

P / REFERENCES OF DESIGN

DESIGNING FOR EQUITY AND JUSTICE: LESSONS FROM PUBLIC LIBRARIES SPACES.

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ABSTRACT | How can the design of educational spaces be changed? How can new strategies be rethought, implemented and influenced to transform educational environments into more equitable and just spaces? In recent years, there has been a gradual reassessment of the design of educational environments to better align with the dynamic changes in contemporary society. The needs arising from the COVID-19 pandemic reinforced the need to renovate educational spaces. In this process, it has been crucial to critically reassess and challenge the paradigms that have governed the design of schools for the past two centuries, particularly in conventional classrooms. The meticulous arrangement of desks in a control grid, with students seated side by side and facing the teacher, reflects an outdated model that fails to meet current educational demands. In addition to schools, various institutions contribute to an urban network aimed at providing access to knowledge. Public and community libraries have undergone a notable transformation, shifting towards prioritizing education and cultivating positive learning experiences for their users. Some libraries serve as exemplars of innovative spatial restructuring and co-design processes, demonstrating the potential for reimagining them as dynamic programmatic spaces for diverse communities.

This article analyses the evolving role of libraries in the contemporary world through three case studies: the Oodi Central Library in Helsinki (ALA Architects), the Rio de Janeiro Park Library (Architect Glauco Campello and be.bo.), and the Library of the Sichuan Fine Arts Institute (Tanghua Architect & Associates). The goal is to examine the strategies and methodologies employed in these projects and to extract practical examples of design decisions that have elevated these libraries beyond mere book repositories, turning them into social agents for interaction between information, knowledge and community. The conclusion emphasizes the emergent need to redefine educational spaces as places of memory and echoes of knowledge to dynamic hubs of circulation and knowledge creation. Public libraries are increasingly assuming a crucial role as community hubs, serving as social institutions that bring together people of all ages, backgrounds and intellectual perspectives. This paradigm shift should not only be reflected in the physical space but also in the collaborative processes that shape them. Similarly, school environments demand attention, with a growing urgency to integrate co-design practices that extend beyond the planning stages. Collective decision-making must encompass the definition of programs and guidelines prior to embarking on the design phase, ensuring that educational spaces truly meet the diverse needs and aspirations of their users.

1. Introduction

Over recent decades, a significant evolution has taken place in the design of educational environments, particularly in traditional settings such as schools. This shift has been towards prioritizing student-centred learning, which fosters active engagement in educational experiences. While classroom spaces have been extensively studied and experimented with to facilitate this approach, they are often perceived as overly structured. Consequently, there has been a trend towards utilizing the school library, which offers more flexible spatial features conducive to a variety of educational activities. The adaptability of library spaces allows for simultaneous usage by diverse individuals (Feinberg and Keller, 2010; Rankin, 2018, IFLA 2018; IFLA, 2022).

In addition to schools, various institutions including libraries and museums contribute to an urban network aimed at providing access to knowledge. It's crucial to reflect on how these spaces are being reimagined to better serve educational objectives, moving beyond mere aesthetics to consider the educational value of architectural design.

Public and community libraries, in particular, have undergone a notable transformation, shifting towards prioritizing education and cultivating positive learning experiences for users. This departure from their traditional role as mere resource repositories underscores the importance of actively contributing to enhancing learning outcomes for citizens. These libraries are now recognized as dynamic learning environments, with committed professionals and users engaging in an evolving educational atmosphere, a community's broader educational ecosystem (Krass et al., 2022; Feinberg and Keller, 2010).

These spaces play a vital role in the community by enhancing non-formal education, facilitating access to information, offering diverse learning materials, promoting digital literacy, and supporting lifelong learning. They significantly contribute to democratizing education, and ensuring accessibility to knowledge and educational opportunities for individuals from all backgrounds.

Despite decades of international research on the design of classroom learning environments, there's a gap in the literature regarding specific aspects related to the design of the public and community library learning environment. Lessons learned from these spaces can inform and enrich the design of educational environments to better align with the evolving needs of society.

This paper delves into the transformation of educational spaces, with a specific focus on public and community libraries. The goal is to comprehend how thoughtful design and new strategies can optimize these spaces, making them more equitable and supportive for all users. It discusses the adaptation of educational settings in recent years to align with contemporary society's changing dynamics, especially in the information and digital age. The paper emphasizes the significance of exploring the emerging network of educational infrastructures that complement traditional education, thereby fostering the development of essential life skills, facilitating continuous learning, and ensuring currency with knowledge.

Furthermore, the paper examines how public and community libraries have evolved into more open and equitable educational environments. While not exhaustive, it analyses a sample of three library sites located in Helsinki (Finland), Chongqing (China), and Rio de Janeiro (Brazil), showcasing them as examples of inclusive and dynamic educational spaces. This examination underscores the significance of context-sensitive design solutions and community engagement in creating environments that are equitable and just.

2. From Traditional Models to Contemporary Challenges

“Let us start with the schools; if anything is to be done to 'reform' men, the first thing is to 'form' them.” (Bo Bardi, 1951)

In recent years, there has been a gradual reassessment of the design of educational environments to better align with the dynamic changes in contemporary society and in particular in the information/digital age (Harrison and Hutton, 2014).

The challenges exacerbated by the COVID-19 pandemic have underscored the urgency of updating educational spaces. The lockdown period has brought into clear view the disparity between traditional educational environments and the significant advancements in education made possible by technology, as well as the essential resources required to support them. The swift evolution of knowledge acquisition as shown the need to a more expansive perspective on the design of physical spaces. It is crucial to reconsider and question the traditional models that have guided the design of educational environments for the past two centuries, particularly within conventional settings.

During the 19th century, the transition from home-based to formal school learning, influenced by the hygiene movement vision, emphasized the importance of spacious, well-lit, and ventilated classrooms. It also recognized the significance of outdoor activities and the connection between physical health and cognitive development (Author, 2012). However, with the rise of mass public schooling in the 20th century, standardized strategies led to the emergence of structured, corridor-based school layouts, often referred to as the "factory model." This model prioritized passive knowledge transmission, uniformity, and conformity but no longer aligned with the evolving needs of contemporary education, that prioritize student-centred learning, critical thinking, and collaboration.

Advancements in educational research and psychology have enhanced the understanding of learning and development. While numerous theories exist regarding how people learn, there is a shared consensus regarding the significance of the social environment in which learning takes place (Calvo-sotelo, 2014). This environment involves numerous individuals, emphasizing the critical role of interaction and connectivity among learners. As the educational context continues to evolve, the spatial response must also adapt. This adaptation extends beyond the design of individual educational spaces to encompass the interaction and connectivity between spaces throughout the city and neighbourhood.

The swift progress of technology has fundamentally changed how we access information and engage in learning. Outdated educational models may fail to incorporate or leverage modern technology, impeding their effectiveness in preparing students for the digital age. These older models often lack inclusivity and fail to address the diverse needs of students from various backgrounds. In contrast, contemporary education places a strong emphasis on inclusivity, cultural sensitivity, and catering to diverse learning styles—qualities that outdated models may struggle to provide.

In this broader context, it is crucial to acknowledge that the future of education increasingly values non-formal education and underscores the importance of alternative environments in the educational ecosystem (Hoppers, 2006). This shift is viewed as a collective responsibility of the community.

Consequently, there is a need to explore various types of built spaces and urban/territorial areas, scrutinizing their potential to facilitate educational practices, disseminate knowledge, provide valuable educational opportunities.

As described by Trilla (1993), the interaction between education and the city unfold across three dimensions: the city as a context for education (learning in the city), the city as a means of education (learning with the city), and the city as an educational subject (learning about the city). This perspective prompts us to contemplate the architectural challenges and view the urban environment as a canvas for

multiple learning experiences. Consequently, public facilities, outdoor spaces, and the dynamic urban life itself are regarded as educational resources.

The physical learning environment extends beyond traditional school boundaries, including outdoor school grounds, neighbourhood surroundings, and the urban fabric. This broadened learning ecosystem incorporates multiple spaces designed to meet diverse educational needs across different age groups, benefiting not only students but also the broader community and families. This perspective encourages us to contemplate architectural challenges and view the urban environment as a place for diverse learning experiences.

In this context, public and community libraries emerge as crucial educational spaces, encouraging active participation in the creation of socially creative learning environments while emphasizing their integration within the urban community.

Over recent decades, there has been a notable transformation in the services and activities provided by public and community library buildings. The rapid evolution of digital technologies and the increased availability of online platforms for data sharing have reshaped the traditional role of printed books as the exclusive repository of knowledge and history. Today, various media and platforms share this responsibility and capacity alongside printed materials. Technology has become an indispensable tool for knowledge acquisition, leading to adaptations and diversification in the offerings, services, and spatial design of library buildings.

It has also been observed that innovative approaches to the design of public and community libraries often involve co-design processes. Through participatory planning and the collaborative creation, spaces are tailored to the needs and desires of users, especially for younger generations. In this way, libraries become catalysts for socialization and bottom-up activism. These examples offer valuable insights into shaping the educational spaces of the future, highlighting the potential of urban space to evolve into a vibrant and dynamic "macro-school."

3. Insights from Three Cases: Helsinki, Chongqing and Rio de Janeiro

The evolving role of public/community libraries is examined through three case studies: the Oodi Central Library (2018) in Helsinki (designed by ALA Architects), the Rio de Janeiro Library Parque Estadual (2014) (designed by Glauco Campello and be.bo.), and the Library of the Sichuan Fine Arts Institute (2009) (designed by Tanghua Architect & Associates) in Chongqing. The goal is to analyse design strategies employed in these projects, drawing practical insights from design decisions that have transformed these resources from mere repositories of book repositories into dynamic hubs for social interaction, information dissemination, and community engagement. Despite being situated in countries with very different socio-political and economic contexts, these case studies also illustrate how public institutions have utilised the architectural design process to foster more inclusive and egalitarian relationships within their communities.

- Oodi Central Library in Helsinki, Finland

A recent example of this transformation is the Oodi Library in Helsinki, Finland, designed by Office ALA Architects and opened in late 2018. However, the journey of this building began long before its completion, characterized by a participation process that engaged citizens and library users in the planning and design of new services and functions.



Figure 1. Oodi Library. Photo: by the author (2022).

According to Haavisto et al. (2017), important stakeholders involved in the construction of this library, the vision set forth by the City Council aimed to establish a library that the citizens would truly feel ownership of. To achieve this, they structured the Central Library planning project as a unique and inclusive city planning process. Unlike traditional approaches that merely solicit opinions through surveys, this initiative actively involved people in the planning process, fostering genuine engagement and collaboration.

"Through the participatory budgeting project, Helsinki City Library acquired concrete directions from the citizens for what kind of public library services are anticipated and needed in the future Central Library. Also, by giving city residents, i.e., the owners of the libraries, a say in financial decision-making, Helsinki City Library fulfilled one of the public libraries' basic tasks as advancers of democracy. One of the workshop participants stated that it was actually great to see close-range democracy in action." (Haavisto et al., 2017, p.3)

An open international architecture competition was conducted to determine the design for the new Central Library. From the very beginning, transparency was maintained throughout the competition, allowing the public to review the proposals, provide feedback, and vote for their preferred designs. However, it's worth noting that while public opinion was taken into consideration, the ultimate decision rested with a jury, not solely on the public vote. Interestingly, the overall winner of the competition did not align with the top choice in the public voting. (Haavisto et al., 2017)

Another significant aspect of the project's strategy is its alignment with the new Finnish library policy, which emphasizes active user engagement rather than passive consumption. The new library offers a wide range of traditional services, spaces and amenities catering to various activities such as learning, work and leisure. Serving as a free and secure public space, it provides numerous opportunities for social interaction and networking, as well as access to books. The program includes a cinema, restaurant, lecture and workshop spaces, recording studios, gaming rooms, kitchens, 3D printing facilities, sewing spaces, meeting spaces, an amphitheatre, and also individual and group reading areas, and a book archive. According to Author (2022), the Oodi Library's diverse program serves different users, addressing diverse needs and expectations. The interior space design prioritizes accessibility, transparency and informality. It is open to

all, with glass partitions that can be easily isolated by curtains where compartmentalization is necessary. The layout encourages informal interaction, with work and meeting spaces integrated into circulation areas. Additionally, interior quality is enhanced using wood or carpeting, visual connections with the exterior, and comfortable furniture.

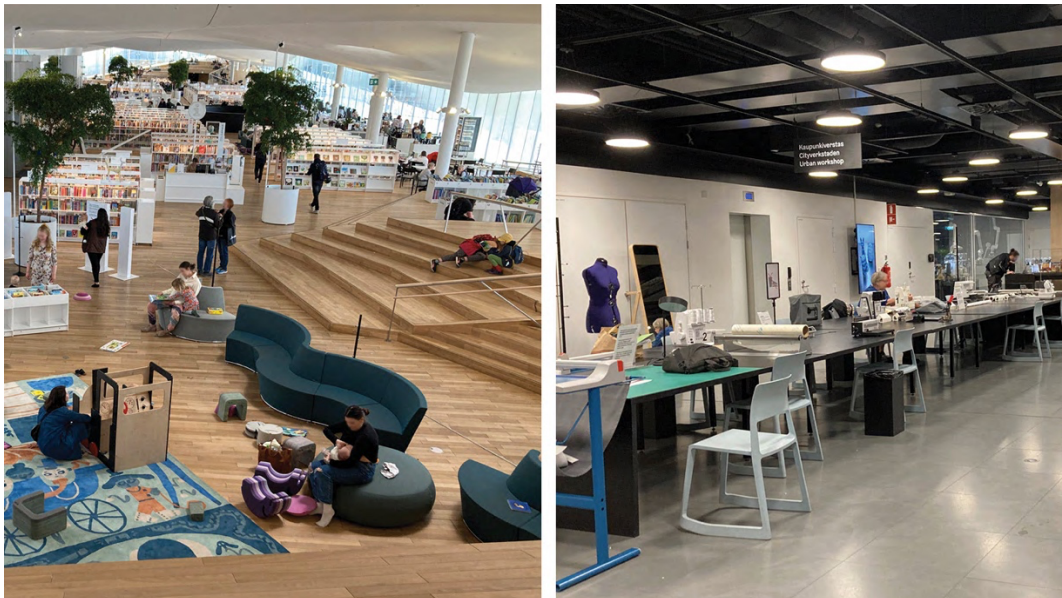


Figure 2. Interior Oodi Library. Photo: by the author (2022).

In urban context, the library forms an integral part of a cultural hub alongside the Helsinki Music Centre (LPR Architects, 2011), the Finlandia Auditorium (Alvar Aalto, 1971), Sanoma House (SARC Architects, 199), and the Kiasma Museum of Contemporary Art (Steven Holl, 1998), situated near Helsinki Central Station (Eliel Saarinen, 1919). Directly connected to the library building is the central square of this complex (Kansalaistori), creating a public space featuring sports facilities and hosting various activities such as fairs, performances and musical events. Functionally, the library's design encompasses three floors, each reflecting distinct but complementary programmes in alignment with the library's objectives. The ground floor serves as a reception area open to diverse uses, while the middle floor is dedicated to recreational, educational and community activities. At the top floor, the library offers a more traditional setting for reading and research. All floors are accessible to the public, with most spaces not requiring a library card for access. Additionally, many amenities are free to use, though reservations may be necessary through a dedicated app.



Figure 3. Aerial view Oodi Library. Photo: Baan, Iwan (2023). ALA Architects - <https://ala.fi/work/helsinki-central-library/>.

- Library of the Sichuan Fine Arts Institute in Chongqing, China

Shifting focus to another example, the Library of the Sichuan Fine Arts Institute, located in the city of Chongqing, situated in the province of Sichuan, in southwest China. This library serves as a part of the Sichuan Fine Arts Institute, a public university established in 1940. Renowned for its emphasis on local cultural traditions, the institute has fostered numerous generations of artists deeply rooted in regional artistic expressions. In recent years, the Institute has advocated the fusion of artistic creation with political endeavours and design practices geared toward local development, garnering global recognition for its research in this domain. Designed by the Chinese studio Tanghua Architect & Associates, the library's architectural project was completed in 2009.



Figure 4. Library of the Sichuan Fine Arts Institute. Photo: by the author (2023).

The campus is nestled within a conserved and enclosed green area situated in a former agricultural district on the western outskirts of the Chongqing urban landscape. Access to the Campus space is restricted and allowed solely for authorized people.

As per insights from the teaching community, meticulous measures were undertaken during the campus construction to minimize disruption to the native farming communities. These communities were allowed to retain their original residences and were entrusted with the upkeep of the college's verdant surroundings. Positioned at the nexus of the campus's residential and educational precincts, the library stands as a focal point, symbolizing the intersection of scholarly pursuits and communal living.



Figure 5. Aerial view Library of the Sichuan Fine Arts Institute. Photo: Chou, Mark (2022). [Online Photo Sphere]. googleearth <https://shre.ink/8iWr>.

The design of this building draws on regional heritage, taking inspiration from ubiquitous structures found in Chongqing, such as brickworks and warehouses. The architecture seeks to establish a meaningful dialogue with the preserved surroundings. Formally, the building is composed of a large compact volume that provides greater spatial flexibility and also pays homage and correlates with the traditional architectural compositions prevalent in the area.

The selection of materials is guided by constructive aspects, but also by reverence for historical significance. The exterior of the main structure is composed of green clay bricks, stacked from the roof to ground level, reminiscent of traditional crafts. Infused with pig iron, these bricks gradually change tone over time, demonstrating constant evolution. Internally, the concrete surfaces echo the exterior texture while asserting its distinct identity. Wooden elements adorn the staircases and facades, adding warmth and personality to the building. Overall, the library's aesthetics embody the essence of regional identity, celebrating Chongqing's cultural heritage.



Figure 6. Interior Library of the Sichuan Fine Arts Institute. Photo: by the author (2023).

The building is made up of a concrete shell that serves as both a roof and a peripheral wall. This element is strategically divided to introduce natural light into the interior of the building through openings along the ridge; strategic gaps that create uncovered interior courtyards and the sequence of windows on the sides that facilitate connectivity between the interior and exterior environments. Internally, the layout features mezzanines interconnected by a staircase that serves as a focal point, guiding visitors through the library. The public entrance hall is divided by an open café and this staircase, which not only functions as a path, but also offers seating and serves as a display area for books and works of art along its climb. Library opening hours are limited to the university community, from 9:30 am to 10 pm, Monday to Sunday. Below, we present the report of a student who frequents the library:

“The school has set many seats by the windows, so when you are tired, you can look up and see the green trees and scenery of the school, which is very pleasant. Moreover, the overall design of the library has regional characteristics, including a lot of Chongqing culture, giving people an amiable feeling. I really like the way it looks. It is very similar to the attic and warehouse modelling and very quiet, but also gives a sense of knowledge of the treasure is hidden in it, which can stimulate my desire to explore”. (Report from the student.)

- Parque Estadual Library in Rio de Janeiro, Brazil

The third case under examination is the Parque Estadual library (BPE) in Rio de Janeiro, Brazil. Established in 1873 by Pedro II, Brazil's last emperor prior to the republic's establishment, the former Public Library of the State of Rio de Janeiro has undergone significant transformations. It relocated multiple times and endured partial destruction of its building and collection due to a fire. However, it was completely remodelled and reopened as the Biblioteca Parque Estadual in March 2014.

Architect Glauco Campello led the remodelling project, who was also responsible for the library project at the end of the 1980s, under the guidance of anthropologist and then State Secretary for Culture and Deputy Governor Darcy Ribeiro. Campello's original aim was to draw in low-income youth to the library, a vision that persisted during the 2014 remodelling. For this recent renovation, the architect collaborated with be.bo., responsible for the interior design.



Figure 7. Aerial view Parque Estadual Library. Photo: Ferraz , Leonardo (2023). Aerial view [Online Photo]. Jornal Dia - <https://odia.ig.com.br/rio-de-janeiro/2022/07/6443601-biblioteca-parque-estadual-no-centro-abre-inscricoes-para-colonia-de-ferias.html> .

BPE is situated adjacent to a public square - Praça da República, near SAARA - Sociedade de Amigos das Adjacências da Rua da Alfândega (Society of Friends of the Adjacencies of Alfândega's Street), the city's largest open-air shopping centre. This bustling area is in the densely populated central district of Rio de Janeiro, situated near the central train station that connects to surrounding neighbourhoods and nearby cities.



Figure 8. Saara. Photo: Screenshot (2024). Google Earth - <https://shre.ink/8iWg>.

The three-storey building, with one level partially submerged, is constructed using pre-cast exposed concrete components. During the refurbishment, the existing ramp was replaced with a staircase and lift, enhancing natural light and revealing the internal spaces. This adaptation also partitioned the ground floor into two areas, one more public and the other more private.

Important premises for the new design were defined by the promoters and served as a guide for the architects. These include creating meeting spaces, accommodating diversity, minimizing visual and socio-cultural access barriers, adopting an inclusive approach, offering various ways to use the space, reflecting the unique characteristics of the residents of Rio de Janeiro (Cariocas) engage with the environment and ensuring a clear understanding of the building layout.

In this way, during the remodelling project, there was a vision to create a substantial central span that would facilitate pedestrian movement between Avenida Presidente Vargas and the Saara popular market, transforming the library into an bustling urban thoroughfare. The architects imagined this intervention fostering greater openness and connectivity within the building, allowing it to serve as a hub for encounters. However, unlike the Oddi's Nordic case, this building is situated in an urban context plagued by security concerns, presenting an ambitious challenge. Given the prevalence of poverty and the growing homeless population in the vicinity, the ambitious goal of promoting fluid movement between the library and its surroundings proved unattainable. Consequently, all access points to the library are currently restricted, with limited physical interaction between the building and the urban space. It is also noteworthy that Praça da República, a nearby green space, faces similar public safety issues and is also a fenced public space.

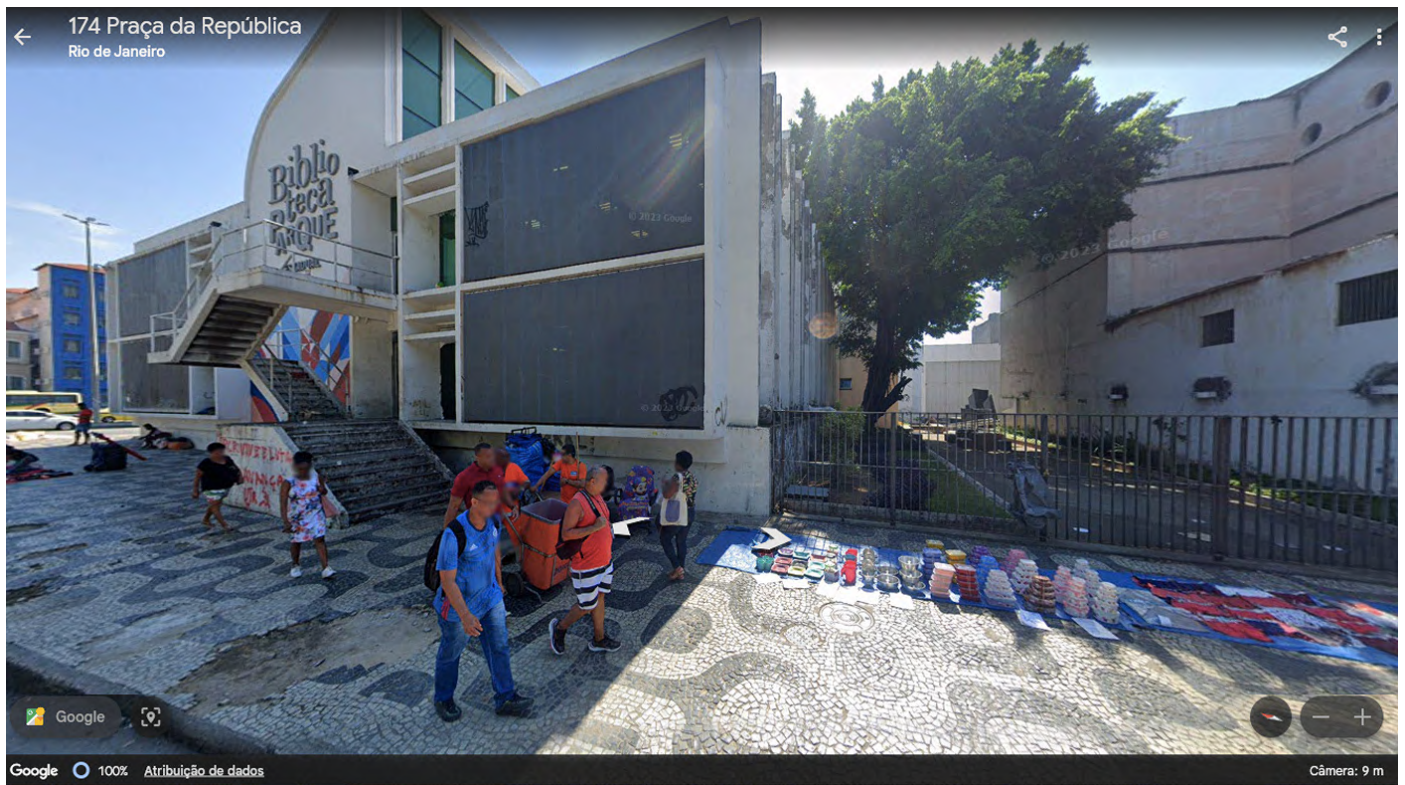


Figure 9. Parque Estadual Library. Photo: Screenshot (2024). Google Earth – <https://shre.ink/8iWp>.

While the building appears closed-off, it paradoxically serves as a vital cultural hub within the city. Surprisingly, its apparent isolation has become one of its most valuable attributes, transforming it into a secure refuge and oasis amidst the urban turmoil. This contradiction is illustrated in first-hand accounts shared by the employee and social mediator of the BPE, as documented by researcher De Souza (2017). One of these accounts recounts the experience of a homeless man who found solace within the library's walls. Having endured a troubled childhood and succumbed to drug addiction in adolescence, he eventually found himself living on the streets of downtown Rio de Janeiro. However, upon discovering the library, he found more than just a place of leisure; it became a shelter where he could escape the hardships of his reality. Here, he could unwind, watch movies, read books, engage with friends, and interact with the staff. Moreover, the library provided him with a sense of security and protection, offering respite from the allure of drug use. During the day, the library served as his haven, shielding him from the harsh realities of life on the streets.

Despite its location within an area characterized by socio-economic precariousness and possessing considerably fewer resources compared to the other two examples (Oodi and Sichuan Fine Arts Institute Library), the BPE stands out as a dynamic and representative local community space. While the surrounding population grapples with extreme poverty, physical access and movement around the building are constrained. However, this limitation does not impede the flow of ideas or the democratic occupation of library spaces by diverse segments of society, representing various local expressions and cultures. Freedom and informality serve as vital compensatory factors for resources constraints. In the BPE, democracy is expressed through the fluidity and spontaneity of interactions fostered and accommodated by the library.

4. Conclusion

Social changes, technological advancements, and pedagogical shifts necessitate the reformulation of educational spaces. Embracing contemporary challenges that reflect broader cultural, political, and economic contexts moves beyond traditional models centered on passive knowledge transmission. As defended in the “Reimagining our futures together: a new social contract for education” (UNESCO 2022),

this recognition acknowledges the diversity of educational approaches and, consequently, the spaces where they occur.

Libraries are essential venues for accessing knowledge, providing opportunities for non-formal education and lifelong education. They foster cultural development among individuals and social groups. As evidenced by the case studies, libraries play a pivotal role in fostering more equitable societies by ensuring access to and facilitating the sharing of knowledge across various domains. Consequently, the spaces that accommodate them must be devoid of any barriers, be they physical, technological or social (IFLA-UNESCO, 2022).

Analyses of case studies illustrates diverse approaches to designing educational spaces, underscoring that there are no universal solutions to the challenge of creating more equitable and just design. Each project reflects unique socio-political contexts, cultural values, and community needs, emphasizing the importance of context-sensitive design solutions. While the desire for a fairer life is universal, the paths to achieving it vary significantly. Designing for equity and justice in Finland differs from doing so in China or Brazil.

The future of education is anticipated to encompass multiple and diverse possibilities, offering a multitude of potential futures. Consequently, the design of educational spaces must also be adaptable to accommodate this variety. Their design should directly address the problem at hand rather than being a hollow response to a preconceived solution.

As such, socio-economic contexts and urban environments dictate the selection of technical solutions, tools and aesthetic vocabularies. In some cases, specific strategies may even appear contradictory. The solutions devised to promote greater equity and justice in the libraries studied differ and yield varied results. However, they do not shy away from confronting their unique challenges and seeking spatial enhancements to tangibly improve the lives of their users. While the desired values may be similar, the paths to achieving them and the reception of each proposal by society are diverse. The primary issues in each context are distinct, leading to different potential impacts for each project.

In Finland, participatory and co-design issues hold significant importance, whereas in Brazil, public safety concerns and the economic abyss between social classes create urgent challenges, acting as barriers to the realization of fluid and freely accessible spaces. The precarious living conditions of a large part of the community surrounding the building, along with the need for secure shelter, overshadow any disruptive utilization program, such as the one proposed in Finland.

There is a lack of details concerning any participatory procedures in the development of the Library of the Sichuan Fine Arts Institute project. In contrast, access to information is considerably restricted when juxtaposed with the abundance and accessibility of data and user feedback available for the other two projects. What is perceived is that for the Chinese project, the path to establishing a connection with the community largely involved exploring the tectonic aspects of the building. Materials, forms, and existing visual references were used to forge connections with the surrounding community. The building's image served as a key attraction and link. Moreover, the seamless integration of space with the university environment and the surrounding green spaces made it a central gathering spot for the academic community.

In contrast, the Brazilian library establishes itself as a sanctuary, offering refuge and safety to the community. It connects with the community by presenting itself as a secure place, contrasting with the characteristics of its surroundings. This connection occurs through the provision of distinct services and spatial experiences rather than through continuity between the surroundings and the building.

Meanwhile, in Finland, the library is a continuum of an already well-ordered and qualified urban context. The library enhances and goes beyond the role of the city as an educational agent.

p e r m e a b i l i t y



Figure 10. Permeability diagram. Image: by the author (2024).

Thus, what becomes evident is the lack of clear and unanimous points in terms of project strategies, form, or even pathways leading to the library's successful integration within the community. There is no common aesthetic, and public participation did not equally influence all three processes. Additionally, the freedom of movement varies across the projects.

On the other hand, all the studied buildings reveal how the functional program of a library has changed, how the space and range of activities have evolved, and how the community uses and seeks the library space for its other values, beyond just being a book repository.

Nevertheless, comparative analysis serves to recognise these nuances and exchange good practices. The experiences, successes and failures of others serve as starting points for reimagining and reshaping practices in each context toward creating more equitable and just educational environments.

The lesson learned is that educational spaces, whether formal or informal, must be engaging, comfortable, social and participatory to be effective. Successful educational space design involves meaningful community engagement and participation. Inclusive decision-making processes ensure that educational spaces truly reflect the needs and aspirations of their users, fostering a sense of ownership and belonging within the community. If designed to embrace diversity, exchange, and contextual needs, these spaces can truly serve communities and education. This means that the design goes beyond symbolism to become a tool for realizing social function, influencing how various social actors interact and engage with learning and teaching.

This underscores the urgent need to rethink libraries as educational spaces, shifting from repositories of knowledge to hubs of knowledge creation and circulation. Public libraries increasingly serve as vital community hubs, bringing together individuals of all ages, backgrounds, genders, and intellectual levels. This understanding should be reflected in both physical space and the generative processes shaping it, with a recognition of the importance of employing co-design tools to develop solutions that can drive social and urban change in the communities where these spaces are located.

Similar attention should be given to formal educational spaces, such as school buildings, where there is a growing demand for processes that extend beyond the design phase to incorporate co-design practices. Collective decisions should involve defining programmes and guidelines before design begins, with the socio-economic and political context of each place always guiding these actions.

The future of educational spaces lies in innovation, adaptability, and sustainability. Design solutions must anticipate and respond to emerging challenges, embrace technological advancements, and promote environmental awareness. By prioritizing holistic learning experiences, fostering community connections, and embracing diverse pedagogical approaches, educational spaces can serve as catalysts for social and cultural transformation.

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