The New Public Library as Supportive Environment for the Contemporary Homo Faber

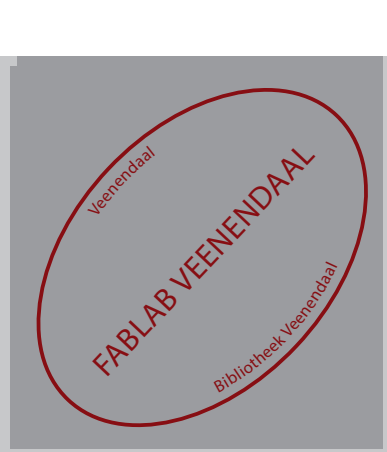
Caso, Olindo

Publication date
2019

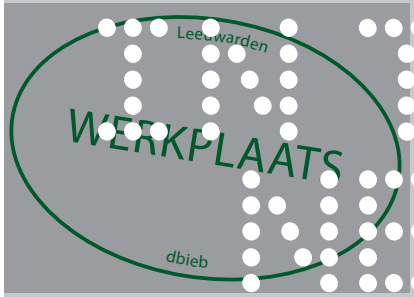
Document Version
Final published version

Published in
Atlas: Performative Spaces in Dutch Public Libraries

Citation (APA)
Caso, O. (2019). The New Public Library as Supportive Environment for the Contemporary Homo Faber. In O. Caso, & J. Kuijper (Eds.), *Atlas: Performative Spaces in Dutch Public Libraries* (pp. 8-29). TU Delft OPEN Publishing.



ATLAS MAKERSPACES IN PUBLIC LIBRARIES IN THE NETHERLANDS



Atlas: Makerspaces in Public Libraries in The Netherlands dr. Olindo Caso ir. Joran Kuijper

ATLAS

MAKERSPACES IN PUBLIC LIBRARIES IN THE NETHERLANDS

dr.Olindo Caso

ir. Joran Kuijper

Colophon

This publication makes part of the research project *Performative Spaces in Dutch Public Libraries. Stepping Stones of Inclusive Innovation* made possible by a grant of the NWO KIEM program Creative Industries CLICKNL. The National Library of The Netherlands actively collaborated with the TU Delft in this investigation.

Atlas: Makerspaces in Public Libraries in The Netherlands	dr. Olindo Caso ir. Joran Kuijper
scientific committee	dr. H. Jochumsen, University of Copenhagen (DK); dr. R. Cavallo, TU Delft (NL); dr. S. Evjen, Oslo Metropolitan University (NOR); dr. N. Marzot, University of Ferrara (I); dr. Olindo Caso, TU Delft (NL); dr. N.E. Akin, Beykent University Istanbul (TUR).
published by	TU Delft Open, Faculty of Architecture and the Built Environment, Delft University of Technology
ISBN	978-94-6366-147-8
graphic design	Michael Tjia (tjjia)

NWO Creatieve industrie - Kennis Innovatie Mapping (KIEM)

KB Koninklijke Bibliotheek

TU Delft Department of Architecture BK Bouwkunde

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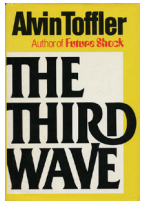
The New Public Library as Supportive Environment for the Contemporary *Homo Faber*

dr. Olindo Caso

Ever since culture emerged as an autonomous field of human activities we have learned to deal with cultural products by distinguishing between those who produce them (art, knowledge) and those who consume them. However, this clear distinction has got increasingly challenged. Consumers and producers of cultural goods are more and more assuming both roles at the same time: they are prosumers (Toffler 1980; Sacco 2011; Ritzer et al. 2012). This heterogeneous group (potentially) knows a large participation, in turn impacting upon the way in which culture is made accessible by cultural institutes and upon culture's diffusion and position in society. The public library, once proverbially devoted to the consuming by patrons of the information stored in its collections, is changing accordingly: a new generation of public libraries is gradually appearing in which sociality, co-creation and collaborative learning become important keywords. These new libraries aim to offer users the opportunities for creating, making and sharing, and support the community with pro-active initiatives. Following American experiences these *creation libraries* (Levien 2011) are increasingly common in Europe too, where the Netherlands is a forerunner. The evolution calls for the refreshing of libraries' ambitions, programs, targets, scopes; along with the availability of adequate investments and specific library's planning. The building hosting the library also needs to evolve accordingly, in order to be able to materialize the

An early, unpublished version of this paper was presented at the conference *Cultural and Creative Industries. Economic Development and Urban Regeneration*, December 2015, Rome. This new version has been further updated, extended and deepened for publication.



The rise of the prosumers was first described by Alvin Toffler as a characteristic of the 'Third Wave'.

updated values and in order to make possible the renewed scopes. When it comes to this point, however, the existing codified knowledge on the design of public library buildings reveals itself insufficient – in turn illustrating an urgent need of a new, broader understanding of the spatial conditions associated to the renewed design assignments.

A new cultural phase is beginning

During the last decade the impetuous development of ICT has produced a myriad of applications that empower individuals with the ability to communicate, network, invent, create, make, manage, enterprise, capitalize. Possibilities once solely available for (large) institutes are increasingly coming within the reach of individuals – boosting their potential to access creativity at any step. Individuals and groups enjoy nowadays unprecedented possibilities to become active social and economic players, and they increasingly do. Pier Luigi Sacco, professor of Cultural Economics at IULM in Milan, observed the raise of a new phase in the relationships between culture and the generation of (added) social and economic value in which a traditionally passive audience transforms itself into pro-active cultural practitioners.

Unprecedented possibilities are currently enabled by the booming ICT applications. *Image https://www.riemysore.ac.in/ict/unit__1__information_and_communication_technology.html*

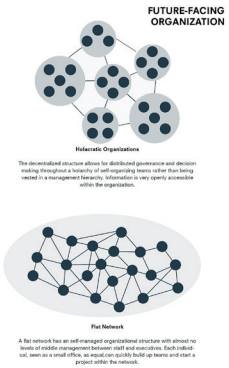
> "*The hallmark of Culture 3.0 phase is thus the transformation of audiences (that are still the reference of the 'classical' phase of cultural industry) into practitioners […] – accessing cultural experiences increasingly challenges individuals to develop their own capabilities to assimilate and manipulate in personal ways the cultural content they are being exposed to. The passive reception patterns of the 'classical' cultural industries*

phase are now being substituted by active, engaging reception patterns. The other hallmark of this phase is the pervasiveness of culture, which ceases to be a specific form of entertainment to become an essential ingredient of the texture of everyday life …" (Sacco 2011, p.4).

Cultural paradigms in time, according to Sacco. *Image, Sacco: Developing impact goals for Cultural Heritage 3.0. Slide Share.*

According to Sacco, while the Culture 1.0 phase was characterized by the concept of patronage and while the Culture 2.0 phase has seen the expansion of the audience (the users) due to the increased capabilities to reproduce artistic products, the Culture 3.0 phase we are entering in is characterized by the "*explosion of the pool of producers*" (Sacco 2011, p.3) and by the closely interwoven relationships of culture with everyday life – resulting in the fragmented dynamics of the 'post-Fordist' production processes as observed by Lash & Urry (1994). The enhancement of the Do-It-Yourself (DIY) capabilities of individuals impacts the cultural markets in multiple ways, potentially opening far-reaching possibilities for the creative industries and the economy. Not only thus, in terms of direct cultural production alone – but also (and most significantly) in terms of creative spill-over to other sectors (Sacco 2011, p.5): the better informed prosumer also demands better products, as well improved in quality and process.

As ICT applications are the main facilitators for contemporary DIY'ers[1], we can recognize three conditions that influence the active cultural participation of individuals, eventually affecting its impact on economy and society: 1) access to technology; 2) adequate literacy; 3) a receptive context.



Post-fordist production shows a growing fragmentation in participating actors. *Image, Complex Projects Graduation Studio, TU Delft.*

1 DIY obviously includes a wide range of (low-tech) (artistic) production as music, painting, home-brewing, and similar. Nevertheless, the present booming can be related to the enhancements made available by ICT developments.

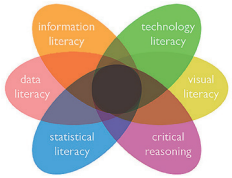
Re.1: Although tools of rather professional quality have never been so diffused and affordable than nowadays, yet laser cutters, 3D printing and sketching, smart chips, robotic components and similar are still beyond the reach of the average individual. Burdens also includes expenses for maintenance and for the materials, and the appropriate spatial requirements (size, environment) hardly to be realized in domestic sphere, especially in dense urban settings. In the practice people joins into groups, likely after (conspicuous) membership fees, in fact constraining a wider cultural participation (Holman 2015).

Re.2: The DIY'ers engaging in advanced technology must be acquainted with its forms, logic, language and methodologies, if not its practice. Digital literacy and the managing of '21st century skills' are prerequisites for the active participation of individuals in the knowledge society, not a choice. Digital natives (Palfrey & Gasser 2008) will be better-off than the present generation, yet it is plausible to think that not everybody will be the same way comfortable with new technologies. Furthermore, education, assistance and (peer) support/tutoring are crucial also when we consider more traditional forms of culture and creativity.

Re.3: A receptive context involves political choices and socio-economic recognition of the phenomenon along with platforms to exchange and possibly exploit the process. Active cultural participation will hardly develop in contexts that are not prepared to welcome it, that do not facilitate it and/or are not supportive enough. "*Capability building and skill acquisition* […] *crucially depends upon the social environment in which individuals are embedded*" (Sacco 2011, p.5). Online platforms somehow mitigate the influence of the physical context, yet the local community and its 'serendipity' is an essential drive.

Advanced tools are still costly for the average maker.

21st century skills are more than the command of digital technology. *Image, http://cmpf.eui.eu/media-literacy-going-digital/.*



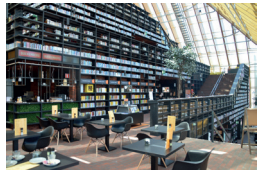
A makingfaire as makers market. *Image, https://viral-hare.com/makingthefuture.*

These conditions show that the access to the claimed opportunities is not self-evident, but depends on constraints of various nature. If we expect[2] that these raising developments will increasingly assume a leading role in future economy and society then specific policies are needed to exploit the new cultural phase in the future, by helping its wider diffusion and anchoring it into the local communities. Otherwise there is a risk of creating new types of socio-economic underdevelopment and for the disadvantaged of lagging further behind. The central assumption of this contribution is that a renewed public library is a crucial social infrastructure for unchaining the potentialities of 'Culture 3.0' and a relevant strategic tool to support policies of inclusive growth based on a future of diffused literacy and entrepreneurship. Accordingly, the spatial dimension of the public library as social and cultural infrastructure needs to be explored in greater detail.

The changing public library

A traditional image of the library. Bibliothèque Sainte-Geneviève by Labrouste, Paris. *Image, ArchDaily.*

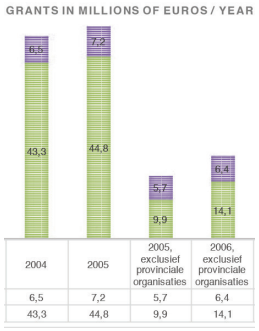
Until recently, libraries where conceived as introvert spaces designed in order to house collections (specifically books) and to render these collections accessible to patrons. This idea of the public library as a silent building inhabited by endless rows of books is not the rule anymore. Changes in technology, life-styles and ways of learning and communicate have brought about profound changes in the way we understand their role and function, although the collections are still taken as major identifier by the most designers and managers. At the same time, a changing welfare (at least in western countries) is leading to



De Boekenberg library at Spijkenisse (MVRDV) adopts the book as an exposed symbol of collective imagery. *Caso.*

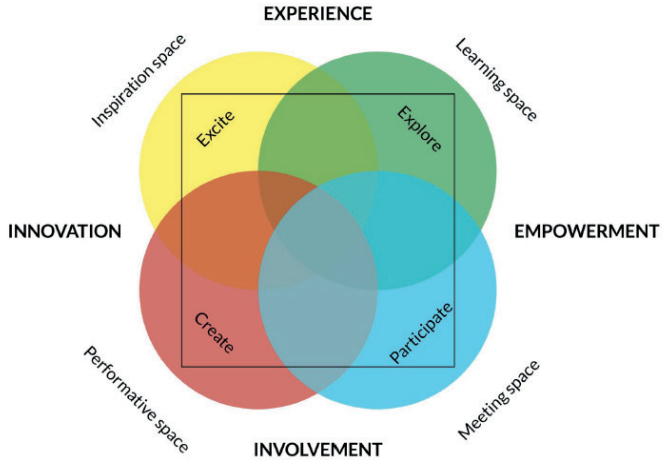
2 Present developments (e.g. Uber-economy, GIG-economy, Grass-Roots initiatives) depict a splintered, fluid future economy landscape in which small-scale, individual initiatives become more the norm. EU policies push long-life learning as motor of future (inclusive) growth (see a.o. EU flagship initiatives *Agenda for New Skills and Jobs* and *European Platform Against Poverty*). The EC foresight study *The Knowledge Future* (EC 2015) suggested policy measures to boost future competitiveness in which (individual) knowledge, skills, creativity, entrepreneurship are key factors.

The library program is increasingly layered: sociality, co-creation, collaborative learning, inspiration... *Image, Ederbro Sikström: Collaboration and Co-creation. Slide Share.*



Declining welfare: in the Netherlands the library budget was drastically reduced in 2005. *Image, adapted from Siob.nl.*

new modalities of governmental support, resulting in the decline of budgets allocated for culture and public libraries - at once requiring new strategies to libraries for staying meaningful for contemporary and future generations. Several studies have attempted to redefine the obsoleted boundaries of the library and to sketch possible future evolutions (e.g. Levien 2011; Davey 2013; SIOB 2014). These studies reveal the changing condition of the contemporary library that is expected to become an active centre of knowledge, participation and empowerment in service of the community.



The Four-Space model. *Jochumsen (et al. 2012).*

Studying the Danish context, Jochumsen (et al. 2012) defined a cloud of properties[3] that inform the contemporary library and elaborated them into a model articulated in four mutually interrelated spaces: inspiration space (excite); learning space (explore); meeting

3 Experience, Innovation, Involvement, Empowerment; with shared sub-clouds of possible associations.

space (participate); performative space (create).[4] This model provides a tool to understand and plan public libraries which is by now commonly adopted in Denmark. The '*performative space*' is particularly interesting in the context of this contribution as it shows close connections with the raising Culture 3.0 phase. Indeed, in a more recent study Jochumsen (et al. 2015) confronted Sacco's argumentations with the public library's timeline, pointing out evident correspondences between the cultural phases and the public library evolution, both in terms of relationships of patronage (the financer is the philanthropist, the king, the state) proper of the Culture 1.0 phase, and in terms of marketing/branding/managing strategies adopted by public libraries in contexts of the mass-economy (the user as a customer, the library as an urban icon) proper of Culture 2.0 phase. For Jochumsen (et al. 2015) then, the parallelism between Culture 3.0 and the evolutions in public library practices is to be found in the performative turn (Fischer-Lichte 2008) that many public libraries are experiencing. The study reports practices from Denmark (Copenhagen: Demotek, FabLab), Finland (Library 10, Helsinki), and Sweden (The Garage, Malmö) that place (digital) DIY possibilities at the centre of the library experience. In the performative spaces users are inspired to give free rein to their own (artistic) expressions and are given the tools to invent and 'make' their products. This refers to both 'creation' and 'innovation',

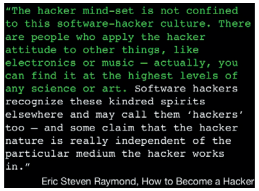
Helsinki Library 10 is specialized in music, including the related performances. *Image, found on Pinterest.*

4 The 'inspiration space' is the space of meaningful experiences that inspire the visitor to move beyond the ones (s)he is familiar with, including the emotional and the irrational – i.e. story-telling, artistic expressions. The 'learning space' is the space where visitors can acquire/update (new) skills and knowledge. The traditional mode of knowledge transfer (the book) is nowadays integrated by a number of other digital and physical possibilities. The 'meeting space' is the space of social participation, like a public space ought to be: a democratic space where people can encounter other citizens, engage in debates and other social activities, and develop a sense of public belonging. The 'performative space' invites people to develop own artistic expressions and/or craftsmanship, being basically (but not exclusively) a place of making/doing (digital or manual) (Jochusen et al. 2012).

according to the main focus of the act of performing (Jochumsen et al. 2015).[5] The public library becomes in this way a fertile territory for the makers.

The upcoming makers movement

The hacker mind-set. *Image, Haas: The Art of Culture. Hacking. Slide Share.*



The development of the new performative attitude by public libraries parallels the diffusion of the makers movement in all its different forms. Anderson (2012) and Hatch (2013) provided this heterogeneous, originally American movement with a framework and a manifesto, claiming the revolutionary contribution of the makers culture.[6]

Essentially, the makers are literally interested in 'making' physical and/or virtual 'things', but there is more to it than this. Makers share a passion for understanding the rules behind objects and processes, an anarchist desire to challenge the established order and explore improvements that are supposed to open the path to equity. Makers often manipulate, combine, reproduce existing products; they remix cultural contents they are exposed to in order to create new (hybrid) contents/products (Lessig 2008). They reject traditional copyright and adopt collaborative logics enabling "*new, non market-mediated forms of cultural and creative exchanges*" (Sacco 2011, p.4).

The cover of Anderson's book from 2012.

5 This distinction is not exclusive. In the practice the two areas often overlap and are connected with each other.

6 The 'makers revolution', also considered a 'new industrial revolution' (e.g. Kerr 2015), is expected to bring about a re-invention of the manufacturing industry and a true democratization of the capitalist economy by potentially placing individual creativity at the centre of the process. Whether these expectations will come true is beyond the scope of this paper and will not be discussed. However, among the general euphoria there are critical voices too (i.e.: Morozov 2014).

The makers meet in places that are equipped at this end: hackerspaces, makerspaces, FabLabs, Tech-Shops and so on.[7] The makers' success can (at least initially) seldom be measured in concrete economic terms, but in worth literacy and the evidence of their (creative) talents (Lessig 2008). Indeed, makerspaces hardly are economically successful as they mostly do not overcome a hobbystic dimension. Holman (2015) suggests that makers should now take a new evolutionary step by focusing on services and on local communities, not only on own products. Interestingly, governments too seem to increasingly discover the possibilities offered by the makers approach. For them the gain in literacy and entrepreneurship skills could provide powerful engines for further economic (re) development. During its mandate, president Obama stated that makers are a chance for the manufacturing industry and for the American economy and advocated for innovation in manufacturing industry. He challenged "*every company, every college, every community, every citizen [to] join us as we lift up makers and builders and doers across the country*".[8] Regardless of how the actual president or the future ones look at it, the maker movement in US is continuing to grow and to set new goals (ASEE 2016).[9]

Maker Faires are increasingly common, not only in the US.

7 We use here the generic term 'makerspace' for all types, unless specified. In general, hackerspaces and makerspaces are not bound to (technical) conditions. Everybody can initiate one. On the contrary the 'fabrication laboratory' (FabLab) must adhere the Fab Charter, following an idea of MIT professor Neil Gershenfeld (http://www.fabfoundation.org). Their specific emphasis lays on the development of high-tech 21st century skills and of users' entrepreneurship. FabLabs and Tech Shops (craft-oriented) are franchise concepts. Other terminologies can be found as well, like DigiLab or FabCafé – in fact being this an open field for colonization. See: Cavalcanti (2013).

8 https://www.whitehouse.gov/nation-of-makers

9 "*There were more than 135 million adult makers, more than half of the total adult population in America, in 2015*". Quote from Open Education Database (OEDb) makerspaces resources website: https://oedb.org/ilibrarian/a-librarians-guide-to-makerspaces/

Worth a mention too are China's big plans regarding manufacturing (Made in China 2025) that include support for the increasingly popular makerspaces and start-ups (Danning 2015) to stimulate innovation and entrepreneurship.

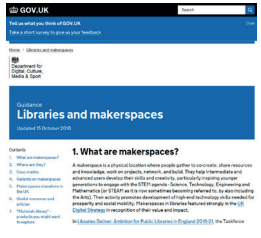
Lab-raries

The 'Fabulous Laboratory' at Fayetteville Free Library opened in 2012. *Image, http://publiclibrariesonline.org/2012/10/a-fabulous-labaratory-the-maker-space-at-fayetteville-free-library/.*

Not surprisingly then, makerspaces of all kinds are arising worldwide, and they catch the attention of governments and sponsors. In this context the combination with (public) libraries is becoming more frequent. A report of the American Library Association (Levien 2011) prefigured the '*creation library*' as strategic development option: a multimedia extended library where users could find (advanced) tools and inspiration to prepare new work. The practice followed soon. The first libraries to embrace makerspaces (in 2012) were American: the Fayetteville Free Library (New York State) and the Westport Public Library (Connecticut). Chicago came soon after (Willingham & De Boer 2015). Today, searching the net for 'makerspaces in libraries' you come across hundreds of hits in both public and academic (American) libraries. In BENELUX a list of fablabs can be found at http://fablab.nl, where many are by now located into libraries or hold some degree of collaboration with a library. The UK public library landscape also discovered the raising phenomenon, and established a national task-force for guiding the development and mapping the presence of makerspaces in libraries across UK.[10]

In fact, librarians and makers likely have similar ethics. Supportiveness, sharing, democracy, inclusiveness, informal learning, bottom-up initiative, community support, openness are keywords that supply much common ground between public libraries and

A makerspace at a public library in US. *Image, https://www.core77.com/posts/25086/Chicago-Public-Library-to-Open-Free-Digital-Fabrication-Maker-Space.*



UK governmental website dedicated to library makerspaces. See footnote 10.

10 Visit: https://www.gov.uk/government/publications/libraries-and-makerspaces/libraries-and-makerspaces

makerspaces. However, this is not enough to explain the reciprocal attraction. It is as much a 'marriage of convenience' too. On the one hand the public library is searching a new contemporary dimension to remain meaningful for the community and the users,[11] for this willing to explore actual trends and developments which are compatible with own statutory mission and ethics. In this view hosting a makerspace is part of a strategy of repositioning of the public library in the social context and in the collective imagery. On their hand, makers can find in the library a stimulating environment to grow and realize own goals. This applies to both the availability of favourable conditions[12] and the reach of the wider (library) communities. Finally, this collaboration can potentially produce added value for both and lead to valuable ways to fertilize new ideas while facilitating access to sponsorships.[13]

Makers are finding their way in the Netherlands too, where the number of makerspaces is exponentially growing.[14] In this, the combination with a public library is increasingly popular (e.g. Apeldoorn, Hilversum, Flevoland, Zeeland, Leeuwarden, Veenendaal and others) as shown by recent survey results (KB 2018).

Percentage of libraries with one or more physical makerspaces. *KB (2018).*

FabLabs in the Netherlands. *Image, http://fablab.nl/fablabs-in-de-benelux/*

11 The public library is still the elected place for an inclusive, democratic access to information and knowledge. Nowadays this definition includes literacy in new technologies and connected learning.

12 The three major budget voices for implementing a makerspace are location, equipment and staff (Boeck & Troxler 2011). Libraries are convenient locations because they already own the needed space; the staff can learn new competencies; the equipment is likely to be more easily subsidized to a library as part of a community engagement project.

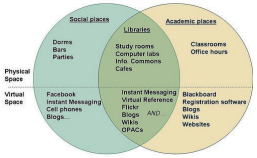
13 However, sponsorship and entrepreneurship remain difficult issues in library environment, basically due to the 'non-profit' and independent status of the public library.

14 See the list from http://fablab.nl as an indication. Non-fablab makerspaces are to be added.

Dutch context

The new Bill on the public library system[15] (WSOB 2014) updated the framework in which Dutch public libraries operate, redefining their role and enabling a broader servicing within a context of local autonomy. Among others, the Bill reaffirmed the responsibility of the local government to ensure public access to information and culture, while leaving to the local democratic concertation the modalities and amount of public support to libraries. Meanwhile almost all public libraries in the Netherlands have changed their legal status and became autonomous foundations bearing more (financial) responsibility. In this new framework, a more pro-active and community-oriented approach from libraries is necessary to mobilize consensus and thus resources (Caso 2016).

The emerging library concepts in the Netherlands generally elaborate around social encounter, discovery and the public sphere, where digitalization and new media increasingly take a central place. In doing this the public library aims ever more to promote itself as an elective 'third place' (Oldenburg 1989; Vos 2017). Also, they often merge with other local (cultural) players establishing alliances, mostly in the framework of local (urban, municipal) strategies. In this context the makers offer additional opportunities for the public library due to the growing belief in the potentialities of the makerspaces for the knowledge economy, in which the public library can act as low-threshold inclusive incubator of digital literacy, ideas, entrepreneurship. The project 'Fab-the-Library' (to support setting up makerspaces in libraries) received in 2014 a grant from the SIOB[16] as most



Library as Third Place. *Image, Habib: Digital Library as Third Place; http://www.mchabib.com/2006/10/05/digital-library-as-third-place/.*

Library system in the Netherlands after the WSOB. *Lankhorst 2015.*

15 Enforced 1 January 2015, it recognizes, regularizes and orders a practice which was already in development.

16 The Netherlands Institute for Public Libraries, now merged into the National Library of The Netherlands.

promising initiative for the Public Library Innovation Agenda, and served as a stimulus and a model for the further development of makerspaces in libraries. The link between library and makerspaces could provide indeed added value as a potentially advantageous business-case. What the makerspace could do, is to help evolve the library into a Culture 3.0 laboratory of knowledge, where users are not only approached as the consumers but also as the producers of knowledge and culture. In this sense it contributes to move the library's image from 'loans' to the development of people and community.[17]

Dutch experiences

The FryskLab has been the first European FabLab initiated by a library (by Provincial Library Friesland in 2012) (De Boer 2014). It is maybe the most well-known makerspace in the Netherlands and has been (still is) a model for other Dutch initiatives of this kind. It is a mobile FabLab housed in a former biblio-bus that used to carry a mobile library to reach patrons in villages and country-side. The bus can be positioned on demand next-door a requiring institute like a library or a school, and is regularly touring. The FryskLab has a strong inspiring impact on users and institutions and is at the base of many innovative projects that are able to attract funding. "*FryskLab creates a healthy interest in technology and maker skills, hereby stimulating digital literacy. Users of the lab will be able to use tools and skills to design and remix their personal environment and share these with others*".[18]

Frysklab bus. *Image, http://www.frysklab.nl*

Interior of Frysklab bus in operation. *Image, http://www.frysklab.nl*

17 At this regard it must be noted that the positions regarding the phenomenon are not univocal. The question asked is the same as Mattern's (2014): in how far can we stretch the public library? Much depends on the relationships with the community and the specific local demands, in which a good balance should be realized.

18 http://www.frysklab.nl

The FryskLab especially focuses on educative projects and on improving the skills that are required to participate in the knowledge society, and operates in a region where poverty rates are double than in the rest of the Netherlands and where early school leaving rates high (Willingham & De Boer 2015). Another Dutch mobile FabLab supporting (public) libraries is the MakersBuzz, based in Tilburg (Willingham & De Boer 2015).

The MakersBuzz in action. *Image, https://mooinisse-roi.nl/nieuws/6936/12922/makersbuzz-tue-junior-maak-kennis-met-techniek-in-bibliotheek-heesch*

The Frysklab collaborated with other libraries like the Apeldoorn's CODA and the Zeeland Provincial Library (Zeeuwse Bibliotheek) at Middelburg in order to set up maker-spaces in these libraries too. The CODA is an umbrella for a diversity of (cultural) functions including the local museum, the public library and the historical archives. The makerspace is part of the public library and has a recreational and educational purpose for all users. The Zeeuwse Bibliotheek at Middelburg has similar finalities. More libraries followed the example, among which Veenendaal, Breda, Leeuwarden, Utrecht, Zwolle, Westland and others, sometimes absorbing external already existing experiences into the library. OBA Amsterdam recently started an own development project to bring 'making' to the local communities through the implementation of the project 'Maakplaats 021' into its branch-es.[19] OBA will invest a conspicuous budget in this project in the coming years. At the present day local makerspaces have been implemented in 3 OBA's branches.

CODA at Apeldoorn. *Caso.*

The Zeeland Provincial Library at Middelburg hosts a FabLab. *Caso.*

More research is needed to understand potential and impact of the makerspaces in Dutch libraries, yet some general characters can be already mentioned here. Several mak-erspaces in Dutch libraries are FabLabs, thus linked to the worldwide network and bound to the FabLab charter.[20] Although generic makerspaces and FabLabs should not be seen

Maakplaats 021 is an initi-ative of OBA Amsterdam.

19 Visit: https://maakplaats021.nl/

20 Visit: http://fab.cba.mit.edu/about/charter

as competitors, presumably public libraries feel the association with the FabLab network more keen to own ideals as it explicitly supports educational finalities along with the sharing of knowledge. On the other hand, the library may enjoy the support of the network when faced with (technical) questions and issues, being itself a learning institution.

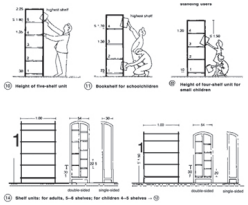
Dutch experiences with makerspaces in libraries also report staff-capacity issues and issues with the specific knowledge needed (training). Another point of discussion is the extent at which the library makerspace could support local entrepreneurs in their activities, due to staff and equipment capacities and to the ethical constraints related to the traditional non-profit DNA of the public library institution.

FabLab extensive network could form an attractive option for initiating a library makerspace. *Image, https://blog.adafruit.com/2012/10/11/how-to-make-almost-anything/.*


How to Make Almost Anything
The Digital Fabrication Revolution
Gallery: Fabrication Revolution

Spatial issues

These developments evidently challenge the codified design knowledge and the understanding of the public library as physical building. In designing libraries, architects can rely on typological considerations (e.g. Pevsner 1976), on normative dimensions (e.g. Neufert et al. 2012) and on a treasury of thematic interpretations carved in the physical realizations: the 'jurisprudence' of architecture (e.g. Barbieri et al. 1997). The local context contributes its specific programmes and regulations to the practice. In general, this knowledge emphasises the traditional role of libraries as repository of collections, offering good practices and design solutions to organize the relationships between the preservation of collections (books) and their fruition in reading rooms.



"Public libraries offer general literature and other information media which are directly accessible on open shelves". *Neufert (et al. 2012).*

Pages from the chapter 'Libraries' in Pevsner's *History of Building Types*. *Pevsner (1976).*

The contemporary architectural practice of library buildings has broadened the gap between codified knowledge and the new design assignments, staging a series of realizations which respond to a vast array of new considerations and demands. In this, each

new assignment originates a specific design process in which the designer likely feels itself entrusted with the task of re-envisioning the library building of our times, over and over again. In urban development, the resurgence of the physical library (Hvenegaard Rasmussen & Jochumsen 2009) is related to the rediscovering of 'culture' as a city-marketing strategy (Miles & Paddison 2005; Vickery 2007; Abrahams 2016). Observing this trend in the case of the public library, Skot-Hansen (et al. 2013) made a distinction into three categories: library as cultural icon (e.g. Seattle); library as place-maker (e.g. OBA Amsterdam); library as community vitalization / catalyst (e.g. Idea Stores London) elaborating upon the main choices at the basis of the realization of the library and of the community served. Vallet (2013) made a similar distinction in dealing with the urban meaning of nine library buildings in Flanders and the Netherlands: the library as urban landmark (e.g. DOK Delft); the library as area-oriented herald (e.g. Antwerp); the library as target-group patron (e.g. Roosendaal). Also her study enlightened the basic choices made as to the strategic relevance of the library in urban (re)qualification goals. In all these studies the authors emphasize the specific value that the library confers to culture: to render it accessible to the community of reference; valuating the potential of the public library for (shared) goals of urban planning according to their community embedment. Indeed the degree at which the public library is successful coincides with the level of engagement it generates into the served community (Lankes 2012). Then, the role of the architectural design in conferring a specific identity to places and spaces coincides in the case of the library with the role of representing the community being it a city, a neighbourhood, a district or a rural area. The focus lays on the library as local asset, as gateway of knowledge and information and as public mediator / social catalyst favouring 'grassroots' forms of

Library as place-maker: OBA Amsterdam. *Caso.*

Library as cultural icon: Seattle Central Library. *Image, https://superheroesin-racecars.com/2016/06/22/seattle-public-library-has-free-access-to-lynda-com-and-safari-books-online/*

Library as community catalyst: Idea Store, London Whitechapel. *Caso.*

local socio-economic development. For this, Mattern (2014) proposed the metaphor of the 'social infrastructure' as an appropriate reference for understanding (contemporary) libraries and emphasize the territorial, three-dimensional layering of the networking structure of the public library.

The metaphor of infrastructure to synthesize the role of new libraries in urban setting seems to gather consensus. Also Holman (2015) adopts the metaphor of 'civic infrastructure', this time in order to define the makerspaces and their scopes within the contemporary urban territory. In this infrastructural conception it is plausible to envision libraries, making and culture increasingly merging with each other forming a new 'smart' artefact that we obstinately keep naming 'library'. Accordingly, the future emphasis must consider a networking system of cultural (library) buildings that empower users to engage in (co-creative) making, that establish connections with peers (people and institutions), that are 'open-source' and that stimulate the production of new knowledge, not its consuming alone. It should be a collective environment, a community-centred public place for (non-market mediated) social and material exchange. The emphasis on the 'book' as identifier should gradually make place for an emphasis on knowledge exchange and autodidactic self-realization / self-representation. Possible design metaphors for this new library building are those of the public marketplace, the collective workshop, the community kitchen, the creative hub, the start-up agency, the factory. The Waiting Room at Colchester, UK, was a library branch entirely devoted to this new understanding of the public library. Unfortunately this temporary experience has been now terminated. It was located in a former waiting room for bus lines connecting the town, essentially offering spaces to the community for workshops, development of new library services,

The Waiting Room at Colchester, UK. *Image, Britishletterpress.co.uk*

Rozet Cultural Centre at Arnhem NL. *Caso.*

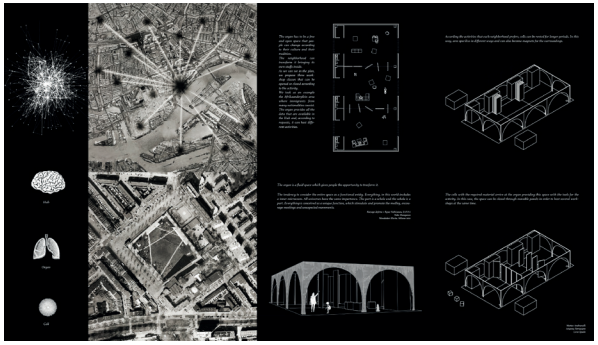
Chocoladefabriek at Gouda NL. The print workshop. *Caso.*

performances (Willingham & De Boer 2015). The management of the Waiting Room was actively participated by local stakeholders and by the Colchester School of Arts. Also inspiring, the Waiting Room experience rediscovered a place once commonly central in the spatial behaviour of locals: the bus station. The Garaget in Malmö has a similar finality and is bottom-up participated by the community of reference, which can change and reorganize the spaces according to changing necessities (Jochumsen et al. 2015). In the Netherlands, the recent emphasis on library as public space (i.e. Rozet Arnhem, Eemhuis Amersfoort) and community alliances is increasingly integrated by making metaphors (like in the Chocoladefabriek Gouda) and by dedicated spaces for different types of performances, of both creational or innovative nature. However, this has not yet brought to the redefinition of the design and spatial characters of a contemporary library with reference to a more ‘active’ users' behaviour. This would indeed imply to address challenges like: visibility of the machinery in operation; the centrality of the learning experience also through the process of imitation and remake / remix; the relationships between the physical frame and the flexibility in operation; the collaboration across the different ways of accessing and make culture; and so on. At this end, non-competitive relationships between the makerspace-related spatial constraints and the fruition of the overall library needs to be re-invented. These libraries will not need to be per se spectacular buildings, but to embody their special meaning for the neighbourhood and the community of our times.

The narrative of the library of the future as the epicentre of a community of cultural practitioners forms a new assignment in library architecture. It is not the only possible future, yet the theme of the pro-active contribution to the construction of people's own future and of a better world can be shared by different ideas of library.

Garaget at Malmö, SWE. *Caso.*

When re-invented and reprogrammed in the spirit of Culture 3.0 development (Sacco 2011) the library would need a new type of spatial organization which is able to refresh and materialize the contemporary values. In doing this ‘learning-by-doing’ and plurality will plausibly take an even more relevant position in profiling the library as a complex urban cultural centre.



Library as a network of 'organs' connected to a central brain. An organ is equipped with on-demand plug-in information cells of specialised content. *Image, TU Delft students Andrianelli, Fornasiero, Spada. 2015 Workshop The Future of Libraries?*

Bibliography

- Abrahams, T. (2016). “What culture is to a city”. In: *Architectural Review,* January.
- Anderson, C. (2012). *Makers. The new industrial revolution.* London: Random House Business Books.
- ASEE American Society for Engineering Education. (2016). *Envisioning the Future of the Maker Movement: Summit Report.* Washington DC: ASEE. (https://www.asee.org/documents/papers-and-publications/papers/maker-summit-report.pdf)
- Barbieri U.; L. van Duin, M. Lampe (1997). *Plandocumentatie Bibliotheken.* Delft: Publikatieburo Faculteit Bouwkunde.
- Boecke, J.; P. Troxler (2011). *Sustainable Fab Labs.* (http://wiki.fablab.is/images/e/ef/Factsheet_LabSustainability_Fab7.pdf).
- Caso, O. (2015). “The Green Library in Holland. Aggregating center for the community/Condenser of urban functions”. In: R. Inglese (ed. 2016). *La biblioteca inForma: l’edificio, l’organizzazione e i servizi di una ‘green library’ - The Library inForms: building, organization and services of a green library.* Proceedings of: Giornata di Studio del CNBA, Rome, 18 June 2015. Bologna: CNBA.
- Cavalcanti, G. (2013). “Is it a Hackerspace, Makerspace, TechShop, or FabLab?” In: *Makezine,* May. (http://makezine.com/2013/05/22/the-difference-between-hackerspaces-makerspaces-techshops-and-FabLabs).
- Danning, M. (2015). “How makerspaces are nurturing the next wave of Chinese innovators”. In: *China Daily,* June. (http://www.chinadaily.com.cn/china/2015-06/29/content_21127750_2.htm)
- Davey, A. (2013). *The Library of the Future.* London: Arts Council England. (http://www.artscouncil.org.uk/what-we-do/supporting-libraries/other-links/library-of-the-future)
- De Boer, J. (2014). *“Library as maker and informationspace”.* September. (https://medium.com/@jtdeboer/library-as-maker-and-informationspace-c264ca4b2b36)
- EC (2015). *The Knowledge Future: Intelligent policy choices for Europe 2050.* Brussels: EU. (https://ec.europa.eu/research/foresight/pdf/knowledge_future_2050.pdf)
- Fischer-Lichte, E. (2008). *“The transformative power of performance: a new aesthetics”.* Milton Park, Abingdon: Routledge.
- Hatch, M.(2013). *The Maker Movement Manifesto. Rules for Innovation in the New World of Crafters, Hackers, and Tinkerers,* New York: McGraw-Hill Education.

- Holman, W. (2015). “Makerspace: Towards a New Civic Infrastructure”. In: *Places Journal,* November. (https://placesjournal.org/article/makerspace-towards-a-new-civic-infrastructure/)
- Hvenegaard Rasmussen C.; H. Jochumsen (2009). “The Fall and Rise of the Physical Library”. 17th BOBCATSSS Symposium, Porto. (http://eprints.rclis.org/12925/1/40.pdf).
- Jochumsen, H.; C. Hvenegaard, D. Skot-Hansen (2012). “The four spaces – a new model for the public library”. In: *New Library World,* CXIII, 11/12, pp. 586–697. (http://www.emeraldinsight.com/doi/abs/10.1108/03074801211282948).
- Jochumsen, H.; D. Skot-Hansen, C. Hvenegaard Rasmussen (2015). “Towards Culture 3.0 – performative space in the public library”. In: *International Journal of Cultural Policy,* Routledge. (http://dx.doi.org/10.1080/10286632.2015.1043291)
- KB—Koninklijke Bibliotheek (2018). *Makerplaatsen in openbare bibliotheken. Onderzoeksresultaten BOP-enquete Makerplaatsen.* The Hague: Koninklijke Bibliotheek. (https://www.kb.nl/sites/default/files/docs/rapportage_makerplaatsen_2018_def_0.pdf)
- Kerr, M.(2015). “3D Printing Fuels New Industrial Revolution”. In: *Forbes Business,* June. (http://www.forbes.com/sites/sungardas/2015/06/01/3d-printing-fuels-new-industrial-revolution)
- Lankes R.D. (2012). *Expect More. Demanding Better Libraries For Today’s Complex World.* Jamesville, New York: Riland Publishing. (http://davidlankes.org/wp-content/uploads/2014/01/ExpectMoreOpen.pdf).
- Lankhorst, H. (2015). *Grijp de kansen van de nieuwe bibliotheekwet! Uitleg bij de Wet stelsel openbare bibliotheekvoorzieningen (Wsob).* The Hague: VOB.
- Lash S.; J. Urry (1994). *Economies of signs and space.* London: Sage.
- Lessig, L. (2008). *Remix. Making Art and Commerce Thrive in the Hybrid Economy.* London: Bloomsbury.
- Levien, R.E. (2011). *Confronting the future. Strategic Visions for the 21st Century Public Library.* Washington: ALA Office for Information Technology and Policy. (http://www.ala.org/oitp).
- Mattern, S. (2014). “Library as Infrastructure. Reading room, social service center, innovation lab. How far can we stretch the public library?”. In: *Places Journal,* June. (https://placesjournal.org/article/library-as-infrastructure).
- Miles S.; R. Paddison (2005). “Introduction: the rise and rise of culture-led urban regeneration”. In: *Urban Studies,* XLII, pp. 833-839, 5/6.
- Morozov, E. (2014). “Making it. Pick up a spot welder and join the revolution”. In: *New Yorker,* January. (http://www.newyorker.com/magazine/2014/01/13/making-it-2).

- Neufert E.; P. Neufert, J. Kister (2012). *Architects' Data.* 4th English edition. Chichester: Wiley-Blackwell.
- Oldenburg, R. (1989). *The great good place: cafes, coffee shops, community centers, beauty parlors, general stores, bars, hangouts, and how they get you through the day.* New York: Paragon House.
- Palfrey, J.; U. Gasser (2008). *Born digital. Understanding the first generation of digital natives.* New York: Basic Books.
- Pevsner, N. (1976). *A history of building types.* Princeton: Princeton University Press.
- Ritzer, G.; P. Dean, N. Jurgenson (2012). "The coming of the age of the prosumer". In: *American Behavioral Scientist,* LVI, 2012, 4, pp. 379-398.
- Sacco, P.L. (2011). *Culture 3.0: A new perspective for the EU 2014-2020 structural funds programming.* EENC, European Commission. (http://www.eenc.info/eencdocs/papers-2/culture-3-0-%E2%80%93-a-new-perspective-for-the-eu-2014-2020-structural-funds-programming).
- SIOB (2014). *The library of the future.* Den Haag: Sector Instituut Openbare Bibliotheken.
- Skot-Hansen D.; C. Hvenegaard Rasmussen, H. Jochumsen (2013). "The role of public libraries in culture-led urban regeneration". In: *New Library World,* CXIV, 1/2, pp. 7-19. (http://www.emeraldinsight.com/doi/abs/10.1108/03074801311291929)
- Toffler, A. (1980). *The third wave: The classic study of tomorrow.* New York, NY: Bantam.
- Vallet, N. (2013). "Becoming partners in urban development. A case-study research on the strategic roles of Flemish and Dutch public libraries in the future development of cities". In: *Library Management,* XXXIV, 2013, 8/9, pp. 650-663. (http://www.emeraldinsight.com/doi/abs/10.1108/LM-03-2013-0024).
- Vickery, J. (2007). *The emergence of culture-led regeneration: a policy concept and its discontents.* Research Papers n. 9. Coventry: University of Warwick.
- Vos, A. (2017). 3rd4ALL. *How to create a relevant public space.* Rotterdam: nai010.
- Willingham, T.; J. de Boer (2015). *Makerspaces in Libraries. Library Technology Essentials n.4.* Ne York: Rowman & Littlefield.
- WSOB (2014). "Wet stelsel openbare bibliotheekvoorzieningen". In: *Staatsblad van het Koninkrijk der Nederlanden,* November 19th. (http://www.debibliotheken.nl/belangenbehartiging/bibliotheekwet/wsob).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