

REIMAGINING LIBRARY SPACES: FROM CUSTODIAL REPOSITORIES TO ADAPTIVE CIVIC INFRASTRUCTURES

M. S. Girish Rathod*

Abstract *This study examines the transformation of library spaces from traditional custodial repositories into adaptive civic infrastructures that support learning, collaboration, and community engagement. Historically, libraries were designed primarily for preservation and controlled access to knowledge; however, rapid digitalization, evolving learning practices, and changing user expectations have necessitated a fundamental rethinking of library design and function. Using spatial theory, comparative case studies, and policy analysis, the research investigates how contemporary libraries integrate flexible spatial zoning, digital technologies, inclusive design principles, and participatory planning processes. Particular attention is given to the challenges and opportunities faced by academic libraries in India within the framework of the National Education Policy (NEP) 2020. The findings reveal that successful library transformation depends on mission alignment, stakeholder engagement, hybrid digital-physical environments, and adaptable infrastructure that accommodates diverse user needs. The study proposes an integrated framework for redesigning library spaces that balances innovation with resource constraints, offering practical guidance for librarians, architects, administrators, and policymakers seeking to create inclusive, future-ready library environments.*

Keywords: *Library Space Transformation, Adaptive Library Design, Digital-Physical Integration, Inclusive Library Spaces, NEP 2020, Learning Commons, Civic Infrastructure*

INTRODUCTION

The Evolving Function of Libraries

Traditionally, academic and public libraries have served as custodians of knowledge, where materials were meticulously preserved and access was tightly regulated. The architectural design of these libraries mirrored their custodial role, featuring grand facades, quiet reading areas, and restricted stacks that prioritized preservation over accessibility (Bennett, 2015). Medieval monastic libraries, Renaissance collections, and even many academic libraries from the twentieth century were designed with spatial logics that emphasized order, silence, and hierarchical control over information resources (Itzkowitz, 2023).

However, the current information landscape is vastly different from the conditions that shaped these traditional models. The explosion of digital information, the emergence of collaborative learning methods, and an increased focus on community involvement have significantly changed what is expected from libraries (Freeman, 2005). Users now

look for adaptable spaces that support both individual focus and group collaboration, seamlessly integrate physical and digital resources, and welcome diverse communities rather than restrict access to knowledge (Bilandzic & Foth, 2013).

This shift goes beyond simple technological updates or aesthetic changes. It signifies a reimagining of libraries as active contributors to social equity, educational innovation, and civic engagement (Jaeger et al., 2013). Modern library design must therefore meet various, sometimes conflicting, demands: creating areas for quiet reflection alongside spaces for lively collaboration, maintaining specialized research collections while being more inviting to general users, and preserving cultural heritage while embracing technological advancements.

The Indian Context and Policy Imperatives

The transformation of libraries presents significant challenges, especially in developing regions where limited resources meet rapid technological advancements and

* College Librarian (Associate Professor Grade), Government First Grade College, Ayanur Affiliated to Kuvempu University, Shivamogga, Karnataka, India. Email: girishrathodms@gmail.com; ORCID: <https://orcid.org/0000-0001-8602-529X>

changing educational policies. In India, the National Education Policy 2020 aims for a thorough revamp of educational infrastructure, emphasizing the need for libraries to prioritize digital approaches, support inclusive education, and serve as community learning centers rather than isolated entities (Government of India, 2020).

However, achieving these ambitious objectives is fraught with difficulties. Many academic libraries in India still operate with constrained budgets, outdated facilities, and spatial designs that were created decades ago for entirely different purposes (Kumar & Singh, 2023). The policy's vision of transforming libraries into flexible, technology-enhanced, inclusive spaces clashes with the practical issues of aging infrastructure, insufficient funding, and a lack of professional development for library staff who are expected to manage this transition (Agarwal, 2022).

This gap between policy goals and institutional capabilities presents both challenges and opportunities. To successfully transform library spaces, particularly in resource-limited settings, it is essential to carefully study international examples, spatial theory, and the unique sociocultural factors influencing library use in various contexts.

Research Questions

This study explores three interconnected questions:

- How have library spaces changed in form and function over recent decades, and what conceptual frameworks best explain this transformation?
- What socio-technological forces, policy initiatives, and design principles have facilitated successful library transformations in diverse institutional contexts?
- How can libraries in India and similar developing regions implement adaptive, inclusive, digitally integrated designs that align with modern educational policies?

Research Objectives

The specific objectives of this investigation are:

- To trace the historical evolution of library spatial design and identify key conceptual shifts from custodial to collaborative models.
- To analyze contemporary international examples of successful library transformation across diverse institutional and cultural contexts.
- To examine the implications of India's National Education Policy 2020 for academic library redesign.
- To develop a practical framework for inclusive,

adaptive library environments suitable for implementation in resource-constrained settings.

Significance of the Study

This research adds to ongoing scholarly discussions about library transformation by integrating spatial theory with practical design considerations and policy analysis. While much attention has been given to library technology adoption and service innovation, less systematic research has focused on the spatial aspects of library transformation, particularly in developing contexts (Rao & Rao, 2023). By combining comparative case analysis with policy evaluation and spatial theory, this study offers actionable insights for librarians, educational administrators, architects, and policymakers working to create library environments that meet the educational needs of the twenty-first century.

The findings are particularly relevant for institutions implementing NEP 2020 in India, but the conceptual framework and practical recommendations have broader applicability for libraries worldwide facing similar challenges of balancing preservation with innovation, accommodating diverse user needs, and operating under resource constraints.

LITERATURE REVIEW

Spatial Theory and Library Architecture

To comprehend the evolution of library spaces, it is essential to employ theoretical frameworks that can analyze the interplay between physical environments and social practices, as well as power dynamics. Lefebvre's (1991) spatial triad offers a foundational perspective, differentiating between perceived space (the tangible physical environment), conceived space (the conceptual and planned aspects crafted by professionals), and lived space (the experiential reality encountered by users). Traditionally, library design has favored conceived space, where architects and administrators dictated spatial organization with minimal input from actual users, leading to structures that mirrored idealized scholarly behavior rather than the complex reality of how individuals learn and interact.

Soja (2010) expanded upon Lefebvre's framework by highlighting the inherently political nature of spatial organization. His notion of spatial justice underscores how architectural design can either perpetuate or challenge existing inequalities. In the context of libraries, spatial justice involves considerations such as accessibility for users with disabilities, accommodation of diverse cultural practices and learning styles, and the symbolic messages conveyed

through architectural choices about who is welcome in these spaces.

Foucault's (1977) examination of disciplinary spaces provides another pertinent perspective for analyzing traditional library architecture. The panoptic characteristics of many historical library reading rooms—with centralized desks overseeing regimented rows of individual study carrels—reflected broader institutional logics of surveillance and behavioral control. Modern library design increasingly moves away from these disciplinary spatial arrangements, favoring what might be termed “post-panoptic” environments that emphasize user autonomy, diverse modes of engagement, and flexible rather than regimented spatial organization (Given & Leckie, 2003).

These theoretical frameworks highlight that transforming libraries involves more than just adding new furniture or computers. True spatial transformation necessitates rethinking fundamental assumptions about the relationship between physical environment and human behavior, between institutional authority and user agency, and between the preservation of materials and the facilitation of experiences (Bennett, 2015).

International Trends in Library Design

A review of recent library construction and renovation projects around the world reveals several converging trends that collectively form a new spatial paradigm. First, modular flexibility has become a key design principle (McDonald, 2006). Instead of fixed spatial arrangements with predetermined uses, modern libraries increasingly utilize moveable furniture, reconfigurable partitions, and infrastructure (power, data, lighting) designed to adapt to changing needs. The Hunt Library at North Carolina State University exemplifies this approach, with most of its space designed for easy reconfiguration based on evolving user demands (Shill & Tonner, 2003).

Second, successful contemporary libraries incorporate diverse spatial zones that support different activities and learning styles (Jochumsen et al., 2012). Rather than treating the entire building as a uniform scholarly space, zoning strategies intentionally create distinct areas for quiet individual study, collaborative group work, social interaction, digital content creation, and specialized activities like makerspaces or multimedia studios. The Oodi Helsinki Central Library showcases sophisticated zoning that accommodates everything from silent reading rooms to recording studios to community meeting spaces within a cohesive architectural whole (Wainwright, 2018).

Third, the principles of accessibility and universal design have transitioned from being secondary considerations to becoming central elements (Latimer & Niegaard,

2017). Libraries such as Dokk1 in Aarhus, Denmark, have integrated features like barrier-free circulation, adjustable-height workstations, sensory-friendly areas, and multilingual wayfinding as core design components rather than mere compliance measures. This change signifies a growing understanding that accessible design is advantageous for all users, not just those with officially recognized disabilities (Canovan & Flynn, 2023).

Fourth, the integration of technology has progressed beyond merely adding computers to existing spaces. Modern library design views digital and physical resources as complementary, with infrastructure that facilitates smooth transitions between print materials, digital databases, multimedia creation, and collaborative digital projects (Tanner & Finnis, 2019). Effective technology integration requires not only devices but also suitable spatial arrangements, power and data infrastructure, technical support, and staff expertise.

Fifth, many recent library projects have deliberately positioned libraries as community hubs and civic infrastructure rather than solely institutional facilities (Alexandrowicz, 2024). This civic focus is evident in expanded programming spaces, partnerships with community organizations, extended hours, and architectural designs that encourage public engagement. The idea of libraries as “third places”—neither home nor workplace but significant social spaces—has influenced design choices that prioritize welcoming aesthetics, comfortable furnishings, and amenities like cafes that foster social interaction alongside academic work (Oldenburg, 1999).

Inclusive Design and Social Justice Frameworks

The shift towards inclusive library design draws on disability studies, multicultural education theory, and broader social justice frameworks that question assumptions inherent in traditional library architecture (Schull, 2015). Early accessibility efforts were narrowly focused on physical accommodations for mobility impairments, but modern inclusive design acknowledges the diverse needs of users, including sensory, cognitive, and neurological differences, as well as cultural and linguistic diversity (Canovan & Flynn, 2023).

Universal Design for Learning principles, initially developed for educational settings, have been adapted for library environments (Sullivan, 2011). These principles emphasize offering multiple means of representation (presenting information in various formats), multiple means of action and expression (allowing users to engage and demonstrate learning in different ways), and multiple means of engagement (addressing different motivations and learning

preferences). Spatially implemented, UDL principles translate into diverse seating options, adjustable lighting and acoustics, multiple formats for accessing information, and flexible configurations that support various working styles.

Critical librarianship scholarship has pointed out how traditional library practices and spaces can unintentionally perpetuate social hierarchies and exclude marginalized communities (Holt, 2019). These critiques have led to reflection on whose knowledge is prioritized in library collections, whose presence is comfortable in library spaces, and whose cultural practices are accommodated by library policies and spatial arrangements. Inclusive redesign efforts informed by these perspectives involve not only physical changes but also an examination of signage language, collection development priorities, staff training, and programming that actively welcomes diverse communities.

Digital Transformation and Hybrid Learning Spaces

The transformation of libraries in the digital age involves much more than just converting collections to digital formats or offering computer access. Modern libraries operate as hybrid spaces where the physical and digital realms are intertwined, allowing users to seamlessly transition between printed materials and electronic resources, and where the lines between consuming information and creating content become less distinct (Lewis, 2022).

This hybrid environment has notable implications for library spaces. Libraries that thrive in the digital era offer not only technological access but also areas specifically crafted for digital scholarship and creative endeavors (Mozenter et al., 2018). Facilities such as makerspaces, digital scholarship labs, data visualization centers, and multimedia studios exemplify how libraries are expanding their role from merely providing information access to fostering knowledge creation. The growth of these spaces acknowledges that modern information literacy encompasses not only the ability to locate and assess information but also to create and disseminate it (Gayton, 2008).

The blending of digital and physical elements also impacts more traditional library areas. Enhanced print collections are now often paired with digital catalog access, mobile applications for navigation and resource discovery, and digital displays that complement static signage (Cervone & Brown, 2023). This integration of digital information into physical spaces offers opportunities for enriched user experiences but also necessitates thoughtful design to prevent overwhelming users or creating obstacles for those less familiar with technology.

The COVID-19 pandemic hastened the digital transformation of many libraries while simultaneously underscoring

the ongoing significance of physical library spaces. The widespread shift to remote services during lockdowns revealed both the potential and the limitations of exclusively digital library services, ultimately affirming the value of hybrid approaches that utilize technology while preserving meaningful physical spaces for community interaction, unexpected discoveries, and equitable access to resources and expertise (Lewis, 2022).

Policy Contexts and Library Transformation

Library transformation takes place within specific policy frameworks that influence priorities, allocate resources, and set expectations. In India, the National Education Policy 2020 represents the most comprehensive expression of government expectations for educational infrastructure, including libraries (Government of India, 2020). The policy explicitly sees libraries as dynamic community learning centers equipped with digital resources. It supports inclusive education and promotes lifelong learning.

Key provisions of NEP 2020 relevant to library transformation focus on digital infrastructure across all educational levels. It commits to inclusive education that accommodates diverse learning needs. The policy emphasizes foundational literacy and lifelong reading habits while promoting flexible, student-centered learning environments (TISS Team, 2024). These policy directives reflect international best practices in library design, yet implementation faces significant challenges in India (Kumar & Singh, 2023).

Resource limitations are a major challenge. Many academic libraries operate on budgets that barely cover basic operations, let alone extensive renovations or technology upgrades (Agarwal, 2022). Apart from funding issues, implementation challenges include inadequate training for library professionals who need to adjust to rapidly changing service models, aging infrastructure that resists change, and limited awareness among institutional leaders about libraries' potential to support broader educational goals (Rao & Rao, 2023).

International policy frameworks provide additional insights into library transformation. The 2022 guidelines from IFLA on inclusive library services, UNESCO's advice on public libraries as civic infrastructure, and various national policies from countries with strong library systems offer models that Indian institutions could adapt. However, adopting international best practices without considering local contexts, resource constraints, and cultural aspects may lead to unrealistic expectations or unsuitable solutions.

The People's National Library Policy 2024 initiative in India represents a grassroots effort to define library needs and

priorities from the perspective of library professionals and users rather than through top-down government directives. This participatory approach to policy development shows a growing recognition of libraries as community-oriented rather than authority-driven entities.

RESEARCH METHODOLOGY

Research Design

This research uses a qualitative, exploratory design that combines various methods to gain a thorough understanding of library space transformation. The methodology includes a comparative case study analysis, examination of policy documents and institutional reports, spatial analysis of library layouts and usage patterns, and semi-structured interviews with library staff and patrons. This mixed-methods approach allows for triangulation of results, offering both theoretical insights and practical suggestions.

The study is grounded in an interpretivist epistemology. It acknowledges that perceptions of library spaces are socially constructed and vary among different users and stakeholders. Instead of trying to find universal rules for library design, the research seeks to uncover patterns, principles, and contextual elements that contribute to successful library transformations in different environments.

Case Selection Criteria

Case studies were chosen through purposive sampling to ensure a variety of geographical contexts, types of institutions, and stages of transformation. The selection criteria included:

- Recent completion of major renovations or new constructions within the last decade.
- Clear integration of inclusive design and digital technology principles.
- Documented planning processes, design choices, and outcomes.
- Geographical diversity covering Scandinavian countries, North America, and India.
- Institutional diversity, including university libraries, public libraries, and community college libraries.
- Variation in resource availability to compare well-funded and resource-limited settings.

The final selection includes six main cases: Oodi Helsinki Central Library (Finland), Dokk1 (Denmark), Hunt Library at North Carolina State University (USA), Amity University Library Mumbai (India), Government First Grade College Library Ayanur (India), and Seattle Public Library Central

Branch (USA). These cases collectively demonstrate different approaches to spatial transformation under various conditions.

Collection Methods

- *Document Analysis:* A thorough review of architectural plans, institutional reports, policy documents, usage statistics, user surveys, and media coverage related to each case study library. The reviewed policy documents include India's National Education Policy 2020, IFLA guidelines on inclusive library services, and relevant national and institutional policies from the case study countries.
- *Spatial Analysis:* Examination of architectural drawings, floor plans, and photographs to assess spatial organization, circulation patterns, zoning strategies, accessibility features, and technology infrastructure integration. For cases where site visits were possible, direct observation provided additional data on actual usage patterns and spatial dynamics.
- *Semi-Structured Interviews:* Interviews with library directors, architects, facilities managers, and front-line library staff from the case study institutions explored decision-making processes, challenges faced, compromises made, and evaluations of outcomes. The interview protocol covered planning processes, stakeholder engagement, implementation challenges, user responses, and lessons learned.
- *User Experience Data:* Where available, existing user satisfaction surveys, usage statistics, and feedback from the case study libraries offered insights into how spatial changes impacted library use and user experiences. This secondary data complemented the primary data collection.

Data Analysis

Thematic analysis was used to identify patterns, similarities, and differences across the cases. The analysis was conducted iteratively, with initial themes refined through constant comparison as more data was reviewed. NVivo qualitative analysis software helped with coding and theme development.

Key Analytical Themes that Emerged Include: planning and stakeholder engagement processes, spatial zoning strategies, technology integration methods, accessibility and inclusive design features, adaptability and flexibility provisions, resource constraints and workarounds, policy influences on design decisions, and user responses to transformed spaces.

Cross-case analysis highlighted factors linked to successful transformations, common implementation challenges,

and strategies for managing resource constraints. Special attention was given to the differences between well-funded institutions in developed countries and those with limited resources in developing contexts.

Ethical Considerations

The research followed ethical guidelines established by the Library and Information Association of New Zealand Aotearoa and the American Library Association. Interview participants provided informed consent and received assurances of confidentiality regarding sensitive information about institutional challenges or internal decision-making processes. Publicly available documents and information already in the public domain were used without restriction, while proprietary institutional data was used only with explicit permission.

Limitations

Several limitations qualify the study's findings. First, while diverse, the case selection cannot capture the full range of library types and contexts worldwide. Second, relying on self-reported data from library professionals may introduce positive bias in their assessments of transformation outcomes. Third, limited long-term data makes it difficult to evaluate the sustainability of changes over time. Fourth, resource constraints prevented an in-depth ethnographic study of user experiences in all case study sites. Finally, the study's focus on recent transformations means that many projects have not yet shown long-term impacts or undergone refinement based on user feedback.

FINDINGS AND ANALYSIS

Planning and Stakeholder Engagement

Analysis of successful library transformations indicated that inclusive planning processes strongly predict positive outcomes. Libraries that involved diverse stakeholders—including current and potential users, library staff at all levels, disability advocates, and community representatives—during early planning stages developed designs more responsive to actual user needs and enjoyed greater acceptance from the communities they served (Wambaugh & Russell, 2022).

The Oodi Helsinki Central Library is an excellent example of comprehensive stakeholder engagement (Wainwright, 2018). The planning process involved extensive public consultation, engaging thousands of Helsinki residents through online platforms, public forums, and outreach to underrepresented groups. This participatory approach generated design ideas that professional architects and

library administrators might not have come up with on their own, such as the “living room” social space that has become one of Oodi's most popular features.

Conversely, libraries where planning was dominated by administrators and architects without significant user input often required modifications post-occupancy to address unforeseen usability issues. For instance, one Indian academic library in the study installed study carrels intended for individual quiet work based on administrators' assumptions about appropriate scholarly behavior, only to find that students preferred collaborative study settings. Costly modifications could have been avoided through earlier user consultation.

Resource-constrained institutions sometimes viewed extensive consultation as an unnecessary expense. However, examples from the study suggest that meaningful stakeholder engagement can be cost-effective. The Government First Grade College Library Ayanur conducted effective low-cost consultation through student focus groups, faculty surveys, and staff workshops that identified priorities and built support for subsequent changes.

Spatial Zoning and Functional Differentiation

Modern library design typically uses spatial zoning strategies that create distinct areas supporting different activities and learning styles (Jochumsen et al., 2012). Successful implementations usually include:

- *Quiet Zones:* Spaces specifically set aside for silent individual study, often located in less trafficked areas of the building, equipped with acoustic isolation, individual carrels or tables, and enforced quiet policies.
- *Collaborative Zones:* Areas designed for group work with moveable tables and chairs, whiteboards, large displays, and sound treatment that reduces noise without eliminating it completely. Successful collaborative spaces accommodate groups ranging from two to twenty people.
- *Social Zones:* Informal gathering spaces with comfortable seating, often near entrances or cafes, where conversation is welcome, and users can take breaks between focused activities. These spaces recognize that libraries serve as social infrastructure, not just information repositories (Oldenburg, 1999).
- *Digital Scholarship Spaces:* These are specialized areas with technology for content creation. They include makerspaces, digital scholarship labs, multimedia studios, and data visualization facilities. These spaces show that libraries are taking on new roles beyond just providing information access to also fostering knowledge creation (Mozenter et al., 2018).

- *Specialized Collection Areas:* These zones house unique or specialized materials. They include archives, special collections, rare books, and browsing areas for popular materials. These spaces aim to balance the need for preservation with accessibility.
- *Service Desks and Learning Commons:* These are redesigned reference and circulation desks that are friendly and approachable. They often appear as open service points rather than barriers (Sullivan, 2011). Learning commons models place library services alongside tutoring, writing support, technology assistance, and other academic services.

The Hunt Library has a thoughtful layout that features varying noise levels. The upper floors provide silent study, while the lower floors offer more social and collaborative areas. Users can choose environments that suit their current activities (Shill & Tonner, 2003). Wayfinding systems and physical indicators help users navigate these different areas.

Zoning strategies in resource-limited settings often require compromises. However, the idea of creating distinct spaces for different functions remains valuable, even if full implementation is not possible. At Government First Grade College Ayanur, budget constraints prevented major renovations, but strategic furniture rearrangement and signage created clear zones within the existing space at little cost.

Technology Integration Approaches

Successful technology integration in library spaces goes beyond just providing computers and WiFi (Cervone & Brown, 2023). The best methods found in this study include:

- *Robust Infrastructure:* Libraries should have power and data access distributed throughout the building, not just in selected tech areas (McDonald, 2006). Modular power systems, like floor boxes, ceiling drops, and furniture-integrated outlets, offer flexibility as technology needs change.
- *Diverse Device Ecosystems:* Rather than sticking to one technology platform, effective libraries provide various options. These include desktop computers, laptops for checkout, tablets, unique equipment for digital content creation, large collaborative displays, and good support for users' personal devices through strong WiFi and plenty of power access (Tanner & Finnis, 2019).
- *Integrated Discovery Systems:* Digital wayfinding, mobile apps, and embedded displays help users find materials and navigate services. They make connections between digital and physical spaces easy.
- *Digital Scholarship Support:* Advanced technology spaces do more than offer basic computer access. Makerspaces typically include 3D printers, laser cutters, and fabrication tools. Digital scholarship labs provide high-performance computing, specialized software, and large displays for data visualization. Media studios offer video recording and editing equipment, podcasting tools, and music production gear (Mozenter et al., 2018).
- *Accessibility Technology:* This includes assistive technologies like screen readers, voice recognition software, adjustable-height workstations, alternative input devices, and equipment to digitize print materials for users with visual impairments (Canovan & Flynn, 2023).
- *Technical Support:* Success requires that technology can be effectively used, leading libraries to offer extensive technical support through dedicated IT staff, peer tutors, and self-service documentation.

The Seattle Public Library's Technology and Social Networking Center highlights comprehensive technology integration. It provides not just equipment but also training, technical support, and spaces for both learning technology skills and applying them to community projects.

Indian academic libraries face unique challenges in integrating technology due to infrastructure issues, unreliable power and internet, and tight budgets for purchasing and maintaining equipment (Agarwal, 2022). Creative solutions identified in the study include partnerships with tech companies for equipment donations, using open-source software to cut licensing costs, and phased implementation strategies that focus on priority technologies.

Accessibility and Inclusive Design Implementation

An examination of accessibility features across various case studies showed significant differences in how comprehensively they were implemented. Leading examples illustrate that inclusive design includes (Latimer & Niegaard, 2017):

- *Physical Accessibility:* This entails barrier-free entrances, accessible restrooms, elevators for all floors, enough space for wheelchair movement, adjustable-height service desks and work surfaces, accessible shelving, and tactile wayfinding elements.
- *Sensory Considerations:* This involves smart acoustic design to manage noise levels, lighting systems that prevent glare and allow for adjustments, sensory-

friendly spaces with controlled stimulation tailored for users with autism or sensory processing differences, and visual contrast in signage for users with low vision (Canovan & Flynn, 2023).

- *Cognitive Accessibility*: This ensures clear wayfinding using simple language and consistent visual symbols. It includes intuitive spatial organization, support for users with different levels of information literacy, and staff trained to assist respectfully those with diverse needs.
- *Cultural and Linguistic Inclusion*: This consists of multilingual signage and services, collections representing community diversity, spaces that accommodate various cultural practices, and programs that actively engage diverse communities (Schull, 2015).

Dokk1 in Aarhus represents a strong example of inclusive design. It features accessible playgrounds for children with disabilities, adjustable-height desks throughout the building, sensory-friendly quiet rooms, multilingual staff and signage, and collaborative processes involving disability organizations and immigrant community groups (Alexandrowicz, 2024).

Among the Indian libraries studied, the implementation of accessibility measures was uneven. Limited resources and a lack of awareness about inclusive design often lead to minimum compliance-driven accommodations instead of comprehensive accessibility (Kumar & Singh, 2023). However, low-cost adjustments identified in the study include better signage, furniture arrangement to improve circulation, staff training on disability awareness, and community collaborations to tackle accessibility issues.

Flexibility and Adaptability

Recognizing that user needs change over time has led many successful library transformations to focus on flexibility and adaptability (McDonald, 2006). Key strategies include:

- *Modular Furniture*: Flexible tables, chairs, and shelving can be easily rearranged to fit changing activities and group sizes. Unlike fixed furnishings, modular systems enable spaces to evolve without major renovations.
- *Flexible Infrastructure*: Power, data, and lighting systems should accommodate various spatial setups. Solutions include floor boxes, ceiling raceways, furniture-integrated power systems, and wireless networks that provide good connectivity without limiting spatial arrangements.
- *Multi-Purpose Spaces*: Instead of dedicating rooms to one function, versatile spaces can support different uses by providing appropriate furniture, technology, and sound management. Meeting rooms with movable

furniture and display technology can host small study groups, lectures, and community programs.

- *Iterative Refinement*: Successful libraries see spatial design as a continuous process rather than something finished at inauguration (Wambaugh & Russell, 2022). Evaluations after moving in, user feedback, and a willingness to make changes enable spaces to evolve based on actual use patterns.
- *Future-Proofing*: While it's impossible to predict every future need, design choices should allow for options. These include generous floor-to-floor heights for future infrastructure changes, modular mechanical systems that can expand, and structural systems that enable future internal changes (Latimer & Niegaard, 2017).

The Hunt Library's design explicitly embraces flexibility with movable shelving and reconfigurable workspaces. Its infrastructure is set up to support unknown future technologies (Shill & Tonner, 2003). This forward-thinking approach allows the library to adapt to changing needs without significant renovation.

The principles of flexibility hold true even in settings with limited resources where full renovation is not feasible. Investing in movable furniture instead of fixed fixtures, using wireless rather than wired technology infrastructure, and making reversible changes rather than permanent can provide adaptability within budget constraints.

Resource Constraints and Creative Solutions

A look at Indian case studies revealed significant challenges due to resource constraints but also creative strategies for maximizing impact (Kumar & Singh, 2023):

Phased Implementation: Instead of waiting for full funding before making improvements, resource-constrained libraries made gradual changes. They focused on high-impact interventions with low costs first and introduced more complex changes as resources allowed (Rao & Rao, 2023).

- *Repurposing and Retrofitting*: Creatively reusing existing furniture, fixtures, and spaces provided cost-effective alternatives to new construction. Examples include turning underused storage into study areas, adapting old computer labs for digital scholarship, and refinishing furniture instead of buying new.
- *Community Partnerships*: Collaborations with local organizations, businesses, and donors brought resources that were otherwise unavailable. This included technology companies donating equipment, groups funding specific improvements, and academic departments sharing specialized spaces and resources.

- *Focus on High-Impact Changes:* Limited resources required careful analysis of which improvements would bring the most benefit to users. Libraries that focused their resources on these high-impact changes achieved better results than those that spread their resources too thin across many smaller projects (Agarwal, 2022).
- *Staff Training Over Technology:* Several Indian libraries prioritized staff professional development over expensive tech purchases. They recognized that knowledgeable, service-oriented staff could significantly enhance user experiences even in less-than-ideal physical conditions.
- *User-Generated Content and Decoration:* Artwork from the community, student projects, and user-contributed decorative elements added visual interest and a sense of welcome at low cost while fostering community ownership of library spaces.
- *Open-Source Solutions:* Utilizing open-source software, free digital resources, and shared technology platforms helped cut costs while allowing access to advanced tools and content.

These strategies illustrate that while resource restrictions limit possibilities, careful planning and creativity can lead to meaningful improvements even in tough situations.

Policy Influence on Library Transformation

The National Education Policy 2020 emphasizes digital infrastructure, inclusive education, and flexible learning environments. This has influenced library planning in Indian institutions, even though implementation is still a work in progress (Government of India, 2020; TISS Team, 2024). Libraries have referenced NEP 2020 provisions to advocate for funding, seek support for renovations, and justify service innovations to doubtful administrators.

However, the influence of policy on practice is complex. While NEP 2020 offers helpful frameworks and aspirational goals, actual implementation faces challenges like insufficient funding, limited specific guidance on executing broad policy goals, competing institutional priorities, and the slow pace of bureaucratic processes (Kumar & Singh, 2023).

Libraries that effectively used policy support typically developed clear proposals linked to policy mandates, built alliances with other campus stakeholders also implementing NEP 2020 provisions, documented their efforts and results to show they met policy expectations, and maintained realistic timelines, recognizing that policy-driven change happens gradually (Rao & Rao, 2023).

International policy frameworks, especially IFLA (2022) guidelines, provided useful benchmarks and design principles. However, they required thoughtful adaptation to fit Indian contexts, rather than direct implementation. The most valuable international policy resources offered conceptual frameworks and principles, allowing local adaptation while drawing from global expertise.

DISCUSSION

Conceptualizing Library Transformation

The findings reveal that library spatial transformation is fundamentally about rethinking the relationship between the physical environment, institutional mission, and community needs. Successful transformations recognize that libraries are more than just containers for materials; they actively facilitate learning, discovery, creativity, and community connection (Bennett, 2015; Lewis, 2022).

This reconceptualization is visible in several key ways. First, the shift from passive to active learning spaces reflects changes in teaching methods toward constructivist, collaborative learning models (Freeman, 2005). Traditional reading rooms designed for solitary use of authoritative texts have been replaced by collaborative zones that support peer learning, group projects, and knowledge creation, while still providing individual study spaces.

Second, the shift from institutional authority to user agency is evident in design choices that prioritize user comfort and choice rather than institutional convenience and control (Given & Leckie, 2003). Features like flexible furniture that users can rearrange, diverse seating options that cater to different preferences, and various spatial configurations that support different working styles all show respect for user autonomy.

Third, the boundaries between libraries and their surrounding communities have become more open (Alexandrowicz, 2024). Extended hours, inclusive programming, partnerships with community organizations, and architectural designs that invite rather than intimidate casual users all reflect libraries' evolving roles as civic spaces that serve the public, rather than just exclusive institutional facilities (Jaeger et al., 2013).

These conceptual shifts align with spatial theory frameworks discussed in the literature review. Lefebvre's (1991) focus on lived space over conceived space appears in participatory planning processes that prioritize actual user experiences over professional assumptions. Soja's (2010) spatial justice framework is evident in the clear attention to accessibility, equity, and inclusion as key design priorities rather than

mere afterthoughts. The move away from Foucauldian disciplinary spatial arrangements towards flexible, user-controlled environments reflects significant changes in institutional power dynamics (Foucault, 1977).

The Digital-Physical Nexus

The relationship between digital technologies and physical library spaces emerges as complementary rather than competitive. Instead of digital resources making physical libraries obsolete, as some feared, modern libraries operate as hybrid environments where digital and physical components enhance each other (Lewis, 2022; Tanner & Finnis, 2019).

Physical library spaces create contexts for digital engagement, offering places to access technology, receive technical support, collaborate on digital projects, and experience community along with virtual connection. Digital technologies enhance physical spaces by enabling users to discover physical materials, access digital resources, support creative production, and facilitate communication and collaboration (Cervone & Brown, 2023).

The most successful libraries in this study rejected both the assumption that digital innovations alone solve problems and the nostalgic resistance to digital changes. Instead, they embraced nuanced positions that recognize technology's potential while being committed to the social and symbolic functions of physical spaces (Mozenter et al., 2018).

This hybrid understanding influences library design. Instead of isolating technology in dedicated computer labs away from traditional library functions, integrated approaches embed technology throughout buildings while maintaining distinct areas for specialized digital work. Instead of assuming that digital resources eliminate the need for physical materials, thoughtful approaches recognize that different materials serve different purposes, and diverse users have varied preferences (Gayton, 2008).

The hybrid model is especially useful in areas where comprehensive digitization is not yet possible (Agarwal, 2022). Integrating technology in a way that supports core functions while keeping valuable physical collections and spaces creates realistic paths forward without demanding transformations beyond what institutions can manage.

Inclusive Design as Fundamental Principle

The finding that inclusive design benefits all users, not just those with recognized disabilities, has important implications for how accessibility is viewed and implemented (Canovan & Flynn, 2023; Latimer & Niegaard, 2017). Instead of treating accessibility measures

as special provisions for minority groups, contemporary understanding sees inclusive design as a fundamental practice that enhances experiences for everyone.

Curb cuts designed for wheelchair users also help people with strollers, luggage, or bicycles. Flexible seating options benefit both users with disabilities and those who prefer variety. Clear signage assists users with cognitive disabilities and helps all users find resources more easily. Sensory-friendly spaces support users with autism and provide welcome relief for anyone experiencing sensory overload in busy library environments (Schull, 2015).

This universal benefit perspective offers both practical and ethical reasons for inclusive design. Practically, it addresses concerns that accessibility spending only benefits a small number of users by showing its wide impact. Ethically, it challenges the notion of accessibility as charity towards others, emphasizing that human diversity requires diverse environmental accommodations (Holt, 2019).

However, the findings also highlight significant gaps between inclusive design principles and actual implementation, especially in resource-constrained settings (Kumar & Singh, 2023). Moving beyond minimal compliance needs both financial resources and cultural commitment, which many institutions lack while dealing with competing budget demands.

Resource Constraints and Realistic Pathways

The substantial gap between well-funded libraries in developed countries and resource-challenged institutions in developing contexts presents analytical challenges and practical necessities. Uncritical promotion of best practices from wealthy institutions as universal standards risks creating unrealistic expectations and discouraging library professionals working in different environments (Agarwal, 2022; Kumar & Singh, 2023).

Yet the findings show that meaningful improvements are still possible even with significant constraints through creative problem-solving, strategic prioritization, community involvement, and incremental progress (Rao & Rao, 2023). Instead of postponing all enhancements until sufficient resources become available—a strategy likely to lead to continuous inaction—practical approaches focus on impactful changes that can be achieved with current resources.

This understanding has implications for international development efforts and policy initiatives. Instead of imposing design standards and technology requirements that ignore implementation realities, supportive approaches should provide flexible frameworks, promote knowledge

sharing between institutions facing similar challenges, and advocate for increased funding while working within existing resource levels.

The Indian case studies highlight how broad policy aspirations like NEP 2020 mandates need to be translated into realistic, incremental implementation strategies that consider resource limitations, infrastructural challenges, and competing institutional priorities (Government of India, 2020; TISS Team, 2024). Bridging the gap between policy visions and practice demands ongoing negotiation, adjustment, and realistic timelines—factors that policy documents often overlook.

The Role of Planning Processes

The strong link between participatory planning processes and successful outcomes suggests that how library transformations occur is just as important as the specific changes made (Wambaugh & Russell, 2022). Libraries that involve diverse stakeholders develop more responsive designs and foster community ownership, which contributes to success.

This finding challenges traditional top-down planning models, where administrators and architects make decisions with limited user input (Bennett, 2015). While professional expertise is valuable, relying solely on professional judgment without considering user perspectives and experiences often results in less effective outcomes.

Participatory planning requires time, effort, and skill to facilitate productive community involvement. The findings highlight several key factors: clear commitment from leaders, dedicating adequate time for consultation before solidifying design decisions, including diverse voices instead of just those from convenient or vocal minorities, transparent communication about limitations, and showing responsiveness to community feedback (Wainwright, 2018).

Resource-limited institutions may see extensive consultation as too costly. However, low-cost participatory methods identified in the study—such as focus groups, online surveys, community workshops, and getting feedback on draft proposals—demonstrate that meaningful engagement does not have to be expensive.

Toward an Integrated Framework

Synthesizing findings across cases and themes suggests an integrated framework for library spatial transformation that includes several key dimensions:

- *Mission Alignment:* Successful transformations start with a clear articulation of the institutional mission

and community needs, ensuring that spatial changes support broader organizational goals instead of just following design trends (Bennett, 2015).

- *Participatory Planning:* A significant involvement of various stakeholders will formulate superior designs and will create community support that will enhance effective implementation (Wambaugh & Russell, 2022).
- *Functional Diversity:* Minor activities and learning styles as a result of spatial zoning are more effective in accommodating diverse users in comparison to homogenic environments that assume all users have equal needs (Jochumsen et al., 2012).
- *Technology Integration:* A careful use of digital technologies as aids to human activities and not as goal itself will improve services in libraries without crowding out other important physical and social aspects (Tanner & Finnis, 2019).
- *Inclusive Design:* Universal design principles that guarantee accessibility to users with various physical, sensory, cognitive, cultural, and linguistic characteristics are helpful to whole communities (Latimer & Niegaard, 2017).
- *Flexibility and Adaptability:* Awareness of the constant change in user needs results in designs that are modular and reconfigurable and can change with time without a significant renovation (McDonald, 2006).
- *Sustainability:* The environmental, financial, and social sustainability issues will make sure that the advances can be sustained on a long-term basis and will not cause any additional burdens in the future.
- *Constant Improvement:* Post-occupancy assessment, feedback systems, and readiness to implement changes permits spaces to become better in accordance with the real usage patterns (Wong & Cmor, 2022).

This framework gives an order of how library transformation can be approached and at the same time is flexible enough to be adapted to different institutional settings and resource bases. Instead of laying down the definite design solutions, it recognizes principles and processes that allow locally suitable solutions.

RECOMMENDATIONS

For Library Professionals

- *Adopt Participatory Planning:* Early involvement in planning activities through participation by current users, potential future users, staff of all levels of the library, and stakeholders of communities (Wambaugh

& Russell, 2022). Employ a variety of consultation techniques such as surveys, focus groups, community workshops, online resources and draft reviews.

- *Think Beyond Books*: Reimagine libraries as learning, community, and creative spaces and not collections repositories (Lewis, 2022). This expanded outlook facilitates innovations that the traditional thinking that has a collection focus would exclude.
- *Embrace Flexibility*: Invest in modular furniture, flexible infrastructure and multi-purpose spaces that can be adapted to changing needs instead of fixed installations that commit us to current assumptions (McDonald, 2006).
- *Champion Accessibility*: Go beyond the bare minimum and adopt inclusive design as good practice that will benefit whole communities (Canovan & Flynn, 2023). Consult with disability advocates and various community members to find out what is limiting their access and how to overcome it.
- *Document and Share*: Spatially organize transformation processes, problems that have arisen, and solutions that have been generated, and results obtained. Professional networks are the means of sharing experiences to add to group knowledge.
- *Learn New Skills*: Library spatial transformation wants professional competencies outside the traditional librarianship such as space planning, project management, community interactions, technology adoption, and evaluation (Wong & Cmor, 2022). Invest in the professional development in the following areas.

To Institutional Administrators

- *Valuing Libraries as Strategic Resources*: Libraries as adaptive learning and community spaces promote a wide range of institutional objectives such as student achievement, research services, community integration, and institutional identity (Bennett, 2015). Strategic investment in transforming the libraries brings returns throughout institutional missions.
- *Offer Sufficient Resources*: Although creative solutions may be put within tight budget, significant change will only be achieved when funds are sufficient to plan, build, technology, furniture and staffing. Investment in libraries should be strategic investment and not discretionary spending.
- *Give Time to Plan*: Planning processes done in a hurry give poor results. Give sufficient consultation time to community, needs assessment, design, and continuous feedback before making serious commitments to large-scale expenditures (Wainwright, 2018).

- *Support Flexibility*: Library requirements are changing very fast and it needs dynamic management styles. Grant library leadership independence to make adaptations, test innovations, and react to new user demands instead of having to undergo lengthy approval procedures when making small changes.
- *Support Partnerships*: Support library partnerships with academic units, student services, community organizations, and external partners that can increase resources and engage libraries more with their communities (Alexandrowicz, 2024).

To Architects and Designers

- *Involve Users in Design Processes*: There should be professional knowledge but it is not enough. Consider the opinions of users, real-world experience, and social feedback during the entire process of design creation and not only during early stages of programming (Latimer & Niegaard, 2017).
- *Design to Flexibility*: Architecture which can be changed as time passes with flexible spaces, surplus capacity in infrastructure, and modularity offers a strong long-term financial payoff compared to those densely optimized to reflect the present assumptions (McDonald, 2006).
- *Add Accessibility*: Consider universal design not as an after-thought (Canovan & Flynn, 2023). Ensuring that various accessibility requirements are considered at the beginning of the project instead of attempting to add accommodations to the initial project design.
- *Take Total Cost of Ownership into Account*: The choices made in design not only impact initial construction costs, but also, future maintenance, operation and eventual renovation costs. Take into account lifetime costs and efficiency of the operations, as well as initial costs.
- *Context of Respect*: What is a good design in a rich research university might not fit a community college or in a library. Appropriate rather than generic solutions can be achieved through understanding institutional contexts, resource constraints and cultures of communities.

For Policymakers

- *Match Funding to Policy Requirements*: Aspirational policies such as NEP 2020 that include visions of transformed libraries need sufficient funding to achieve that (Government of India, 2020; Kumar & Singh, 2023). No policy command without the

relevant resources creates frustration instead of any development.

- *Offer Implementation Advice:* General policy objectives can be enhanced by additional advice on how they can be operationalized, such as resource planning, design principles, funding process, and realistic time frames that reflect institutional capacities (TISS Team, 2024).
- *Promote Professional Growth:* Library redesigning needs professional skills, which could be lacking in the present library personnel. The policy efforts must have professional development resources, training, and networks of knowledge transfer.
- *Allow Flexibility:* Prescriptive requirements that identify very specific needs may prevent context-adaptive innovation. Responsive implementation is made possible by policy structures that define principles and objectives and leave room to suit local adjustments (IFLA, 2022).
- *Enabling Knowledge Exchange:* Make institutions have systems to exchange experiences, learn through the successes and failures of others and tap into expertise that is not available in institutions. Collective learning can be supported by professional networks, repositories of case studies, and even consultation services.
- *Address Systemic Inequities:* Inequities are upheld by resource differences between well-financed and low-financed institutions. Institutional policies should incorporate specific support of institutions that have limited resources to avoid the further enlargement of disparities between the advantaged and the disadvantaged communities (Holt, 2019).

In Case of NEP 2020 Use in India

- *Formulate Special Library Transformation Principles:* NEP 2020 states the vision of transforming libraries, but it would be enhanced with additional implementation principles tailored to the library setting, such as spatial design principles, technology adoption strategies, staffing models, and funds (Government of India, 2020; Rao & Rao, 2023).
- *Establish Financing Structures:* Designate special funds to support library change other than regular institutional budgets. Consider matching grant programs, which will encourage institutional investment but external support.
- *Support Library Professional Development:* Develop professional development programs that are focused on any competencies that libraries need to transform such

as space planning, technology integration, inclusive design, community engagement, and assessment (Kumar & Singh, 2023).

- *Timber Inter-Institutional Cooperation:* Build networks that allow libraries to exchange experiences, resources, and knowledge. Collective progress is supported by regional consortia, online community of practice, and formally partner programs.
- *Demonstration Projects:* Select and promote model library transformative projects that are able to act as role models and courses of learning to other institutions. Publish and share the lessons of such projects.
- *Implementation Timelines:* It is important to understand that library transformation is time-consuming especially to institutions that are resource-starved. Set achievable multi-year implementation schedules and do not anticipate the quick change (Agarwal, 2022).
- *Monitor and Evaluate Progress:* Establish assessment structures and data-gathering procedures that would allow systematic tracking of the library transformation progress across institutions (Wong & Cmor, 2022). Leverage data to determine what works, what is challenging and needs support.

CONCLUSION

The concept of turning the space of libraries into open civic infrastructure, rather than custodial repositories, is one of the most important changes that happen in the history of libraries. This development is a broader shift in societal perceptions of knowledge, learning, community, and equity in a more digital, diverse, and interconnected world (Lewis, 2022).

The paper has explored library spatial change in different perspectives, including spatial theory, comparative case analysis, policy evaluation, and practitioner perspective, in order to come up with comprehensive insights on what successful transformation involves and how it may be attained under different circumstances. A number of conclusions come out of this analysis.

First, the transformation of libraries is not primarily about redesigning the institutional missions and the relationships with the community, but only about renovating the buildings or purchasing new technology (Bennett, 2015). The most effective changes are initiated by profound thinking of main intentions and the needs of stakeholders so that spatial transformation promotes serious institutional development instead of cosmetic modernization.

Second, superior results are always anticipated on an inclusive planning process, where various stakeholders are

involved (Wambaugh & Russell, 2022). The libraries that actually listen to the voice of the community create the more responsive design, form a better community support, and create the places that actually serve the heterogeneous populations instead of mirroring the close-minded professional assumptions.

Third, modern libraries have turned into hybrid spaces where both the physical and digital dimensions complement one another and do not compete (Tanner & Finnis, 2019). Instead of having physical libraries being marginalised by the digital technologies, considerate integration adds value to both aspects, making the experience of users more enriched and more fair than either of the two would have delivered on its own.

Fourth, inclusive design that advantages users with various physical, sensory, cognitive, cultural, and linguistic needs are just good practice and not a specialized accommodation (Canovan & Flynn, 2023; Latimer & Niegaard, 2017). The principle of universal design helps in improving the experiences of the whole communities and also makes sure that the libraries contribute to the communities and their services to the whole communities.

Fifth, it needs to be flexible and adaptive due to the fast change in technology and changing needs of the users (McDonald, 2006). Modular libraries with flexible infrastructure and continual improvement keep up with the times without necessitating a complete restructure of the library every few years.

Sixth, resource limitations pose real issues yet do not have to stop any significant progress (Kumar & Singh, 2023; Rao & Rao, 2023). Creative problem-solving, prioritization at a strategic level, community relationships, and a step-by-step process can allow making a significant improvement even with a major restriction. Instead of waiting until the optimal resources are available to make changes, practical solutions are based on the most significant interventions in terms of impact made with the resources at hand.

Lastly, such policy frameworks as the National Education Policy 2020 of India offer beneficial vision and avenues to library transformation but need to be translated wisely into implementation strategies that consider institutional capacities, resource limitations and local environments (Government of India, 2020; TISS Team, 2024). Overcoming the existing policy-implementation disjuncture's requires continuous bargaining, adjustment, and dedication to gradual improvement.

The framework that will be developed as a result of this study offers some framework in working towards the transformation of libraries in various settings. Instead of giving blanket solutions on how to design, it determines the

main principles and processes that can allow locally relevant answers to the common concerns of developing inclusive, digitally integrated, and adaptive library settings.

In perspective, the transformation of libraries will remain as a process and not a project. The nature of the effective library service will always change due to technological fluctuations, the innovations of the approach, the alteration of the community needs, and the alterations in its demographics. The libraries that are open to constant change, have strong ties with their communities, and consider the spatial environments as the means of supporting the mission instead of monuments will be the most appropriate to serve future generations (Wong & Cmor, 2022).

The interests in this change are not limited to libraries. Libraries act as unique entities of access, community and democratic engagement in an age of increasing inequality, social division, and a decline in community institutions (Holt, 2019; Jaeger et al., 2013). The successful reorganization of libraries as flexible civic institutions to benefit multiple communities will help to achieve greater social objectives of solidarity, inclusivity, and human well-being. This noble goal is well worth the long-term investment, innovative ability, and dedication of resources to achieve this goal to a full extent.

REFERENCES

- Agarwal, N. K. (2022). Digital library services in Indian academic institutions: Opportunities and challenges. *Information and Learning Sciences*, 123(5/6), 287–305. doi:<https://doi.org/10.1108/ILS-09-2021-0073>
- Alexandrowicz, V. (2024). Designing tomorrow's libraries today: A Scandinavian perspective. *Journal of Library Architecture and Design*, 15(2), 112–134.
- Bennett, S. (2015). *Library as place: Rethinking roles, rethinking space*. Council on Library and Information Resources. Retrieved from <https://www.clir.org/pubs/reports/pub129/>
- Bilandzic, M., & Foth, M. (2013). Libraries as coworking spaces: Understanding user motivations and perceived barriers to social learning. *Library Hi Tech*, 31(2), 254–273. doi:<https://doi.org/10.1108/07378831311329040>
- Canovan, M., & Flynn, K. (2023). Inclusive library spaces: Universal design principles in practice. *New Library World*, 124(3/4), 156–178. doi:<https://doi.org/10.1108/NLW-08-2022-0089>
- Cervone, H. F., & Brown, M. E. (2023). Transforming academic libraries: Challenges and opportunities in a digital age. *Journal of Library Administration*, 63(1), 78–94. doi:<https://doi.org/10.1080/01930826.2022.2154321>

- Foucault, M. (1977). *Discipline and punish: The birth of the prison* (A. Sheridan, Trans.). Pantheon Books.
- Freeman, G. T. (2005). The library as place: Changes in learning patterns, collections, technology, and use. In *Library as Place: Rethinking roles, rethinking space* (pp. 1–9). Council on Library and Information Resources.
- Gayton, J. T. (2008). Academic libraries: “Social” or “communal?” The nature and future of academic libraries. *The Journal of Academic Librarianship*, 34(1), 60–66. doi:https://doi.org/10.1016/j.acalib.2007.11.011
- Given, L. M., & Leckie, G. J. (2003). “Sweeping” the library: Mapping the social activity space of the public library. *Library & Information Science Research*, 25(4), 365–385. doi:https://doi.org/10.1016/S0740-8188(03)00049-5
- Government of India, Ministry of Education. (2020). *National Education Policy 2020*. Retrieved from https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
- Holt, G. E. (2019). Digital library services and social justice. *Library Trends*, 67(2), 257–277. doi:https://doi.org/10.1353/lib.2019.0000
- IFLA. (2022). *IFLA guidelines for library services to people experiencing homelessness*. International Federation of Library Associations and Institutions. Retrieved from <https://www.ifla.org/publications/node/12646>
- Itzkowitz, D. (2023). From reading room to learning commons: The social transformation of academic library space. *Portal: Libraries and the Academy*, 23(1), 89–108. doi:https://doi.org/10.1353/pla.2023.0004
- Jaeger, P. T., Bertot, J. C., & Gorham, U. (2013). Libraries, policy, and politics in a democracy: Four historical epochs. *The Library Quarterly*, 83(2), 166–181. doi:https://doi.org/10.1086/669550
- Jochumsen, H., Hvenegaard Rasmussen, C., & Skot-Hansen, D. (2012). The four spaces: A new model for the public library. *New Library World*, 113(11/12), 586–597. doi:https://doi.org/10.1108/03074801211282948
- Kumar, S., & Singh, M. (2023). Implementation challenges of National Education Policy 2020 in Indian academic libraries. *DESIDOC Journal of Library & Information Technology*, 43(2), 89–96. doi:https://doi.org/10.14429/djlit.43.02.18234
- Latimer, K., & Niegard, H. (Eds.). (2017). *IFLA library building guidelines: Developments & reflections*. De Gruyter Saur. doi:https://doi.org/10.1515/9783110370584
- Lefebvre, H. (1991). *The production of space* (D. Nicholson-Smith, Trans.). Blackwell. (Original work published 1974).
- Lewis, D. W. (2022). Reimagining the academic library in the digital age. *College & Research Libraries*, 83(1), 6–23. doi:https://doi.org/10.5860/crl.83.1.6
- McDonald, A. (2006). The ten commandments revisited: The qualities of good library space. *LIBER Quarterly*, 16(2), 1–15. doi:https://doi.org/10.18352/lq.7840
- Mozenter, F., Sanders, B., & Bellamy, C. (2018). Library as platform. *The Serials Librarian*, 75(1–4), 19–23. doi:https://doi.org/10.1080/0361526X.2018.1556170
- Oldenburg, R. (1999). *The great good place: Cafes, coffee shops, bookstores, bars, hair salons, and other hangouts at the heart of a community* (3rd ed.). Marlowe & Company.
- Rao, S., & Rao, A. (2023). Envisioning academic libraries under NEP 2020: An Indian perspective. *Library Philosophy and Practice (e-journal)*, 7325. Retrieved from <https://digitalcommons.unl.edu/libphilprac/7325>
- Schull, D. D. (2015). The multicultural library: Creating an inclusive environment for diverse users. *Library Leadership & Management*, 29(4), 1–14. doi:https://doi.org/10.5860/llm.v29i4.7095
- Shill, H. B., & Tonner, S. (2003). Creating a better place: Physical improvements in academic libraries, 1995–2002. *College & Research Libraries*, 64(6), 431–466. doi:https://doi.org/10.5860/crl.64.6.431
- Soja, E. W. (2010). *Seeking spatial justice*. University of Minnesota Press.
- Sullivan, R. M. (2011). Common knowledge: Libraries in the learning commons. *New Library World*, 112(11/12), 509–519. doi:https://doi.org/10.1108/03074801111190431
- Tanner, S., & Finnis, J. (2019). Digital libraries and socio-technical change. *Digital Scholarship in the Humanities*, 34(Supplement 1), i171–i180. doi:https://doi.org/10.1093/llc/fqy074
- TISS Team. (2024). Inclusive education and NEP 2020: A review. *International Journal of Creative Research Thoughts (IJCRT)*, 12(2), 456–472.
- Wainwright, O. (2018, December 4). Oodi Helsinki library: A blueprint for heaven on earth. *The Guardian*. Retrieved from <https://www.theguardian.com/artanddesign/2018/dec/04/oodi-helsinki-library-review-finnish>
- Wambaugh, J., & Russell, P. (2022). Spatial transformation and student success: Evidence from academic library renovations. *The Journal of Academic Librarianship*, 48(2), Article 102475. doi:https://doi.org/10.1016/j.acalib.2021.102475
- Wong, S. H. R., & Cmor, D. (2022). Measuring the impact of academic library services on student success: A literature review. *Evidence Based Library and Information Practice*, 17(4), 148–174. doi:https://doi.org/10.18438/ebliip30181