

Global Perspectives

JIM AGEE, Column Editor

Library General Manager, Nazarbayev University, Astana, Kazakhstan

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MORE THAN BRICKS AND MORTAR: BUILDING A COMMUNITY OF USERS THROUGH LIBRARY DESIGN

BENJAMIN MEUNIER

Assistant Librarian, Building Projects, UCL Library Services, University College London, London, United Kingdom

OLAF EIGENBRODT

Senior Head of User Services / Advisor for Planning and Construction, Staats-und Universitätsbibliothek Hamburg Carl von Ossietzky, Hamburg, Germany

INTRODUCTION

Although libraries seem to be in the middle of a decade of increased building activities which are resulting in both spectacular new buildings and smaller but not less important refurbishment or renovation projects, library design is facing several challenges. Due to the accelerating technical progress, the changing cultures of learning, (co)working, recreation and communication as well as social changes, the predictability of the future use of library space has become uncertain. For over three decades, fully flexible library space seemed to be the answer to those challenges. Harry Faulkner-Brown (1997)

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Address correspondence to Benjamin Meunier or Olaf Eigenbrodt. E-mail: benjamin.meunier@ucl.ac.uk or Olaf.Eigenbrodt@sub.uni-hamburg.de

and later Andrew McDonald (2007) valued flexibility as an important factor in library design. In many ways, open plan structures are in fact more adjustable for later refurbishments and retrofitting. On the other hand, fully flexible buildings appeared to be less attractive work environments. This is mainly a question of architectural typology as many of those buildings which were designed as 'learning machines,' 'fortresses of knowledge' share the same characteristics as more prosaic public facilities of the 1970s and 1980s. Until the late 1990s, library design was in many cases mainly a question of fitting a room schedule into a structure in the most functional and cost-effective way. The numbers behind the room schedules seemed to be easy to calculate as they were standardized by population or number of students and faculty to be served, size and predicted growth of collection as well as full-time equivalent. The planning process was top-down as library designers, architects and building authorities had great confidence to do the best for the library user. This technocratic approach hardly allowed any user participation in the planning process unless the user, as a patron or member of the faculty, became part of the advisory board or planning commission.

Things changed dramatically since the late 1990s when librarians realized that library buildings had to become more attractive, user-friendly and diversified places in order to survive in a changing context. Libraries as brick-and-mortar buildings came under pressure from two perspectives. The increasing digital resources led some decision-makers to the conclusion that there was no need for physical library spaces in the future and users tended to prefer more welcoming or exciting places like coffee shops, both for learning and recreational activities. At this point librarians and LIS scholars started to think about the changing context and future of library buildings. The first decade of the 21st century saw an increasing number of publications about library space, its qualities, social aspects, and design. But the so-called renaissance of library design took place in the architects' studios as well. The new interest in library space led to spectacular buildings of a new type like the Seattle Public Library by Rem Kolhaas/OMA, the Mediatheque in Sendai by Toyo Ito or the Library of Delft University of Technology by Mecanoo Architects. All of them were planned and built in the late 1990s or early 2000s.

Both the uncertainty about coming developments and the pursuit for welcoming, user-friendly environments led to the idea of involving the user in the planning process. Generally speaking there are two main sources for this idea. First and foremost, engagement of users in the design process tends to be seen as a positive input instead of an exhausting disturbance of a project. Architects as well as librarians can deal better with their uncertainty about the typological and functional aspects of the design if they know the later users and their necessities beyond the abstract ideas of social engineering. But there is another aspect in public planning which is becoming more and more important. Particularly on a communal level, decision making is developing from a top-down process to a participatory approach. Planning and funding a new library building or a major refurbishment nowadays involves more parties than just some local politicians, authorities, and journalists. In this column, both aspects of user involvement in library design are highlighted. The quality approach is about the demand for new types of library space fitting the needs of a library's target group and the political approach is about new strategies in public planning and community outreach of a proposed project. Both aspects are not to be seen separately, as plausible involvement leads to political acceptance of a project as well as good library design.

The design of library buildings is an emotive subject, both for staff, users and for the general public. When the £189m public library opened in Birmingham in September 2013, media across the UK covered the event with commentary ranging from the aesthetics of the new building, the cost of the project and the place of libraries and print collections in a world where innovation is synonymous with technology. Architect Francine Houben described the library as a "people's palace."

This column looks at participatory design, which reflects a growing trend in the creation of libraries as "people's palaces." The first section of the article discusses project management processes, and the challenges of engaging with stakeholders. In the second section is an exploration of the political context of participatory design with a current example from Berlin. Finally, the article looks at some of the benefits of participation, both in terms of process and outcomes, in the delivery of cutting-edge facilities suited to a community of users.

TRADITIONAL LIMITATIONS OF ENGAGEMENT: THE IMPORTANCE OF HIGH-LEVEL VISION; TIME CONSTRAINTS AND CHALLENGES OF PROMOTING PARTICIPATION

In the first instance, it may be useful to define what participatory design means in the context of library building design. The expression "Participatory design" has been used in the IT field for some time (Schuler & Namioka, 1993) and the model has its roots in Scandinavia. The guiding principle is that all stakeholders (including library users and staff as well as design experts) should be involved in the design process, in order to ensure that the end result of the design process meets the actual needs of these stakeholders.

The traditional model for designing new buildings is for the client (a nominated representative of the library) to define a clear brief which an architect can develop into plans: the brief may be based on previous examples of good practice, on previously-expressed user needs or on the strategic aspirations of an institution. In this model, as the design becomes crystalized into clear plans, late changes to the brief are generally discouraged as a source of additional cost and time to the project.

Foster (2014) explains the imperative for adopting participatory design for libraries:

Participatory design begins with the belief that relying on precedent—on the way things have always been done—no longer serves us as well in these times of rapid and even disruptive change. It used to make sense to build an academic library that looked and worked like other, older academic libraries. To imitate older academic libraries now would be to build a library that is obsolete even before it opened. (p. 1)

Stakeholders in library building projects range from end users (whether students, researchers or members of the public), to library staff, as well as funders and institutional governing bodies. In addition to these disparate groups of people, there are the traditional parties involved in construction design: architects, engineers, project managers, quantity surveyors and specialist designers or contractors. The typical project coalition comprises a client representative, responsible for ensuring that a brief is produced which sets out the needs of the library and its users. However, this process incorporates a limited amount of input from end-users and is not optimal. Based on observations of construction projects at an industry-wide level, Walker (2007) notes that many briefs provided by clients are unsatisfactory. This leads to imperfect results, and can cause difficulty in the process of construction, as the end-users may not understand the vision or the rationale for the new facilities which they will inherit upon completion of the project. Adopting participatory design is one way of building trust and understanding between the parties who are involved in designing, constructing, and using a new library building.

CHALLENGES OF ENGAGING WITH STAKEHOLDERS

Based on the complexity of the stakeholder networks described above, the scale of participatory design can be overwhelming. It requires additional resources in terms of staffing, often with specialist skills to effectively capture user requirements, either through observation or surveys, to facilitate workshops and carry out other forms of consultation and data analysis. It is crucial that the design team incorporates this participatory element within its structure (potentially by having the design team attend Q&A events with stakeholders) and that the project manager supports this process to achieve the best results. There is a growing volume of anthropological research on how students work in academic libraries in the US, which is permeating

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into the EU. The use of observational studies is delivering interesting results (Foster, 2014). This is building up the body of knowledge available, so that future projects can benefit from better understanding the processes of participatory design to adapt and adopt for their own benefit.

The inclusion of a multitude of additional stakeholders into any project is a risk. The key, as described by Lindahl (2014), is to allow the discussion to happen early enough in the process that finding the right solution does not cause a conflict between different users' needs. This requires significant time to be allowed at the front-end of projects, and also a willingness to listen to a variety of viewpoints in order to capture the most fit-for-purpose brief.

Establishing the communications between the stakeholders and the design team can also be a challenge. The first challenge is to get stakeholders involved. Strong communications are essential to generate a "buzz" around the new project, much like the launch of a new product in the commercial world and many institutions now have experience of creating this atmosphere. One tried-and-tested method is a prize draw for survey respondents, which is an effective way of boosting feedback rates and also hearing from users who might not otherwise complete a survey response.

One of the keys of generating meaningful participation is to ensure that the project team listen and make evident that they are listening to feedback. In order to achieve this, library leadership and management should communicate clearly with their staff, who can then relay a message when they are discussing plans with users. The use of social media can be effective, but this also requires time and dedicated staff to ensure that responses can be made rapidly and that users feel like there is a two-way communication channel.

It is also important to note the importance of maintaining the integrity of the architectural design of a building, so that it can act as an inspiring destination, and not look or feel like a set of disparate modules artificially bonded together. In order to achieve this without major difficulty, the key is to engage the wide stakeholder group in discussions with the architects from a very early stage, so that the design team can take in the values and goals of the stakeholder group. If this early engagement does not happen, the risk is either that facilities will be lacking for some users or that token insertions are slotted into the original design, which can compromise the architectural integrity and "wow factor" of a building. One example, where the maintenance and cleaning teams were brought in late in the design process of a light and airy new building, caused an unsightly gantry to be retrospectively inserted to access the glass roof at high-level.

The design of new library buildings is a challenge: the building has to demonstrate value for money, and perhaps prove to detractors that there is still a place for a library on campus or in a city of the 21st century. The success of library buildings as knowledge hubs in coming decades will define the place and the role of libraries: these are the places where people can make sense of information. The added value of libraries lies in how people are enabled to find resources, exchange information and create new knowledge, compared with "learning centres" or cafés, which provide a pleasant work environment with at best a small presence of information skills staff.

It is not sufficient to look at emergent good practice and replicate it: where Wi-Fi used to be a major priority, and has been rolled out across most libraries, some students are calling for "cold spots" where they cannot be distracted by the constant stream of digital noise coming to their mobile devices. What works in one environment, for one group of people, will not always be appropriate in another location, for another group of users. Library designers face a different predicament to cinema chains for example, who can build megaplex facilities and replicate almost *ad infinitum*. Library users have high expectations of what they will experience in our libraries: free access to knowledge and technology, assistance to retrieve and interpret specialist information, opportunities to discuss ideas with other people. All of these are complex interactions which require bespoke facilities tailored to meet users' requirements and enable the exchange of knowledge.

PROJECT MANAGEMENT: WHY CHANGE?

To carry out any type of complex project using a standard project management methodology is no guarantee of success; even copying a method which worked on a previous complex project might lead to sub-optimal results. Ruuska and Brady (2011) are inconclusive on the effectiveness of adopting a replication strategy and concede that further research in this area is needed to verify the compatibility of using standard processes in complex or innovative projects.

Academic literature on project management indicates that, in order to deliver innovation, projects need to evolve in an unstable environment, outside of routine and stable organizations (Walker, 2007; Geraldi, 2008). The principles of the Agile Manifesto (Beck et al., 2001) stress the importance of collaboration and regular contact between the designers and the clients and changes are encouraged at any time throughout the life of the project. This approach is mirrored in Bredillet (2008) who advocates a "mission shared in ambiguity (adaptive and implicit) rather than with clear definition (explicit) if innovative view is desired."

Project management as a discipline is evolving to be more concerned about understanding the environments which projects exist in, the interactions between project actors (Pryke & Smyth, 2006) and interdependencies between each project and its environment. On a pragmatic level, this is a useful concept to respond to the stricter frameworks governing consultation with project stakeholders, such as local residents. In 2009, construction was halted on the striking new university library building in Seville, designed by Zaha Hadid, due to opposition by local residents on the grounds that it would take over some of the parkland 'del Prado de San Sebastian' (Cohn, 2009). The building was subsequently demolished, since no resolution could be found to the problem. Poor communications with local stakeholders and lack of engagement with key stakeholders in the project environment can literally cause a project to fall to dust. This issue is becoming ever more pressing as across Europe, on the wider political stage, there is a rise in participatory elements being embedded into decision-making.

In most European countries, participatory elements have been gaining more and more influence in decision making on a communal, regional or even national level during the last decades. Representational party democracy with its well-attuned interaction of policymakers and administrative bodies has been coming under pressure and citizens have been demanding more direct influence, especially in their own neighborhoods, communities, and regional entities. In most cases, these processes are evolutionary rather than revolutionary. With few exceptions, we do not see crowds or mobs burning down the city hall or the public library. But the changes are visible and noticeable. Publicly founded institutions like libraries cannot rely on good lobbying and advocacy alone any more. There may be new and other interests and groups involved in political processes nowadays. Library budgets may have to compete with supporters of funding for a new sporting field or librarians may have to argue with local initiatives about the proposed library building as a catalyst for unwanted gentrification processes in a specific neighbourhood. Libraries need to develop strategies for campaigning and promoting their interests in this changing political and social context.

Libraries tend to see themselves as institutions with strong democracyrelated values. Intellectual freedom, reliable access to information, public events and spaces for communication are crucial both for public and academic libraries. Furthermore the social aspects of libraries as places are emphasized in the literature. Audunson (2005) refers to the idea of a public arena for citizenship and exchange across social and cultural borders within a community. Neither the resources nor the formal events the library offers are basically for these functions. The space itself, its design, accessibility and flexible use makes the library a social arena. It is obvious that user involvement in the planning of such spaces is crucial for its later usability as a public arena. One important argument is the non-commercial character of the library. Unlike other third places as described for example by Oldenburg (1999), libraries as publicly funded institutions have an explicit non-commercial character. In lieu libraries are characterized as third places by their function as public-private spaces. They are neither really public as people do private things like reading, studying or chatting there, nor really private as they are open to the public and allow communication, public activities, and offer social and cultural events. Therefore Eigenbrodt (2013) proposes the concept of the societal space. Both the public arena concept and the societal space concept offer various additional values for community building and informational freedom. If they want to involve the public and make it a lobby for their interests, libraries have to emphasize these functions and their importance for the communities. In fact, depending on the political and social circumstances advocating for libraries can be quite complex as the following current example shows.

In 1994 the government of Berlin decided to use parts of the Tempelhof Airfield, which closed as an airport in 2008, for a new urban development in the center of Germany's capital. According to the latest masterplan, the southern periphery of the area is dedicated to a mix of housing, business and cultural use while the inner part shall remain as an urban park landscape. The value of these open spaces for recreation, ecology and microclimate of the city is undisputed. On the other hand the capital needs new, centrally located developments in order to offer much demanded space for housing and particularly smaller businesses. The marketing and concrete planning for the new development started in 2008. Almost at the same time Zentral-und Landesbibliothek Berlin (ZLB), Germany's largest public library, started a new attempt to get a central library building. Neither before nor after World War II was Berlin able to build a central library. After the reunification of the city in 1990 the two main libraries of the former capital of the German Democratic Republic and West-Berlin, the Berliner Stadtbibliothek and the Amerika-Gedenkbibliothek, the latter dedicated to the citizens of West-Berlin by the American people, merged in 1995. But the new ZLB remained in two different buildings, plus an offsite storage site. Both buildings are too small for both the population to be served and the collections which is partly the legal deposit library of Berlin. The space need for a new building housing the ZLB is calculated at 51,000 square meters. After discussing and scrapping the idea of a partial reuse of the existing airport complex for the ZLB-a mainly unfinished building of the Nazi-era-it was decided to construct a new library building as part of the edge area development of Tempelhof Airfield. At this point the project became part of a major debate about urban development in Berlin in general and particularly the future of Tempelhof Airfield. Immediately after it opened to the public as a park in 2010, the space became extremely popular as a place for recreation, sports, and other activities. Coincidently the neighboring district of Neukölln went through a process of gentrification during the last decade; to a certain extent an outcome of the closure of Tempelhof Airport. In 2011 people from this district started a local initiative against the development plans for Tempelhof Airfield. They argue that the new development will reinforce the gentrification in an unwanted direction and that the character of the area as an open space for the public could be restricted. The opposition against any kind of building activities explicitly involves the new ZLB. Due to professional campaigning and a political crisis around exploding construction costs of the new Berlin airport, the local initiative has been becoming quite successful so far and gained enough support for a referendum which will be held at the end of May 2014.

Meanwhile the architectural competition for the new library ended in a temporary deadlock as two drafts won the first prize. At the end ZLB has to promote its new library building against a strong local initiative and without a definite idea what the building will look like. Campaigning for the library has to rely on the core values of the library as a public arena and a societal space—something the local initiatives against any building activities on Tempelhof Airfield are claiming for themselves. ZLB started various activities like short commercials with celebrities, extensive information, and interviews with users about their ideas and wishes for the new libraries. Although this campaign is professionally developed and is earning much attention both within the city and the profession, there is a lack of convincing involvement of the population in the planning process so far. The outcome of the referendum is not predictable at this stage but the example shows that libraries are forced to think about new strategies in order to get in touch with sceptical individuals and groups. Therefore it is crucial to be on a par with those people and to prevent a top-down approach. At the end of the day a genuine offer for participation implicitly includes the possibility of becoming part of the planning process. Thus from a sociological and political perspective user involvement in library planning and building are becoming more and more important either for the successful design of societal spaces or for the assertiveness of a project even in a difficult political context.

BENEFITS OF PARTICIPATION: CREATING FACILITIES WHICH ARE FIT FOR PURPOSE AND CUTTING EDGE

The business case for the value of academic libraries continues to be made, building on some excellent research in the US (ACRL, 2010). One of the elements which is highlighted in the report is that "library services and resources support institutional engagement in service to their communities locally, nationally, and globally, thus contributing to their institution's reputation and prestige through service." Participatory design fits well within this context: many libraries already have relationships with existing users and local communities, and this relationship can be leveraged so that libraries can develop new facilities for their community of users. This could lead to a virtuous circle, where users feel able to bring new ideas and the library can adapt to continuously evolve to meet its users' needs.

IMPROVED UNDERSTANDING BETWEEN GROUPS OF USERS

One of the first benefits of participation across groups of stakeholders in the library is that each group of users can understand the needs of others better. Lippincott (2010) states that librarians are often surprised by some of the attitudes and priorities of students, such as their tolerance of noise in designated areas. Indeed, in many cases undergraduate students enjoy working in lively environments, whilst postgraduate students and staff often prefer quieter environments. In an attempt to better understand users and design the campus environment accordingly, TU Delft has developed the concept of 'living campus,' which establishes different archetypal users, or "personas," based on research and interviews with university staff, students and other stakeholders. Each persona represents a group of people with similar requirements and wishes that can be distinguished within the total population. The learning generated from this initiative will lead to better facilities on campus but it also provides a clear blueprint describing each group's needs and the rationale for the university to meet this group's requirements. This will enable the different stakeholders to appreciate how their needs are being met, but also to see why and how other groups require various other facilities on campus.

STATE OF THE ART FACILITIES

One of the leading examples of innovative learning space in the UK is the Information Commons in Sheffield, which opened in 2007. The design of this library building was radically different from previous libraries and it continues to be popular thanks to its provision of social learning space, group work areas and rich IT facilities. The building is well managed by university staff who listen to student feedback and analyze student usage of the space; it is also pro-active in adapting the building to suit new types of usage. For instance, it ran workshops in December 2013 to encourage users to redesign the "Flexispace" in the building: this approach encourages users to bring fresh ideas which can then be appropriated by the university to continue to innovate in its delivery of modern study spaces.

The Cruciform Hub is the latest example at UCL of this participative-style design. In this context, a "Hub" is a place that enables UCL students and staff to interact with each other and to access the wealth of resources available at the university. Many Hubs are at the heart of each School or Faculty, and they provide support services and facilities to enhance life on campus. From the inception of the Cruciform Hub project, workshops were held with groups of students, academic and professional services staff and e-learning experts as well as design team members (see Figure 1). Significant early user input into design led to relatively few late changes; it also enabled the incorporation of technology elements later in the design process, because sufficient flexibility had been embedded in the project program. The computer teaching suite, with the latest PCs and projectors, was designed for optimal teaching use, by laying out the tables at a slight angle, so that students could easily



FIGURE 1 UCL Medical Students provided input in two "Meet the architects" sessions with Burwell Deakins Architects on 27 and 30 November 2012. (Color figure available online).

work in pairs at times. For study spaces, students summarized their needs in three words, defining the learning activities which would support their learning: "Concentrate," "Collaborate" and "Contemplate." This echoed best practice guidance for corporate office environments, which is well summarized in a *Welcoming Workplace Study* (Smith, 2008). Building on these core requirements, the design incorporates additional features to enhance users' experience. Docking stations in the quiet study room will enable users to bring their mobile devices and connect to a larger monitor, to enable them to work for extended periods. Discussions with groups of students showed strong demand for laptop loans and automated lockers, both of which have been integrated into the plans for the new facility, which opens in October 2014.

CREATING AN INSTITUTION-WIDE CULTURE OF OPENNESS AND COLLABORATION

As noted above, the UCL Cruciform Hub offers an insight into adopting a process to ensure maximum participation from a wide range of stakeholders. At the earliest stages of the project, a Board was established to set the vision and high-level brief for the project. This group involved student representatives, Estates, Library Services, Information Services and academic staff. Thanks to the early engagement with students and wide range of university staff (academic and professional services) in concept/ideas workshops, high levels of trust developed between the different stakeholders. An initial survey was carried out with a very high response rate (over 1,000), followed by a series of workshops and the creation of a "Pilot" space which tested in a real environment some of the concepts which were envisaged for the Hub. Student and staff feedback from the pilot was extremely valuable, and the

experience was also useful in terms of observing student behavior and considering new types of staff services which might be helpful in the new space.

It was decided from a very early stage that there should be, incorporated into the design of the building, some of the current research and material from UCL Museums and UCL Special Collections to connect the intellectual activity of the Medical School and the physical environment of the Hub. This led to fruitful collaboration between Library and Museums staff, in planning the inaugural exhibition for the Hub.

A Communications Strategy was developed, with input from Library Services, Estates, the Medical School and the University's Communications and Marketing team. The creation of a dedicated Web site, use of a social media and face-to-face contact between Library staff and users throughout the project period has proven essential during the disruptive works period. The communications strategy also set out to raise awareness of the project, both in managing expectations but also maintaining a sense of anticipation from current and prospective students about the new facilities.

Most Hubs are open to all UCL students and staff, to foster crossdisciplinary exchanges. The process adopted for the Cruciform Hub had the added benefit of generating a sense of genuine partnership from many parts of the university, especially the staff and students of the Medical School and the multiple professional services divisions. The principles of open communications and maintaining engagement with stakeholders from an early stage are those of participatory design, and these can lead to transformational change beyond the project scope of designing a new library.

PARTICIPATION BEYOND THE LIBRARY'S IMMEDIATE USER GROUP

The library can and should be a "catalyst for urban development" as presented compellingly by architect Helle Juul, from JuulFrost Architects Copenhagen, at the LIBER Architecture Group in 2012. Our buildings need to respond to the changing needs of the community of learners who come into the library: they should be centers of exchange and a resource for a diverse community. For academic libraries, particularly in the UK since the advent of tuition fees, whereby students have to pay for higher education, this can create a paradoxical situation. On the one hand, university libraries have a duty to enable the learning of fee-paying students and on the other, many university libraries are driving public engagement agendas, with an aim to attract and engage with communities from outside of the Higher Education sector. One noteworthy example, which opened in 2012, is the Sir Duncan Rice Library at Aberdeen University. The new library devotes a significant quantum of space to public facilities and its Special Collections Centre is equipped with a range of learning and events spaces. The library welcomes visits from community groups to see its Special Collections, and offers regular school and Family Fun events. The ground floor is open to anyone who wishes to visit, which places the library as an accessible place for all.

As Juul notes, one of the big challenges for the libraries of the future is "to be inclusive and ambiguous—work as urban hubs that—physically and mentally—connect different parts of the city and its inhabitants." The library as a place should form a focal point for the university campus and the city: this is where the innovation and knowledge exchange between academia and society can happen, in a living laboratory. That is what the libraries of the future should aspire to be.

FOSTERING AN INTELLECTUAL COMMUNITY

Beyond the provision of technology and resources to all their users, libraries have a duty to facilitate the exchange of information and knowledge. With the rapid technological advances of the past 25 years, the focus has been on digital provision of resources. More recently, for the past 10–15 years, there has been a great increase in making available social (or social learning) spaces and group work areas. The next step is to create a sense of community amongst library users: not merely providing spaces for individuals or groups of people who already work together, or to enable the discovery and utilization of learning resources but to facilitate serendipitous interactions between users. In an age where social media is part of everyday life, the sense of community extends far beyond the physical users of a library building: libraries should focus both on providing quality meeting space for face-to-face discussion, but also spaces where virtual meetings can take place, by harnessing the potential of new technologies and enabling users to trial new ways of communicating, in ways which they could not at home or in the workplace.

The Hive in Worcester, which opened in 2012, showcases many of these features, as Europe's first joint university and public library, jointly founded by the University of Worcester and Worcestershire County Council. From 2005, the project leadership initiated "a number of public consultation exercises [...], including 'What Makes Worcestershire Distinctive' A-Z workshops; question and answer sessions about the project; project plans viewings; and stakeholder meetings" (Worcester Library & History Centre, 2009). The output from the process is an award-winning design with fit-for-purpose amenities. For instance, the Business Centre within the modern building offers meeting facilities for local businesses, with high-tech equipment and access to business management collections. In addition to this, the library is able to offer a service layer through its roaming staff. Furthermore, the Hive provides specialist consultations and advisory services by appointment through the University's Business School and the County Council's Economic Development Team (The Hive, 2012). By understanding the needs of its local community, the Hive was able to develop a range of services which bring together a diversity of users.

In summary, successful libraries are not concerned with the provision of information alone, rather they act as the enabler and catalyst for the active intellectual life of a community of users. Berti and Costa (2009) draw the parallels between the Library of Alexandria and the modern age of elibraries. The authors stress that a "collaborative environment is not only desirable, but constitutes an essential condition to maintain a high level of studies."

Many modern academic libraries recognize this and provide collaborative spaces: the themes of interdisciplinary working and collaboration are guiding principles in the design of Kaisa House, Helsinki University Library (Sinikara, 2013). The University adopted "*service design* methodologies" in order to capture user requirements and this input was summarized into the following keywords "diversity, flexibility, convertibility and support for interaction." The light, open design of the library building with large windows certainly meets these criteria. It is also striking that—in spite of the architectural grandeur of the building and its varied interactive areas—there are also many intimate study areas which lend themselves to quiet individual study, in line with the expressed requirements. It is also clear that great attention has gone into the staff areas and service points in the library. This feature embodies in the physical building the sense that service provided to users by library staff is of paramount importance in ensuring that the library space functions effectively.

CONCLUSION

The Column first looked at a definition of participatory design and explored how the discipline of project management needs to adapt in order to deliver library designs which meet the high expectations of all stakeholders. Some of the risks and challenges of adopting participatory methods were also discussed. In the second section, the article set out the political context of participatory design and presented the current example of Berlin, where a referendum on the new library building will be held in May. Finally, the article looks at some of the benefits of participation: not only can this approach deliver cutting-edge facilities suited to its users, it can also help to create a real sense of community between users. Participatory design will also facilitate exchange between the diverse communities of users and help foster interactions. This can make the library the place which connects people from across the campus and the city, and from these connections generate valuable social capital and knowledge outputs. If participatory design leads to better communications, delivery of better design and a happier experience of constructing buildings for all involved, it is certainly worth trying to overcome the difficulties to initiate the process.

REFERENCES

- Association of College and Research Libraries (ACRL). (2010). Value of academic libraries: A comprehensive research review and report. Researched by Megan Oakleaf. Chicago: Association of College and Research Libraries.
- Audunson, R. (2005). The public library as a meeting place in a multicultural and digital context: The necessity of low intensive meeting places. *Journal of Documentation*, 61(3), 429–441.
- Beck, K., Beedle, M., van Bennekum, A., Cockburn, A., Cunningham, W., Fowler, M.,...Thomas, D. (2001). Manifesto for agile software development. Available at http://agilemanifesto.org
- Berti, M., & Costa, V. (2009). The Ancient Library of Alexandria. A model for classical scholarship in the age of million book libraries. In *International Symposium on the Scaife Digital Library* (held at the VisCenter of the University of Kentucky). Lexington, KY (pp. 1–26). Available at: http://www.perseus.tufts.edu/publications/Berti-Costa_Alexandria_Kentucky.pdf
- Bredillet, C. (2008). Shikumidukuri vs. One Best (no) Way! Project and programme management for enterprise innovation (P2M): Toward a new paradigm? Proceedings of IRNOP VIII: projects in innovations, innovations in projects, Brighton, UK.
- Cohn, D. (2009). Zaha Hadid's Central Library for the University of Seville. *Architectural Record*, 197(9), 36–37.
- Eigenbrodt, O. (2013). The multifaceted place: Current approaches to university library space. In G. Matthews & G. Walton (Eds.), *University libraries and space in the digital world* (pp. 35–50). Farnham, London: Ashgate.
- Faulkner-Brown, H. (1997). Design criteria for large library buildings. In Unesco world information report (1997/1998) (pp. 257–267). Paris: Unesco.
- Foster, N. (2014). Participatory design in academic libraries: New reports and findings (CLIR pub 161). Available at http://www.clir.org/pubs/reports/pub161
- Geraldi, J. (2008). The balance between order and chaos in multi-project firms: A conceptual model. *International Journal of Project Management*, 26, 348– 356.
- The Hive (2012). Business Centre. Available at http://www.thehiveworcester.org/ business-centre.html
- Juul, H. (2012). The library—A catalyst for urban development—Reshape, refurbish, reorganise—Rethink! Presentation given to LIBER Architectural Group seminar. Available at http://147.88.230.242/LIBER-LAG/PP_LAG_12/Wednesday/ Juul_Liber_prag_2012_vorbereitet.pdf
- Lindahl, D. (2014). Organizing the library for user-centered design. In *Participatory design in academic libraries: New reports and findings* (CLIR pub 161) (pp. 7–22). Available at http://www.clir.org/pubs/reports/pub161

- Lippincott, J. K. (2010). Information commons: Meeting millennials' needs. Journal of Library Administration, 50(1), 27–37.
- McDonald, A. (2007). The top ten qualities of good library space. In K. Latimer & H. Niegaard (Eds.), *IFLA library building guidelines: Developments & reflections* (pp. 13–29). München: Saur.
- Oldenburg, R. (1999). *The great good place: Cafés, coffee shops, bookstores, bars, hair salons and other hangouts at the heart of a community* (3rd ed.). New York: Paragon Books.
- Pryke, S., & Smyth, H. (Eds.). (2006). *The management of complex projects: A relationship approach*. Oxford: Blackwell.
- Ruuska, I., & Brady, T. (2011). Implementing the replication strategy in uncertain and complex investment projects. *International Journal of Project Management*, 29, 422–431.
- Schuler, D., & Namioka, A. (Eds.). (1993). Participatory design: Principles and practices. Hillsdale, NJ: CRC.
- Sinikara, K. (2013). Service design and collaboration. Scandinavian Library Quarterly, 2. Available at: http://slq.nu/wp-content/uploads/2013/06/SLQ2. 13web.pdf
- Smith, J. (2008). Welcoming workplace: Designing office space for an ageing workforce in the 21st century knowledge economy. Available at: http://www.hhc. rca.ac.uk/welcomingworkplace/_pdfs/welcomingworkplaceguidance.pdf
- TU Delft. (2013). *The vision for the campus as of 15 July 2013*. Available at: https:// intranet.tudelft.nl/fileadmin/Files/medewerkersportal/fmvg/Campusvision_A5_ def_-_the_vision_for_the_campus_as_of_15_juli_2013.pdf
- Walker, A. (2007). *Project management in construction* (3rd ed.). Oxford: Blackwell.
 Worcester Library & History Centre. (2009). Your Involvement? Available at http://www.wlhc.org.uk/consultation.htm