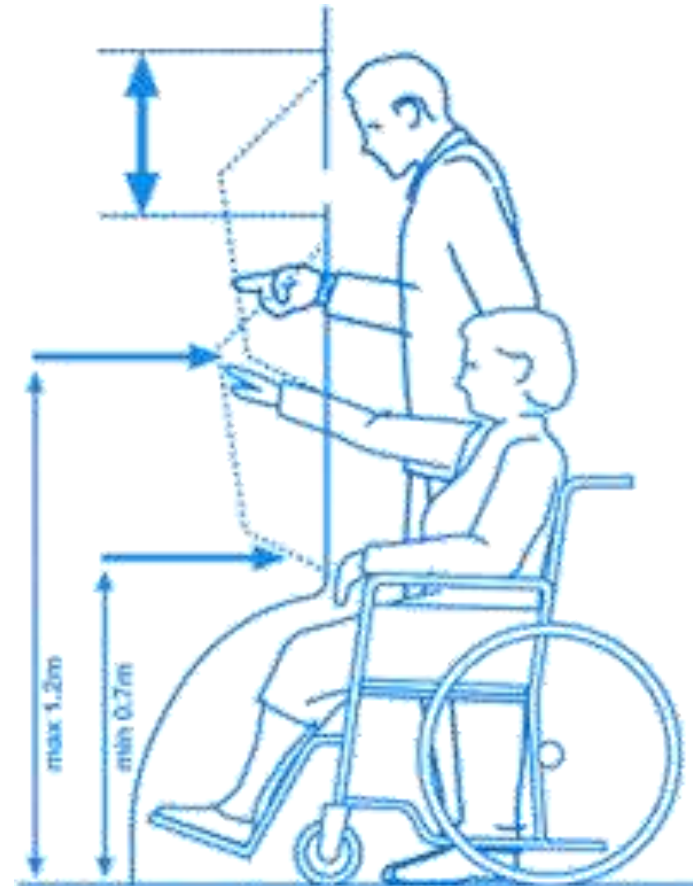
- Enhances accessibility 24/7
- Faster and easier library services
- Frees up staff to be available for support in other areas of library service
- Barrier for slow technology adopters
- Self service kiosks are not naturally accessible
- Intricate user guidance

# Typical Self-Service Kiosks for book check out



# Accessibility issues

- Height and distance
- Control panel or touch panel
- Card slot / scanner
- Book drop
- Visibility
- Menu prompt

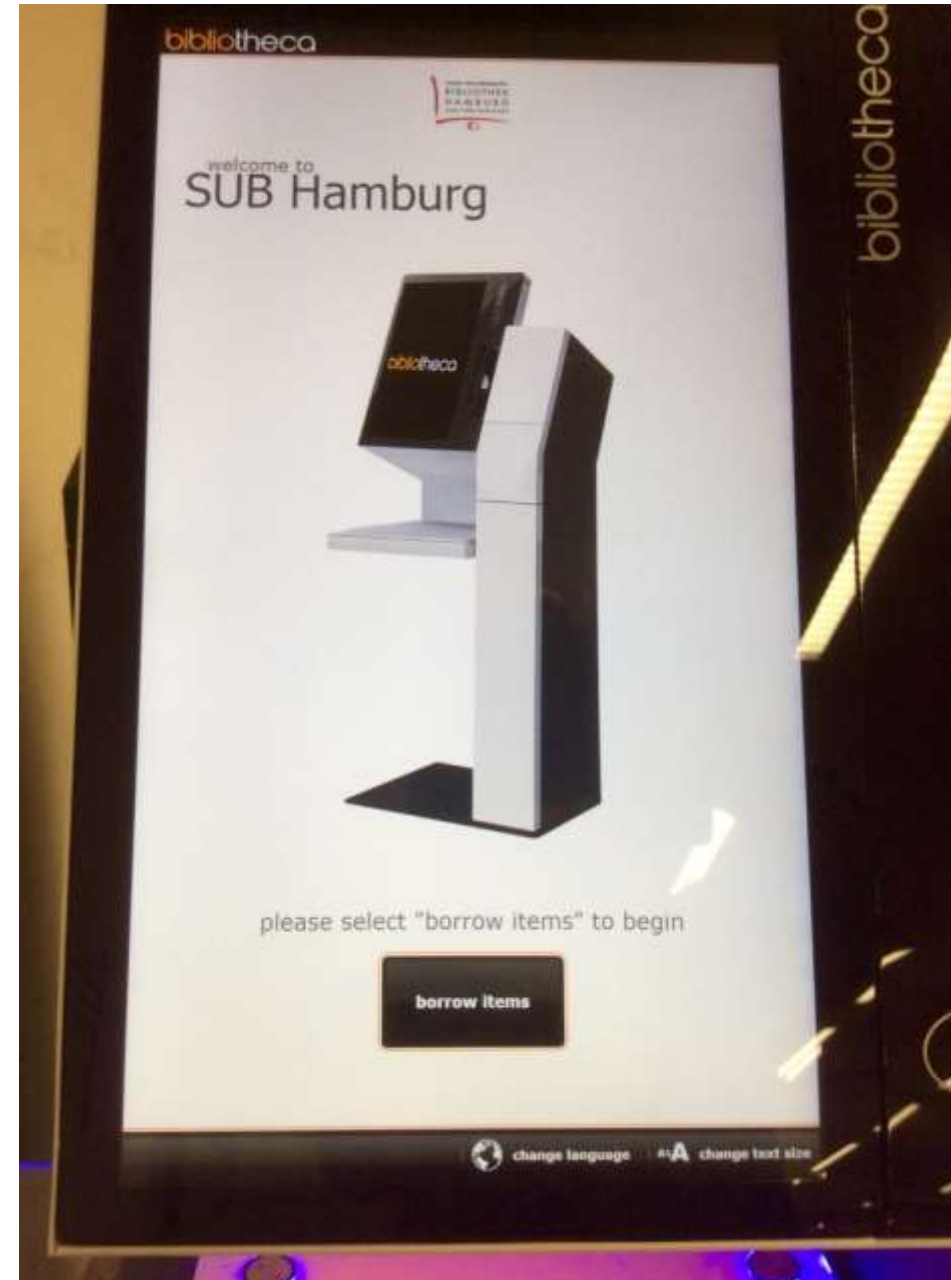


# UD-solutions



# Benefits

- Easy to use
- Accessible
- Intuitive user guidance
- Interfaces designed for people with low vision
- Texts reduced, simple language
- UD approach enhanced usability for everyone





# Automated storage

- Books or other items are stored in bins and accessed via robotic technology using the catalogue
- Lessens the need for stacks
- Enables quick access providing the catalogue is accessible



UIMKC Libraries  
Automated Storage and Retrieval System  
"The Robot"

# Library Catalogues

- Traditional library online-catalogues tend to be less accessible
- New catalogues based on smart search engine technology
- In most cases UD is not a priority issue but this is changing
- Professional checks and scoring of accessibility

# Conclusion: Challenge accepted!

- Many new opportunities
- Funding always an issue
- Static to flexible spaces and services
- User involvement and creativity
- International UD strategy for libraries desirable