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**LibrarIN [101061516]: Value Co-creation and Social Innovation
for a new Generation of European Libraries**



**D3.4 Social entrepreneurship, public-private networks &
social innovation v1.0**

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Document description	This document reviews the academic and non-academic literature relating public libraries and social innovations, which we define as innovations involving a network of partners in its making (input) and generating interaction networks among individuals as outcome. Public libraries' core missions have changed through time, from the curation of books to the building of communities. In this sense, they stand as potential social innovators. The upcoming case studies will explore this working hypothesis.



Disclaimer

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Executive Summary

This report reviews the existing academic and non-academic literature about public libraries involvement into public-private networks aiming to foster social innovations and social entrepreneurship. The purpose of the report is to establish a series of criteria to be used in selecting empirical cases to investigate later-on.

The document reports that public libraries' core missions have changed through time, from the curation of books to the building of communities. Not all libraries can be called community builders, but overall there seems to be a general tendency in which traditional operations of preservation and circulation of collections are progressively replaced by new operations aiming at connecting people and at generating social interactions.

The old and the new missions are actually more related than one may think at first, because they are both part of the knowledge creation process. For its part, the curatorial library plays a supportive role in this process by providing the agents with an access to codified knowledge. In comparison, a community builder is a more central player, because it fosters the exchange of potentially informal knowledge. In this sense, it can be the initiator of a knowledge creation cycle.

Public libraries should thus be thought as agents specialized in innovations that change the interaction patterns within the society. As a side outcome, this literature review clarifies the concept of social innovation. It encompasses innovations that modify interaction patterns among individuals, be they located within a company, a neighborhood or a larger area. Interaction can be the method used to innovate and it is also the result of the innovation. Our take is that pursuing inclusion or aiming at improving people's well-being shall not be used as the only defining criterion.

Defined as such, social innovations seem of primary importance for democratic societies, because there are social and technological forces that produce social disintegration. For instance, the development of suburban life, or the promotion of taylor-made experiences, like the one provided by online recommender systems, are reducing occasions to build shared experiences with others – which reduces the communication channels between people. Community building libraries appear as a potential answer to this phenomenon.

Many surveys identify a disaffection of the general public for libraries, but their role as prime social innovators makes them essential for social cohesion. The empirical case studies will certainly illustrate this point. From all that has been said, the selected cases shall involve:

- Innovations that generate discussion networks among individuals. These networks may be largely invisible at first sight, and their study will require further investigations, like the conduct of interviews.



- In this sense, researchers should be attentive to the “outcome network”: how many actors have been reached out? Is the network ephemeral or self-sustained? what is the long term effect of such network on the actors involved?
- The public libraries can be the initiator or a supportive agent. Further, the input network might involve a variety of public and private actors.



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List of Terms and Abbreviations

Abbreviation	Definition
KISS	Knowledge Intensive Social Services
NSIS	National Social Innovation Systems
PSINSIs	Public Service Innovation Networks for Social Innovations



1 Introduction

1.1 Purpose and scope

Public libraries are ubiquitous organizations: the European Union alone counts as much as 65,000 of them (Quick et al., 2013, p. 13). Yet, behind this apparent success, they are facing many challenges. Among these, Smith (2019) identifies a general distrust for Government agencies, the decline in people's "attention span" (p. 244) due to the pervasive use of smartphones, the "decline in reading" (p. 244) and severe budget cuts. Further, the available data regarding the use of libraries reveal dramatic figures. For instance, Weaver and Appleton (2020) report that "between 2010 and 2016, the number of UK public libraries decreased by 14%, the number of library visits by 15% and the number of active borrowers by 23.5%" (p. xxi).

In this context, many question the usefulness of public libraries. Palfrey (2015) illustrates this point, by recalling typical conversations in which his interlocutors declare that "we don't really need libraries so much now that we have Google" (p. 22). But, what are we talking about when we evoke libraries? To some authors, these organizations are mere codex curators (see for instance Gaines, 1985b) while for others, libraries are builders of conversational networks within the society (Lankes et al., 2007). This duality can be touched on by the reading of a recent report ordered by the French Government to assess the means, the needs and the realizations of public libraries throughout the country (Orsenna and Corbin 2018). On one hand, the authors adopt a lyric stance, stating that "libraries are these porous places where multiple networks of actors and projects weave, where tears are healing, where we recover strengths to address the future, where territories are livening and re-livening" (p. 9-10). But, later on, they adopt a technical approach, more in line with the curatorial perspective, stating that a library "owns a collection and [...] sets an annual acquisition budget", that it has a "qualified personnel" and that it occupies at least 25m² (p. 35). Both types of libraries certainly coexist, and those in difficulty might be primarily the curatorial ones.

In a sense, this report contributes to the debate regarding the usefulness of public libraries. The line of argument stemming from our literature review is that libraries are more needed than ever, because some actually stand as prime social innovators. By doing so, we revisit the definition of a social innovation as an innovation that creates or modifies interaction patterns within the society. We advocate that these new patterns can produce serendipitous discoveries, and that they can foster social cohesion, at an age in which some authors identify a tendency towards social disintegration (Oldenburg and Brisset, 1982; Pariser, 2011; Sunstein, 2017).



1.2 Approach for Work Package and Relation to other Work Packages and Deliverables

In accordance with the multi-agents framework developed in the *Work Package 2 Conceptual framework of participatory management and sustainable growth*, we focus our attention on the competences used by libraries in their social innovation activities. In this respect, we distinguish between two competence sets of libraries: technical ones, in terms of books curation, and relational ones, when they act as community builders. We also find that users' preferences are increasingly driving/ initiating libraries' innovation activities and that their competencies are increasingly mobilized, as they become co-creators of libraries' services.

Aside from specifying the competence sets, the value added of this work package to the overall framework is to enlarge the focal of the main multi-agent framework by bringing in the concept of network. Indeed, we define social innovations as innovations involving networks of partners in their making (input network) and which produce interaction networks (outcome).

1.3 Methodology and Structure of the Deliverable

This document consists in a traditional literature review so as to stimulate serendipitous discoveries. Key books and papers were identified on Google Scholar and Web of Science based on their citation counts. Then, we navigate through the literature via a snowball search into the reference lists of the various documents, and also by linking our readings with our area of expertise: economics and management of innovation in services and through services.

The report is organized as follows. Section 2 details the shift in libraries' core missions. Section 3 conceptualizes the implications in terms of innovation trajectories. In section 4, we discuss the definition of social innovation, and we draw a parallel with libraries' innovation trajectory. Sections 5 and 6 discuss two dimensions of social innovations: the involvement of social networks in their making, and the production of such networks. Finally, section 7 concludes the report and proposes some case selection criteria.



2 Public libraries: from books curators to community builders

The traditional view about a library's activities stresses on its curatorial mission. A first example is provided by the Cambridge Dictionary, which states that a library is "a building, room, or organization that has a collection of books, documents, music or sometimes things such as tools or artworks, for people to borrow, usually without payment".¹ In another entry, it defines a public library as "a building where people can read or borrow books without having to pay".² These definitions emphasize on the collections: a library's role is to take care of these and to ensure their free circulation within the society. Note that the fact that every citizen can access to books without payment does not entail that the library's role is to serve everyone. For instance, Gaines (1985a) – director of the Cleveland Public Library at the time – is a tenant of an elitist view. To him, "the guts of the library are in the integrity of its collections, the care with which it assembles and buys materials over a long period of time, materials that often the average member of the public is unaware of or indifferent to. The point of all our work is that when essential information is needed, it is there, and that is in the care of a curatorial staff" (p. 53). As such, in the curatorial perspective, a public library might serve an elite minority, but not the whole community in which it is located. But a more universal view is also possible. For instance, Richter and Haley (1984) emphasize on the term "public reading". This expression, widely adopted in the French-speaking world between the two World Wars, evokes an educational mission of libraries: to promote the activity of reading within the general public. In this perspective, libraries' acquisitions should respond to the tastes and needs of the commoners so as to stimulate their interest.

The universalist curatorial perspective is consistent with the 1949 and 1972 versions of the UNESCO's Public Library Manifesto, which underlines libraries' roles of conservation, diffusion and as a "living force for popular education" (UNESCO, 1949 ; UNESCO, 1972). In 1994, the same manifesto adopted a more inclusive stance by highlighting the need to provide accessible resources and specific services to "linguistic minorities, people with disabilities or people in hospital or prison" (UNESCO, 1994). Interestingly, serving prisons and hospitals require the library to being active in bringing its collections to the population, instead than being a static access point to bookshelves. To this respect, the core missions of the library now exceed the work of a curator - hence the need for a renewed definition. The 2022 version of the manifesto even declares that "libraries are creators of community, proactively reaching out to new audiences and using effective listening to support the design of services that meet local needs and contribute to improving quality of life" (UNESCO, 2022). In this

¹<https://dictionary.cambridge.org/dictionary/english/library> (last access; Oct. 7th 2023).

²<https://dictionary.cambridge.org/dictionary/english/public-library> (last access: Oct. 7th 2023).



last definition, collections are only implicit and the library appears as a central social service for its community.

The shift towards community building has emerged in early 2000s. For instance, Muddiman et al. (2000) question the equality of access to public libraries in the UK, in particular due to recurrent shifts in policy orientations of public libraries with, in background, a tension between serving the "vocal 'traditional' library users and trying to establish services for 'new' communities" (p. 15). Besides, the authors highlight that some marginalized groups, in particular those without a stable address, had no access to library services. Among their recommendations to librarians, they insist on the necessity to engage into "real and continuing consultation with socially excluded communities, groups and individuals" (p. 61). To put it another way, the authors recommend to adopt co-creation methods - that is collaboration, listening and discussions with end-users, here marginalized groups, in the design phase of new library services (Vargo et al.2008). De Moor and van den Assen (2013) summarize this new logic as follows: "libraries should move from 'service design for patrons' to 'service design by communities'" (p. 1).

Many co-creation examples are provided by UCL (2005) in the case of the Chicago Public Library and of its branches. For instance, Rose Powers, one of the branches directors, is said to routinely search to identify and contact local communities leaders, so as to gain a better understanding of their needs. This search strategy brings her to participate to community projects - sometimes even not directly related to librarianship, like helping to revive a chamber of commerce - which ultimately drag community attention to the library. This helps to expand the number and the variety of stakeholders, so as to elaborate new library initiatives, like new outreach programs or the sharing of teaching staffs. By doing so, the library can (re)create social cohesion.

Community building is therefore related to co-creation, which supposes an exchange of information. Lankes et al. (2007) develop this idea further by stating that the main role of libraries is to "facilitate conversation" (p. 18). Indeed, one can consider that books or any other types of artifacts provided by libraries are the results of conversations and, "while one cannot converse with a book, that book certainly can be a starting point for many conversations within the reader and within a larger community" (p. 18). Further, noting that "knowledge is created through conversation" (p. 17), one can summarize the core mission of libraries by saying that they "improve society through facilitating knowledge creation in their communities" (Lankes 2011, p. 31). As such, these authors ground librarianship into conversation and knowledge creation theories.

The end-objective of community-building is knowledge creation. Going back to the initiatives reported by UCL (2005) in Chicago, it is clear that they involve a sustained dialogue with the community. The individuals involved certainly gained access to new knowledge, either from discussions with librarians or from discussions with other stakeholders. This conception of a



knowledge creating library is influential in academic literature, as many authors adopted it. For instance, Heseltine (2020) declares that "libraries [...] are in the business of knowledge, learning, creativity, and imagination" (p. 5). In the same vein, for Bieraugel and Neill (2017), "libraries should look beyond the role of storing and serving up existing knowledge and examine the academic library as a place of discovery and development" (p. 36).

The relationship between conversation and knowledge creation has been theorized by Nonaka and Takeuchi (1995 and 2019) in the form of a spiral in four phases: socialization, externalization, combination and internalization. In the socialization phase, a person acquires tacit knowledge or know-how from working, observing and/or through discussions with someone else. This tacit knowledge is then made more explicit by the individual during the externalization - this time, through discussion with a small team of close co-workers. During combination, the explicit knowledge is combined with other bits of explicit knowledge, typically steaming from more distant working groups. It is in this third phase that knowledge produces new working prototypes, and thus potential innovations. Then comes a fourth phase of internalization, where the individual acquires a new know-how from the three previous phases. This new tacit knowledge can then fuel another cycle of knowledge creation and innovation.

The spiral of knowledge highlights an important point regarding libraries: by nature, books record explicit or codified knowledge, while the process of knowledge creation is initiated by a transfer of tacit knowledge, which often occurs through discussion. In this view, the curatorial library can only play the role of supportive agent in the knowledge creation process, while the community building library becomes an essential participant, because it facilitates - or even permits - the initial transfer of tacit knowledge. Interestingly, it appears that books and other artifacts traditionally provided by libraries are now subordinated to the connecting activities, which gained in importance.

In a sense, the library promoted by Gaines (1985a) was a provider of codified knowledge for the few users who were engaged into the combining phase of the knowledge creation process, while the one promoted by Lankes et al. (2007) and by Lankes (2011) is a facilitator in the socialization phase of that process. The community building library also democratizes knowledge creation by permitting everyone to participate to the, potentially society-wide, discussion.

3 Innovation trajectories in public libraries

The changing definition is the reflect of profound organizational changes experienced by libraries.

The very first public libraries, in the second half of the 19th Century, were mostly book-centered and were not meant to be user-friendly. For instance, in the United States, Pungitore (1995) indicates that in the 1850s, "the stacks of shelving containing the books were closed to the public; users had to know exactly what they wanted so that they could ask the library employees to retrieve specific items" (p. 5), and the collections excluded fictions and novels. In the same vein, the first public libraries in France were "forbidding the lending of books" (Richter and Haley, 1984, p. 51). It is later, during the Great Depression, that American public libraries became "a People's University" (Pungitore, 1995, p. 50), as they enlarged their collections to popular novels, and were massively used by unemployed people for education and leisure.

Pateman (2020) proposes a history of the evolution of Public Libraries in the United Kingdom in three phases - which differ in terms of libraries' objectives, how they use their floor space, and in terms of performance indicators (Table 1). The three phases are: the "traditional library" (1850-1970), the "community-led library" (1970-2000) and the "needs-based library" (from 2000 to nowadays). To the author, the process is necessarily sequential: one library has to start as a traditional one, and it has to become community-led before being needs-based. The sequential view is debatable, but in any case, different types of libraries can coexist in the same country.

Table 1: The stages of evolution of public libraries, adapted from Pateman (2020)

	Traditional library (1850-1970)	Community-led library (1970-2000)	Needs-based library (2000-present)
Objective	<ul style="list-style-type: none"> - Control of the working class. - Serving the elite and the middle class. 	<ul style="list-style-type: none"> - Reaching new audiences (i.e. outreach programs) - Supporting the marginalized 	<ul style="list-style-type: none"> - Building a community - Community-led partnerships
Floor space	Dedicated to collections.	<ul style="list-style-type: none"> - 2/3 collections - 1/3 services 	<ul style="list-style-type: none"> - 1/3 collections - 1/3 services - 1/3 partnerships
Performance	Breadth and depth of collections, regardless of the community needs.	Breadth and depth of services.	Breadth and depth of community development activities.

The evolution process described in Table 1 is consistent with the already mentioned progressive servitization of libraries' activities: the floor space is less and less dedicated to collections. Another major trend is the use of a co-creation logic: in the "community-led" model, the library generates initiatives to reach out new - and usually impoverished - users, while in the needs-based model, the users are the initiators of projects and they are standing as equal partners with the library. This dual change towards servitization and co-creation, and its implications in terms of innovation activities, can be conceptualized with the help of the definition of a service.

For Gadrey (1992), "a service activity is an operation, aiming to transform a medium C, owned or used by a consumer (client, or user) B, performed by a provider A mandated by B, and often in relation with him, but without resulting into the production of a good susceptible to circulate independently from the medium C" (p. 17). Such operation mobilizes a set of capabilities from the provider (Gallouj and Weinstein, 1997) and often also from the client himself (Djellal and Gallouj, 2008). In this respect, Gadrey (1999) distinguishes between "technical" and "human" (i.e. relational) capabilities (p. 15) and two modes of activation of the service: a client may want to be served, or to serve himself. Crossing the types of capabilities with these types of requests allows Gadrey to identify three service logic (Figure 1). There is, at first, the "logic of provision" in which the client rents the use of a material artifact maintained by the provider. This applies well to the activities of the curatorial library. In this case, interactivity is low and the provider uses mainly technical capabilities. In the "human representation" logic, the provider uses a set of human and technical capabilities in a low interactivity context. An example is the display of a live performance for the benefit of the user. Thirdly, Gadrey (1999) identifies a logic of "intervention", where the provider mainly mobilizes a set of human capabilities in a high interactivity context. This case suits well to the community-builder library, which interacts with its readers and, more generally, with the community in which it is located in order to generate discussions and knowledge.

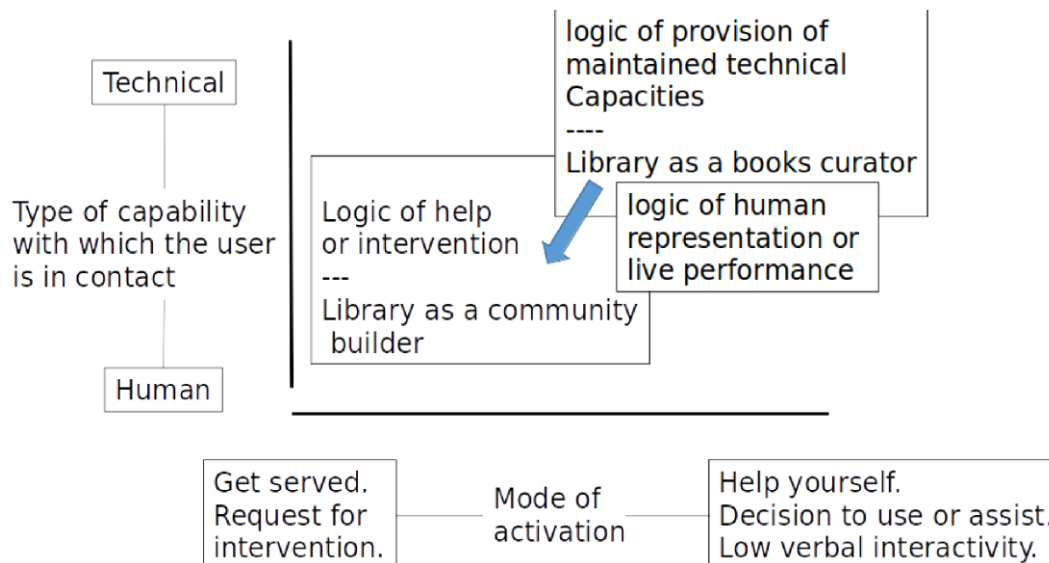


Figure 1: The different service logic and the libraries, adapted from Gadrey (1999, p. 15).



The two service logics applicable to libraries (i.e. provision and intervention) suggest two directions, or trajectories, of innovation (Nelson and Winter, 1982): one improving a library's technological capabilities to preserve and circulate its collections, and another, more relational and methodological, that increases the scale and depth of the discussion and knowledge exchange within the society. Table 2 summarizes these two innovation trajectories in terms of capabilities, types of operations and nature of the service medium in Gadrey's sense (see above). We present them in details in the following sub-sections.

Table 2: The two innovation trajectories in public libraries

	Book curator	Community builder
Capabilities of the librarian	Technical	Relational
Operations	- Conservation - Provision	- Conversation - Connection
Nature of the service medium	Books (material)	- Individuals - Knowledge
Innovation trajectory	Science and technology based	Methodological and relational

3.1 The science and technology trajectory

This innovation trajectory improves, in a technical sense, libraries' capabilities to fulfill their missions of conservation and circulation of collections. The traditional view about service organizations is that, when it comes to technological innovations, they are "supplier dominated" (Pavitt 1984): the technology is not developed in-house, but provided by a supplier, with a strong orientation towards process innovation and the lowering of operation costs.

The literature abounds of examples related to the digitization of library services, which often carry a supplier-dominated view. For instance, Cervone (2008) uses a questionnaire to test the influence of professional advise networks on librarians' receptivity to innovation. This topic itself suggests that innovation is emanating from other organizations and then adopted by libraries - which therefore stand as supplier dominated. In this study, the surveyed population is selected from the members of the Consortium of Academic Librarians in Illinois, and the receptivity to innovation is measured by a set of 9 attitudinal variables ranging from individual risk tacking to views related to organizational flexibility. These indicators are not related to technology adoption per se, but the authors specifically invoke the digitization of resources to motivate their investigations. To this respect, they mention that "Traditionally, the university library has held the role of caretaker of scholarly information on behalf of the academic community. However, as electronic modes of information delivery have begun to overtake traditional print-based formats, the scholarly information environment has been changing rapidly" (p. 72). The curatorial perspective is transparent here. Another supplier-dominated



view can be found in Khan et al. (2022), who build and administrate a questionnaire among academic libraries in Nanjing, China, so as to "assess the library personnel's willingness to adopt internet of things services" (p. 1977).

The supplier-dominated attitude might be explained by the fact that most libraries are now focusing on a relational trajectory - therefore delegating technological improvements to suppliers. Indeed, at an earlier period, curatorial libraries were able to produce in-house technological innovations - therefore behaving as "science-based" organizations (Pavitt 1984). In this respect, Malinconico (1997) reports many instances in which libraries developed technological solutions in the fields of computing and telecommunication. As such, the author recalls that, in the 1930s, the New Jersey Public Library developed its own machine "to mechanise the processing of circulation cards" (p. 48), and that a former director of the National Library of Medicine in the U.S. was instrumental in the birth of a punched card machine. In the field of telecommunication, he highlights that Guy Sylvestre, "the National Librarian of Canada [...] appointed a task group on computer communications protocols for bibliographic data interchange" (p. 52). This effort can certainly be considered as a work of technological R&D performed by libraries.

3.2 The methodological and relational trajectory

This innovation trajectory is dominant among community-building libraries. It aims at finding new ways to deepen and to enlarge the scope of the discussion within the society. Here, discussion refers to ideas generation and to their sharing. More specifically, Nicholson (2019) identifies 5 types of innovation in libraries that satisfy this general objective: "participation innovations", "making and creating innovations", "learning innovations", "outreach innovations", and "partnership innovations".

- i. Participation innovations are initiatives that help libraries to get involved into the current cultural trends regarding media use and production, like promoting open data or the gamification users' experience. For example, Nicholson (2019 p. 334) reports the launch of the "Minecraft Gaming Day" in the North Melbourne Library, in which users had to build a virtual library in the Minecraft video game.
- ii. The learning innovations (Nicholson, 2019) encompass libraries' initiatives to promote lifelong learning. In this context, Nicholson (2015) mentions "a large reading and writing club programme" run by the Copenhagen Main Library (p. 27), and the project of a "guided reading club" potentially ran in partnership with "the psychiatric department of a local hospital" (p. 27).
- iii. The outreach innovations aim to expand the user base. Examples are the opening of "pop-up libraries" (Nicholson, 2019, p. 341) or the delivery of library services through bikes. Some initiatives require partnerships. For instance, the Grand Rapid Public Library is proactively



searching for partners to organize any type of events that can, even indirectly, promote "the cause of literacy, books, information or the library as a community institution" (Warner, 2013).

- iv. The "partnership innovations" (Nicholson, 2019) are meant to expand the range of services provided by the library through partnerships with other, often governmental, organizations. In this perspective, the library becomes a "community center" (UCL, 2005 p. 3). An example is the setting up of a fair grouping many social services for the homeless in the Salt Lake City Public Library (Torres 2015).
- v. The "making and creating" innovations aim at changing "the role of public library, from being a content provider that encourages consumption, to a content producer that fosters creation" (Nicholson, 2019 p. 336). This type of innovations is more documented than the others in the literature. Innovations belonging to this category range from dedicating floor space to fablabs, to a complete re-thinking of the design of library's spaces. On this respect, Bieraugel and Neill (2017) propose to test how different spaces of a university library correlate with specific learning behaviors among their users. They proceed by distributing questionnaires in the library, asking a series of questions to which users have to respond using a Likert scale. The questions are then grouped into 7 learning behaviors: "explore", "exploit", "observe", "question", "experiment", "network", and "reflect" (p. 42). Mean results obtained by the authors for the various space types in the surveyed library are reproduced in Table 3. This Table reveals that Makerspace is the most effective location for most learning behaviors, except for exploitation - in which computer lab has the highest score of all locations - and the reflection, where the atrium scores best.

Table 3: Ability of libraries spaces to support learning behaviors, extract from Bieraugel and Neill (2017, p. 42)

	Mean Values							
Means	Communal Tables	Quiet Study	Computer Lab	Fishbowls	Atrium	Greenspace	Makerspace	Student Union
Explore	4.84	4.73	5.12	5.58	5.01	4.97	6.31	4.17
Exploit	5.00	5.55	5.94	5.52	4.80	4.06	5.45	4.91
Observe	4.51	3.83	4.22	5.30	5.08	5.92	6.20	5.16
Question	5.00	4.29	4.90	5.68	5.45	5.17	6.38	4.23
Experiment	3.92	2.98	4.29	4.98	3.85	3.89	6.47	3.38
Network	5.02	4.10	4.01	5.37	4.22	5.52	6.34	5.91
Reflect	3.83	5.62	5.96	5.25	6.26	6.05	5.33	4.03

Bieraugel and Neill (2017) explore only one university library in the United States. Hence, replication studies are needed, both in this country and abroad and for a variety of library types. Besides, one may ask about the direction of causality: are spaces promoting behaviors, or attracting people who



already possess these attitudes? Also, are the high scores of the makerspace due to this type of rooms in general or to some specificities of the one under study?

Despite its limitations, this study raises up the question of the influence of the design of physical spaces on users' behaviors. Marino and Lapintie (2015) also tackle this issue by dressing up a typology of users of three public libraries located in the Center of the city of Helsinki - therefore in quite similar locations. The main difference resides in the organization of the floor spaces: a first library, referred to as "library 10" (p. 121) is mainly made up of "large group tables but not confined spaces, except for one meeting room of around 12 persons" (p. 121). The second one, called "Meeting Point" is made of meeting rooms with movable walls, and equipped with workstations. Finally, there is the university library, in which some equipment are reserved for students and researchers. The authors proceed through observations and interviews. By doing so, they produce a list of 55 users profiles, distributed in a non-uniform manner between the three libraries, which suggests that space and furniture arrangements are more or less appealing depending on the user type. Users' categories are the followings:

- "The scholar", is typically a researcher seeking a "peaceful environment and easy access to information resources".
- "The artist" is a young and educated person "employed in the fields of art and culture", often a freelancer, he is looking for a free office space.
- "The walker" is a worker who stop by the library at the middle of a commuting journey to sit and do some office work (consulting e-mails etc.).
- "The starter" is a young teleworker, often an entrepreneur. According to the authors, "the library can act as an incubator for them".
- "The fugitive" is someone who escape from his office "to get work done".

Marino and Lapintie (2015)'s work highlights the many creative uses of public libraries, especially as incubators for start-ups. Interestingly, the interviews reveal that the way people are using the floor spaces differ markedly from what their designers envisioned. For instance, some spaces of the university library were designed to appeal researchers, while in fact they mostly attract teleworkers. Regarding researchers, they seem to work in more or less random locations within the library.

In our view, the delimitation between these five types of innovations is porous. For instance, UCL (2005) reports a case in which a branch of the Chicago Public Library partners with "the local hospitals to use the library to educate people and provide health screening" (p. 25). Such initiative is, at the same time, a partnership, a learning and an outreach innovation. For this reason, we prefer to use the encompassing label of "methodological and relational innovation". Most of these initiatives



can be labelled as social innovations, which thus stand as the main innovation trajectory of community building libraries.



4 Social innovation: definition and parallel with libraries' activities

There are many definitions of social innovations (Dacin et al., 2010), which Cloutier (2003) classifies in three categories. There is, first, the definitions "centered on the individuals" (p. 3). Under this lens, social innovations aim at "creating new social structures" (p. 3) through cooperation and co-creation. For the author, the novelty to qualify a social innovation as such shall not be absolute. Rather, there is novelty when there is a "discontinuity" (p. 8) with past practices used in a specific setting to address a certain problem - novelty is thus, above all, contextual.

Secondly, Cloutier (2003) distinguishes "the social innovations oriented towards a milieu" (p. 13). Most of these social innovations adopt a territorial perspective and they modify "social relations" (p. 13). From the point of view of consumer theory, Gershuny (1982) states that a social innovation consists in "changes in the modes of provision for households needs" (p. 496). The starting point of Gershuny is the assumption that households have various needs, which are met through their demand and use of goods and services. In the author's view, new goods or services that respond to needs previously met by other means are social innovations. They relate to the "milieu" category because they necessarily change the interaction patterns within the society: using a car instead than a taxi, or asking a librarian instead than a town hall for some public services, all change the way people interact, and therefore the social structure. As such, these new goods and services can be labeled as social innovations.

Thirdly, Cloutier (2003) identifies contributions stressing that "new ways to organize work" are "social innovations within companies" (p. 21). Note that these new working methods do not necessarily aim at improving workers' life.

Our take from this typology is that social innovations are innovations that modify interaction patterns among individuals, be they located within a company, a neighborhood or a larger area - like a country, in the case of a culture change. Interaction can be the method used to innovate - for instance through the use of a co-creation logic (Vargo and Lusch, 2004 and Vargo et al., 2008) - and it is also the result of the innovation. We note that pursuing inclusion or aiming at improving people's well-being is absent from the analysis here.

Interestingly, the more recent definitions focus on the existence of an inclusive or "good" objective as a decisive criterion for social innovations.³ By doing so, they move away from the interactive perspective, at the risk of facing a problem of circularity by defining "social innovations" as innovations which are "social". An illustration of the circularity issue can be found in Mulgan (2012),

³As an illustration of this state of affairs, we can refer to Dacin et al. (2010), who list no less than 37 definitions of social entrepreneurship. The vast majority of those refer to social innovation and define it in a circular manner by employing the word "social".



who defines social innovations as "innovations that are social in both their ends and their means" (p. 35). Further, for Moulaert and Ailenei (2005) such innovations involve "the (re)introduction of social justice into production and allocation systems" (p. 2037), with no discussion about the meaning of "social" in this specific context.

Hayek (1993) deploras the many uses of this word. To him, the misuse of a word devoids it from its meaning and, when employed as an adjective, it also confuses the speakers about the meaning of the noun being qualified - which is especially true about the word social. Hayek proposes to stick to the etymology of the word: it comes from the Latin "societas, derived from socius, the personally known companion" (p. 155). In this sense, the interactive dimension identified by Cloutier (2003) seems the fairest: a social innovation should create or modify interaction patterns, permitting unknown individuals to get to know each other. Interactions can happen in the making of the innovation, or as a result of it. An inclusive dimension is still possible, but should not be decisive to classify an innovation as social.

From this discussion, we can think of the community-building library as a social innovation in itself, since its stated objective is to foster conversation, and in particular to involve those with a weak acquaintance network. Apart from its conversational mission, the library becomes socially innovative when it introduces a discontinuity – i.e. a drastic change – in the interaction pattern within a given milieu. As such, most of the innovations that belong to the methodological and relational trajectory can be qualified as social.

In the following two sections, we distinguish the interaction/network as an input/process involved in the making of a library innovation or as a result of it.



5 Social innovations and libraries: network as a process

As noted, social innovation research has departed from the study of interactive solutions. In parallel, it developed a tendency to emphasize the figure of the social entrepreneur, that Mulgan et al. (2007) characterize as "heroic, energetic and impatient individuals" (p. 13). Desmarchelier et al. (2020a) oppose to this individualistic view the fact that social innovations can also be the product of large networks of actors. In particular, they highlight the connecting role of a new type of actors, the "knowledge intensive social services" (KISS). These are "the equivalent to knowledge intensive business services in nonprofit activities" with some notable differences, namely they "pursue an explicit social mission" and they "act as connectors", linking their clients with other actors of the social economy (Desmarchelier, 2023 p. 52).

The large innovation networks that emerge from KISS activities have been labelled as "public service innovation networks for social innovations" (PSINSIs) by Desmarchelier et al. (2020) and even as national social innovation systems (NSIS) in Desmarchelier et al. (2022). Such networks differ from more traditional and technological innovation networks by the centrality of public and private services. But a paradox emerges here: while the community-building libraries should stand among the key actors in these networks, they are absent from the data provided by Desmarchelier et al. (2020a and 2022). This might be due to several factors. Firstly, the authors do not depart significantly from the circular definition of a social innovation from Mulgan (2012). Therefore, the projects covered in the authors' datasets are not necessarily aiming at changing the social structure. In fact, the networks reported by Desmarchelier et al. do record interactions among organizations but not among individuals. Secondly, community-building libraries are certainly more present at the local level, while NSIS are of national scope.

Yet, the idea of PSINSIs is appealing, because it suggests that social innovations could be stimulated by the presence and interactions of a specific set of institutions. In this context, can we identify public libraries and projects initiated by them in such networks? Are community-building libraries acting as KISS actors - that is, do they help social entrepreneurs by connecting them to other actors?



6 Social innovations and libraries: network as a result

The community-building library aims at generating “conversation networks” and, through them, to take an active role in the knowledge creation process (Lankes et al., 2007). Such a connection between knowledge and social interactions is investigated by Carley (1986). In particular, she declares that “the development of the social world involves tacit consensus among the individuals in the society over perceived regularities; in this way, social knowledge as shared cognitive structure is also a by-product of human interaction. Social knowledge affects future interaction/communication [...]. As individuals' knowledge bases co-evolve, their propensity to interact changes, social knowledge evolves, and social structures change” (p. 382). What is being suggested here is a virtuous circle: social interactions nurture social knowledge, which in return create improved conditions for future social interactions and so on.

This view echoes Nonaka and Takeuchi (1995)'s spiral of knowledge, in particular in that the spiral highlights a co-evolution between an epistemological dimension (i.e. the interaction between tacit and explicit knowledge) and an ontological dimension, since the various stages of the knowledge spiral involve an increasing number of individuals (Nonaka and Takeuchi, 2019). We note that, in Nonaka and Takeuchi's theory, knowledge creation is initiated by a meeting of individuals (network as a process). If the end-product of this process is a social innovation (network as a product), then further novelties in terms of interactions are possible, which could trigger the spiral of knowledge once again. This remark highlights the intimate relationship between social innovations and knowledge creation, as well as the intertwining of the networks involved in the innovation process and those resulting from this process.

The idea that interaction is a prerequisite for knowledge creation is shared by authors from other disciplines. As such, from a political science perspective, Pariser (2011) underlines that shared/social knowledge is a necessary condition for nurturing the debate of ideas in a well-functioning democracy, in particular because such debate requires “citizen to see things from one another's point of view”. From this assumption, Pariser (2011) and Sunstein (2017) shed a pessimistic outlook at recent evolutions of the Internet, notably the ubiquity of recommender systems, in that they would lock-up internet users into “information bubbles” and therefore diminish the base of shared knowledge within the society. Indeed, recommender systems provide individuals with tailor-made experiences, that Sunstein labels as “the daily me”, in lieu of the public - or shared - opinion (Tarde 1901) - which could thus disappear. In a sense, recommender systems are the opposite of social innovation, as they reduce opportunities for interaction.



In this context, an essential role of the community-building libraries could be to counter-balance the disintegrating force of the online recommender systems. Their ability to create acquaintances and shared knowledge, even with the less connected ones - for instance the newly arrived migrants - is evident in Wessendorf (2022). The author conceptualizes public libraries as "physical arrival infrastructures" (p. 182), because - in addition to providing a variety of public services, resources and information - they stand as places where "serendipitous encounters can happen" (p. 180). As an illustration, she recalls, about a public library in East London in which, "Pre COVID-19, twice a week a group of about 15 women used to gather their weekly crochet group on a large table by the front window, most of them with a migrant background. During the many times I attended the group, women regularly came into the library to ask members of the group about crochet, which sometimes led to conversations about how to find resources. One of those resources is English classes that take place several times a week at the back of the library" (p. 182).

The risk of social disintegration was already foreseen by Oldenburg and Brissett (1982), but in the context of the development of the suburbs, which reduce people's life to a diptych home-office in which social interactions are governed by specific/well-defined roles and status. To the authors, individuals rather need alternative places, labeled as "third places", where they can exercise "pure sociability" (p. 270), that is where they can participate to informal discussions with other people from a variety of backgrounds, and without the boundaries conferred by social status. The benefits of getting involved in a third place are numerous: it exposes individuals to "diversity and novelty" (p. 273), the author puts forth that confronting one's ideas to the judgment of others is beneficial for mental health, and that it gives access to "collective wisdom" (p. 281).

To summarize, third places create informal and temporary discussion networks. Despite their instantaneousness, such networks provide individuals with significant benefits. Public libraries can be described as third places (see for instance, Orsenna and Corbin, 2018) and, as such, if we are interested into the networks they produce, we should certainly pay attention to the passing experiences that they permit instead than searching for institutionalized/stable networks. This suggests that network as a process are certainly more permanent than the networks as a product. To put it another way, the networks produced by social innovations are certainly most often invisible due to their spontaneousness. The crochet group described in Wessendorf (2022) can illustrate this point: it consists into a permanent (process) network of around 15 women, which produces many temporaries (product) networks through serendipitous encounters with passers-by.



7 Conclusions

Social innovations may involve a network of actors in their process. But it seems that their most distinctive feature is that their outcome is a flow of new social interactions. By doing so, social innovations fuel the cohesion of the society. In this perspective, a typical social innovation is the third place, as it routinely produces a renewed sociability. As such, the shift of libraries' core missions from the curation of material artifacts to the building of communities makes these organizations prime social innovators. We could even say that social innovations are now libraries' natural innovation trajectory.

To some authors, social ties are getting increasingly distended in western societies, due - among other factors - to suburban developments (Oldenburg and Brissett, 1982), and to the pervasiveness of online recommender systems (Pariser, 2011; Sunstein, 2017). Hence, third places, and therefore also public libraries, are of considerable importance to ensure societal resilience. Further, this paper suggests that social cohesion could nurture the knowledge creation process. In this perspective, social disintegration might even reduce the performance of the national innovation systems. This, undoubtedly, speaks up for public libraries. Thus, we argue that their usefulness exceeds the need to nurture a literate society.

This new role advocates for a change in the metrics used to assess for libraries' performance. In particular, we should consider how and to what extent public libraries contribute to social cohesion and innovativeness in their surrounding environment, rather than just focusing on numbers of borrowed books. Also, the fact that several types of libraries coexist calls for the establishment of typologies of libraries, so as to monitor their demographics and performances more finely. This should constitute an interesting avenue for a multi-disciplinary research agenda.

The main objective of this literature review is to establish a series of criteria to select relevant social innovation cases in a public library context. From all that has been said, the selected cases shall involve:

- Innovations that generate discussion networks among individuals. These networks may be largely invisible at first sight, and their study will require further investigations, like the conduct of interviews.
- In this sense, researchers should be attentive to the "outcome network": how many actors have been reached out? Is the network ephemeral or self-sustained? what is the long term effect of such network on the actors involved?
- The public libraries can be the initiator or a supportive agent. Further, the input network might involve a variety of public and private actors.

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