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**UNIVERSIDAD
DE EXTREMADURA**
Facultad de Ciencias
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la Comunicación

Ledizioni

The Identity of the Contemporary Public Library

Principles and Methods of Analysis, Evaluation, Interpretation

EDITED BY MARGARITA PÉREZ PULIDO AND MAURIZIO VIVARELLI



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Introduction

This volume publishes the proceedings of the conference “L’identità della biblioteca pubblica contemporanea. Principi e metodi di analisi, valutazione, interpretazione = La identidad de la biblioteca pública contemporánea. Principios y métodos de análisis, evaluación, interpretación”, which was held in Turin on 14th December 2014, and it was promoted by the Dipartimento di Studi storici of the Università di Torino and by the Facultad de Ciencias de la Documentación y la Comunicación of the Universidad de Extremadura, under the patronage of SISBB - Società Italiana di Scienze Bibliografiche e Biblioteconomiche, and with the cooperation of the Sezione Piemonte of the Associazione italiana biblioteche.

The idea of this conference was sparked by the presence in Turin of Margarita Pérez Pulido as visiting professor from September to December 2014. This opportunity favoured first of all the organisation of the conference, in which both Italian and Spanish scholars took part; in the following months the collaboration between the editors of this volume grew stronger. This was how the core ideas of a research project came into shape, as it was promoted, alongside the two afore-mentioned Universities, also by the Universitat de Valencia. In keeping with this supranational and comparative perspective, we shall continue to work with the latter on the topic of public library identity, and on the principles and methods used to assess and interpret its nature, a complex one for historic, social, economic, epistemological, as well as methodological reasons.

In the conference, whose proceedings are hereby presented, these subjects began to be tackled and debated, within the framework of the three sections the papers were delivered in. The first thematic section, *History, Present and Future of the Public Library*, comprised the contributions by Paolo Traniello, Margarita Pérez Pulido, Maurizio Vivarelli. To the second section, *Models of Analysis, Measurement, Evaluation*, belong the papers by Aurora González Teruel and Chiara Faggiolani. The overall title *Complexity Challenges* gathers the research results by Giovanni Solimine, Ernest Abadal, Giovanni Di Domenico and Alberto Salarelli. In the fourth section, *Work in progress*, are pro-

posed studies by students (Maria Pagano) or recent graduates (Ilaria Giglio and Maria Maiorano). Finally, in the *Appendix*, the volume includes a brief selective bibliography on the identity of the public library, compiled by Maria Senatore Polisetti.

The editors believe this volume, and the essays herein contained, may help further feed an already ample debate, in Spain, in Italy and in the better part of the rest of the world. The public library certainly was an institution and organisation which played a prominent part in 19th and 20th century European history. And still today it has its place in an extremely relevant field from the conceptual, metaphorical, symbolic and documentary standpoint, as it can be seen for instance in the countless plans for large public libraries both envisaged and realised, whose often uncertain and problematic specific identity brings to the fore the tensions and torsions of a classical model spoiled by criticalities of different sort and kind.

It is indeed for its relevance for socio-cultural as well as LIS studies, that we believe this subject to be rather interesting and topical, and thus we hope these early results may resonate with the different interest groups this book addresses, that is academic scholars, professional librarians, students from diverse educational paths.

Turin - Badajoz, April 2016

Margarita Pérez Pulido
Maurizio Vivarelli

HISTORY, PRESENT AND FUTURE OF THE PUBLIC LIBRARY

The Public Library in Contemporary Society: Analytical Tools

Paolo Traniello*

On 3rd March 1818 Ugo Foscolo exiled in England wrote to Quirina Mocenni: «Qui non hanno pubbliche biblioteche»¹. His complaint, voiced in what would be the birthplace of public libraries in Europe, was justified because at the time in London there was no institute as such, aside from the largely incomplete (and at any rate differently aimed) British Museum. On the other hand, though it is not so well documented, Foscolo was familiar with the Italian libraries created between the sixteenth and eighteenth century, the same libraries that still today make up the majority of the so-called group of “public state libraries”. Libraries that had originated from scholars’ bequests or sovereigns’ grants, all created with clear purposes of public service even if the actual extent of this offer to the public is yet to be studied. Foscolo himself, but he surely was not the only one, witnessed during his English sojourn the growing inclination of that society, already dragged into the irresistible process of industrialisation, to make a more and more widespread use of written communication until it took the shape of “a nation of readers”, according to an expression Giuseppe Pecchio used in the 20th century², which is echoed, albeit with no depended relationship, in the title of a seminal study by William St Clair: *The Reading Nation in the Romantic Period*, published in 2004 by Oxford University Press. Reading was experienced both in

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1 «Here they do not have any public libraries» [TN]. See in the national edition of his works (Firenze, Le Monnier, 1949-1994) letter no. 2240 in the *Epistolario* (v. 7, 1816-1818).

2 This definition can be found in the dissertation *Sino a qual punto le produzioni scientifiche e letterarie seguano le leggi economiche della produzione in generale*, published by Pecchio in Lugano with Ruggia in 1832.

family gatherings as well as in such social forms, like coffee-houses, books clubs or library societies, but not in libraries freely open to the public (nor, after all, a public education system until 1870). Yet that nation of readers would have seen the institution of public libraries only over thirty years later when 1850 Act was passed.

The legislative definition of the institution was actually preceded and followed by a recognition of the existing situation and a debate on the goals to achieve and the means towards their fulfilment, which was one of the most intense moments in the political discussion on libraries in the contemporary world. It was prompted by such qualified representatives of English political *élite*, like Joseph Brotherton, George Hamilton and namely the promoter of the Act, whose name is invariably tied to, William Ewart, to name just a few, with the help of the librarians called to testify during the committees' work: first of all, the very active Edward Edwards, who had authored a comparative statistic study between European and British libraries and was a qualified witness of 1849 Select Committee, and Antonio Panizzi who, though from a very different standpoint from the idea of public library, would be able to provide a key-input to the definition of libraries as a public service, both in 1836 Parliamentary Commission on the British Museum and in 1850 Select Committee. On the content of these debates we shall not here analytically linger on³. However, we may assert that throughout this very complex, even if ultimately rather rapid, process of institutional elaboration a type of action clearly stands out, which belongs to the category Weber defined as «goal-oriented rational actions» also supported by what – again in Weber's terms – is called «formal rationality», presiding over the assessment of the means to use with regard to the set purpose or purposes. For the public library these means basically consisted in the citizens' financial participation with a local tax; a certainly insufficient measure in its early provision that was rapidly and considerably changed, but that succeeded in placing the library amongst the local public services from the start, thus planting a seed of profound transformation in its own core⁴.

3 I shall refer to chapter IV (*La nascita della "public library"*) of my *La biblioteca pubblica. Storia di un istituto nell'Europa contemporanea* (Bologna, Il Mulino, 1997), with the references to sources therein contained.

4 Paradoxically, this key aspect was clearly understood, even if he argued *e contrario*, by one of the most fiery and picturesque representatives of the conservative benches in the House of Commons. In a session on 13th March 1850 during the debate on the law on free libraries, colonel Charles Sibthorp, a Member of Parliament for Lincoln constituency known for his radically anti-progressive positions, after a reckless statement of hate towards reading, declared that he was willing to offer his "mite" for the more disadvantaged classes regardless, but that he could absolutely not understand «how one halfpenny in the pound would be

It is important to remark that the actually achieved purpose, proving undoubtedly fruitful in the industrial age, that is the institution of libraries as a public service, factually took on a different form from those variously introduced in the debate, often bearing reasons we may call 'superstructural', like the ones aimed at improving behaviours on the moral level or the progress of working classes. Such goals proved more or less alien to the actual potential of libraries, whereas what was really cogent, that is public service – or if one wills libraries as a public good, was not only realised, but it deeply marked the cultural development of those societies who had embraced it. The definition of this goal, i.e. the institution of public libraries, did not solely depend on the individual will of its promoters, but it was the result of a process where the historical background of British society had an instrumental part. On the other hand, when the institution took place in a context where the available resources were invested in infrastructures other than those devoted to free access to reading, then the various proposed goals, even though driven by high purposes and posited as models to pursue, were impossible to attain because they were not supported by an assessment of the necessary means.

In Italian society, as well as in many other European countries, similar goals to the ones of public libraries had been introduced in popular libraries back in the 19th century. But since no-one went ahead identifying the necessary means to actually reach the key purpose, that is creating a public service where all the resources necessary to develop in an industrial society could be directed, it was only very recently that it was partially achieved, and its stated ends, adding to that goal, mostly remained on an abstract or one might even say ideological level. This phenomenon is all the more clear in republican Italy, where the constitutional principle conferring regions the authority on local libraries, oblivious of the relation between public libraries and local services that was well established in other parts of Europe, even when it was finally effective along with the creation of a regional system, it did not lead however to the actual institution of public libraries. This is indeed what can be inferred from some formal aspects that may only seem secondary, such as the persisting denomination of 'local library' instead of 'public library', a term that in our legislation is solely used for state libraries, with a terminological cha-

enough to enable town councils to carry into effect the immense powers they were to have by this bill» (Hansard, *Parliamentary Debates*, 1850, March 13, col. 839). Aside from the matter of the issue, one cannot help noticing that his observation on the method was correct and in fact the amount of the tax burden was almost immediately increased. Not such a regressive attitude, although a more realistic one and at any rate responsive to economical calculation would have perhaps benefited the proponents of people's libraries in continental Europe, exponents for the most part of politically progressive stands.

os that did not fail to yield a poor outcome in the most recent history.

If we then move from a mainly institutional analysis to the field examination of the actual behaviours of public library goers, we must admit to a fact that is hard to deny: i.e. libraries are amongst cultural institutions the ones where the recipients' actions less directly correspond to the goals assigned through normative instruments (for instance, regional laws) or also resulting from the proposals of renowned associations (for example AIB, or IFLA) or from academic elaborations.

While the use of an archive is unlikely to go beyond the consultation of preserved documents, at least in its main aspects, and that of a museum is mainly aimed at observing the objects on display (in spite of all the cultural and educational activities that it may offer), the possible use of a library, especially of a public library in a contemporary sense, is very diverse and difficult to narrow down to one way alone. Since also in our country, or at least in part of it, several architecturally impressive libraries have been created, alongside - or even as a consequence of - the reform of local administration in the 1990s, one can easily observe a large increase in public library attendance, as the most permanently frequented public places in local communities. On this matter, it was justly remarked that where new public libraries were created, they became primarily places to socialise, where events tend to naturally develop into different kinds of projects. These behaviours, even if quite fluid and hard to ascribe to specific types, that have led to think of public libraries in terms of forums, would deserve to be more closely studied than what has heretofore been done, insofar as both empirical analysis and sociological reflection. Another Weberian category may fit the case, again referred to the analysis of social action: *community acting*, intended as a kind of action supported by an orientation with a view to one's own or other people's interests, however without corresponding to an institutional shelter for such interests. Community acting does not merely consist in a united action, driven by sheer collective conditioning (like opening an umbrella when it rains) or by simple imitation, but it must encompass a conscious reference to other people's actions without this reference being previously regulated or established⁵.

However, in order to further delve into our topic, we need to take a closer and unbiased look at the real and prospective public's behaviours in a library to try and analyse the uses that can be made of this facility in relation to its space. This issue, at the heart of any reflection

5 For further information of the Weberian notion of «community acting» refer to: *Über einige Kategorien der verstehenden Soziologie*, in: *Gesammelte Aufsätze zur Wissenschaftslehre*, Tübingen, Mohr Siebeck, 1985; Italian translation *Alcune categorie della sociologia comprendente*, in *Il metodo delle scienze storico-sociali*, a cura di Pietro Rossi, Torino, Einaudi, 2003, p. 181-239 (201 ff.).

on libraries, is today posited quite strongly in our country, where we have witnessed the creation of new public libraries in aesthetically and functionally remarkable buildings, sometimes as a result of the recovery of previous historical buildings, at times resorting to industrial archaeology, and the impetuous development of information and online technologies that brought along services automation, thus directly including libraries within web resources. I believe such behaviours can be organised in a typology ranging from a minus to a plus with regard to the use of the library as a space, comprising within the library space also its collections. On a lower level, there is the purely external use of the library. This is indeed how libraries are used online, from browsing their catalogues to utilising information services or social networks, up to consulting digitalised online documents. We shall note in passing that this more advanced technological use of the library is also what more directly questions its purposes and its very existence as a physical facility. On a second level, there is a way of using the library from the outside to the inside, accessing its inner physical space but not its collections. Indeed, it mostly concerns the different types of activities and events (talks, debates, concerts, screenings) the public library commendably undertakes. Then there is a use from the inside to the outside. This includes loan services, one of the most frequently targeted uses to assess the efficiency of the service provided by the inside space as a group of collections. Finally, there is a purely inside use of the library space. Except for the children's case, which ought to be addressed separately, this kind of usage is first of all that of the user who consults catalogues and online resources, classifications and reference services to find documents within the collections and read them in the library, if need be comparing them with one another. What can be considered as the proper use of a library, however, comes with, and is by far outnumbered by, the use that is perceived as a less appropriate, or even inadequate, though even more directly involving the inside space, that is when people read and study material not coming from the library collections. Not taking this behaviour, so blatant and significant, into sufficient consideration means overlooking what is by far the prevailing use of the public library seen from the inside, as a space. If indeed the library as an equipped space is predominantly utilised for studying, it is all the more true that studying mostly does not require its material, that is to say that the behaviour we may observe in the library (unlike, as said, archives and museums) does not correspond to that suggested by the institution and pursued by assigning resources to form its collections. The library is a meta-communication facility and is used as a place for independently organised learning, instead.

Facing such a relevant social phenomenon, the question we must find an answer to is therefore precisely outlined: why do students

study in libraries since they do not - or very little - use their collections? The most immediate answer cannot but be: «Because libraries are study places». Then, another question immediately arises: «What does a 'study place' mean, what is the relation between studying and a place?». An answer can be found considering how anthropological places are described in a recent and very popular hypothesis by French anthropologist Marc Augé, i.e. as opposed to «non-places»⁶. He qualifies them as identity-making, relational and historical spaces, such characteristics that libraries, especially Italian ones, more or less tend to match. But how do these characteristics affect the studying? These topics must be addressed and analysed, also from a philosophical and psychological standpoint, as far as the general issue of the relation between human actions and the surrounding space is concerned. But also from a purely empirical perspective we may note, for instance with regard to relations, that students for the most part do not go to libraries on their own but with someone else or in small groups, and these relationships persist, despite not being straightforwardly expressed, during their activity in the library. The students who attend libraries recognise themselves as members of the locally-based community the library as a study place belongs to. Thus the public library study place as part of the local community is prompted to become a kind of forum, albeit considerably reducing its scope compared to a claimed general sociality.

Is the use of its inside space alone, though including all the other events the public library hosts, enough to economically and politically justify the existence of a facility that clearly cannot only be preserved but that also requires multiple and constant adequate investments? Or do we have to resign to the idea that the growing digital revolution will end up cannibalising the library itself? Or yet does the preservation of a local community-oriented physical space where people can study bear in itself a value worth defending? They are crunch questions I personally cannot give certain answers to; on the contrary, I believe that there is no straightforward and ultimate answer, but it rather depends on the sure rapid development of the cultural situation within today's complexity.

(Translation by Jennifer Cooke)

6 MARC AUGÉ, *Non-lieux. Introduction à une anthropologie de la surmodernité*, Paris, Éditions du Seuil, 1992.

The Public Library Today: State of the Art as an Ethical Organization

Margarita Pérez Pulido*

Introduction

This paper is part of a study carried out after the reading of Luis Anglada's article *Are Libraries Sustainable in a World of Free, Networked, Digital Information?* published in «El Profesional de la Información» in 2014¹. Starting from his own concept of sustainability («the capacity of endure over the time»), the author argues that libraries are less sustainable with the past of the time, if we consider the sustainability as the relationship established between the value added and the management and maintenance costs. The current period that libraries are experimenting, characterised by the digitalization and the use of electronics resources, is very expensive from an economic standpoint and, nevertheless, the society continues linking them to the physical space and to the management of “printed books”.

Another interesting aspect that the above-mentioned article refers, lies the key element defended by the author in order to achieve the sustainability of the libraries: the perception. According to Anglada, the sustainability is related to a mental attitude, the perception of the library, that is forged by different groups of interest. In order to achieve the sustainability of the library it is necessary to refer to the emotional

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1 LLUÍS ANGLADA, *Are Libraries Sustainable in a World of Free, Networked, Digital Information?* «El Profesional de la Información», 23, 2014, 6, p. 603-611, <<http://dx.doi.org/10.3145/epi.2014.nov.07>>.

side and not only to the use of facts and rational data. Upon the arrival of new technologies, the role played by libraries has faded away over the time due to users' perception and, subsequently, it should be developed a mental image of the library in the society as an organization that transforms the information in knowledge, instead of a physical space that contains information in different supports.

The last aspect of interest refers to the library as organizations that, nowadays, extol the values of sociability and intermediation and the sustainability depends of the capacity of showing these values independently of the value attributed to them and the information presents in the library. In this sense, it is necessary carry out an analysis of the library, not only from an economic and social point of view but from an ethical one as well.

The perception of the public library, therefore, respond to the emotional part of the user and those who keep it and the ethical analysis is seen as a value for knowing and evaluation the library as organization and its capacity of endure over the time.

Starting from Anglada's considerations, explained in the above-mentioned article: the sustainability in the sense of enduring over the time and its evaluation from the premise of relationship value - cost, the perception as fundamental element of the analysis, and the adaptation to a new paradigm about the identity of the public library, we can establish the fundamental points of analysis from the ethical perspective by using the following questions:

- Does the evaluation of the ethical values in a library contribute to its sustainability?
- Does the management of the Social Responsibility as ethical value contribute to change the perception of the library as organization?
- Does the application of ISO 26000:2010 favour the management of the complexity of the public library?

The proposal in this paper refers to the realization of an analysis of the perception of the library as organization, which expects the sustainability of the application of the social responsibility as ethical value regulated in a recognize ISO(26000:2010) in order to give a visibility to the community that serves and to the society in general.

Values, social responsibility and sustainability

From a conceptual perspective, when we speak of value of the public library, we can refer to the economic, social or ethical value. The last one inspired our aim which is to provide an answer to the aforementioned questions. For this reason, we will start establishing a difference between economic or social values and ethical values,

between the concepts of social responsibility and sustainability.

A difference between the social, economic and ethical value of the library is found in the norms that rule its management and evaluation. In this way, the economic and social value is related to impact studies and it is evaluated through the ISO 16439:2014 and the ethical values, explicit in the codes of conduct, can be evaluated by applying the ISO 26000:2010, a guide of social responsibility management.

According to Di Domenico, the ISO 16439:2014 is valid for the strategic planning and quality management in libraries, promotes the value of the library for learning and educational, cultural, social and economic research, and for taking political and financial decisions at services and strategic levels². Hence, the analysis of the impact can generate changes in individuals, institutions and the community where the library is located. From this point of view, the ISO 26000:2010 proves that the ethical principle of the social responsibility is not only related to the society but to the organization and professionals as it is outlined by traditional codes of conduct, and it helps to the ethical management of the library.

Ridi expresses it in this way: «the library can represent at the same time an economic value for the community (measured by the social impact) and the deontological value as result of the searching of the social consensus in the application of the social value»³. The impact is a norm of quality management and social responsibility. It is a deontological norm and both can be complementary in the evaluation of the public library. Both Ridi and Di Domenico⁴ find elements in common: the union with the society and the decision about what types of impacts must be intensified in a library.

The social responsibility is an ethical principle applicable to an organization that leads into values that may be managed⁵. It is an ethical principle in opposition to the Social Utility (the profit for the majority) as all the parts involved are taken in consideration, including the minorities.

In this sense, it is interesting to approach the concept of public library as a Good. According to Di Domenico⁶, it is possible to establish

2 *L'impatto delle biblioteche accademiche: un progetto e un seminario*, a cura di Giovanni Di Domenico, Roma, Associazione italiana biblioteche, 2014.

3 RICCARDO RIDI, *La responsabilità sociale delle biblioteche: una connessione a doppio taglio*, «Biblioteche oggi», 32, 2014, 3, p. 26-41.

4 G. DI DOMENICO, *La responsabilità sociale nella gestione delle biblioteche*, «Bibliotime», 14, 2014, 1, <<http://www.aib.it/sezioni/emr/bibtimenum-xiv-1/didomenico.htm>>.

5 ALDO OLCESE - JUAN ALFARO - MIGUEL ÁNGEL RODRÍGUEZ, *Manual de la empresa responsable y sostenible: conceptos, ejemplos y herramientas de la Responsabilidad Social Corporativa o de la empresa*, Madrid, McGraw Hill, 2008.

6 G. DI DOMENICO, *Conoscenza, cittadinanza, sviluppo: appunti sulla biblioteca pubblica come servizio sociale*, «AIB studi», 53, 2013, 1, p. 13-25. DOI: <http://dx.doi.org/>

a characterization of the Good in such context and with different tradition depending on the countries: public good, social good, private good and common good. Following this typology we can define the knowledge as common good and the library as public social good financed by the State or the community of reference and with useful services for such community or cofinanced both by the community and an external third party supported by the State.

If we promote the library as social public good we are outlining the library as a public physical space (or virtual), a formative and informative supply for all the groups of the community of reference, that contains useful services for the community which allow the claim of its fundamental rights, and contribute to its social and economic development.

The sustainability is a philosophy of behaviours and management principles (sustainable development) in order to preserve the future based on three pillars: social, economic and environmental. We have already commented that according to Anglada⁷ the evaluation of the sustainability of the library consists in analysing the relationship between the value added and the cost. He maintains that the sustainability of the library lies in the capacity of showing that libraries provide values not only related to printed books and physical documents, and also he affirms that with the new technologies the role of the libraries has been devaluated over the time: this means that libraries were more sustainable in the past than now.

The social responsibility is the practical application of the sustainability in a specific organization in relation to the ethical behaviour of its members, to the society, the community and other organizations, and to those who support them. This approach entails a model of internal and external management in the institution and a normative system beyond the legal or purely managerial perspective. We measure the impact of a library (economic, social and cultural) in order to see if it contributes to the development of the community, but if we associate the concept of sustainability to a library, we are also measuring it from the ethical point of view, applying, with the social responsibility, principles and ethical values as part of the sustainability development (Fig.1).

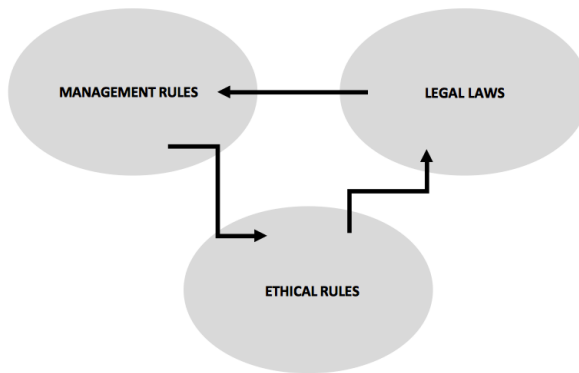


Fig. 1 - Sustainable Management of the Library

Regarding the ambit of the public library, in 2012 the Declaration of Glasgow on libraries and sustainable development⁸ already recommended to libraries and general information services to promote the free access to the information, to respect the equality and the environment, to recognise the importance of the access to education for everybody, the learning along the life, to preserve the intellectual freedom, to respect user's privacy, to reduce the inequality through the cooperation in networks and, generally speaking, to defend the principles of sustainable development. Nowadays, these are ethical values present in all codes of conduct of our profession.

Recently, as part of the Agenda of Development post - 2015 the United Nations, IFLA recognised in 2014, as consequence of the contribution of the libraries to the sustainable development, the inclusion of the access to the information to facilitate the exercise of the information right, propitiate the access to the cultural heritage or help the government to achieve the development targets, 7 big targets, nowadays converted in 17 according to a document recently approved by the United Nations⁹, in which the library has increased its leading role regarding the information access, the wealth fare in the education, the sustainably development, the sustainable economic, the equality of development and its capacity to prevent the poorness.

⁸ IFLA, *Declaración acerca de las Bibliotecas y el Desarrollo Sostenible*, Glasgow, 2002, <<http://www.ifla.org/ES/publications/declaracion-acerca-de-las-bibliotecas-y-el-desarrollo-sostenible>>.

⁹ *Sustainable Development Goals*, 2014, <<http://sustainabledevelopment.un.org/index.php?menu=1300>>.

Evolution of the ethics in the library: the ISO 26000:2100. Guide of the social responsibility

The public library as organization has to gain the social legitimation and for this it must respect the rights recognised by the society and the values shared in such social context. Demanded and expected values are socially integrated in three different levels: individual level, through the individual shared values; organization level, through the activities carried out directly by the organization; social level, as part of the society where the library operates.

The ethical management of a library, nowadays, must have continuity in the quality management. The application of an ethical standard to the management of the library provides a value added: it shares the values with the society, reinforces its integration, increases the sustainability and intensifies the reputation¹⁰.

Traditionally in the business world standards for the certification of the ethical management have been applied, i.e. the Social Accountability 8000 (SA 8000), a process that is developed through an audit in which the Social Organizations, NGOs and trade units have a leading role in order to achieve such certification. The audit process in this case is similar to quality management processes, and for this reason the ethical evaluation is considered an extension of the implemented quality management system.

However, we are not in favour of using this ethical evaluation system (certification) for the public library due to its own philosophy of public Good, that is far away of the private business parameters. Nevertheless, we believe that it is necessary to build a solid process of evaluation linked to the specific quality management system of the library. For this reason, the recent ISO 26000:2010 can contribute to an evaluation from the ethical point of view of the public library, due to the fact that this ethical standard is not certifiable (fundamental principle of its creation) and it doesn't constitute a management system rule (as the rules that analyze the impact) but is compatible and complementary to the rules and quality management models (EFQM).

The ISO 26000:2010 is an international standard¹¹, through which it is possible to make a comparison between different institutions, to analyze the ethical behaviour of the library based on ethical norms and the behaviour rules commonly accepted by everybody (human rights) and to contribute to sustainable development management (i.e. we can consider sustainable to introduce an ethical conduct in

10 ANGELES LÓPEZ CABARCOS - PAULA VÁZQUEZ RODRÍGUEZ, *¿Puede certificarse el comportamiento ético? SA 8000*, «Investigaciones Europeas de Dirección y Economía de la Empresa», 8, 2002, 2, p.133-148, <<http://dialnet.unirioja.es/servlet/articulo?codigo=306041>>.

11 INTERNATIONAL STANDARD ORGANIZATION. ISO 26000:2010. *Guidance on Social Responsibility*, <http://www.iso.org/iso/catalogue_detail?csnumber=42546>.

the training programmes, ensure the free access to the information or elaborate codes of conduct).

We can establish a general performance standard of the ISO 26000:2010¹². It is based on seven principles or fundamental pillars for decision making, according to a perspective oriented to the realization of ethical behavior. These principles are: accountability, transparency, ethical behaviour, respecting the interest of the group, respecting the legality principle, respecting international rules of behaviour and human rights. Taking in account these principles, the norm enumerates seven core subjects where specific social responsibility actions occur: Organizational Governance, Human Rights, Labour Practices, The Environment, Consumer Issues and Community Involvement and Development and Fair Operations Practices (relationship with stakeholders, providers, customers, competitors, other organizations). Each operational area is described in detail and it is fully defined, and gives rise to the identification of a series of ethical conducts and good practices (Fig. 2).

We can provide some examples of ending war conflicts and good practices related with each of the areas included in the ISO standard. These examples are grounded in preliminary studies of the Ethical Group of the Spanish Society of the Documentation and Information (Sedic), and they were undertaken in order to elaborate the professional code of conduct, which consisted in an inquiry about ethical values. Professionals were questioned about specific ethical conflicts and good practices cases experimented by them in their workplace¹³.

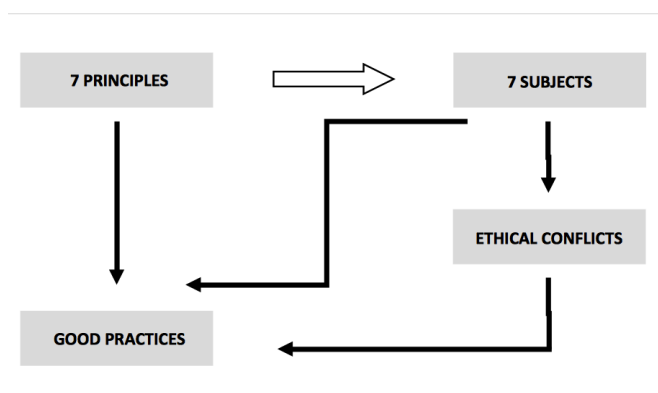


Fig.2 - Graphic of ISO 26000: 2010 operation process

¹² *Principios, prácticas y beneficios de la responsabilidad social*, coords. Jesús Morena Olías, Yolanda Villaseñor Sebastián, Madrid, AENOR, 2012.

¹³ SOCIEDAD ESPAÑOLA DE DOCUMENTACIÓN E INFORMACIÓN. GRUPO DE TRABAJO DE ÉTICA, *Hacia un código deontológico común: resultados de la encuesta. Seminario de Análisis*, en: *Jornadas Españolas de Documentación: una profesión, un futuro*, Málaga, 25-27 de mayo de 2011, <<http://www.sedic.es/Fesabid-2011-codigo-deontologico.pdf>>.

The first subject treated in the ISO 26000:2010 is *Community government*. The management of the community recommends the accountability, the transparency, the declaration of mission, vision and values of the library, the elaboration of a code of conduct, the definition of measurable objectives, of actions and of specific projects, with particular reference to procedures and processes. The group has identified, as examples of ethical conflicts, the existence of strategic plans without values and of uncompleted internal rules, the lack of acceptance of the ethical concepts by professional librarians, and, as examples of good practices, the elaboration of services lists, creation of groups for conflicts resolution, diffusion of good practices through the intranet (Fig.3).



Fig. 3 - Relationship among the core subject 1, ethical conflicts and good practices

The second core subject is *Environment*, which, according to the description that appears in the standard, is related to pollution prevention, to sustainable use of the resources promotion, and to the mitigation of the climate change and of the protection of the biodiversity. The identification of ethical conflicts in a public library according to this matter can be related, for example, to the use of air conditioning systems that use electricity generated from fossil fuel, instead of low consumption electricity system; or to the fact that old computers aren't replaced. The good practices can be represented by the use of recycled materials, divulgation of environmental information and creation of the so called "green libraries" (Fig. 4).



Fig. 4 - Relationship among the core subject 2, ethical conflicts and good practices

In the case of the third core subject, *Human rights*, we can identify these actions related to the rights of the 1st, 2nd and 3rd generation, and to those which are not contained in the Charter of Right, but that have been incorporated into such document through conventions and declarations undertaken from the sixties to our days (peace, multiculturalism, environment). In this case, ethical conflicts in public libraries can be related to the neutrality principle, such as the protection of minority issues not contemplated in the formation of the collections manager's censorship, due to ideological reasons, unequal access to the information, prohibition of internet, discrimination on users. The good practices can be the actions undertaken by the library in relation with countries that have suffered major disasters, or that they need to build new libraries, or a strict acquisition policy (Fig. 5).



Fig. 5 - Relationship among the core subject 3, ethical conflicts and good practices

In the case of *Labor practices* (core subject four) it is advisable to take in consideration library employees' work conditions, the social dialogue to find solutions to these issues, the training, the health and safety conditions. In this way, eventual ethical conflicts that might appear are related with workers' levels and categories, employees' training and retraining, irregular recruitment, staff management and assignation of tasks or respect among colleagues. The good practices would be the explanation of the code of conduct to new workers incorporated to the organization, equal genre practices, fair promotion of employees (Fig. 6).

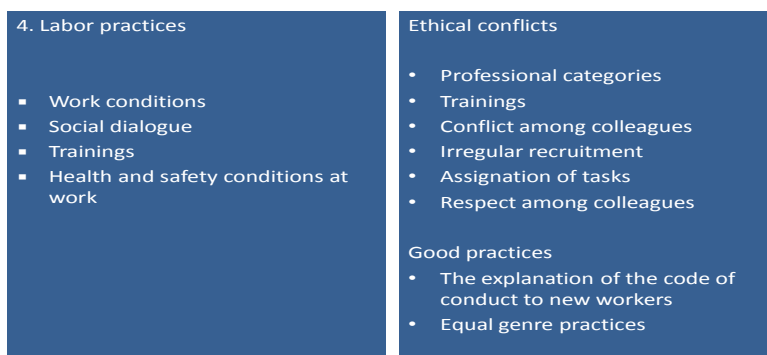


Fig. 6 - Relationship among the core subject 4, ethical conflicts and good practices

Regarding *Users* issues (core subject 5) we should take in consideration the privacy, the knowledge of user's information needs, users care services, access to information and trainings. In a library, many cases of ethical conflicts are associated to preserving users' data and privacy regarding books search and borrowing data. We can highlight, among the good practices, the participation of users in the development of collections, to provide documents to external users without restrictions through the website (Fig. 7).

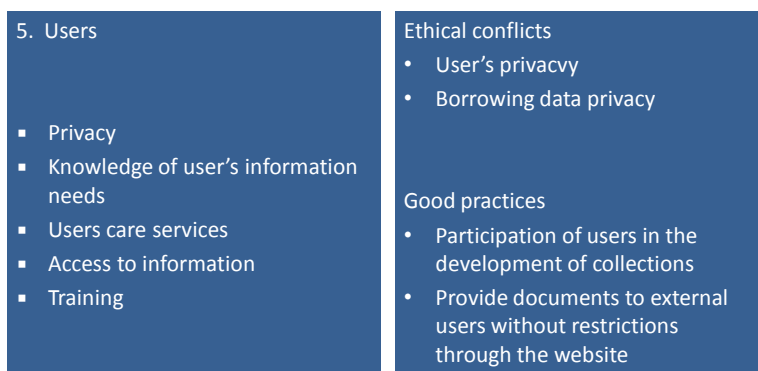


Fig. 7 - Relationship among the core subject 5, ethical conflicts and good practices

Regarding the *Community involvement and development* (core subject 6) we can consider ethical the cooperation with other organizations, associations, NGOs, or programming information literacy activities, or working with local providers, or developing partnerships with the voluntary sector or promoting cultural activities. In this case, the ethical conflicts detected are referred to unplanned digitalization activities, or to the lack of attention to minorities. The good practices are related to the attention to emigrants and disadvantaged groups, to disabled people and to the establishment of programmes on information literacy (Fig. 8).



Fig.8 - Relationship among core subject 6, ethical conflicts and good practices

In the fair *Operational practices* (core subject 7) the rule recommends the cooperation, the associationism, the respect of the physical and intellectual property, the adoption of fair marketing practices and of fair contractual relationships. Thus, ethical conflicts detected among Spanish professional are related to the incorrect use of associations, the influence of the publisher company in the development of the collections, the lack of respect to licences agreements of the digital resources, and to plagiarism. Good practices are related to cooperation with others institutions, to respect of intellectual property and to the provision of data to other communities as a specific service of cooperation (Fig. 9).



Fig. 9 - Relationship among core subject 7, ethical conflicts and good practices

Methodology for the implementation of the ISO 26000:2010

In order to put into practice and integrate the Social Responsibility in the library, according to this ISO standard, it is necessary to understand the principles, identify the cores subjects, detect the ethical conflicts and developing solutions with the creation of fair practices. From this methodological perspective, the implementation of this standard is based on two fundamental ideas: the approach of the interest groups and the respect to the current legislation and international laws. The ISO standards divided into four phases, with different methodological characteristics: the theoretical base, the study of the stakeholders, the internal management procedure and the communication.

- 1) *The theoretical base.* It is necessary to know rules, directives, declarations, national and international legislations and international codes of conduct. A library as organization must consider the assumed commitments with the Social Responsibility, these commitments can be reflected in the codes of conduct, in the directives, in the legislation or in the association membership (Fig.10).



Fig.10 - Methodology for the application of ISO Standard. Theoretical base

2) *Analysis of stakeholders.* We must identify stakeholders and take in consideration how their decision impact and how they interact with the society, to detect the possibility of an ethical conflict, through quantitative and qualitative methodologies. The study of the user must comprehend the potential and the real users, face-to-face and virtual users, and active and passive virtual users (Fig. 11).



Fig.11 - Methodology for the application of ISO. Analysis of stakeholders

3) *Internal management procedure.* It is important that Social Responsibility is embedded with management, systems and processes of the library. As we have already commented, the standard of ethical evaluation is compatible and complementary to the quality management rules. The library works with a model of quality management, and this facilitates the incorporation of

Social Responsibility into the structure of the organization, into its mission, vision and values. Similar approaches are referred to the description and development of processes and procedures (Fig. 12). In these last ones we can identify, for example, ethical conflicts related with the cataloguing process and services.

In this manner, the adaptation of the EFQM model and the evaluation of the impact provide information to the ethical evaluation process, and, in the same way, studies of the values help to identify the ethical conflicts and good practices, and to elaborate codes of conduct. It may be useful to the preparation of other instruments of ethical nature, as services charters, work teams and ethical conflicts resolutions. The application of quantitative and qualitative indicators measures the ethical management, and any other qualitative research technique helps to achieve more information (interviews, observation, focus groups, networks analysis).



Fig. 12 - Methodology for the application of ISO. Internal management procedure

- 4) The last part of the methodology, *Communication*, helps to be aware about the strategies, performances and challenges of the Social Responsibility. It is useful for committing, for creating a dialogue, for showing how the commitments are fulfilled; it facilitates the information about impacts in activities, product and services; it eases the comparison, increases the visibility and the reputation of the library. The internal and external communication strategic must be analysed and we have to take in the consideration the diffusion of the outcome of whatever study, analysis or the investigation carried on in the library, especially the so called “studies of values”.

The over-mentioned study about ethical values of the Spanish pro-

professionals¹⁴ aimed to understand, in a general way, the importance of the ethic in the profession and, in particular, in the organizations. It consists in an investigation about the transmission of basic behaviours based on such values, trying to understand if they are considered necessary for activities, and professionals' making-decision processes in their workplace.

In the following table (Fig. 13) we can appreciate the importance of values for functioning of institutions, minimizing the importance of those related with technical processes (borrowing, classification) and with relationship with authority.

Valores	Política de dirección	Política de adquisiciones	Clasificación y descripción	Política de préstamo	Relación con los usuarios	Relación con la sociedad	Relación compañeros	Relación superiores	Relación instituciones	Conservación	Seguridad información	Multiilingüismo/Multiculturalidad
Muy poco	30	20	35	28	11	18	15	25	14	21	18	35
Poco	29	30	59	41	13	22	22	31	30	32	21	40
Algo	62	139	192	136	38	61	77	80	101	125	59	116
Bastante	246	313	308	314	186	206	246	288	292	280	192	271
Mucho	366	224	129	201	485	424	373	306	291	273	440	259
N.S./N.C.	16	23	26	29	16	18	16	19	21	18	19	28
Total general	748	748	748	748	748	748	748	748	748	748	748	748

Fig. 13 - Importance of the ethical values for functioning of the institution
Source: *Hacia un código deontológico*, 2011.

In relation with the diffusion of ethical values in the institution, Spanish professionals say that it happened through the ethical values, the mission and the vision of the institution and the current legislation, and to a lesser extent, by the managers' behaviour and the professional librarians (Fig. 14).

We can appreciate how the ethical behaviour is related to the management of the quality, and how Spanish professionals perceive a difference between legal rules and ethic values, or how the ethical practice is based on the common ethical behaviour to both the group in each case and not on the professionals codes of conduct.

14 SOCIEDAD ESPAÑOLA DE DOCUMENTACIÓN E INFORMACIÓN. GRUPO DE TRABAJO DE ÉTICA, *Hacia un código deontológico*.



Fig. 14 - Diffusion of ethical values in the institution
Source: Hacia un código deontológico, 2011.

When Spanish professionals were questioned about initiatives related with ethical values implemented in their organizations they mention, first of all, quality plans, list of services and ISO and EFQM certifications, that is to say, they link quality management and ethical management in their organization, as we have already commented. Other initiatives are deontological commissions, ethical codes, work groups and the area of social responsibility.

Other example of studies of values dates back to 2014¹⁵, and are referred to the perception of issues of professional ethic among managers of the institutions in Extremadura. They were asked about the importance of some ethical values previously extracted from codes of conduct. In relation with libraries, they answered by the following priority order: access to the information, privacy and professionalism and, to a lesser extent, intellectual freedom and respect for the cultural and ideological diversity. Issues related to protection of copyright and loyalty to the organization were the less valorised (Fig. 15).

¹⁵ NEREA NIETO PINO, *Ética profesional: análisis de percepción en los profesionales de la Comunidad Autónoma de Extremadura*. Trabajo Fin de Grado, realizado bajo la tutela de la profesora Margarita Pérez Pulido, Setiembre 2014, <<http://hdl.handle.net/10662/2160>>.

%N=21	Valores	Muy importante	Bastante importante	Importante	Poco importante	Nada importante
Biblioteca	Privacidad	91	9	-	-	-
	Profesionalidad	82	18	-	-	-
	Acceso a la información	100	-	-	-	-
	Libertad intelectual	91	9	-	-	-
	Respeto a la diversidad	91	9	-	-	-
	Respeto a la diversidad cultural e ideológica	64	36	-	-	-
	Calidad del servicio	45	45	10	-	-
	Conservación	55	45	-	-	-
	Responsabilidad social y respeto al medio ambiente	27	73	-	-	-
	Formación continua	55	36	-	9	-
	Derecho de autor	27	46	9	-	18
	Lealtad a la organización	91	9	-	-	-

Fig. 15 - Importance of the ethical values among the librarians
Source: Nerea Nieto Pino, *Ética profesional*, 2014

Regarding the importance of different organization operations, the librarians of Extremadura coincide with the national survey in relation with the fact that they give more importance to the values related with users, and with relations of library with society. The technical processes are placed in a secondary position (Fig. 16).

%N=22	Valores	Muy importante	Bastante importante	Importante	Poco importante	Nada importante
Biblioteca	Procesos técnicos	32	41	18	9	-
	Servicios	68	23	9	-	-
	Relación con los usuarios	91	9	-	-	-
	Relación con la sociedad	86	14	-	-	-
	Relación con los superiores	59	23	13	-	5
	Relación con los compañeros	68	23	9	-	-
	Relación con instituciones semejantes	50	36	14	-	-

Fig. 16 - Importance of the ethical values for the organization operations
Source: Nerea Nieto Pino, *Ética profesional*, 2014

Librarians, when they were asked to identify the mode of communication of values, felt important the face-to-face communication and after this, the use other work documents and codes of conduct (Fig. 17).

N=19	Modo de transmisión de valores	Total respuestas	%
	Códigos éticos de asociaciones o de la propia institución	2	11
	Comunicación personal	9	48
	Otros documentos escritos	1	5
	Comunicación personal y códigos éticos de asociaciones o de la propia institución	1	5
	Comunicación personal y cursos específicos	1	5
	Comunicación personal, otros documentos escritos y sesiones de trabajo	2	11
	Comunicación personal y sesiones de trabajo	1	5
	Comunicación personal, códigos éticos, otros documentos escritos, sesiones de trabajo y cursos específicos	1	5
	Comunicación personal, otros documentos escritos, sesiones de trabajo y curso específicos	1	5

*Fig. 17 - Modality of communication of the ethical values in the organization
Source: Nerea Nieto Pino, Ética profesional, 2014*

In both studies of values, one with national range and another related to a regional area, the conclusions are the same: professionals haven't a clear representation of their ethical behaviour as part of an organization, and they tend to solve ethical conflicts recurring to their personal values. This implies that the management of the ethic in the organization needs to be normalised in order to give more visibility to a correct ethical behaviour.

Generally, values related to the society or to the users are considered more important than those related to technical processes or to the relationship with the authorities, but the importance of the society and community of reference, assumed as essential part of the ethical library management, not contribute to its visibility if we don't valorise the ethical values of the technical processes and the relationships with the authority like a important part of the ethic of the organization.

Finally, the values can be transmitted through written or oral documents, but most of the people thinks that they are incorporated to the own quality management of the institution, circumstance that, as we have already affirmed cannot be enough.

5. Conclusion

Through this paper we have tried to find an answer to those questions put in the introduction and that have the general objective of valorising the public library through the ethical management, in order to achieve sustainability.

In the survey about the values undertaken by the Ethical Group of Sedic, for the elaboration of a code of conduct in Spain, as well as the

other survey conducted in the Region of Extremadura, the majority of the ethical conflicts detected by the Spanish professionals are related with the ethics of the organization, it means, with the ethical behaviour of professionals as part of the organization. This means a necessity of change in the management of the ethic in order to improve library services, and consequently, the perception of the users. The ethical behaviour associated to the society and communities are highly estimated but the application of the ethic to the technical processes and the relationship with the authorities contribute in the same way, to the betterment of the institution and to the change in the users' perception, and the society perception in general.

In this way, we can say that the application of the ISO 26000:2010 identifies the ethical factors of change that join the social and economic factors previously analysed in order to achieve a deeper analysis of the complexity of the library. The ethical management, through the use of this rules, creates a unique methodology and a unique tool that favors the in depth analysis and the comparison, allows the identification of key factors for the libraries evaluation. Finally the results are intertwined with the outcomes of other management rules, equally focused to the sustainable development.

The ethical evaluation in the library as organization, according to the principles of Social Responsibility, takes in consideration the "emotional attitude" of citizens, supporters and workers of the library, from the perspective of ethical behaviours as factor of change and following the Anglada's utterances about the power of the perception.

The correct management of the public library as ethical organization guarantees the improvement of the visibility conditions to the society, fundamental element to achieve a sustainable library.

The Identity of the Contemporary Public Library. Theories for a Holistic Perspective of Interpretation

Maurizio Vivarelli*

Library is a growing organism
S.R. Ranganathan, 1931

1. Points of view. Public library and its identity

One of the most debated topics in the last years, is no doubt the analysis of the many factors changing the identity of the contemporary public library, from its conceptual model to its architectural shape, from its documentary features to organising and managing procedures, analysed from the different points of view that can be assumed in the general scope of library science¹. Hence this implies the definition and adoption of tools to evaluate and interpret the new contexts which are beginning to be outlined, and that entail the production and communication of information and knowledge, the nature of collections, the cognitive profiles of users and their styles of use, the new anthropological fields which must be taken into account so as to envisage, conceive and manage public libraries firmly rooted in their cultural, social and documentary environment. The radical

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1 An ample section devoted to a bibliographic framework on the matter, can be found in ANNA GALLUZZI, *Libraries and Public Perception: A Comparative Analysis of the European Press*, London, Chandos, 2015, especially in chapter 1, *Wondering about the future of libraries*, which also recalls a survey made by the American Libraries Association and relative to the period between 1998 and 2009.

nature of the ongoing transformations, however, makes the task library science is forced to take on really difficult and problematic, and this also implies the fact, at least obvious to the writer, that interdisciplinarity will become the necessary road we must take with true conviction, leaving all rhetoric behind. If one were to slightly simplify this argument one could state that, until not long ago, the quantitative import of the various service indicators was believed to be, on its own, a criterion one could base library assessment on, whose «effectiveness», whose ability to reach the goals set, was the clear, explicit, shared purpose to pursue, and on which the level of social legitimacy the library itself was able to achieve depended. A partial dematerialisation of the concept of collection, advancing new anthropological demands no longer based on the quality of custom services alone, a fragmentation of the models organising knowledge have raised a battery of problems, which not only regard the institutional public library as historically outlined since the first half the 19th century, but which also delve into the intimate nature of the concept of 'library' since its foundation in the early modern age, at least insofar as the cultural history of Europe is concerned². Moreover, the progressive definition of these problematic fields involves not only LIS studies or, in its more general aspects, the evolution of the models of selection, management and transmission of registered knowledge. It also affects the symbolic and metaphoric nature of libraries, which in its many visual and textual ramifications is at the heart of a wide connective tissue of relationships, them too culturally and historically defined. It is interesting to note, in that respect, that also in a recent film directed by Christopher Nolan (*Interstellar*, 2014), the library plays a very prominent role: it is indeed the communication surface of a small home library which is the place for contact and mediation with the complex space-time environment the lead character must venture in (Fig. 1). This simple and ultimately obvious realisation, however, further and significantly confirms how vital the conceptual and metaphorical dimension of a library can be, in its multifaceted dimensions, partly afferent to the limited confines of library science, and, to a much more relevant degree, to the wider and thick cultural and communicative context, that the library, since its farthest and mythical origins, certainly is no irrelevant part of.

2 For a general introduction to these topics an excellent approach is PETER BURKE, *A Social History of Knowledge: From Gutenberg to Diderot*, Cambridge, Polity Press, 2000, and *A Social History of Knowledge Volume II: From the Encyclopédie to Wikipedia*, Cambridge, Polity Press, 2012. On the crisis of the historical and institutional public library model a fundamental reference is PAOLO TRANIELLO, *Biblioteche e società*, Bologna, Il Mulino, 2005.



Fig. 1 - Picture taken from *Interstellar*, directed by Christopher Nolan, 2014.

Therefore, the library form takes on an important narrative role in *Interstellar* (but there could be many more examples), and this means that this form, in its historically and morphologically determined identities, still holds a relevant semantic and expressive potential, which is worth identifying, outlining, discussing, also exploring the heuristic possibilities of an oblique gaze, attempting to intersect the principles and methodologies rooted in the scope of library science with other imports, which would hopefully strengthen interpretative competences.

The specific purpose of this paper is to posit a string of considerations on the contemporary public library identity, on the *kind* of its physical and metaphorical *spaces*³; the object of this examination consists in its beginnings (well-rooted before the postmodern whirlwind), from the 'public' library in the sense scholar and librarian Luigi Crocetti (1929-2007) identified twenty years ago, i.e. a 'general', 'free', 'contemporary' one⁴. The perspective here proposed basically intends to observe the library from the inside, analysing, in general, all the traces of the different phenomena taking place within the uncertain boundaries of its space. With the expression 'library space', we shall here refer to the architecturally defined morphology of space, to the informative and documentary aspects of such space, and to its exten-

3 The reference, clearly, is to the book by GEORGES PEREC, *Species of Spaces and Other Pieces*, London, Penguin, 1999 (*Espèces d'espaces*, 1974).

4 LUIGI CROCETTI, *Pubblica*, in: *Il nuovo in biblioteca e altri scritti*, Roma, Associazione italiana biblioteche, 1994, p. 49-57, also published in *La biblioteca efficace. Tendenze e ipotesi di sviluppo della biblioteca pubblica negli anni '90*, a cura di Massimo Cecconi, Giuseppe Manzoni, Dario Salvetti, Milano, Editrice Bibliografica, 1992, p. 15-21.

sions in the digital environment⁵. We shall therefore examine many elements of a heated national and international debate on these topics, well aware of their wide scope and complexity, which certainly make a thorough and complete discourse difficult to pursue. This is why we shall preliminarily outline the structure of this paper, and the principles and methods used. First of all, by the term 'identity', whose polysemy is blatant, we shall refer to the features all the subjects attribute to the library, in order to identify its role, functions and special services. Leaving the intricate philosophical and lexicographic matters characterizing the concept and term in the background, we could define 'identity' as all the qualities pertaining to the library, which make a library, at least according to the use in the natural language, 'identical' to a conceptual and abstract model outlining its form. Identity, therefore, in a nutshell, indicates the «perfect equality» between two entities. Amongst the multiple meanings described in Treccani *Vocabolario*, for the Italian word 'identità', the closest ones to this linguistic use are two. The former is the one stating, about personal identity, that it consists "in being that one and not another". Hence, identity is what is established and proved through the correspondence between the subject's features and the elements described in a specific document, which is not coincidentally called 'document' or identity 'card'. The latter, stemming from the psychological and psychoanalytical field, defines identity as "the sense and self-awareness as an entity different from the others and persistent in time", and as "continuity of one's self"; and when the awareness of these elements diminishes there is an "identity crisis"⁶. We can then affirm that the library 'is' something (public, social, digital, participatory etc.), and that this 'something' identifies, specifies, differentiates, characterises its identity, physiognomy or, daring an even more idealistic term, its essence. The qualities associated to the library originally depend on an aesthetic act; it is on the preliminary basis of a perception that we come to formulate a judgement, be it personal, social, or one elaborated within a disciplinary field; and this judgement ultimately is of a relational nature, like when we state something is identical to itself: also in this case there is a reference - i.e. a relation -, even if a circular one. For this reason, in the end, we say that the library is something, and not something else; for this reason we can state that the library in its uniqueness corresponds to its prototype; finally, for this reason

5 On other occasions I defined this triple articulation of space with expressions such as architectural space, bibliographic space, digital space: cf. in this respect *Lo spazio della biblioteca. Culture e pratiche del progetto tra architettura e biblioteconomia*, a cura di M. Vivarelli; collaborazione di Raffaella Magnano; prefazione di Giovanni Solimine; postfazione di Giovanni Di Domenico, Milano, Editrice Bibliografica, 2013, especially in the chapter *Lo spazio della lettura*.

6 *Vocabolario*, in Treccani.it, <<http://www.treccani.it/vocabolario/>>, s.v.

we are authorised to believe one library is identical to another. In this way, we actually go back to what Aristotle had argued about the term *tautótēs* (which indeed corresponds to 'sameness'), when he wrote that «sameness is a unity of the being either of more than one thing or of one thing when it is treated as more than one, i.e. when we say a thing is the same as itself; for we treat it as two»⁷.

Leaving for now the linguistic and especially epistemological issues we have cursively hinted at in the background, the topic of the identity of contemporary public libraries will be tackled preliminarily in connection with what is said of it, in a period of deep transformations which have long been changing its paradigmatic profile. In paragraph 2, first of all, a concise review of all the interpretative angles on this matter will be proposed, clearly showing the articulated outline of the debate; as we shall see, (too?) many things can be said about a library; ideal, ideological and ethical options, sometimes radically divergent ones, are compared. Paragraph 3 deals with the specific matter of measuring and assessing the services the library provides. On this matter, it is interesting to note, first of all, a sort of epistemological shift wherein evaluation techniques, originally aimed at acquiring pieces of information useful for the management in a concrete and empirical fashion, are invested with the difficult task to qualify as principles and methods with their autonomous and steady cognitive independence. As we shall see, when we change from the framework of library management to the one of social librarianship, ultimately, we start to feel the need for methodologically and heuristically adequate tools to better understand the characteristics of an object, the library, whose complexity can no longer be analysed in light of techniques based on theoretical premises, whose strength is crippled by many pitfalls. In paragraph 4 we shall discuss and argue the need to broaden our scope of analysis, metaphorically moving towards the limits of library science, as it is historically known. In my opinion, indeed, following this argumentative path, there is a growing awareness that the focus of the debate is not only the public library model and its sometimes approximating postmodern versions. In fact, the focal point of the research turned out to be the idea of the library itself, as a place where the *words* of knowledge find a conceptual and material order in the *things* that books are. For this we need a long-term perspective, which would steadily see the changing factors beyond the fashions and contingencies that often simply dull their perception, banishing them to a limbo conceived as a sombre past, naively opposed to the shiny novelties of an Eden-like future. We shall here out-

7 ARISTOTLE, *Metaphysics*, in *The Complete Works of Aristotle. Volume Two*, edited by Jonathan Barnes, Princeton NJ, Princeton University Press, 1984, V, 9, p. 1607. On these topics refer to classic EMANUELE SEVERINO, *Tautótēs*, Milano, Adelphi, 2009.

line the general tenets of the suggested methodology, that finds an important turning point first in Edmund Husserl famous *epochè*, and that is then coupled with some themes in the reflection of Georges Perec, Albert-László Barabási and Gregory Bateson, and that consists in trying to interpret the phenomena taking place within the library, in their peculiar uniqueness, from a basically unifying and holistic perspective. The choice of these authors, and of some elements of their reflection, seems to me important, not only for their intrinsic value, but because it encourages library science, in its specific disciplinary configuration, not to sever all connections with other disciplinary fields. It would then avoid the risk of a self-referential homogenisation, that would otherwise lead it to attempt to hoist itself from the swamp it is stuck in, acting like Baron Münchhausen, who in the famous pages by Rudolph Graspe (1736-1794) tries to lift himself up finding support, circularly, only on his own hair (Fig. 2).



Fig. 2 - Baron Münchhausen trying to hoist himself from the swamp by pulling his hair. Postcard collection by Oskar Herrfurth (detail). Source: <<http://www.goethezeitportal.de>>.

Paragraph 5 describes the methodology applied to the analysis of three Tuscan libraries, whose partial results are described in the paper by Maria Pagano in this volume.

It is difficult to foresee in a detailed way what the overall outcome achieved might be. The first impression - which excludes any form of utopianism, rest assured -, regarding the convictions and hypotheses this work stems from, is that in the past years a deeper and deeper rift has opened up between academic and professionals cultures and library use practices: people in libraries behave and use cognitive styles very differently from what provided by the structural configuration of models, and from their normative and predictive characters. For this reason I believe it is useful to try and go beyond this «impression», and verify if, going back to the phenomena, it is possible to better understand what causal links can be inferred.

Finally, one clarification. The path whose theoretical premises, methodological elements and applicable practices are shown in this study, has, at this stage, its own independent configuration, which is in essence linked to research lines I have pursued in the last years, which will be accounted for case by case. The further perspective is to build up a mixed Italian and Spanish research group, with whom to establish a common ground to carry on the study activity, strengthening and explaining its methodology and expanding its specific territorial range.

2. Library /libraries

This paragraph outlines the debate sparked in Italy in the last years, which discussed the identity of the library and libraries, public ones in the sense previously recalled, examining both studies by Italian authors and evaluating the reception contexts of other authors. In order to determine, also according to current rhetorical usage, this specific research field, it is necessary to also make a series of considerations on the general concept of 'library', on the problematic and complex elements marking its historically defined identity, in a time whose changes have no less than weakened the paradigm of Anglo-American public library and that of the reference library closely connected to it. They have written extensively on these topics, and the general lines of the debate in Italy shall here be very briefly recalled. In general, and in an oversimplification of the reasoning, it is safe to say that the discussion developed along some main guidelines. Along an axis, whose genealogy can be traced back to Paolo Traniello's book *Biblioteche e società*, the historical, juridical, institutional motivations leading to the abatement of the conceptual model of the traditional public library have been explored. From another point of view, which I would essentially connect to the studies by Alberto Petrucciani and Riccardo Ridi, the similarities remarked within the conceptual area of Anglo-Saxon librarianship and library science were emphasised. As

a result, the reasoning focused, on the one hand, on the historically outlined figure of the librarian, and, on the other, on positing a normative and binding framework which defines that action, anchoring it, with the developing professional practices, in a prescriptive code of conduct rigidly regulating its scope of action. Anna Galluzzi, with her *Biblioteche nella città*, has tried to discuss the reasons of this crisis considering them against the wider social, economical and cultural dynamics amplifying its context, regulating their reasons within social librarianship (biblioteconomia sociale), as Giovanni Solimine and Chiara Faggiolani have recently elaborated and opined⁸. Basically bordering on this area, and crossing political and ethical tensions on one side, and service marketing on the other, there is the model of the social library as a metaphorical neutral and mostly democratic «square», which was published by Antonella Agnoli, and which found in Sergio Dogliani's Idea Store an example of validation and, especially, an objective and desired identification. In this line of opinions we may include, in the architectural field, Marco Muscogiuri's reflections and design proposals⁹. Interesting critical options, in many ways standing out of the crowd, aimed at emphasising more extensively epistemological and methodological issues, have been proposed by Giovanni Di Domenico and Alberto Salarelli¹⁰. To this argumentative ground, and customarily apologising for the self-reference, I believe some of my studies could be added, wherein, rather than positing a

8 Cf., in the order in which they are referred to in the text, P. TRANIELLO, *Biblioteche e società*; ALBERTO PETRUCCIANI, *Biblioteca pubblica senza identità? No, grazie*, «Bollettino AIB», 46, 2006, 4, p. 377-382; RICCARDO RIDI, *Biblioteconomia e organizzazione della conoscenza: quattro ipotesi fondazionali*, in *1. seminario nazionale di biblioteconomia*[...] a cura di Alberto Petrucciani e Giovanni Solimine, Milano, Ledizioni, 2013, p. 101-110, in «E-LIS», <<http://eprints.rclis.org/20958/>> and *Sulla natura e il futuro della biblioteca pubblica. Lettera aperta a Claudio Leombroni*, «Bollettino AIB», 46, 2006, 1/2, p. 87-90, <<http://bollettino.aib.it/issue/view/348/showToc>>, also in «E-LIS» <<http://eprints.rclis.org/handle/10760/8593>>; A. GALLUZZI, *Biblioteche per la città. Nuove prospettive di un servizio pubblico*, Roma, Carocci, 2009 and *Il futuro della biblioteca pubblica*, «Bollettino AIB», 46, 2006, 1/2, p. 227-234; G. SOLIMINE, *Nuovi appunti sulla interpretazione della biblioteca pubblica*, «AIB studi», 53, 2013, 3, p. 261-271; G. SOLIMINE - CHIARA FAGGIOLANI, *Biblioteche moltiplicatrici di welfare*, «Biblioteche oggi», 31, 2013, 3, p. 15-19; A. GALLUZZI - C. FAGGIOLANI, *L'identità percepita delle biblioteche: la biblioteconomia sociale e i suoi presupposti*, «Bibliotime», 18, 2015, 1, <<http://www.aib.it/aib/sezioni/emr/bibtime/num-xviii-1/galluzzi.htm>>.

9 Cf., by ANTONELLA AGNOLI, *Le piazze del sapere. Biblioteche e libertà*, Roma-Bari, Laterza, 2009 and *La biblioteca che vorrei. Spazi, creatività, partecipazione*, Milano, Editrice Bibliografica, 2014; by SERGIO DOGLIANI, *La (mia) verità su Idea Store*, «Bollettino AIB», 49, 2009, 2, p. 259-267; by MARCO MUSCOGIURI *Biblioteche. Architettura e progetto: scenari e strategie di progettazione*, Rimini, Maggioli, 2009.

10 Cf. G. DI DOMENICO, *Conoscenza, cittadinanza, sviluppo: appunti sulla biblioteca pubblica come servizio sociale*, «AIB studi», 53, 2013, 1, p. 13-25; ALBERTO SALARELLI, *Pubblica 2.0*, «Bollettino AIB», 49, 2009, 2, p. 247-258.

model, I try to define a framework for the phenomena taking place in the library space, following a perspective, which, since it chooses not to deal with practical matters, we may define of a more correctly and specifically interpretative nature. A further perspective is provided by the studies discussing the relations between library traditional models and those changes induced by the dissemination of digital cultures and technologies; in this sense, we should mention at least the import of Riccardo Ridi, Anna Maria Tammaro and, especially after his recent Italian translation, the view championed by David Lankes with his «atlas» of new library science¹¹. Finally, there are some lines of reflection, though not very recent, with a markedly theoretical and historical outlook, whose results are necessarily interlaced, sometimes in a hidden way, with the current debate, in which we may list the studies by Paolo Traniello, Alberto Petrucciani, Giovanni Solimine, Alfredo Serrai, Attilio Mauro Caproni, Piero Innocenti, who have each explored the normative-institutional horizons of the library (or libraries, a not irrelevant matter) seen in its historical dimension¹², the role of librarians¹³, the diachronically-determined relations between spaces and services¹⁴, the foundations of the concept of 'bibliotheca' since the early modern age¹⁵, the issues regarding the mechanisms of knowledge appropriation through the act of reading¹⁶.

11 R. RIDI, *Unified Theory of Information, Hypertextuality and Levels of Reality* (with Claudio Gnoli), «Journal of Documentation», 70, 2014, 3. Preprint available in «Emerald EarlyCite» <<http://www.emeraldinsight.com/journals.htm?issn=00220418&volume=70&issue=3&articleid=17101491&show=abstract>>; ANNA MARIA TAMMARO, *Che cos'è una biblioteca digitale*, «DigItalia», 2005, 1, <<http://digitalia.sbn.it/article/view/325/215>>.

12 P. TRANIELLO, *Storia delle biblioteche in Italia. Dall'Unità ad oggi*, Bologna, Il Mulino, 2014.

13 A. PETRUCCIANI, *Libri e libertà. Biblioteche e bibliotecari nell'Italia contemporanea*, Manziana, Vecchiarelli, 2012.

14 G. SOLIMINE, *Spazio e funzioni nell'evoluzione della biblioteca: una prospettiva storica*, in: *La biblioteca tra spazio e progetto: nuove frontiere dell'architettura e nuovi scenari tecnologici: 5a Conferenza nazionale per i beni librari*, Milano, Editrice Bibliografica, 1998, p. 24-56, also published in: *La biblioteca e il suo tempo: scritti di storia della biblioteca*, Manziana, Vecchiarelli, 2004, p. 15-71.

15 See *Storia della Bibliografia. 5: Trattatistica biblioteconomica*, a cura di Margherita Palumbo, Roma, Bulzoni, 1994, p. 146-186 and *Caratteri, insufficienze, ed ambiguità di Storia delle Biblioteche*, in: *Racemationes bibliographicae*, Roma, Bulzoni, 1999, p. 9-44.

16 Refer to ATTILIO MAURO CAPRONI, *La biblioteca e i segni della memoria. La biblioteca, cioè un sistema logico del sapere, La biblioteca come fenomeno della conoscenza*, in: *L'inquietudine del sapere. Scritti di Teoria della Bibliografia*. Nota introduttiva di A. Serrai, Milano, Sylvestre Bonnard, 2007, respectively on p. 171-200, 201-204, 205-2014; PIERO INNOCENTI, *Introduzione*, in: *Passi del leggere. Scritti di lettura, sulla lettura per la lettura ad uso di chi scrive e di chi cita*, con la collaborazione di Cristina Cavallaro, 2 v., Manziana, Vecchiarelli, 2003, p. ix-cxi, especially part 2, *Biblioteca*,

Once this intricate context has been unravelled, we cannot but preliminarily acknowledge the variety and diversity of the views upheld, where, as previously mentioned, the considerations on the conceptual layout of the library in an abstract sense are coupled, and sometimes assimilated, with the ones rooted in and confined to specific fields, or subfields, of application. Therefore, the all but peaceful coexistence of these discordant and opposing theses is in itself a clear and blatant sign of the critical phase we are experiencing. The previous paradigm, in the sense indicated by Thomas S. Kuhn, is gradually fading, and the new one has yet to emerge in its completeness¹⁷. In this scenario, library science, also in its digital extensions, with its tools and its heuristics, mainly offers analysis methods; the practical and professional one seeks, often hastily, immediate practical results, perceived as necessary and undeferrable, in order to tackle impending financial and managerial criticalities. In this way, the enigmatic outlines of a giant puzzle have come into shape, whose many pieces we are not sure if and how to assemble, and on which the ancient, symbolical, mythical image of the labyrinth looms. Indeed, for this reason we believe it is useful to place, on this threshold, the restless figure of Georges Perec, an intellectual who, with his actions, is an excellent example of the liveliness of this and other more general issues. Perec, in his *Preamble to Life a User's Manual*, suggests we identify with the «player» who wants to put back together an image with the discordant pieces of a jigsaw puzzle, for instance an unlikely «three-pointed black hat with its rather ruined black plume», and who at the same time wants to avoid «chance to cover his tracks». The player will have to acknowledge that «the organised, coherent, structured signifying space of the picture is cut up not only into inert, formless elements containing little information or signifying power, but also into falsified elements, carrying false information», and will have to deduce - and us with him - that, an ultimate truth, the jigsaw puzzle is no solitary game, and that «every move the puzzler makes, the puzzle-maker has made before; every piece the puzzler picks up, and picks up again, and studies and strokes, every combination he tries, and tries a second time, every blunder and every insight, each hope and each discouragement have all been designed, calculated, and decided by the other»¹⁸.

In the light of this premise, in which framework can we place the views of analysis, study and research previously exposed? In order to provide further clarification, a summary of the basic elements

macchina per leggere, p. xlvii-lxxxiv.

17 THOMAS S. KUHN, *The Structure of Scientific Revolutions*, Chicago, Chicago University Press, 1962.

18 G. PEREC, *Life a User's Manual: Fictions*, London, Collins Harvill, 1987 (*La vie mode d'emploi*, 1978).

characterising some of these interpretative directions will follow; the former (A-C) mostly entrenched in the professional pragmatic horizon; the latter (D-F) linked to a wider and more articulate theoretical and methodological horizon.

- A. In this first area, more closely related to professional cultures and practices, the goal seems to be initially circumscribed and defined, and the main demand is to anchor library practices in a form essentially derived from Anglo-American tradition. This manifestly pragmatic scope focuses on establishing a set of values, deposited along the line of this tradition, rather than tracing theoretical models with their own independent stability. The elements that characterize this perspective, hinges on the practices believed to be essential to run a library, and first of all on those concerning, in a general sense, the mediation between information and users, which can be summed up by Michael Gorman's «only connect»¹⁹. Thus, mediation is the essential character we find in the principal area of catalogue and reference services, which expresses the main core of the librarian's professionalism and of the principles borne out of this practice.
- B. A second area consists in the field of social librarianship, whose remote genealogies go back to Jesse H. Shera's works²⁰, and the more recent ones of library management, which can be interpreted as the crossroads where classic library science and library management. The sense of the library lies in its being a part and expression of the wider context it belongs to, in its qualifying as a system able to interpret itself as an integral and normative part (also in terms of welfare) of the social body it is a part and expression of.
- C. A third group interprets this vision according to a perspective whose strong ethical-political leanings are coupled with the tools of social marketing. The public library is seen as a «third» place, a «square» or a «social melting pot», able to foster, elaborating them, primary and diffused demands. The symbolical arrangement of the collections is relegated to the background, to the advantage of the priority of diffused and general social relationships, which have little to do with the principles and method developed within the tradition. We may connect to some elements of this perspective the communicative extensions of library cultures, wherein the main topic consists in the ability to dialogue with users, developing «conversations» which ultimately are the added value that library

19 MICHAEL GORMAN, *Our Enduring Values. Librarianship in the 21st Century*, Chicago - London, American Library Association, 2000.

20 Cf., by JESSE H. SHERA, *Sociological Foundation of Librarianship*, London, Asia Publishing, 1970 and *The Foundations of Education for Librarianship*, New York [etc.], Wiley-Becker and Hayes, 1972.

service, in all its forms, is able to offer. Some foundations of this line I reckon can be found in some topics at the heart of David Lankes's *new librarianship*, and in the librarian's role as a «facilitator» posited therein²¹.

- D. A fourth area identifies the key topic in the chances digital cultures and technologies may offer, seen in the prospective ability to provide new models of document organisation and communication.
- E. The theses of those aspiring at an articulate and coherent vision of ongoing phenomena belong to a fifth group, and they develop, with different premises and results, their arguments starting from the topic of complexity.
- F. A sixth area is linked, in a broad sense, to the field of historical-bibliographical research, with some significant disagreements, which qualify some of these positions as: a) the interpretation of the evolution of contemporary public libraries according to a historical-institutional axis; b) the analysis of library history strongly emphasising the role played by the librarian and his/her professional skills; c) the diachronic account of the relations between ideology, model, services and spaces of the library; d) the research aimed at tracing the cultural genealogy of the *bibliotheca* in its foundation in the early modern age; e) the analysis of library purposes with regard to organisation and, especially, of knowledge elaboration.

The discord among ongoing views, as previously also recalled, is blatant. The arguments presented develop from premises and theoretical and methodological viewpoints so different from one another that it is really hard to recognise, in the various pathways, the actual object of study; on the contrary, I may add, the word and concept of 'library' which can be found in these argumentative discourses give way to a series of linguistic games, in actual Wittgenstein's sense, wherein the different contexts necessarily give the word unclear, discordant, and sometimes completely opposite meanings²². The points of view previously outlined, in other words, generate plural narrations, marked by different premises, ends and results, and endowed with differing degrees of prescriptive compulsoriness, generally dependent upon the *auctoritas* of the champion of such peculiar standpoint. If we then acknowledge the fact that, within this scope of research, we cannot identify founding axiological traits, whose truth can constitute a solid argumentative assumption, we are only left with pathways which may be coherent, but which are basically made up of opinions, more or less authoritatively upheld.

21 R. DAVID LANKES, *The Atlas of New Librarianship*, Cambridge (Mass.), MIT, 2011.

22 LUDWIG WITTGENSTEIN, *Philosophical Investigations*, Oxford, Basil Blackwell, 1953.

3. *Cultures of evaluation*

Many years ago, Alfredo Serrai had already admonished with great clarity that «Valutare il funzionamento di una biblioteca è impresa che molti giudicano irrealizzabile per tre ordini di motivi: la prima per la diversità non comparabile dei criteri di valutazione, la seconda per la molteplicità non cumulabile dei processi che hanno luogo in biblioteca, la terza per la convinzione che il mondo bibliotecario rientri nella sfera politica e sia pertanto insondabile da strumenti di analisi che non tengano primariamente conto di questa appartenenza» [“Assessing how the library works is an endeavour many deem impossible because of three kinds of reasons: first, for the incomparable difference in evaluation criteria; second, for the non concurrent variety of the processes taking place in a library; third, for the conviction that the library world falls within the political sphere and therefore cannot be explored by analysis tools unless taking primarily into account this association”]²³. Indeed, assessing a library according to current praxes (and in particular for the quantitative ones) consists in forming a judgement that measures the correspondence degree of some phenomena, situated in the library space, to the ones present in the ideal space of a reference model, basically accounting for their degree of adequacy or variation²⁴. In Serrai’s words, analysing the library purposes from the quantitative point of view means namely examining «l’esercizio della relazione di utenza nei confronti di una raccolta di documenti» [“the exercise of user relationship with regard to a document collection”]²⁵.

23 A. SERRAI, *Guida alla biblioteconomia*, Firenze, Sansoni, 1981, p. 118.

24 ‘Quality’, according the definition of ISO 9000 standard, is indeed defined as «the consistent conformance of a product or service to a given set of standards or expectations»: cf. ISO 9000, *Quality Management Systems, Fundamentals and Vocabulary*, Geneva, International Organization for Standardization, 2005.

25 Ivi, p. 119. The bibliography in this book curated by Maria Senatore is devoted to the literature on this subject. For a historical introduction to these topics in the reflection developed in Italy it suffices here to recall that it was initiated in the former half of the 1990s by GIOVANNI SOLIMINE (cf. *Problemi di misurazione e valutazione dell’attività bibliotecaria*, in: *Il linguaggio della biblioteca. Scritti in onore di Diego Maltese* raccolti da Mauro Guerrini, 2 voll., Firenze, Giunta regionale toscana, 1994 (2nd ed.: Milano, Editrice Bibliografica, 1996); *Per una prassi biblioteconomica ispirata ai principi del management*, in: *Biblioteche e servizi: misurazione e valutazione. Atti del XL Congresso nazionale dell’Associazione italiana biblioteche*, Roma, 26-28 ottobre 1994, Roma, Associazione italiana biblioteche, 1995; *Quanto valgono le valutazioni. Il punto sulle esperienze di rilevazione statistica dei servizi delle biblioteche italiane*, «Biblioteche oggi», 14, 1996, 4, p. 34-39), which were followed by the studies by ANNA GALLUZZI (*La valutazione delle biblioteche pubbliche. Dati e metodologie delle indagini in Italia*, Firenze, Olschki, 1999; *Modelli e strumenti per la valutazione dell’efficacia* in *Gestire il cambiamento. Nuove metodologie per il management della biblioteca*, a cura di G. Solimine, Milano, Editrice Bibliografica, 2003, p. 289-385; *La valutazione dei servizi*, in: *Biblioteconomia: principi e questioni*, a cura di G. Solimine e Paul Gabriele Weston, Roma, Carocci, 2007, p. 129-143), by GIOVANNI DI

On the other hand, qualitative methodologies are more vague and belong to interpretative fields outside this «user relationship», as they were recently illustrated and discussed by Chiara Faggiolani²⁶, relating evaluation to the very intricate problems regarding the fickle identity of contemporary public libraries, especially to what their ‘impact’ is²⁷, and to how they are perceived²⁸. Anna Galluzzi and Chiara Faggiolani, in a recent previously mentioned study where the paramount importance of interdisciplinary extensions is evoked, effectively try to update the state of the art on these subjects, also sketching a general periodisation of the different types of evaluation tools. In that way, a line emerges where the attention focused during the 1980s on «dati di struttura» [“structure data”] (facility, spaces, collections, types of tools etc.) and on «dati di attività» [“activity data”] (criteria of collection resources selection, impact indexes, loan, circulation etc.), while studies in the 1990s discovered the relevance of user satisfaction for the services used. In the last years, finally, the social and economical impact of libraries has been one of the key points of reflection, in its anthropo-

DOMENICO (*Biblioteconomia e culture organizzative. La gestione responsabile della biblioteca*, Milano, Editrice Bibliografica, 2009, with special reference to chapters 2 and 4; *Valutare l'impatto delle biblioteche accademiche: le ragioni di un progetto valutativo e di un seminario*, in: *L'impatto delle biblioteche accademiche. Un progetto e un seminario*, a cura di G. Di Domenico, Roma, AIB, 2014, p. 9-35; *Sistemi e modelli per la gestione della qualità in biblioteca*, in: *Biblioteche e biblioteconomia. Principi e questioni*, a cura di G. Solimine e P. G. Weston, Roma, Carocci, 2015, p. 153-173), by CHIARA FAGGIOLANI (*La ricerca qualitativa per le biblioteche. Verso la biblioteconomia sociale*, Milano, Editrice Bibliografica, 2012). We finally refer to FAGGIOLANI and GALLUZZI, *La valutazione della biblioteca*, in: *Biblioteche e biblioteconomia*, p. 175-204. Non-Italian bibliography, Anglo-Saxon for the most part, is very large, and generally linked, in its early configuration, to RICHARD H. ORR, *Measuring the Goodness of Library Services: a General Framework for Considering Quantitative Measures*, «Journal of Documentation», 29, 1973, 3, p. 315-331. Ample collections of resources on this topic (*Useful Links to Libraries Evaluation*) are available on IFLA and ALA websites (<<http://www.ifla.org/statistics-and-evaluation/links-library-evaluation>> and <<http://www.ala.org/pla/performance/measurements>>).

26 C. FAGGIOLANI, *Studio dell'efficacia dell'approccio qualitativo all'analisi dell'utenza reale e potenziale dei servizi bibliotecari attraverso la ricerca empirica* in: *1. seminario nazionale di biblioteconomia*, p. 183-186.

27 Cf. ISO 16439, *Methods and Procedures for Assessing the Impact of Libraries*, Geneva, International Organization for Standardization, 2014, commented by G. DI DOMENICO in *ISO 16439: un nuovo standard per valutare l'impatto delle biblioteche*, «AIB studi», 54, 2014, 2/3, p. 325-329. DOI: 10.2426/aibstudi-10279. For an overview on the use of ISO standards see, by ROSWITHA POLL, *I dati che abbiamo e i dati che potremmo avere: nuovi sviluppi nel campo della valutazione delle biblioteche*, «Bollettino AIB», 51, 2011, 4, p. 369-380 and the extensive bibliography on *Impact and Outcome of Libraries*, <http://www.ifla.org/files/assets/statistics-and-evaluation/publications/Bibliography_Impact_and_Outcome_11_2012.pdf>.

28 In this sense, therefore, «the key issue is that quality becomes a meaningful concept only when it is indissolubly linked to the aim of total customer satisfaction»: cf. ISO 9000, *Quality Management Systems*.

logical and psychological developments²⁹. The direction taken by the methodological evolution, therefore, clearly shows a tension of evaluation cultures, as a whole, towards a perspective able to account for not only arguments supporting service management, but more in general to shed some light on the ways in which a library interprets and organises its own identity, as we have seen comprising phenomena related to documents and information, already unclear and elusive on their own, in anthropological fields which are even more difficult to explain. Finally, we ought to point out that, within this evolution lines, also the traditional evaluation perspectives promoted and validated by IFLA try to take into account the changing aspects that need to be evaluated. Previously recalled *Measuring Quality: Performance Measurement in Libraries*, edited by Roswitha Poll & Peter te Boekhorst, underlines that the 40 indicators selected must be able to organise information regarding «The demand for cost-effectiveness»; «The library as working place and meeting point»; «The library's teaching role»; «The library's functions for external users»; «The importance of staff» (*Preface*, p. 7-8).

In the light of these considerations, therefore, the research hypotheses Scott Nicholson had some years ago presented, in an article titled *A Conceptual Framework for the Holistic Measurement and Cumulative Evaluation of Library Services*, take on a special relevance, albeit with no further attempts of application (Fig. 3). Nicholson, after introducing and discussing the theoretical and methodological tenets of evaluation, in a framework mainly aimed at service management, acknowledges the fact that «many evaluations occur because of a problem or report requiring immediate management involvement. These last-minute evaluations are akin to modern emergency-room medicine: just as many patients wait until the symptoms become unbearable before seeking treatment, many library decision-makers wait until problems force a rapid evaluation. Just as the goal of holistic medicine is reaching a state of wellness for the entire body, the goal of holistic evaluation is reaching a state of wellness for the entire library. While the subsystems of a human body are more closely entwined than the subsystems of a library, enough connections exist between the library subsystems to give this comparison validity»³⁰.

29 A. GALLUZZI - C. FAGGIOLANI, *L'identità percepita delle biblioteche*.

30 In «*Journal of Documentation*», 60, 2004, 2, p. 164 - 182: 164.

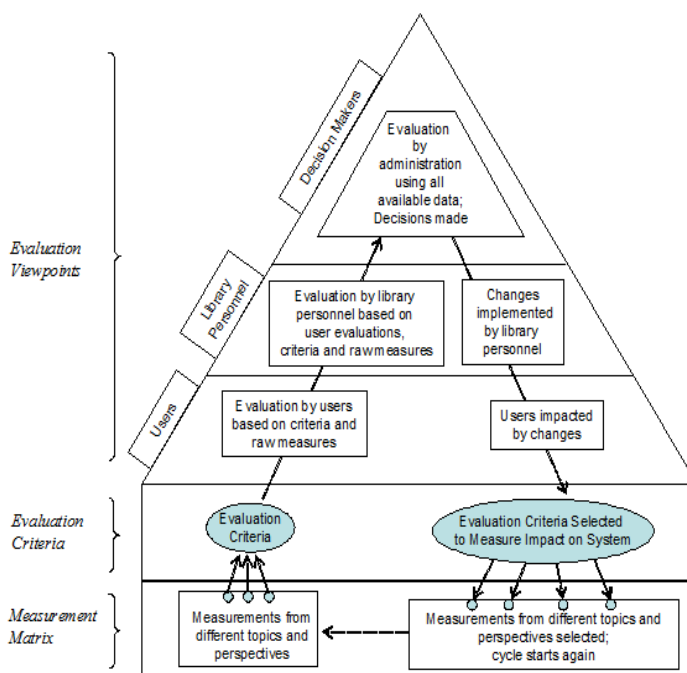


Fig. 3 - Holistic measurement and evaluation cycle.

Source: S. NICHOLSON, *A Conceptual Framework for the Holistic Measurement and Cumulative Evaluation of Library Services*,
 <<http://www.bibliomining.com/nicholson/holisticfinal.html>>.

The founding lines of the reflection developed in the library science, therefore, clearly show the demand for analysis tools allowing for the multiple elements we need to consider to draw a profile of contemporary public libraries. At any rate, at this point of our reflection, I believe we are faced with an aporia not easy to solve, which basically consists in the ever-increasing degree of complexity principles and methods of evaluation must deal with. To some respects, it is as if the unclear object of evaluation (the public library), its not easily discernible boundaries, were emphasising the structural limits of goal-oriented, empirical and practical methods. If the hypotheses at the root of this study do not consist in elaborate data collection that we can direct towards management, but in the attempt to understand, discuss, interpret ongoing changes, we may perhaps appreciate the benefits of giving centre stage to what really happens in a library, focusing our attention on the different kinds of phenomena, which in certain circumstances can be observed and meas-

ured. In order to follow this guideline, we then need to carry out an uncommon series of epistemological operations, which will be discussed in the next paragraph.

4. *Starting from the phenomena, connecting the data*

At this point the reader is presumed to be aware of the reasons bringing to reconsider the need for a radical return to the phenomena, in their concrete uniqueness. But this operation alone is clearly not enough. The different phenomena which can be identified in the library space, in this way, risk being seen and conceived as unrelated pieces of a jigsaw puzzle that we do not know how to compose. From these assumptions, in this paragraph we intend to verify the results of radically holding one's judgement on the purposes, tasks, duties of the public library, and experiment on the field the possibilities of adopting an *epochè* like the one Edmund Husserl (1859-1938) introduced in the late 19th century in a very different context. In this phase marked by such radical discontinuities, it is necessary to succeed in envisaging research paths that first of all tackle with coherent methods, tools, heuristics, the first and basic phenomenological matter, i.e. explaining what happens in the physical and conceptual boundaries of the public library space. Of course, holding one's judgement does not imply that one rudimentarily dismisses the historical and actual dimension of the contemporary public library; all the points of view, no matter how elaborated, naturally maintain their original argumentative soundness, within the limits previously mentioned. It is necessary, and perhaps essential, that research principles and methods shift, so as to adjust directly to the examination field, hence the considerations here specifically suggested: i.e. analyse the factors of change in their initial expressive configuration, in their being first of all phenomena we come across and necessarily have to come to terms with, metaphorically speaking. Therefore, turning to the phenomena means to once more - after the famous Husserlian *epochè* - consciously hold one's critical judgement, relinquishing the reassuring perspective that regulates, defines and binds it to a predetermined and authoritative interpretative framework. Let us try and carefully read an ample excerpt from a book by Husserl, wherein he defines and delimits the domain of *epochè*: «But our purpose is to discover a new scientific domain, one that is to be gained *by the method of parenthesizing* which, therefore, must be a definitely restricted one. The restriction can be designated in a word. *We put out of action the general positing which belongs to the essence of the natural attitude*; we parenthesize everything which that positing encompasses with respect to being; *thus the whole natural world* which is continually "there for us", "on hand", and which will always remain there according to consciousness as an "actuality"

even if we choose to parenthesize it. If I do that, as I can with complete freedom, then I am *not negating* this “world” as though I were a sophist; I am *not doubting its factual being* as though I were a sceptic; rather I am exercising the “phenomenological” *epochè* [...] I inhibit precisely the being-accepted beforehand of “this” world or its antecedent being-for-me which, as a being posited both actually and habitually, carries me continuously in my entire natural living and is this the foundation of all my practical and theoretical living; I take from it the force that, up to now, gave me the world of experience as my basis. And yet the old course of my experience goes on as it always has, except that this experience, modified by the new attitude, no longer supplies the “basis” on which I was standing up to now. In this manner I exercise the phenomenological *epochè* [...] *Thus I exclude all sciences relating to this natural world* no matter how firmly they stand there for me, no matter how much I admire them, no matter how little I think of making even the least objection to them; I make *absolutely no use of the things posited in them*»³¹. As is known (and how it can be inferred by reading the long quotation) Husserl’s standpoint does not correspond at all to that of ancient scepticism; it only expresses the inescapable need to try and identify the conditions of an argumentative ground no longer limited by coalescent layers of interpretations, interpretations of interpretations, and so forth to infinity. Does it make sense to try and apply such a complex methodology to the measured field of contemporary public libraries? Of course, the writer thinks so, i.e. that it does make sense, and especially that we must attempt to discuss the issues of contemporary library science from an analysis as free and open as possible of the phenomena that outline, constitute, people this research field. In order to develop this reasoning, do we have to move outside a certain librarian tradition? Sure, without a doubt, but we must also ask ourselves even in the light of ordinary common sense: is this *really* an issue? As far as I am concerned, I reckon it would be promising to start a research where initially *all* the phenomena come to light and manifest themselves as their being in essence ‘data’; this implies the assumption of a deliberately passive listening, possibly and a hopefully neutral and objectifying, condition. To do so we must go straight to the field, equipped with what our methodological traditions and judgement skills allow us, carefully assessing if new methods and tools might be beneficial to the pursuit of these goals. I believe the suggestions and risks from adopting such an interpretative perspective are blatant. The advantages basically consist in releasing the analysis of the phenomena from

31 EDMUND HUSSERL, *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy*, translated by F. Kersten, Den Haag - Boston - Lancaster, Nijhoff, 1983, p. 60-61. (*Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie*, 1913). Italics in original.

all practical finalisation, which would necessarily falsify its evaluation. The risks have to do with the fact that, like in the most radical deconstructionist perspectives, we may have to face an even more confused and partial bulk of data, stripped of their contexts and consequently impossible to know, literally. The main difficulty consists in focusing the attention on all recognisable relations between data. And that is when physicist and network science specialist Albert-László Barabási comes into play³², here referred to as a witness of a study perspective based on the famous formal model elaborated by Swiss mathematician and physicist Leonhard Euler (1707-1783), in order to solve the problem of Königsberg's seven bridges, which consisted in analysing the chances to walk across all seven bridges following only one direction, crossing each bridge only once and so without ever going back. Euler, as is known, solved the problem by showing that this hypothesis could not be viable, and came to this result using an abstract model, in other words free from Königsberg's specific geographical local configuration, and therefore using the principles of what is now called graph theory. Euler basically examined, in his model, four urban areas enclosed in the distribution of bridges, and he represented them with a point (today called 'node'); while the bridges were visualised with a line segment ('arch'). We herewith propose (Fig. 4) the sequence of the formalisation levels we used.



Fig. 4 - Progressive elaboration of the Königsberg's Bridges Problem. GFDL Licence via Wikipedia, <http://it.wikipedia.org/wiki/File:Grafo_ABCD.jpg#/media/File:Grafo_ABCD.jpg>.

Discussing at length the foundations of this theoretical area certainly exceeds the writer's competence; for this reason, aside the complexity of the theoretical model as a whole, we shall merely delve into some particularly significant notions of the conceptual structure of network science (and of Barabási's work), like the ones saying that «Each one of us is part of a large cluster, the worldwide social net, from which no one

³² General information on his research activity are available at the URL <<http://www.barabasi.com/>>.

is left out. We do not know everybody on this globe, but it is guaranteed that there is a path between any two of us in this web of people. Likewise, there is a path between any two neurons in our brain, between any two companies in the world, between any two chemicals in our body»³³. If this is true (or if it is reasonable to think it may be true), we may envisage an analysis path, which would attempt a comprehensive interpretation of the phenomena on a fine-grained level and of the relations which can be established between them. Barabási has tried to develop the principles of network science on the field in the book *Bursts*, where, once we have acknowledged our «nakedness in the face of increasingly penetrating digital technologies», and in fact from this acknowledgement, we may realise the conditions to create «an immense research laboratory that, in size, complexity, and detail, surpasses everything that science had encountered before». He is profoundly convinced that, if we succeed in following the «trail», we may identify the «evidence of a deeper order in human behavior, one that can be explored, predicted, and no doubt exploited». Moving along this direction implies the preliminary assumption to «stop viewing our actions as discrete, random, isolated events», since they, on the contrary, «seem to be part of a magic web of dependencies, a story within a web of stories, displaying order where we suspected none and randomness where we least expect it»³⁴. If we see things from this perspective, 'phenomena' therefore basically become 'data' we must analyse, associate, interpret: is someone perhaps thinking we are jumping out of the frying pan into the fire? Leaving metaphors aside, data analysis undoubtedly is for many reasons complex and nonetheless interesting and promising. It aims at «inspecting, cleaning, transforming, and modeling data with the goal of discovering useful information, suggesting conclusions, and supporting decision making», hence positing probabilistic and statistical inferences, like for instance a cause-effect relation between two phenomena, or formulating a prediction or anticipation of a given fact³⁵. The remarkable quantity of data to examine leads us to the field of complex systems, and we may final-

33 ALBERT-LÁSZLÓ BARABÁSI, *Linked. The New Science of Networks*, Cambridge MA, Perseus, 2002, p. 18.

34 A.-L. BARABÁSI, *Bursts. The Hidden Pattern Behind Everything We Do*, New York, Dutton, 2010, p. 11.

35 LORENZO VERNA, in the paragraph *Complexity of the concept of 'data'*, in: MARCO RUBICHI - M. PAGANO - L. VERNA, *Libraries, Archives, Museums Between Physical and Digital Space. Models and Analysis Perspectives*, p. 9, <https://satelliteturin2014.files.wordpress.com/2014/05/iflaltsatellite2014_rubichi-et-al.pdf>. On principles and methodologies of data analysis there certainly is an extensive literature, and we refer to: MELISSA A. HARDY - ALAN BRYMAN, *Handbook of Data Analysis*, London; Thousand Oak (CA), SAGE Publications, 2004; PIERGIORGIO CORBETTA, *La ricerca sociale: metodologie e tecniche. IV. L'analisi dei dati*, Bologna, Il Mulino, 2003; PAOLO GIUDICI, *Data mining. Metodi informatici, statistici e applicazioni*, 2nd ed., Milano, McGraw Hill, 2005.

ly surmise that «since all complex systems have many interconnected components, the heart of this discipline is network science»³⁶. A network, or graph, is the result of two basic components: the nodes, i.e. the entities present in the network, and the arches, i.e. the relations between nodes, according to the ways described in a famous article by mathematicians Paul Erdős (1913-1996) and Alfréd Rényi (1921-1970), *On Random Graph*³⁷, which proposed the theory of random distribution of nodes and arches in graphs (Fig. 5). The phenomenon of so-called six degrees of separation is related to the concept of graph, in other words each object in any network is linked to every other object in the same network by an average of five relationships³⁸.

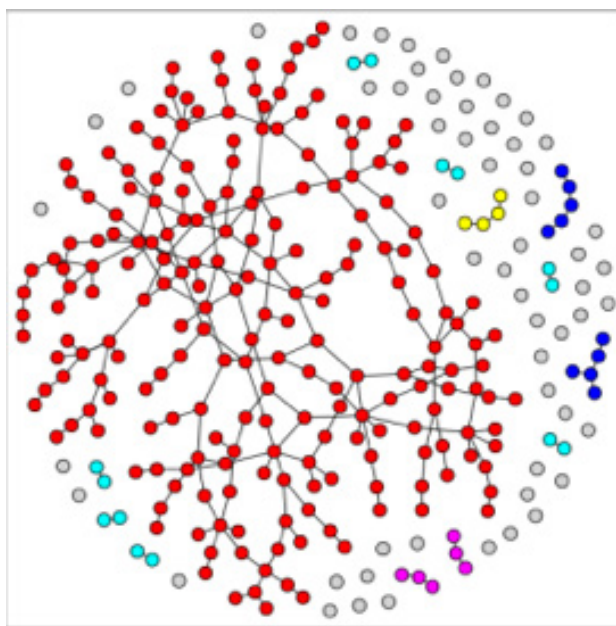


Fig. 5 - Random graph according to Erdős and Rényi model.

Source: <<https://linbaba.files.wordpress.com/2010/10/erdos-renyi.png>>.

Data analysis in the light of network science, therefore, could then be useful to help explain what relations exist between the phenomena, for their being 'data', which take place in the complex system of a library. More specifically, as we shall see, it could be applied to the analysis of different types of digital data connected to the library's

³⁶ Ibidem.

³⁷ In «Publicaciones Mathematicae», 6, 1959, p. 290-297, <http://ftp.math-inst.hu/~p_erdos/1959-11.pdf>.

³⁸ The matter is discussed at length in A.-L. BARABÁSI, *Linked. The New Science of Networks*, p. 25 and ff.

identity and purposes; no doubt important data as traces, which are difficult not only to evaluate, but also to simply collect, because they are very numerous. Each digital datum, indeed, is the result and trace of an action, be it a research on a catalogue or a like added to a Facebook post; for this reason, it would surely be very interesting to try and see, also through proper visualisation techniques, how data-phenomena relate to one another and how they make the system work in its entirety.

We better specify that the principles here briefly referred to are only one of the working hypotheses currently considered, and only when data are collected and examined, analysis models will be evaluated, incidentally strictly in connection with visualisation ones. The impression is that the graph theory may turn out to be useful to analyse complex data with no overt relationships; however, all the data we must consider make adopting one single formal model of representation rather difficult. Therefore, with this frame of mind, we may start discussing the nature of the connection elements which typify our field of study, and which in this stage we perhaps better cautiously lead back simply to the general area of complexity. Moreover, we may consider in the background the reflections of such scholars as philosopher and physicist Henri Poincaré (1854-1912), the father of modern chaos theory, physician and philosopher Aleksandr Bogdanov (1873-1928), who tried to elaborate a general science of all living and non-living systems, he called 'tectology', biologist Ludwig von Bertalanffy (1901-1972), father of the general theory of systems, meteorologist Edward Lorenz (1917-2008), who discovered the so-called 'butterfly effect' (Fig. 6), biologist Ilya Prigogine (1917-2003), Nobel prize winner in 1977 for her research on complex systems far from equilibrium, besides many studies by previously mentioned Edgar Morin.

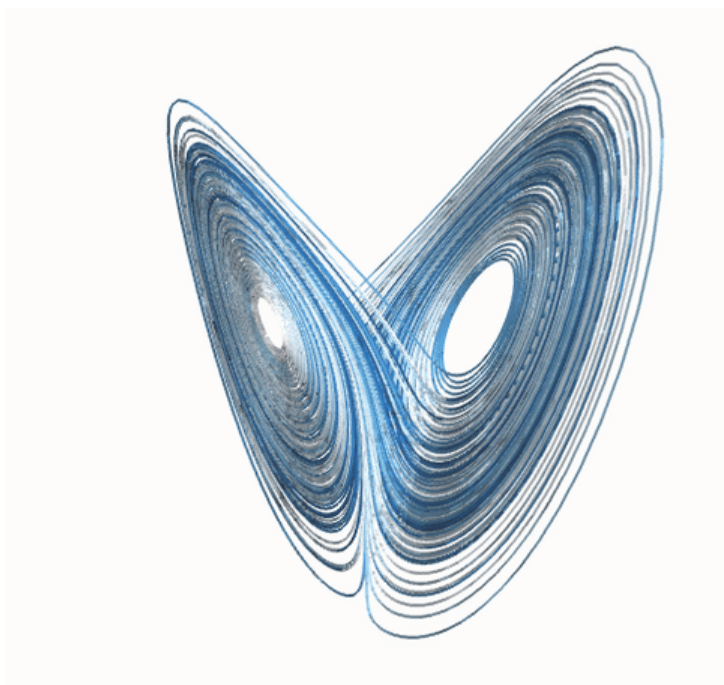


Fig. 6 - Butterfly effect: evolution of two trajectories in space when the initial condition varies.

Source: <<https://www.quara.com>>.

This complexity is the same one psychologist, anthropologist and sociologist Gregory Bateson (1904-1980) defined «dance of relationships», which «connects» every living thing. More in general, all of the work by this outstanding thinker may be read as a huge attempt to «rendere visibili le relazioni» [“make relationships visible”], and especially those regarding relationships between people, which become meaningful only if they are placed within the relational contexts they belong to³⁹. This perspective may allow us to appreciate the ecological dynamism of all complex systems, and by extension also of the library; an interconnected, evolutionary and self-regulating environment of elements continuously interacting with one another, linked by relationships which can be made visible; relationships which produce micro-systems, connected to other micro-systems, and so forth, to infinity, in a network where the effects of what Bateson defined «algorithms of language» (i.e. reason) are weaved together with the more ancient and primal «algorithms of the heart», which express them-

³⁹ Cf. SERGIO MANGHI, *La conoscenza ecologica. Attualità di Gregory Bateson*, Milano, Raffaello Cortina, 2004, p. 53 and ff. and p. 63.

selves through dreams, poetry, religious experience⁴⁰. The 'mind', in Bateson's words, is the «structure connecting» all the different kinds of phenomena, and by using this tool correctly we can account for the relationships connecting the single 'things' to one another⁴¹. The reality we have learnt to come to terms with, therefore, is not much different from the eccentric game of croquet Alice plays in wonderland with the flamingo, in a cloddy place, where the balls to hit are porcupines, the arches are soldiers, the bat is a flamingo; all this while the Queen issues contradictory and hysterical orders. Let us read the description Lewis Carroll gives first-hand:

The chief difficulty Alice found at first was in managing her flamingo: she succeeded in getting its body tucked away, comfortably enough, under her arm, with its legs hanging down, but generally, just as she had got its neck nicely straightened out, and was going to give the hedgehog a blow with its head, it *WOULD* twist itself round and look up in her face, with such a puzzled expression that she could not help bursting out laughing; and when she had got its head down, and was going to begin again, it was very provoking to find that the hedgehog had unrolled itself, and was in the act of crawling away: besides all this, there was generally a ridge or furrow in the way wherever she wanted to send the hedgehog to, and, as the doubled-up soldiers were always getting up and walking off to other parts of the ground, Alice soon came to the conclusion that it was a very difficult game indeed⁴².

Knowing, in this sense, implies the chance to successfully observe and interpret reality, and hence the library too, according to a wider, more open-minded, creative perspective; and, especially, trying to see phenomena and relationships between them, not in light of rigid and deterministic causal sequences, but as the result of the relationships connecting the «dancers» who move in the system space.

These arguments, closely intertwined, can be summed up in an underlying need, I do not know how perceptively recognised on a scientific and professional level, in other words, in the need to have an interpretative outlook on the library phenomena, which seeks for re-

40 G. BATESON, *Steps to an Ecology of Mind*, San Francisco, Chandler Pub. Co., 1972, p. 148.

41 Cf. G. BATESON, *Mind and Nature. A Necessary Unit*, New York, Bantam Books, 1980. In Bateson's words the concept allowing to conceive this connection is the counterintuitive one of 'Mind', meant as «un insieme interconnesso, evolutivo e autocorrettivo di parti interagenti» [“an interconnected, evolutionary and self-correcting set of interacting parts”] S. MANGHI, *La conoscenza ecologica*, p. 57. Hence, 'Mind', in this sense, is a meta-language able to represent and describe complexity.

42 LEWIS CARROLL, *Alice's Adventures in Wonderland*, <<https://www.cs.indiana.edu/metastuff/wonder/ch8.html>>.

relationships between them traced according to a perspective we may define as essentially a holistic one.

5. *On the field*

In this paragraph I shall briefly outline the research project which is the “laboratory” where, based on the theoretical premises previously exposed, we shall attempt to examine what happens in the (physical, digital, metaphorical) space of three Tuscan libraries (Oblate in Florence, Ginestra Fabbrica della conoscenza in Montevarchi, MMAB Museo Archivio Biblioteca in Montelupo Fiorentino), and whose early results are described in Maria Pagano’s paper in this volume, and whose processing will be completed with the end of 2015. By the expression ‘library space’, within this scope, we refer to all the bibliographical and extra-bibliographical phenomena which can be placed in the physical, organisational, metaphorical, digital boundaries of the library⁴³. To this respect, library space is, as a whole, analysed as a system of signs and codes aimed at producing procedures of cultural meaning, a sort of text, in a socio-semiotic sense, including user’s practices⁴⁴. The phenomena shall be identified and described in the physical and metaphorical confines of these institutions; at the same time, from an evaluative and interpretative point of view, we shall try to provide complete and as cohesive as possible representations of such phenomena. That way, as is evident, we shall apply two different languages to the same phenomena, the former a descriptive, the latter an interpretative one. Hence, the institutions examined in this first stage, begun in the latter half of 2014, were Biblioteca delle Oblate in Florence (<http://www.biblioteche.comune.fi.it/biblioteca_delle_oblate/>), Ginestra Fabbrica della conoscenza in Montevarchi (<<http://www.fabbricaginestra.it/>>), MMAB. Museo Archivio Biblioteca in Montelupo Fiorentino (<<http://www.comune.montelupo-fiorentino.fi.it/index.php/cosa-e-il-mmab>>).

The methodological premise of the project, as already said, consists in not relating description, and its ensuing evaluative outcome, to the conscious or unconscious restrictions posed by adhering to a pre-de-

43 The underlying principles and methods which can be used to operate within this perspective have been recently exposed in the afore-mentioned *Lo spazio della biblioteca*. The book, and especially the chapter *Le persone*, analyses, argues and discusses the analysis methodologies falling within an interpretative framework which can be linked to socio-semiotics, on the one hand, and to examination perspectives based on ethnographic observations, on the other, taking into consideration also the analysis methods of museum space from the field of visitor studies.

44 For a more extensive discourse on these matters I refer to chap. 4 in my *Un’idea di biblioteca* (Manziana, Vecchiarelli, 2010, p. 157 and ff.).

defined model; this premise rests on two founding elements. The former consists in a sort of pursued and conscious syncretism: in that sense, we shall use all the different evaluative tools we can recover. This helps to both collect data and information on the phenomena, and evaluate the reference meta-theoretical profiles; in other words, elaborate a first-level (of the phenomena), and a second-level evaluation (of how the phenomena are assessed). The latter element is expressed by the attempt to use analysis models of all the data collected borrowing principles from the field of network science. The observation preliminarily and basically extended to all the phenomena is pivotal, because only this way - it is useful to stress once more - we may rule out the restrictions, both conscious and unconscious ones, that adhering to a model implies. In order to better convey this concept, the gathering of data and quantitative indicators regarding loan, impact, circulation, growth of collections is clearly related to a model intended to evaluate the ways in which specific services are provided; equally clear is the fact that quantitative methods cannot (and will not) account for many other phenomena (essentially actions) occurring in the library's physical space. On the opposite end, with qualitative methods (questionnaires, interviews, focus groups, etc.) the general goal is to understand the ways in which a library, in its conceptual and organisational overall configuration, is perceived and interpreted by its social groups (actual and potential users, stakeholders, staff etc.). From the practical point of view, we have therefore proceeded to pay a preliminary visit to each institution, in order to gather all the data and information necessary to the next stage of the fieldwork: namely all the elements necessary to understand the building structure and functions (plans, photographic documentation, architectural and librarian projects), the qualitative and quantitative examination tools used in the facilities analysed⁴⁵, the sources accounting for any debate arisen when defining the project. At the same time, we have carried out an accurate analysis of the architectural, organisational and functional configuration of space, so as to identify what actions are and are not allowed. We have selected parts of library space of special interest, wherein for example complex phenomena take place, about which we intend to gather more coherently formed knowledge. Then, from these phenomena typified in actions we have defined some observation grids, used by whom is conducting the survey. The observer places himself/herself in the space analysed and traces, noting them down, the different uses in a sample period,

45 The monitoring of the services trend in Tuscan public libraries is under the aegis of Regione Toscana. The last report available, from the period 2011-2013, titled *Il valore delle biblioteche pubbliche e della cooperazione bibliotecaria toscana*. <<http://www.regione.toscana.it/cittadini/cultura/biblioteche>>.

whose duration can be estimated to around 6 days⁴⁶. Furthermore, also a non-structured observation of the space, called 'logbook', has been carried out. Finally, a Likert scale questionnaire was drawn up, allowing us to evaluate the behaviour of the person interviewed insofar as the content of each item, modulating the degree of one's agreement or disagreement, expressed in five options (Extremely/ Very/ Average/ Poor/ Not at All). The questionnaire is divided into four sections. The first (24 questions) is aimed at analysing the evaluation of what aspects users believe to be more significant to ensure the quality of library services (e.g.: quality of the architectural space, of the catalogue, seminars activated, educational activities etc.). The second section (9 questions) is about the perception of the aspects believed to be the most relevant to evaluate the librarian's professional skills (cataloguing competences, relative to information literacy, relational inclinations etc.). The third section (9 questions) is about space perception (pleasant, noisy, etc.). The fourth section is made of six questions identifying different spaces in the analysed facility, and ask the compilers to indicate which one they prefer. The questionnaires (as Maria Pagano's paper in this volume clarifies), were submitted to staff members and random samples of users present at the time when these observations were carried out⁴⁷. From the point of view of digital contents, different types of data on the informative content of catalogue records will be gathered and analysed, together with digital objects connected to the records, such as text, audio, video file, etc.; logs of user's researches on web portals and online catalogue; evaluative elements used (folksonomic tags, likes, shares and posts on Facebook and other social media); relations connected to all these digital traces present online. The goal, in this specific research, is to attempt to combine the analysis of data coming from so-called log analysis - measuring the interactions between users and systems of information representation and recovery - with the information which be retrieved by analysing data produced in the environment of the different types of social web⁴⁸. In other words, considering

46 According to this perspective further examination was carried out in some dissertations defended in the past years at the University of Turin, and which focused on the analysis of the space in Biblioteca Universitaria and in Biblioteca civica "Primo Levi" in Turin, in Biblioteca Archimede in Settimo Torinese, in Biblioteca civica in Alessandria. For a methodological overview on the observation techniques cf. A. GONZÁLEZ-TERUEL - M. BARRIOS CERREJÓN, *Métodos y técnicas para la investigación del comportamiento informacional*, p. 159 and ff. (chapter 6, *Observación*).

47 Ivi, p. 79 and ff. (chapter 3, *Los estudios de encuesta*).

48 Ivi, p. 227 and ff. (chapter 9, *Análisis de los registros de transacciones*). On social web analysis, within a now ever-expanding literature, cf. EVELIEN OTTE - RONALD ROUSSEAU, *Social Network Analysis: a Powerful Strategy, Also for the Information Sciences*, «Journal of information science», 28, 2002, 6, p. 441-453. DOI:

how this project strategy is articulated, we need to start examining the relationships between so-called 'big data' and libraries, and the three V's characterising them: volume, velocity, variety⁴⁹.

With the two following pictures (8 and 9) we present a simple and for some respects rudimentary visualisation model of data relations that we shall here only exemplify⁵⁰. Fig. 8 identifies 4 digital environments in which there are, in different informative contexts, some linguistic occurrences, which in the example correspond to names of contemporary Italian literature authors. Data, therefore, have a different value according to the different contexts: in the case of the catalogue, 'Andrea Camilleri' is the key used for a simple research or also, in the case of the 'social' catalogue, i.e. full of folksonomies, a term users employ; in the case of Facebook and Twitter accounts of the library, the same occurrence we can imagine in the posts relative to a meeting with the author. On the website the same linguistic occurrence can be present in texts about that author, or where the meeting is disclosed and promoted, and so forth. Usually, the correlations of these data are not analysed, though we may clearly infer there are some. In that sense, trying to examine all the effects produced by these occurrences in the library's different space and services might prove interesting. 'Andrea Camilleri', therefore, could be useful to determine the number of books by this author on loan, according to traditional or digital ways; the number of posts, likes and tweets about the event planned and carried out; the number of pictures of the event uploaded on Instagram. In other words, by keeping all the information that can be obtained from these data together, we would succeed in mapping the impact of the various actions related to the 'Andrea Camilleri' occurrence in the different environments and services connected to the specific configuration of library space, for how in this paper this expression is meant. 'Library', in that sense, is a term whose value changes according to the different (physical and

10.1177/016555150202800601; BING LIU, *Web Data Mining. Exploring Hyperlinks, Contents, and Usage Data*, 2nd ed., Berlin, Springer, 2011; *The SAGE Handbook of Social Network Analysis*, edited by John Scott and Peter J. Carrington, London; Thousand Oak (CA), SAGE Publications, 2011.

49 A synthetic introduction, with bibliographical reference, can be found in MARK BIERAUGEL, *Keeping Up with... Big Data*, <http://www.ala.org/acrl/publications/keeping_up_with/big_data>. For a wider overview cf. *Big Data: the Next Frontier for Innovation, Competition, and Productivity*, [Texts by] James Manyika [et al.], Washington, McKinsey Global Institute, 2011, and JANNA ANDERSON - LEE RAINIE, *The Future of Big Data*, <<http://www.pewinternet.org/2012/07/20/the-future-of-big-data/>>, report from Pew Research Center's Internet & American Life Project, <<http://www.pewinternet.org/>>.

50 An effective outline of data visualisation models and examples is offered by *Data Flow. Visualizing Information in Graphic Design*, ed. by Robert Klanten, Nicolas Bouquin, Thibaud Tissot, Sven Ehmann, Berlin, Gestalten, 2008.

digital) environments, which suffer the consequences of the actions, variously contextualised, associated to the linguistic occurrence. If we picture the ‘library’ as a circle, on the inner surface we may then highlight the quantified effects of these actions, evaluate them both in their endogenous dimension and compare them to the ones recognised using other occurrences (Fig. 9).

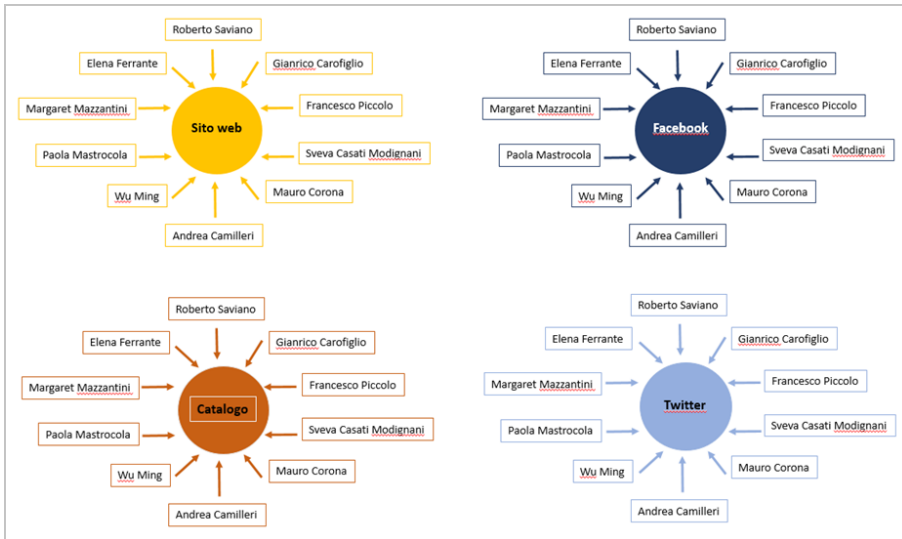


Fig. 8 - Types of data in different digital environments such as catalogues or websites.

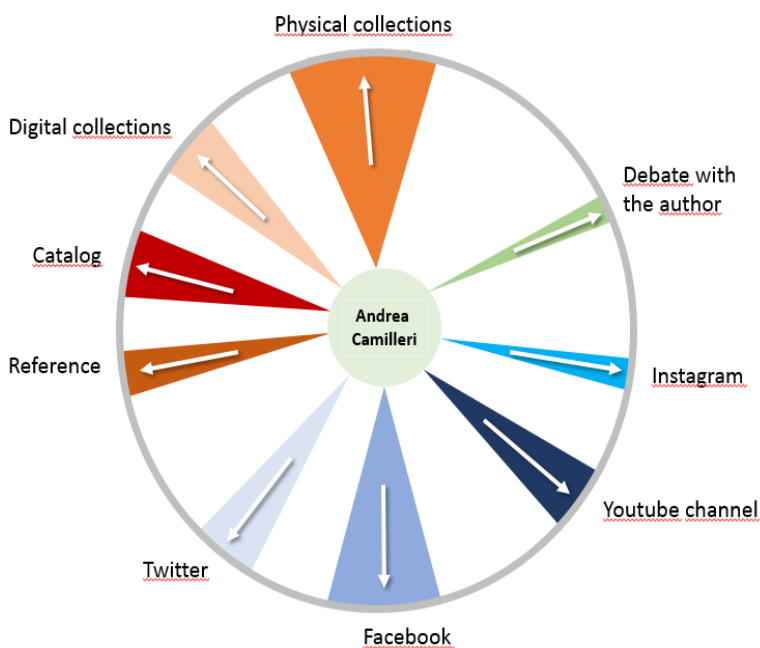


Fig. 9 - Distribution of the different types of actions related to the term 'Andrea Camilleri' on the various types of services, physical and digital, in the library "space".

The visualisation model, depicted in fig. 9 in a simple and synthetic manner, could however be much more analytical, like for instance what the example shows (Fig. 10), made with Circos visualisation software⁵¹ (<<http://circos.ca/>>), which allows circular representation models, originally made to visualise genome features and used for many types of complex data. The demand we have identified and attempted to give an answer to, stemmed from the fact that «new approaches in data modeling and analysis need to be accompanied with corresponding innovations in the visualization of these data. To mitigate the inherent difficulties in detecting, filtering, and classifying patterns within large data sets, we require instructive and clear visualizations that (1) adapt to the density and dynamic range of the data, (2) maintain complexity and detail in the data, and (3) scale well

⁵¹ Circos is a visualisation software created to identify and analyse comparative features in genome structures: cf. MARTIN KRYWINSKI - JACQUELINE SCHEIN - INANC BIROL - JOSEPH CONNORS - RANDY GASCOYNE - DOUG HORSMAN - STEVEN J. JONES - MARCO A. MARRA, *Circos: an Information Aesthetic for Comparative Genomics*, «Genome Research», 19, 2009, 9, p. 1639-1645. DOI: 10.1101/gr.092759.109.

without sacrificing clarity and specificity»⁵².

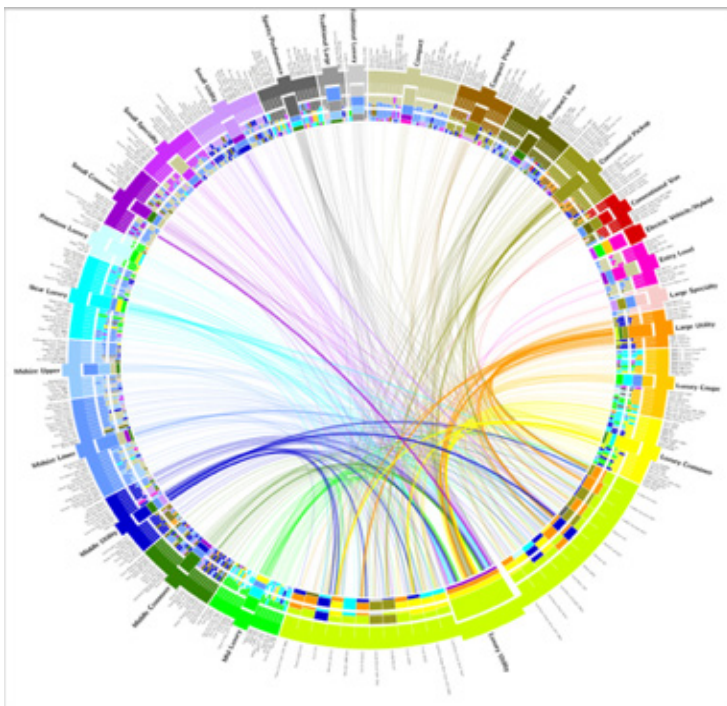


Fig. 10 - Car choice criteria listed by market sectors and brands.
Source: <http://circos.ca/intro/general_data/>.

Therefore, as previously stated in the opening paragraph, with this methodology, here very briefly outlined, we may have a very important visual tool to evaluate how library space responds, with different languages, to the solicitations it is submitted to each time. So the impact takes on a centripetal and not a centrifugal direction: what is important is to look for the effects of actions on the library's - physical digital and metaphorical - surface, and not to look for the traces the library left on the outside, passing through the mental representations people create and on which they base further actions.

In an experience, carried out at Teton County Library (<<http://tclib.org/>>), the searches users conducted on the catalogue are visualised on approximately 1000 optical fibres (for a total of 5 miles of cables), associated to 1000 categories of knowledge contents (Fig. 11).

52 Ibidem.



Fig. 11 - The fibres of Teton County Library visualise, based on 1000 categories-taken from CDD, searches performed by users on the catalogue.

Source: <<http://collabcubed.com/2013/04/01/filament-mind-teton-county-library/>>.

Finally, we shall here briefly sum up the different types of information we shall use in the evaluation:

- *Sources relative to the project and its realisation*
 - Sources and documents on the architectural and librarian project (preliminary, definitive and executive project; librarian planning documents; administrative instruments and resolutions).
 - Sources referred to the debate connected with the project definition and its results (in-depth analysis on periodicals, websites, blogs etc.).
- *Previous tools for services measurement and evaluation*
 - Quantitative analyses;
 - Qualitative analyses.
- *New analyses made*
 - Observation of space usage;
 - Questionnaire, submitted to users, librarians, interested subjects;
 - Analysis of digital data.

In the end we shall have a series of data and very heterogeneous information at our disposal. The goal is to examine it all, in order to

account for the multiple viewpoints of the different actors involved, trying to identify the actual key-factors in the process studied, and producing in the end an *account* on its comprehensive development. For digital data, once the difficulties with their acquisition are overcome, we will test analysis and visualisation techniques able to express the relationships network they are a part of.

6. A willful outlook

In 1974, forty years ago, Georges Perec sat for three days at a table in a bar in Place Saint-Sulpice, in Paris 6th *arrondissement*, gazing at the space around him: the square, a girl passing by (Fig. 12), changing weather conditions, the number of a bus driving by, the way in which a punter is holding a cigarette between the fingers of his hand, and a young woman's dress, the colour of a car, the changing shape of clouds⁵³.



Fig. 12 - A little girl crossing Place Saint-Sulpice, 1974
Photograph by Pierre Getzler (courtesy of Voland edizioni)

Dressing with obstinate determination, by his own choice, the mythical part of *Funes el memorioso*, Perec is at the same time witness and guinea pig of an extraordinary experiment. He single-mindedly

⁵³ An account of these observations can be found in *Tentative d'épuisement d'un lieu parisien*, with photographs by Pierre Getzler, published on the magazine «Cause commune» in 1975 and then by publisher Christian Bourgois in 1982.

applies the question about what and how we observe and interpret reality to his specific phenomenological field. And he does so - thus turning his experience into a testimony - stubbornly, and endearingly, trying to understand; he exposes the observer's limits in all their anthropological and epistemological frailty. Hence he directly confronts, with no alibis nor mediations, the experience of complexity. This reference to Perceval basically is intended to invite readers, members of a niche interpretative community, not to lose sight of the fact that the topics, here examined since they belong also to the disciplinary field of library science, are a fundamental and essential part of a wider set of problems, which share the same tensions, changes, criticality. Singling out, from this problematic field, a disciplinarily accomplished knowledge, is a difficult task, which must be embarked with careful attention. All this, from our specific point of view, must be first of all traced back to the blurry polysemy of the term and concept of 'book', that very familiar and yet elusive object which has occupied since its mythical origins the library's space; a polysemy that, if possible, has become even more blurred since the Gutenbergian book migrated to the more volatile and occasional form of swishing digital information. For this we must envisage, that is *see*, following perspectives that have always accompanied all speculation on the organisation of knowledge, and then define a library science that is both practical and interpretative, which is able to rediscover the multiple meanings attributed to the entities, marking the limits of the discipline: data, information, documents, books, digital objects, that can be reinterpreted according to their original purpose of artefacts developed to produce practices of cultural significance. And in this sense, finally, the visual representation of processes can be a viable cognitive help, as for instance the studies by Walter J. Ong (1912-2003) have effectively shown⁵⁴. It is thus necessary to reassert the indissolubility of relationships between the organisational and interpretative dimension of library science⁵⁵; they both have to learn to first of all recognise each other, aware of their own specific

54 Necessarily refer to *Orality and Literacy. The Technologizing of the Word*, London - New York, Methuen, 1982 and *Interfaces of the World. Studies in the Evolution of Consciousness and Culture*, Ithaca NY, Cornell University Press, 1977. On the relations between history of bibliographical thought, arts of memory, use of visual representation models, I dare refer to my *Le dimensioni della bibliografia. Scrivere di libri al tempo della rete*, con testi di Maria Cassella, Giovanna Balbi, Bianca Gai, Diego Arduino, Roma, Carocci, 2013, with special reference to contents in chapters 2 and 7.

55 Cf. in that sense G. DI DOMENICO, *Biblioteconomia, scienze sociali e discipline organizzative: un rapporto da ripensare*, in: *Una mente colorata. Studi in onore di Attilio Mauro Caproni per i suoi 65 anni*, promossi raccolti ordinati da P. Innocenti, curati da C. Cavallaro. 3 v., Manziana, Vecchiarelli; Roma, Il libro e le letterature, 2007, p. 495-511; contents recalled in chapter 1 in *Biblioteconomia e culture organizzative. La gestione responsabile della biblioteca*.

premises and ends, and especially mutually legitimate themselves. A professional practice rooted solely in the organisational axis cannot but yield techniques stiffened by aseptic conventionalism; just as an academic culture falling back on itself cannot but, tautologically and self-referentially, address only the few members that populate and form it, who knows for how long. A practical and professional library science which deliberately severs all connections with the history of ideas, and hence with library science, risks generating strategic errors of such a magnitude that, in the long term, may actually bring catastrophic effects for the group of disciplinary fields and subfields, which in books, documents, libraries, in all their discontinuous and morphing forms, find their area of more or less mediated application. There is no doubt that the research strand here briefly outlined is in its entirety quite complex⁵⁶. However, as is clear, it is not a deliberately pursued complexity, but it rather stems from the intrinsic nature of observable and observed phenomena. Moreover, as Alberto Salarelli effectively argues in his paper contained in this volume, the best research perspective for contemporary library science «consists first and foremost in seeking a type of model that can, or rather, that tries to respond appropriately to the complex needs of the contemporary world, avoiding solutions that are pre-packaged in terms of organizing spaces, services and functions and, at the same time, are reductionist on the plane of the dialectic between tradition and change»⁵⁷. The fact that these phenomena are, to our eyes, complex, is neither a good nor a bad thing in itself: we ourselves are continuously part of it, even if on most occasions we do not realise it, striving to achieve a clear and precise goal, which is, at the same time, a final and efficient cause of our actions. Thinking of the library as a growing organism, recalling Ranganathan's well-known and still popular metaphor cited in the epigraph, inevitably leads us to take on as a basic subject for a new outlook on libraries, not only ideology and technique, but also complexity, which is ultimately the stuff of life: for this we have to willfully persist to try and understand it.

(Translation by Jennifer Cooke)

56 Dense and interesting, in this respect, the theories argued by EDGAR MORIN in *La voie: pour l'avenir de l'humanité*, Paris, Fayard, 2012, discussed by G. DI DOMENICO in the afore-mentioned *Conoscenza, cittadinanza, sviluppo*. Interesting considerations on the relations between libraries and digital eco-system are also proposed by GINO RONCAGLIA in *Social network e riconquista della complessità: il ruolo delle biblioteche*, «Biblioteche oggi», 32, 2014, 5, p. 4-8, <<http://www.bibliotecheoggi.it/2014/20140500501.pdf>>.

57 A. SALARELLI, *Towards a Critique of the Concept of Model in Library Science*.

MODELS OF ANALYSIS, MEASUREMENT, EVALUATION

Beyond Indicators and Measures. Understanding the User's Reality Through a Qualitative Approach

Aurora González-Teruel*

1. Introduction

Nowadays in order to manage libraries it is no longer justifiable to think about the future based on what has been done in the past, or to act and make intuition-based decisions ¹. Now more than ever, it is necessary to make decisions based on empirical evidence obtained from knowledge about the internal and external settings of this library in order to adapt to them. Such a setting expects justifying the usefulness of investing the resources invested in this library, and in changing its direction towards users.

Yet these users have an ever-increasing offer of mechanisms to provide the information at their disposal. In this way, in recent years, the typical procedures of business organisation have been introduced in the management of information units, which generally correspond to the public sector. There is also a second matter: in professional discourse, the need to direct library management towards users is increasingly expected. As a result, similar discourse to the following can be frequently found in professional literature: «The objectives that libraries (and businesses) pursue when planning the use of social media are the same: earning more trust in the brand (reputation); satisfying users/customers (engagement); increasing sales (more library use and

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1 MARIE L. RADFORD, *Foreword*, in: Douglas Cook, Lesley Farmer (Eds.), *Using Qualitative Methods in Action Research: How Librarians Can Get to the Why of Data*, Chicago, Association of College and Research Libraries, 2011, p. XI-XII.

user collaboration) and cutting costs»². This argument is filled with terms like strategy, value, fidelity, segmentation, profitability, cost or benefit. These terms are typical of the management of organisations in a market setting, which other than focusing on users, centre on justifying the decisions made. Thus rather than users being the subject of action, they become its object. It is the library that acts because users will perceive a value, will feel satisfied or will use the services they have at their disposal more. Everything for users, but without users, who are a kind of management goal, a measure of success and justifying investment, rather than users being the main figure of action. In parallel to extending the use of the philosophy of library management, a new way of collaborating appears in the generation, use and exchange of information: web 2.0 and social media. This is a new setting where users play a more autonomous role. Consequently, libraries must consider the role they should play in an increasingly more information society.

In this context, the present work considers the necessity of changing the perspective from that which we professionals observe users and from where we make decisions, decisions in which users are absolutely involved. We can no longer think only about “adapting users’ requirements” in terms of products and services, but must increasingly think about “blending into the user’s reality”. In other words, thinking about in what way it is possible to integrate the library into the user’s reality. From the methodological viewpoint, this involves putting in second place measures of transactions between users and the library through library statistics, and focusing our interest in knowing users and their social setting. It is a matter of seeking in-depth knowledge about potential users rather than representative results. Not being limited to only evaluate the library with standard surveys about satisfaction, but finding out what is beyond the good or bad evaluations that users give, and acting accordingly.

So with such a change in perspective, reviewing what information behaviour research has contributed to users’ knowledge of information, and also to library management with a user-centred approach, might prove useful. It is a research field whose theoretical and methodological debates about the study object and the most suitable methodology are similar, to a great extent, to those now considered in the library management and evaluation domain. Specifically, the present work puts forward the theoretical positions taken in IB research and their translation into a predominantly qualitative methodology. Finally, three methodological designs are provided that reflect the

2 NIEVES GONZÁLEZ FERNÁNDEZ-VILLAVICENCIO - ALICIA GONZÁLEZ-MARTÍN, *Demostrar el valor de la biblioteca en la web social: social media marketing*. In: *XII Jornadas Españolas de Documentación Científica. FESABID. 2013, 2013*, p. 31.

different perspectives taken when studying users of information systems. These three designs start from objectives and/or research questions that respond to different theoretical assumptions, which are also reflected not only in the analysis type undertaken, but also in the type of responses obtained.

2. Theoretical and methodological debates in research into information behaviour

2.1. Theoretical foundations

Information behaviour is defined as the study of any experience lived by an individual or group of individuals related with need, search, management, diffusion and use of information in various contexts³. As a specific research line within Library & Information Science (LIS), its development starts precisely when the library no longer considers that it is a warehouse of books, but starts stressing its diffusing function. Yet despite former literature including such a background, it generally pinpoints the start of user studies in 1948, the year when the Royal Society Scientific Information Conference⁴ was held. In the first years of such studies, the user type that research centred on was experimental sciences and technology because of the way that the value that information had then was perceived in such contexts. Later other contexts were also considered target groups: social scientists, humanists and people in everyday settings. The methodologies of social sciences were also introduced when these new target groups were introduced.

While this research line was developing and progressing, the publication of a review chapter by Dervin and Nilan in 1986 in «Annual Review of Information Science and Technology» (ARIST⁵) about information requirements and uses became a major milestone. This chapter described a change in the user research paradigm; on the one hand, a traditional system-centered paradigm and, on the other, an emerging user-centred paradigm⁶. This duality between the system

3 KAREN E. FISHER - SANDA ERDELEZ -LYNNE MCKECHNIE, *Preface*, in: Karen E. Fisher, Sanda Erdelez and Lynne McKechnie (Eds.), *Theories of Information Behaviour*, Medford, Information Today, 2005.

4 RANIA SIATRI, *The Evolution of User Studies*, «Libri», 49, 1999, 3, p. 132-141.

5 BRENDA DERVIN - MICHAEL NILAN, *Information Needs and Uses*, «Annual Review of Information Science and Technology», 21, 1986, 1, p. 3-33.

6 AURORA GONZÁLEZ TERUEL, *La perspectiva del usuario y del sistema en la investigación sobre el comportamiento informacional*, «Teoría de la Educación. Educación y Cultura en la Sociedad de la Información», 12, 2011, p. 9-27.

perspective and the user perspective has since been a compulsory reference used to distinguish a more quantitative research type to address the user's observation of an information system, and another emerging one where the user is perceived in relation to information with a more qualitative approach. A consequence of this new paradigm was the start of a race, which resulted in an explosion of theoretical proposals for user studies, whose early beginnings came about in the 1970s and 1980s⁷. These theories intended to describe the information search process globally or holistically, and were interested in knowing certain aspects like the reason which leads people to seek information, irrespectively of the system they resort to, or the way they interact with a social, cultural or historic context. Since then, numerous theories have emerged, of which those by Pettigrew, Fidel and Bruce⁸ had a more far-reaching repercussion and were classified as cognitive approaches. They are based on the same grounds: cognitive aspects, or the model that each individual has of the world, condition the way that information is interpreted and employed. This approach centres on studying information behaviour from the perspective of an individual's cognitive and emotional motivations. Accordingly, two of the most cited theoretical models in recent years are included⁹. The first is Ellis' model¹⁰, which centres on studying behavioural aspects of users when they interact with information retrieval systems. Its objective is to propose a series of individual patterns that users reproduce when seeking information and, from this, they determine specifications to design information retrieval systems. The second model is Kuhlthau's Information Search Process¹¹. This model is based on a constructivist perspective of learning. It conceives information seeking as a building process in which users make progress by moving from uncertainty to knowledge. Uncertainty is considered a cognitive state that causes anxiety and lack of trust. In this way, different patterns are described to explain users' experience during the information search process. This process consists in a succession of these

7 DAVID ELLIS, *The Emergence of Conceptual Modelling in Information Behaviour Research*, in: Amanda Spink, Jannica Heinström (Eds.), *New Directions in Information Behaviour*, Bingley, UK, Emerald Group Publishing, 2011, p. 17-35.

8 KAREN E. PETTIGREW - RAYA FIDEL - HARRY BRUCE, *Conceptual Frameworks in Information Behaviour*, «Annual Review of Information Science and Technology», 35, 2001, 1, p. 43-78.

9 A. GONZÁLEZ TERUEL - GREGORIO GONZÁLEZ ALCAIDE - MAITE BARRIOS CERREJÓN - MARÍA FRANCISCA ABAD GARCÍA, *Mapping recent information behaviour research: an analysis of co-authorship and co-citation networks*, «Scientometrics», 103, 2015, 2, p. 687-705.

10 DAVID ELLIS, *A Behavioural Approach to Information Retrieval System Design*, «Journal of Documentation», 45, 1989, 3, p. 171-212.

11 CAROL C. KUHALTHAU, *Seeking Meaning. A Process Approach to Library and Information Services*, Norwood, NJ, Ablex, 1993.

stages or phases: starting, selecting, exploring, formulating, collection and presenting. Each one of the above stages is also seen from three points of view: affective (feelings), cognitive (reflections or thoughts) and physical (actions).

After consolidating information behaviour study, through the search of a theoretical foundation, critical positions have emerged in recent years that question the value of these theories, user centrality and the operationalisation of the context in which users seek information, among others. As to what these positions contribute to research in general terms, we can state that they are alternatives to not only individualism, but also to the lack of definition of what is social and its relation with seeking and using information since this context is not considered to go beyond the process and individuals' experience, but is implicit and constructed through these social processes.

From this perspective, the value of theoretical models is questioned. For instance, Olsson¹² considers that the emergence of a new socio-technical phenomenon, like social networks or online communities, has evidenced shortcomings in predominant theoretical approaches. This is because they provide very few tools to study these aspects and state that studying the knowledge exchange that takes place in this medium, a practice as old as humanity, is once again being ignored, as has been traditionally the case. Likewise, McKenzie¹³ considers that recent theoretical models are restricted because they refer to limited aspects and represent successive searches to obtain information about a single problem, but do not include a wide variety of information practices, such as scanning surroundings, chance encounters and searches through intermediaries.

As regards the perspective taken, user centrality is also questioned. In line with this, Julien¹⁴ observed the poor interest shown in investigating the non-user of formal information systems, an aspect that can be considered system centrality as opposed to the user. Hence by analysing the relations between the user and the librarian according to Kuhlthau's Information Search Process, Tuominen¹⁵ sustains that user-centred discourse does not always address serving user requirements, but the system's requirements. Discourse does not necessarily

12 MICHAEL R. OLSSON, *Ciphers to this Great Accompt. The Shakespearian Social Sense-Making of Theatre Professionals*. In: Gunilla Widén, Kim Holmberg (Eds.), *Social Information Research*, Bingley, UK, Emerald Group Publishing, 2012, p. 17- 42.

13 PAMELA J. MCKENZIE, *A Model of Information Practices in Accounts of Everyday-life Information Seeking*, «Journal of Documentation», 59, 2003, 1, p. 19-40.

14 HEIDI JULIEN, *Constructing "Users" in Library and Information Science*, «Aslib Proceedings», 51, 1999, 6, p. 206-209.

15 KIMMO TUOMINEN, *User-centered Discourse: an Analysis of the Subject Positions of the User and the Librarian*, «The Library Quarterly», 67, 1997, 4, p. 350-371.

free the user from the system's limitations, and so it does not easily allow the relations of unequal power between the expert librarian and an ignorant user to be left behind. As Talja¹⁶ states, the objective of providing help to people so they can move around in a modern knowledge setting and cope with it is inevitably based on a unilateral limited vision of knowledge, the system's vision. Hence McKenzie¹⁷ considers that many theoretical models, which describe the information search process, are based on the observation made by academic or professional users. So these models prove useful for describing the type of systematic search made in these settings, centre on analysing a current need, and consider a holistic approach, which intends to address any information behaviour. Nonetheless, these considerations are not always useful for knowing behaviour or information practices in an everyday life setting.

Talja¹⁸ considers that the cognitive point of view does not offer solutions to conceptualise the context in which users seek information, an aspect that has been extensively debated in the user-centered research of information. Olsson¹⁹ considered that, in their thirst for generalising information-seeking situations, existing models have become intercontextual models. In other words, as Courtright²⁰ states, they omit the context or do not suitably represent the complexity, variability and mutual interactions of the contextual factors in the area of social networks, information technologies and organisational practices. Conversely when considering the context from a social perspective, this female researcher states that, from this perspective, both user and knowledge are considered actors and social facts, respectively. Accordingly, the actors in the information search process are social beings who construct information through interaction and language, and not only in their minds. Therefore, as actors' language reveals their social constructions of reality, the best way to understand the context for research is to analyse the discourse of these actors rather than merely observe their behaviours and record their points of

16 SANNA TALJA, *Constituting Information and User as Research Objects: a Theory of Knowledge Formations as Alternative to the Information Man-theory*, in: Pertti Vakkari, Reijo Savolainen, and Brenda Dervin (Eds.), *Information Seeking in Context. Proceedings of an International Conference on Research in Information Needs, Seeking and Use in Different Contexts*, London, Taylor Graham, 1997, p. 61-80.

17 P. J. MCKENZIE, *A Model of Information Practices in Accounts of Everyday-life Information Seeking*, p. 19-40.

18 S. TALJA, *Constituting Information and User as Research Objects*, p. 61-80.

19 MICHAEL R. OLSSON, *Re-thinking our Concept of Users*, «Australian Academic & Research Libraries», 40, 2009, 1, p. 22-35.

20 CHRISTINA COURTRIGHT, *Context in Information Behaviour Research*, «Annual Review of Information Science and Technology», 41, 2008, 1, p. 273-306.

view²¹. A cognitive perspective of studying information behaviour takes the context as another variable, while this context from a social perspective constitutes the research object itself.

2.2. Methodological foundations

From the methodological viewpoint, investigating information behaviour does not go beyond the evolution of other social sciences in the 20th century. After an initial phase, in which survey-based quantitative designs predominated, user research began to introduce qualitative designs. Wilson²² stated that the quantitative research methods being applied in the positivist tradition context were not adequate for studying human conduct. Likewise beyond the methodology guideline, the few techniques being employed were also criticised, as were the diversity and ambiguous nature of language when documenting the use of these techniques. Innovation was generally lacking and thorough experimental designs were inexistent²³.

Extending the target groups in user studies, the emergence of the user-directed paradigm and, generally speaking, the shift towards social sciences in LIS²⁴ all helped extend the qualitative methodology. In Tom Wilson's work *On User Studies*, a compulsory reference for information behaviour researchers, when describing one of its theoretical models that attempts to delimit the frontiers of user research, this author states that: «The vast majority of 'information needs' studies have been conducted under a relatively crude conception of the 'scientific method', using self-completed questionnaires as the main data-collection instrument. Social researchers of many kinds have become disenchanted with this model of research and are turning increasingly to a consideration of 'qualitative research' either as a complete alternative to quantitative research or, at least, as a preliminary»²⁵. Otherwise, he defends a qualitative approach in user research as follows: «Qualitative research seems particularly appropriate to the study of the needs underlying information-seeking behaviour because: our concern is with uncovering the facts of the everyday life of the people being investigated; by uncovering those facts we aim to understand the needs that exist which press the individual towards

21 Ibidem.

22 TOM D. WILSON, *Models in Information Behaviour Research*, «Journal of Documentation», 55, 1999, 3, p. 249-270.

23 HERBERT MENZEL, *Information Needs and Uses in Science and Technology*, «Annual Review of Information Science and Technology», 1, 1966, p. 41-68.

24 D. ELLIS, *The Emergence of Conceptual Modelling in Information Behaviour Research*, p. 17-35.

25 TOM D. WILSON, *On User Studies and Information Needs*, «Journal of Documentation», 37, 1981, 1, p. 11.

information-seeking behaviour; by better understanding those needs, we are able to better understand what meaning information has in the everyday life of people; and by all of the foregoing, we should have a better understanding of the user and be able to design more effective information systems»²⁶”.

Nowadays, it can be stated that this research line has broadly assumed qualitative methodology assumptions, just as recent research works have demonstrated on an intellectual information behaviour research basis. One aspect that makes up this intellectual basis is precisely the qualitative methodology and, within it, other methodologies stand out, such as Grounded Theory²⁷. Other methodologies include ethnography, case studies or phenomenology, to name just a few²⁸. Apart from conventional questionnaires and interviews, whose hegemony is indisputable in this field²⁹, other techniques are also employed, like observation, content analysis, focus groups, social network analyses or discourse analysis, among others³⁰. The qualitative methodology has generally complemented and, to a great extent, favoured the theoretical developments achieved in recent years. As Gorman and colleagues³¹ stated, qualitative research is in tune with the increasing complexity of an information domain that requires flexibility and variability in data analysis. Generally speaking, the main contributions made by this approach boil down to four: a) assuming the conception of the user's reality as being subjective and multiple, rather than being determined by the reality of the information system; b) directing research to user observation where information problems emerge. So wherever the user is, he/she needs and uses information by introducing this user's context as an important research aspect; c) going deeply into various aspects of the information search process, and leaving or postponing the generalisation of results; d) developing inductive data analysis, in which concepts are

26 Ibidem.

27 A. GONZÁLEZ TERUEL - MARÍA FRANCISCA ABAD GARCÍA, *Grounded Theory for Generating Theory in the Study of Information Behavior*, «Library & Information Science Research», 34, 2012, 1, p. 31-36.

28 LYNNE E. F. MCKECHNIE - LYNDY BAKER - MARTHA GREENWOOD - HEIDI JULIEN, *Research Method Trends in Human Information Literature*, «The New Review of Information Behaviour Research», 3, 2002, p. 113-125.

29 HEIDI JULIEN - JEN PECOSKIE - KATHLEEN REED, *Trends in Information Behavior Research, 1999-2008: a Content Analysis*, «Library & Information Science Research», 33, 2011, 1, p. 19-24.

30 L. E. F. MCKECHNIE - L. BAKER - M. GREENWOOD - H. JULIEN, *Research Method Trends in Human Information Literature*, p. 113-125.

31 G. E. GORMAN - PETER CLAYTON - SYDNEY J. SHEP - ADELA CLAYTON, *Qualitative Research for the Information Professional: A Practical Handbook*, London, Facet Publishing, 2005.

organised and categories are built based on data, and not on former judgements, based generally on socio-demographic variables.

Nowadays however, confrontation between qualitative or quantitative research is not the main point of debate because their complementarity appears to have been demonstrated. The really interesting aspect is to look for the most suitable methodology in accordance with the research objective, regardless of its approach. So as previously described for theory, and from a methodological point of view in user research, some critical positions can be found with former research.

For instance, when analysing the methods adopted for user research in a users' everyday life context, Davenport³² considers that there has been very little reflexivity on the researcher's position in the power networks that constitute academic work. Indeed when analysing the methods employed, these being the focus group, the critical incident technique³³ and the time-line interview³⁴, this female researcher classifies them as confessional methods since they are designed to help research to obtain truths or hidden meanings. The main point they have in common is that they intend to obtain information about activities and mental states that are not directly observable. Therefore as Olsson states³⁵, results generate the representation of the social interaction between the researcher and the informant, but not of the user's cognitive structures. According to Davenport³⁶, these methods also involve a researcher (a figure of authority or an expert) and one subject or more, so no interactions take place among peers; moreover, their objective is the intervention that improves a system, rather like providing some form of cure to the sick. So Olsson³⁷ considers that the most outstanding information seeking models are those that result from their social-discourse context, and that they come over more as researchers' constructions than representations of the user's "reali-

32 ELISABETH DAVENPORT, *Confessional Methods and Everyday Life Information Seeking*, «Annual Review of Information Science and Technology», 44, 2010, p. 533-562.

33 JOHN CLEMANS FLANAGAN, *The Critical Incident Technique*, «Psychological Bulletin», 51, 1954, 4, p. 327-358.

34 BRENDA DERVIN, *An Overview of Sense-Making Research: Concepts, Methods, and Results to Date*, in: *Annual Meeting of the International Communication Association, Dallas, TX. 1983*, <<http://communication.sbs.ohio-state.edu/sense-making/art/art-dervin83.html>>.

35 MICHAEL R. OLSON, *Beyond "Needy" Individuals: Conceptualizing Information Behaviour*, «Proceedings of the American Society for Information Science and Technology», 42, 2006, 1, p. 43-55.

36 E. DAVENPORT, *Confessional Methods and Everyday Life Information Seeking*, p. 533-562.

37 M. R. OLSSON, *Re-thinking our Concept of Users*, p. 22-35.

ty". Along these lines, Carey, McKechnie and McKenzie³⁸ observe that LIS researchers have begun to explore a discursive approach whose intention is to identify the means by which knowledge is generated and shared in a social context. This approach also expects critical thinking about the relationship between the observer and what is observed, and about the ways in which researchers jointly construct this relationship. So any change made in the perspective offered by the discursive viewpoint is a chance for these researchers to reflect on the research process itself, and also on what this process attempts to discover about people and their involvement in the world that surrounds them.

Basically, when examining the theoretical and methodological foundations of current IB research, at least two perspectives emerge, which have been described, among others, by Talja, Tuominen and Savolainen,³⁹ or more recently by Tabak⁴⁰. The first is the research that stems from the premise that users' cognitive aspects condition the way in which information is interpreted and used. From this perspective, this user context is considered another variable in the research process, a variable formed by social, cultural or historic aspects, among others. Thus the researcher role focuses on unveiling the content of cognitive maps or users' knowledge structures to understand how users interact with information. Apart from this cognitive perspective, there is another more social one that does not contemplate the user context as merely another variable, but as the research object itself. Users are considered actors and knowledge is a social fact, which implies that actors in the information search process are social beings who construct information through interaction and language, and not just in their minds. So as actors' language reveals their social constructions of reality, the best way to understand the research context is to analyse actors' discourse instead of merely observing their behaviour.

Behind such positions lie several theoretical assumptions related with the conception of reality, the researcher's role in the research process or what the main research object is. These different conceptions can be revealed when examining the three user-centred designs to do this: content analysis, social network analysis and discourse

38 ROBERT F. CAREY - LYNNE E. F. MCKECHNIE - PAMELA J. MCKENZIE, *Gaining Access to Everyday Life Information Seeking*, «Library & Information Science Research», 23, 2002, 4, p. 319-334

39 S. TALJA - KIMMO TUOMINEN - REIJO SAVOLAINEN, *Isms in Information Science: Constructivism, Collectivism and Constructionism*, «Journal of Documentation», 61, 2005, 1, p. 79-101.

40 EDIN TABAK, *Jumping Between Context and Users: A Difficulty in Tracing Information Practices*, «Journal of the Association for Information Science and Technology», 65, 2014, 11, p. 2223-2232.

analysis. The three designs share the same data collection method, this being a qualitative interview. Yet the research objective or matter they are based on, and the analysis type to which they submit the information they obtain, differ. The aim is to not only reveal the usefulness of a procedure, but to also show that beyond the method, the research design responds to the theoretical assumptions that define what the research object actually is.

3. User research from a qualitative perspective: content analysis, social network analysis and discourse analysis

3.1 Content analysis

Content analysis is a set of procedures that interpret messages, texts or discourses based on quantitative or qualitative measurement techniques, whose objective is to prepare and process relevant data on production conditions or for these messages, texts or discourses to be subsequently used⁴¹. The content analysis procedure of texts begins by obtaining and selecting research data. This can be done by interviews⁴², an observation method⁴³ or with contents from a series of written documents, e.g., scientific texts⁴⁴, websites⁴⁵, among others. The next step in the content analysis is to determine the analysis units, which are the basic analysable elements (words, sentences, paragraphs, etc.). Finally, the analysis itself commences, and consists in coding and classifying the analysis units by following either an inductive procedure by means of an open coding process, or a deductive process using the former categories or classifications. Quantitative and qualitative contents are generally distinguished. From a procedural viewpoint, what distinguishes them is basically the procedure used to select the sample of texts (probabilistic or non-probabilistic),

41 JOSÉ LUIS PIÑUEL RAIGADA, *Epistemología, metodología y técnicas del análisis de contenido*, «Estudios De Sociolingüística», 30, 2002, 1, 1-42.

42 ANNU SAIRANEN - REIJO SAVOLAINEN, *Avoiding Health Information in the Context of Uncertainty Management*, «Information Research», 15, 2010, 4, <<http://www.informationr.net/ir/15-4/paper443.html>>.

43 MARIE L. RADFORD, *Approach or Avoidance? The Role of Nonverbal Communication in the Academic Library User's Decision to Initiate a Reference Encounter*, «Library Trends», 46, 1998, 4, p. 699-717.

44 REBECCA GREEN, *The Profession's Models of Information: a Cognitive Linguistic Analysis*, «Journal of Documentation» 47, 1991, 2, p. 130-40.

45 STEPHANIE W. HAAS - ERIKA S. GRAMS, *Readers, Authors, and Page Structure: a Discussion of Four Questions Arising from a Content Analysis of Web Pages*, «Journal of the American Society for Information Science», 51, 2000, 2, p. 181-192.

and the analytical procedures (induction or deduction)⁴⁶.

To describe the content analysis application to the user study domain, the work by Ho and Crowley (2003)⁴⁷ is taken as a reference, whose objective was to investigate the perceptions of students (users of a university library) of the reliability and exactness of the services that this library offered. This objective arose after conducting a previous study, which evaluated these users' satisfaction. This was done by administering a survey about satisfaction that followed the ServQual Model. Its results revealed discrepancies among users' expectations and perceptions of quality service on one of the dimensions, reliability. Despite these authors detecting this discrepancy, the results provided no further information other than a simple piece of data. Therefore, they set up this study, which employed a qualitative approach in order to not merely obtain a user satisfaction description, but to also understand the nuances of this dimension.

These authors employed several focus groups as the data collection technique, and a group interview to obtain information about the participants and the interaction among them. What the informants said was recorded and later transcribed completely or partially in order to be subsequently analysed. The basic units of this analysis were themes on the reliability of the service that appeared in the transcriptions. Next an inductive open coding procedure was set up, which consisted in thoroughly reading the text to be analysed and dividing it into fragments. These fragments were compared with each other, grouped into categories on the same theme, and labelled with a code. This code was a term or sentence that expressed the meaning of the analysed fragment⁴⁸. In the work of Ho and Crowley⁴⁹, this process produced five analysis themes or categories, which were separated inductively, and they responded to the research question; that is, the causes behind the poor perception of the reliability of the services offered by the library under study.

46 A. GONZÁLEZ TERUEL - MAITE BARRIOS CERREJÓN, *Métodos y técnicas para la investigación del comportamiento informacional: fundamentos y nuevos desarrollos*, Gijón, Ediciones Trea, 2012.

47 JEANNETTE HO - GWYNETH H. CROWLEY, *User Perceptions of the "Reliability" of Library Services at Texas A&M University: a Focus Group Study*, «The Journal of Academic Librarianship», 29, 2003, 2, p. 82-87.

48 HENNIE B. BOEIJE, *Analysis in Qualitative Research*, Los Angeles, Sage Publications, 2010.

49 J. HO - G. H. CROWLEY, *User Perceptions of the "Reliability" of Library Services at Texas A&M University: a Focus Group Study*, p. 82-87

Table 1. Results of the content analysis in the research work of Ho and Crowley⁵⁰

TRANSCRIPTIONS	ANALYTICAL CATEGORIES
"I [have come to] assume that [LibCat] has a lot more books in it than we actually have [in the stacks]. So when I do searches, I automatically account for that and I look for extra books."	Finding Materials on Shelves
"There are four main primate journals and two of them [are at another campus library] and because of that, I end up not getting those two as much because I have to go over there. That is an issue."	Arrangement of Materials
I ordered books by interlibrary loan, they came in, and nobody told me. So I [went by to ask, found them] and checked them out. A couple of days later [I was notified by e-mail to] pick them up. [I was only able to have them for two weeks instead of four because of that.	Interlibrary Loan/Circulation Procedures
"I want it to be easy and not time consuming. . .my time is very limited and I have to go up flights of stairs and elevators just to figure out what floor a book is on."	Signage
"I did an author search on the person's last name, and brought up several names, but not him. Then I did a search under book title and then it brought up his name."	Searching the Online Catalog

3.2 Social network analysis

A social network is a structure made up by a series of nodes, or actors, some of which are connected to one relation or link, or more⁵¹. Studying information behaviour with a social network analysis centres the research on information exchange from a formal information flows viewpoint, but above all, from an informal information flows viewpoint. This, therefore, is a methodological approach that guides research towards user study (the network node) according to a social group (the set of relations) rather than towards studying the individual influenced by social factors, among others. In the 1990s, and from a

⁵⁰ Ibidem.

⁵¹ DAVID KNOKE - YANG SONG, *Social Network Analysis*, 2nd ed., Thousands Oaks, Sage Publications, 2008.

methodological viewpoint, Haythornthwaite⁵² described the potential of this method to study information exchange. However, it is not a widely used method in LIS, except in the bibliometrics context, and it has been more recently used to study online social networks.

With a view to illustrating the social network analysis procedure from the information behaviour viewpoint, we took the work by González-Teruel and Andreu-Ramos⁵³ as a reference. The objective here was to test this approach to study information behaviour from a social perspective, centered more on relationships between people in a group than on these people's characteristics. In this way the social networks of a group of retired widowed women were studied, which is an information behaviour aspect in an everyday life situation. This population group was also at high risk of information exclusion as it is not a population that widely uses the Internet. Although recent studies⁵⁴ have demonstrated that the senior citizens population frequently visited the public library to, for example, read the press on a daily basis, this was more a male practice than a female one. Hence this senior citizen population group could benefit from the services of this library.

For data collection purposes, two techniques were used: a semi-structured interview and a questionnaire. The interview was based on that employed by Elfreda Chatman, a pioneer in introducing the social research methodology into LIS, to study the group of retired women from the social network perspective⁵⁵. Thanks to this procedure, a general picture of the study group's information behaviour obtained. By the second technique, the questionnaire, which was designed by partly following that employed by Johnson to study the information behaviour of a Mongolian population group⁵⁶, information was col-

52 CAROLINE HAYTHORNTHWAITE, *Social Network Analysis: an Approach and Technique for the Study of Information Exchange*, «Library & Information Science Research» 18, 1996, 4, p. 323-342.

53 A. GONZÁLEZ TERUEL - CAROLINA ANDREU RAMOS, *Investigación del comportamiento Informacional a través del análisis de redes sociales*, «El Profesional de la Información», 22, 2013, 6, p. 522-528.

54 HILARIO HERNÁNDEZ SÁNCHEZ - RAFAEL RUIZ PÉREZ, *Estudio sobre los hábitos de lectura en la ciudad de Córdoba*, «Boletín de la asociación andaluza de bibliotecarios», 96, 2009, p. 67-83.

55 ELFREDA A. CHATMAN, *The Information World of Retired Women*, New York, Greenwood Press, 1992. E. A. CHATMAN, *Framing Social Life in Theory and Research*, «The New Review of Information Behaviour Research», 1, 2000, p. 3-17.

56 CATHERINE A. JOHNSON, *Choosing People: the Role of Social Capital in Information Seeking Behaviour*. «Information Research», 10, 2004, 1, < <http://www.informationr.net/ir/10-1/paper201.html>>. C. A. JOHNSON, *Social Capital and the Search for Information: Examining the Role of Social Capital in Information Seeking Behaviour in Mongolia*, «Journal of the American Society for Information Science and Technology», 58, 2007, 6, p. 883-894.

lected on each informant's social network. The data collected from the interviews were submitted to a qualitative content analysis to produce descriptive categories, which allowed the interviewed women's social networks to be contextualised. The data obtained by the questionnaire were used to graphically represent the network and its size.

Regarding data collection, it is worth stressing that one of the questions from the questionnaire was a name generator, an instrument devised to provide a series of names of the people related through some link to the informant⁵⁷. In the work of González-Teruel and Andreu-Ramos⁵⁸, the women were asked to provide the names of the people to whom they would turn to if they needed help in their everyday life. For all these people, the informant also provided socio-demographic information and the type of relation they had with them. Based on this information, a graph was created of the personal or ego-centric social network; that is, that which surrounds a node, known as an ego, and the other actors (alter egos) who share a given relationship⁵⁹. When applying the results, Haythornthwaite⁶⁰ states that this perspective helps model the information search process to guide new users with similar information needs, to make changes in an information system that can adjust to their behaviour, or to diffuse services that they do not employ.

Apart from the position generator, other instruments are available to extract social network nodes. For example, Marouf⁶¹ presents a full list, or roster, of the actors who form part of the informant's network, which indicates those people who can share information in the organisation context. According to Nan Lin⁶², this can also be used in the social capital theory context. In this way, the names of the known people within a given social structure are obtained. This begins with the social capital concept being understood as those resources embedded (including information) in a pyramidal social structure, which are mobilised by the network actors to solve certain questions. The

57 FÉLIX REQUENA SANTOS, *Redes sociales y cuestionarios*, Madrid, Centro de Investigaciones Sociológicas (CIS), 1996.

58 A. GONZÁLEZ TERUEL - C. ANDREU RAMOS, *Investigación del comportamiento informacional a través del análisis de redes sociales*, p. 522-528.

59 ALEXANDRA MARIN - BARRY WELLMAN, *Social Network Analysis. An introduction*, in: Peter Carrington and John Scott (Eds.), *The SAGE Handbook of Social Network Analysis*, Thousand Oaks, CA, USA, Sage Publications, 2011, p. 11-25.

60 C. HAYTHORNTHWAITE, *Social Network Analysis: an Approach and Technique for the Study of Information Exchange*, p. 323-342.

61 LAILA NAIF MAROUF, *Social Networks and Knowledge Sharing in Organizations: a Case Study*, «Journal of Knowledge Management», 11, 2007, 6, p. 110-125.

62 NAN LIN, *Social Capital: A Theory of Social Structure and Action*, Cambridge, Cambridge University Press, 2001.

social relations among the network actors and the positions to which they have access determine the availability of these resources; thus people with more social capital are more likely to achieve success than people with less social capital.

In general terms, measures related with studying structural properties, or the model of the relationships within a network, of the links among nodes, or the position that several actors occupy within this network, can be applied from the social network analysis perspective to study Information Behaviour.

The most basic measures of structural properties are network size and density. Size refers to the number of actors who form part of the informant's network. From the information exchange viewpoint, a large network is considered to favour access to not only more information sources, but also to more varied ones. In the reference work, the mean network size was 19 nodes, the network with the fewest actors had 13 nodes, and that with the most had 27⁶³. In the research by Johnson, the mean network size was 14 people. However, it is necessary to compare this figure with the studies done in similar contexts and with similar information collection instruments to evaluate this figure. For density, it is a matter of the number of existing links compared to the number of possible ones. We take the idea that information flows more quickly through well interconnected networks. However, a very dense network with a few links to external networks means that flowing information is recurrent, and thwarts information searches or leads to failed searches.

As regards the characteristics of the links, it is interesting to stress those studies based on Granovetter's⁶⁴ theory of the strength of weak ties, which states that an individual's social network can be formed by strong or weak ties. Nonetheless, only weak ties act as links or "bridges" to another social network, through which it is possible to access the information that does not circulate through the network's own strong ties. Hence weak ties are not a potential source of access to new ideas, while stronger ties hinder this. In order to study information behaviour, Pettigrew⁶⁵, for instance, described the relevance of nursing staff as providers of health information in a senior citizens network that they attended to because they provided senior citizens with information that strong ties were unable to obtain; e.g., ties with family relations.

63 A. GONZÁLEZ TERUEL - C. ANDREU RAMOS, *Investigación del comportamiento informacional a través del análisis de redes sociales*, p. 522-528.

64 MARK S. GRANOVETTER, *The Strength of Weak Ties*, «American Journal of Sociology», 78, 1973, 6, p. 1360-1380.

65 KAREN E. PETTIGREW, *Waiting for Chiropody: Contextual Results from an Ethnographic Study of the Information Behaviour among Attendees at Community Clinics*, «Information Processing & Management», 35, 1999, 6, p. 801-817.

Finally, in order to study positions within a network, one of the measures taken was brokerage, understood as the extent to which an actor plays a role to connect different groups. This was a measure from which several roles were appointed within groups that worked collaboratively. There were also other measure types that related with the actors and could be accessed within a social structure following the social capital theory: diversity and reach. Diversity is the number of different positions within a social structure to which an individual has access to. From the information behaviour perspective, the higher the diversity, the more options of finding the information required to solve a given informative problem. Reach is based on the idea that the better reach is, the more likely it accesses information resources. For example, from the information behaviour point of view, the better reach is in this social pyramid or in different networks through links, the more likelihood of, e.g., accessing information about better potential uses; in other words, more and better information⁶⁶.

3.3 Discourse analysis

Discourse analysis «involves the careful examination of talk and texts in order to trace the ways in which discourses bring into being the objects and subjects of which they speak»⁶⁷, and «is based on the premise that the words we choose to speak about something, and the way in which they are spoken or written, shape the sense that can be made of the world and our experience of it»⁶⁸. Variety in traditions has contributed to its development, and has made it difficult to obtain a common definition of all the methodologies that study the use of language in a social context, which stem from disciplines like sociology, philosophy, psychology or linguistics, among others. So, for instance according to Carla Willig⁶⁹, critical discourse analysis centres on the ways in which institutional discourses maintain power relations in a society, the analysis of conversation in microprocesses associated with using discourse in everyday conversations or, finally, the discourse analysis of psychology, which stresses how talkers use discourse resources to build particular versions of their experiences. From this last perspective, Gill⁷⁰ took discourse (any form that talk

66 C. A. JOHNSON, *Social Capital and the Search for Information: Examining the Role of Social Capital in Information Seeking Behaviour in Mongolia*, pp. 883-894.

67 CARLA WILLIG, *Discourses and Discourse Analysis*, in: UWE FLICK (ed.), *The SAGE Handbook of Qualitative Analysis*, London, Sage Publications, 2014, p. 341.

68 Ibidem.

69 Ivi, p. 341-353.

70 ROSALIND GILL, *Discourse Analysis: Practical Implementation*, in: John Richardson (Ed.), *Handbook of Qualitative Research Methods for Psychology and the Social Sciences*, Leicester, British Psychological Society, 1996, p. 141-156.

and text come in) as the object to study discourse rather than considering it a means to know a reality that goes beyond discourse itself. Moreover, the conception of discourse as something constructive, prepared from pre-existing linguistic resources, is used which the talker combines depending on its direction. Discourse is also social practice and is related to the world through these constructions; that is, language is not a neutral means to access a reality, but different social constructions.

In the LIS context, «the discourse analysis approaches lend themselves to projects exploring how people make sense of their information practices, examining the socially constructed understandings of information, information organizations, and information technologies, and applying these insights to improving the design of information technologies, search interfaces, and information services»⁷¹. Despite it not being a widespread approach in our discipline, some examples can be found in the information behaviour study domain. One of them is the work by Tuominen⁷², which investigates the position of the user and the librarian in professional user-centred discourses by analysing Kuhlthau's Information Search Process model. Similarly, Talja⁷³ conducted a discourse analysis by studying the interpretative repertoires of both professionals and users of music libraries.

The work taken as a reference to analyse the discourse analysis application to study information behaviour, according to his procedure, was Reijo Savolainen⁷⁴. This work investigates the discourses employed when some individuals talk about the Internet in an everyday life context. The research question, from which this male researcher started, focused specifically on knowing the way in which the Internet was spoken about and what discourses could be identified in these narrations. For this purpose, a series of semi-structured interviews was used with a population formed by people interested in personal development, i.e., studies done in one's free time, and who used the Internet to search for information for self-development requirements. Eighteen people were interviewed.

71 LISA M. GIVEN - DEBORAH HICKS - THERESA J. SCHINDEL - REBEKAH WILLSON, *The Informing Nature of Talk & Text: Discourse Analysis as a Research Approach in Information Science*, «Proceedings of the American Society for Information Science and Technology», 51, 2015, p. 1-4.

72 KIMMO TUOMINEN, *User-centered Discourse: an Analysis of the Subject Positions of the User and the Librarian*, «Library Quarterly», 67, 1997, 4, p. 350-371.

73 S. TALJA, *Music, Culture, and the Library: An Analysis of Discourses*, Lanham, Scarecrow Press, 2001.

74 REIJO SAVOLAINEN, *Enthusiastic, Realistic and Critical: Discourses of Internet Use in the Context of Everyday Life Information Seeking*, «Information Research», 10, 2004, 1, <<http://www.informationr.net/ir/10-1/paper198.html>>.

As Talja states⁷⁵, with the discourse analysis, the interview did not intend to know the informant's point of view, or which processes were going through his or her mind. Its objective was to know regularities in language use. From this viewpoint, an interview seeks to know these regularities, descriptions and accounts on a theme, the evaluations on this theme, the different versions that appear, and the effects they have. In line with this, during the interviews conducted by Savolainen,⁷⁶ informants were asked to describe how they used the Internet in their everyday life, what sources they preferred to use to acquire information for self-development purposes, and to describe the process they employed to search for a specific theme. The collected information was analysed by a discourse analysis based on the identification of interpretative repertoires of discursive psychology.

Interpretative repertoires are «sets of systematically related terms, often used with stylistic and grammatical coherence, and frequently organised around one central metaphor or more. They developed historically and are a key part of the “common sense” of a culture, although some are specific for certain institutional domains»⁷⁷. In short, they would be linguistic resources recurrently employed to talk about reality. Talja⁷⁸ summarises this analysis procedure in three phases. Firstly, it is necessary to analyse internal inconsistencies and contradictions in a participant's responses. The second phase consists in identifying regular patterns of variability in narrations: the descriptions that constantly emerge, and explanations and arguments in the speech of various participants. Finally, the third phase consists in identifying the basic assumptions and starting points that are the basis of a particular way of talking about a phenomenon.

In the reference work, three repertoires were obtained, which refer to three different ways of describing the Internet as a source of information. As mentioned earlier, these three repertoires are not the interviewees' thoughts or perceptions, but descriptions of the Internet, different versions of a reality. Nor are they versions of one informant or another, but descriptions that the same informant offers when faced with a question or given context.

The three repertoires were enthusiastic, realistic and critical. The

75 S. TALJA, *Analyzing Qualitative Interview Data: the Discourse Analytic Method*, «Library & Information Science Research», 21, 1999, 4, p. 459-477.

76 R. SAVOLAINEN, *Enthusiastic, Realistic and Critical: Discourses of Internet Use in the Context of Everyday Life Information Seeking*.

77 JONATHAN POTTER, *La representación de la realidad. Discurso, retórica y construcción social*, Barcelona, Paidós, 1998, p. 131 (*Representing Reality Discourse, Rhetoric and Social Construction*, 1996).

78 S. TALJA, *Analyzing Qualitative Interview Data: the Discourse Analytic Method*, p. 459-477.

enthusiastic repertoire was characterised by the optimism with which interviewees talked about the Internet as a source of information, and included recurrent expressions like fast, easy, versatile and interactive when participants talked about this means. The realistic repertoire indicated a more reserved discourse when talking about the advantages offered by the Internet as a source of information. Finally as part of its Internet version, the critical repertoire outlined the poor quality of the key information available online and it being badly organised, which make accurate information searches difficult.

Generally speaking, discourse analysis aims to know the social constructions made through language while, according to Wildemuth and Perryman⁷⁹, the analysed text in the content analysis is treated as the description of an external reality, and aims to describe this reality through a series of analysis categories. Indeed the origin of both these directions lies in the theoretical assumptions that underlie both approaches.

The research question in discourse analysis aims to know how people talk about the Internet. It therefore assumes that knowledge of the reality is a linguistic product generated socially through communication, and not individually in each person's mind. So it starts with the conception of language as the previous condition of thought or, at least, as inseparable aspects, with language as the basis of all psychological activity⁸⁰. Thus it changes the research approach from one that entails understanding individual users' needs, situations and contexts to knowledge production in these users' discourses⁸¹.

Unlike these considerations, a study based on the content analysis of what people think about the Internet would be based on the idea that their language would be the user's window of reality, and that this reality would be conceived by this user with a series of cognitive processes. Talja, Tuominen and Savolainen⁸² believe that this cognitive perspective begins with the conception of the user who acts as an information processor, and also from the generation of knowledge in this user's mind because cognitive maps and knowledge structures form according to his/her experiences and observations. During this process, the social context can be influential as another variable, but not as the research object. The researcher could, therefore, evidence all this through interviews or other methods.

79 BARBARA M. WILDEMUTH - CAROL L. PERRYMAN, *Discourse Analysis*, in : Barbara M. Wildemuth, (ed.), *Applications of Social Research Methods to Questions in Information and Library Science*, Westport, Libraries Unlimited, 2009, p. 320-328.

80 VIVIEN BURR, *An Introduction to Social Constructionism*, London, Routledge, 1995.

81 S. TALJA, K. TUOMINEN - R. SAVOLAINEN, *Isms in Information Science*, p. 79-101.

82 *Ibidem*.

4. Conclusion

The three designs have been presented, and they offer different results despite them being based on a similar information collection procedure. They are research works that have been designed according to different assumptions in which the research question intended to obtain an interpretation of a group of users' perceptions of a library, the way they exchange information in a social context, and how reality is built by means of language.

These are all different aspects of information behaviour but, above all, they reflect various conceptions of what user research must be. So user reality, his/her social world as a preferable information search setting or the reality built by a group of users is taken as the study object.

Despite not being a homogeneous set of procedures, qualitative research has enabled the user in this research to direct the focal point of interest on the same context in which information is sought, used or exchanged, perhaps by leaving the study of the transactions between the user and information systems to one side. It has also enabled the interpretations and conclusions made in the research to be based on that observed rather on judgements made *a priori* based on socio-demographic characteristics, whose influence on information behaviour is important, but not decisive. It has also helped research understand the reason why people search (or not) for and convert this information into requirements that a new information system must cover in order to suitably satisfy its users. All this can be assumed from the library management and evaluation viewpoint if it intends to "be integrated into the user's reality" rather than "be adapted to requirements", users do not often perceive the need for brokerage in information searches. In any case, complexity does not lie in the method, but in choosing the procedure according to the research objectives or question, and beyond all this, in choosing the best design to allow us to acquire information to improve the system.

Between Quantity and Quality: Big Data and the Value of Data Interpretation

Chiara Faggiolani*

Introduction

The digital revolution has dramatically transformed the way in which information is produced, stored, and distributed. Today we have large amounts of data, of various types and of varying degrees of quality, that we find it hard to frame in predefined categories since it is very different from the data that we have used and interacted with so far: the so-called Big Data. Libraries, especially research libraries, are becoming more aware of what their strategic role can be in preserving and organising this explosive amount of information to make it universally available for research and future generations. It is not just a matter of building a new and costly infrastructure, but also of re-adjusting the library system as a function of new content: since now libraries deal especially with books, but in the future they will have to cope with all the available data¹.

Libraries can and are assuming a key role in making this information opinions more useful, visible, and accessible, such as creating taxonomies, metadata designing schemes, systematising and retrieval

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¹ Literature is exponentially growing. For example NATHAN A. RINNE, *Big Data, Big Libraries, Big Problems?: the 2014 LibTech Anti-talk? 2014*, Library Technology Conference. Macalester College, St. Paul, MN. Mar. 2014. Available at: <http://works.bepress.com/nathan_rinne/4>; AMY AFFELT, *The Accidental Data Scientist: Big Data Applications and Opportunities for Librarians and Information Professionals*, Medford, New Jersey, Information Today Inc., 2015. In Italy there is a lack of organic studies on the subject.

methods. The impact Big Data can have on libraries does not imply only a rethinking of the role librarians may play in classifying and presenting Big Data cleansed of their noise, but it also requires a reflection on the use of Big Data in the evaluation or research in the library to improve the effectiveness of their service or, more generally, the impact of libraries on society, exploiting the data deluge to make better decisions and optimise their performance. This paper focuses on this aspect by essentially addressing to two issues mentioned in the title: the former is methodological and relates to the way in which the concepts of quantity and quality change in the new paradigm of Big Data; the latter is related to the value data interpretation takes on in this changing landscape characterised by a flood of data.

From the evaluation to the research in libraries: the development of mixed methodology

Before talking about Big Data, defining them and understanding how this concept can have an impact on evaluation activities in the library, it seems appropriate to take a step back and briefly review the history of measurement and evaluation practices in Italy in the last 30 years.

A first reflection on measurement and evaluation began in Italy back in the Eighties, and yielded the first theoretical contributions during the Nineties. In this first phase the object of study was the investigation mainly revolving around the analysis of “data structure” and “activity data”. The former referred to the data relating to seats, space organisation, presence of equipment, reading places available, features, documents, or to all those aspects that were not the result of an activity but that made up the library “supply” that would be the starting point to organise the service. The latter referred to the distribution of resources, purchases, attendance, consultations, members, loans, cultural activities, events, etc. ; it ultimately consisted in the effects of the services put in place by libraries that corresponded to the following questions: “How much is the library used?” and “What does the library do to increase this use?”².

From the methodological point of view, it was obvious that it was a matter of investigations that found a perfect tool in the library statistics and the ability to synthesise indicators.

2 Cf. *Quanto valgono le biblioteche pubbliche? Analisi della struttura e dei servizi delle biblioteche di base in Italia*, Roma, Associazione italiana biblioteche, 1994. Report of the research “Efficiency and quality of basic services in libraries”, conducted by the National Commission AIB “Public libraries” and the Working Group “Management and Evaluation”. Coordination group and direction of research: Giovanni Solimine; working group: Sergio Conti, Dario D’Alessandro, Raffaele De Magistris, Pasquale Mascia, Vincenzo Santoro.

From the point of view of the investigation, if the first phase was characterised by the attention to data on the library structure, the second phase focused on the use: since 1994 it began to pay more attention to the problems linked to methods, because what had changed in the meantime, thanks to the knowledge gained on that subject, was also the size and scope of cognitive practices, matters of measurement and evaluation. The analysis started considering not only those data structure and activities, with the indicators developed in those years perfectly knew how to respond to, but also the use of services by users³. There is a growing awareness that there are volatile and intangible aspects of the service that should be taken into consideration, audited and measured⁴. It is at this stage that you can trace the birth of a first methodological reflection, recalling the debate “quantity versus quality” which has always characterised the methodology of social research, because in the evaluation of opinions with respect to service use, user’s needs are indeed suitable instruments in terms of information but also methodologically and scientifically sound. Today we are in the third stage of the library assessment, a phase characterised by the availability of different methods and tools of knowledge that follow an expansion of the research objects that are of interest (Fig. 1).

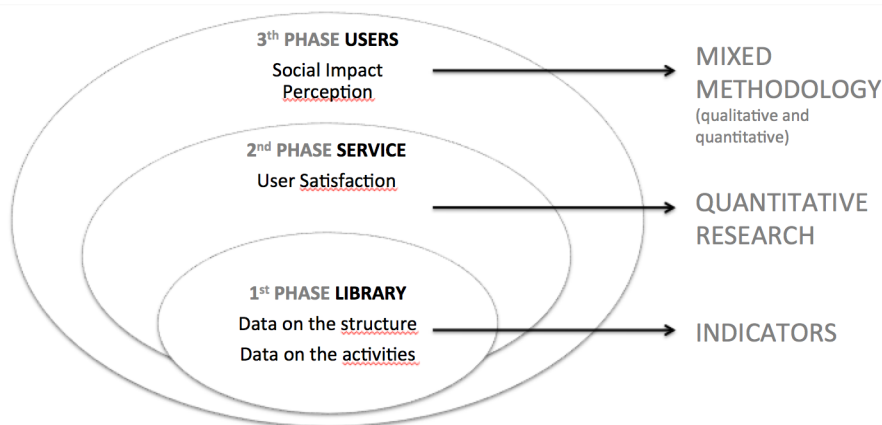


Fig. 1 - The three phases of library assessment

3 *Linee guida per la valutazione delle biblioteche universitarie*, italian edition of *Measuring Quality*, a cura della Commissione nazionale Università Ricerca, Roma, Associazione italiana biblioteche, 1999; *Linee guida per la valutazione delle biblioteche pubbliche italiane. Misure, indicatori, valori di riferimento*, Roma, Associazione italiana biblioteche, 2000.

4 GIOVANNI DI DOMENICO, *Progettare la user satisfaction: come la biblioteca efficace gestisce gli aspetti immateriali del servizio*, «Biblioteche oggi», 14, 1996, 9, p. 52-65.

This is why we prefer to use the term “search for the library”⁵: including not only those investigations that can be developed after the delivery/use of the service for evaluation purposes but also before, to design the best one. This expression refers the set of investigations that can be implemented “in” the library and more generally “for” the library in order to understand and explain the processes and generate real changes. We must firmly keep in practice the data-information-knowledge-decision chain⁶ (Fig. 2).

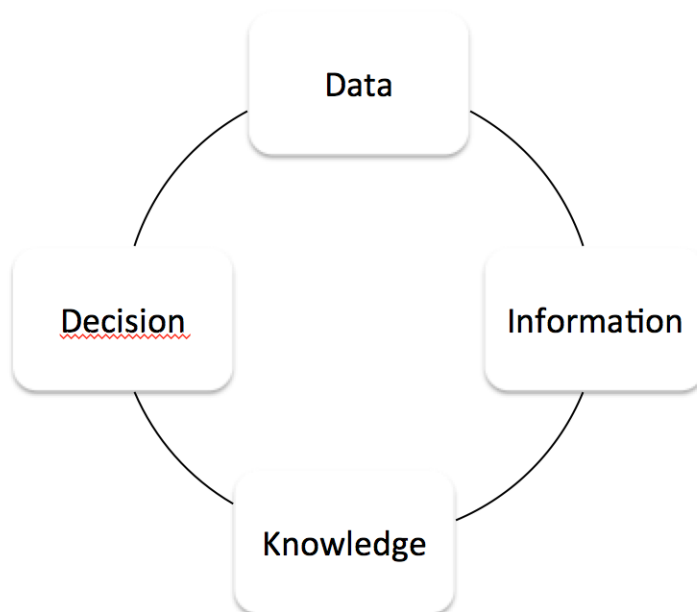


Fig. 2 - Chain data-information-knowledge for better decisions

If, in past years, we have developed effective tools to study customer satisfaction carefully, thus becoming a common practice in every

5 ALISON JANE PICKARD, *Research Methods in Information*, London, Facet, 2007.

6 Data, information and knowledge are not synonymous. ITIL v3, the third version of the Information Technology Infrastructure Library, a globally recognised collection of best practices for managing information technology (IT), defines them as follows: the data are a set of facts originated from individual events (also called “raw” or “raw data”); information derived from the data, fitted with the suitable interpretive context; knowledge descends from the information enriched with different elements: analysis, experience, ideas, values and judgments, tacit or explicit, personal or institutional, coming from within the organisation or outside of it.

library, today the focus has shifted on the subject of the social and economic impact of libraries⁷ and user evaluation. Libraries began to place a premium on the more psychological, emotional and affective levers that motivate the choices of use. Today we are aware that users can make choices by constantly changing and that there is no set of values or permanent demands⁸. Moreover, we are also aware that the data on real user satisfaction shall not only be meaningful, if upstream users' needs and motivations have been investigated and identified, but also in this case this figure could be only partially indicative. It is difficult to understand the perceived identity of the library that undermines the equation "effective library = library attendance = satisfaction", it is the power of perception making it so unstable⁹.

Researchers have started, therefore, to pay attention to this "new" object of investigation - i.e. perception, in order to understand it not as a passive moment where the user automatically receives information, but as an actual selection and actively constructive experience, starting from the stimuli in the environment, in close cooperation with the patterns, expectations, motivations shared by the user himself¹⁰.

There is a gap between what can be done in the interests of effective service and what is perceived by the user, because the truth is that we perceive things not as they are made but how we are made. We shall go back on this point further on. It is in this gap that we find a number of agents including memories, past experiences, media influence¹¹, and other related factors - not the least - the characteristics of the reference context, that shape the library perceived¹². This path shows that the premise for evaluation, or research in the library, have been in part redesigned.

The point of view of the objects of investigation highlights the need to further analyse not only the issues related to service efficiency and

7 See, by G. DI DOMENICO, *L'impatto delle biblioteche accademiche: un progetto e un seminario*, Roma, Associazione italiana biblioteche, 2014, and *L'impatto delle biblioteche pubbliche: obiettivi, modelli e risultati di un progetto valutativo*, Roma, Associazione italiana biblioteche, 2012.

8 GIAMPAOLO FABRIS, *Societing. Il marketing nella società postmoderna*, Milano, EGEA-Università Bocconi, 2009.

9 C. FAGGIOLANI - A. GALLUZZI, *L'identità percepita delle biblioteche: la biblioteconomia sociale e i suoi presupposti*, «Bibliotime», 2015, 1, <<http://www.aib.it/aib/sezioni/emr/bibtime/num-xviii-1/galluzzi.htm>>.

10 VINCENZO RUSSO, *Processi di costruzione del significato: il sistema cognitivo*, in: *Psicologia del consumatore. Consumi e costruzioni del significato*, a cura di Giovanni Siri, Milano, Mc Graw-Hill, 2004, p. 3-63.

11 A. GALLUZZI, *Libraries and Public Perception: a Comparative Analysis of the European Press*, Oxford, Chandos Publishing, 2014.

12 C. FAGGIOLANI, *Posizionamento e missione della biblioteca. Un'indagine su quattro biblioteche del Sistema bibliotecario comunale di Perugia*, Roma, Associazione italiana biblioteche, 2013; *I nuovi volti della biblioteca pubblica. Tra cultura e accoglienza*, a cura di Maurizio Bergamaschi, Milano, Franco Angeli, 2015.

effectiveness, and to user satisfaction, but also the effects and benefits that the library has on users themselves, and on the communities they belong to. On the community as a whole, these effects relate to knowledge, skills, people skills; intellectual and cultural development of individuals; their well-being; their prospects of studying, living and working¹³. From the methodological standpoint, there has been a shift from a mainly quantitative approach to a mixed approach (*Mixed Research*), through the integration of qualitative research. Although the history of social research methodology has always been marked by a dichotomy “quantity versus quality”, today it is clear that the two approaches can be used together, as demonstrated by the development of this “third methodological movement”¹⁴. The research conducted on a combination of qualitative and quantitative methods has been designated in the literature over time with different terms:

- *quantitative and qualitative methods*¹⁵;
- *methodological triangulation*¹⁶;
- *combined research*¹⁷;
- *mixed methodology*¹⁸: this is the most widely used and now, we could say, consolidated expression¹⁹.

In our field, but also outside of it, we have come to speak of Mixed Methodology thanks to the growing popularity of qualitative research, that kind of research aimed at a greater and better understanding of the point of view of users, the people, with the purpose of involving them first hand in the assessment process.

13 G. DI DOMENICO, *L'impatto delle biblioteche accademiche*, p. 16.

14 ABBAS TASHAKKORI - CHARLES TEDDLIE, *Sage Handbook of Mixed Methods in Social & Behavioral Research*. 2nd ed., Los Angeles, Sage Publications, 2010.

15 NIGEL FIELDING - JANE FIELDING, *Linking Data. The Articulation of Qualitative and Quantitative Methods in Social Research*, London, Sage Publications, 1986.

16 JANICE M. MORSE, *Approches to Qualitative-quantitative Methodological Triangulation*, «Nursing Research», 40, 1991, 2, p. 120-123.

17 JOHN W. CRESWELL, *Research Design: Qualitative & Quantitative and Mixed Methods Approaches*, London, Sage Publications, 1994.

18 ABBAS TASHAKKORI - CHARLES TEDDLIE, *Mixed Methodology: Combining Qualitative and Quantitative Approaches*, Thousand Oaks, Sage Publications, 1998.

19 This approach to social research is now widely shared in Anglo-Saxon countries, as evidenced by the proliferation of journals dedicated to it, as «Journal of Mixed Methods Research» (<<http://mmr.sagepub.com/>>), «Australian International Journal of Multiple Research Approaches» (<<http://mra.e-content-management.com/>>) and important textbooks like the afore-mentioned one by Tashakkori and Teddlie. Even in Italy in recent years we are witnessing a greater consolidation of this methodological approach, see for example FULVIA ORTALDA, *Metodi misti di ricerca. Applicazioni alle scienze umane e sociali*, Roma, Carocci, 2013.

3. The qualitative research in libraries: what does it offer more?

Offering a universal definition of qualitative research is not easy because the expression takes on different connotations depending on the context in which the discipline is used, and the contexts are manifold. A keyword search on Google search engine is sufficient to account not only for the substantial amount of resources covering the subject, but also for their variety. Qualitative research is located, that is, at the intersection of a wide range of intellectual traditions and disciplines, and at the same time it is not entirely comprised by any of them. What characterises it is not the reference to a particular area of study, but the reference to some basic indications when doing research: the central role played by subjects' worldview in interpreting reality; generating materials through strategies sensitive to the contexts of everyday life; the desire for a holistic and profound understanding of the reality under examination. If it is true, then, that the scientific orientation of quality crosses fields and contexts belonging to very different studies, it is also true that they all share a common aspect: the need for a useful methodological approach to knowledge and an in-depth analysis of an object study considered complex and integrated in their sphere of activity. Among the possible definitions, here is the most cited one in the literature:

Qualitative research is a situated activity that locates the observer in the world. Qualitative research consists of a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including fieldnotes, interviews, conversations, photographs, recordings, and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to the world. This means that qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them²⁰.

What more does it offer compared to traditional instruments? The main advantage of qualitative research in our opinion is its context sensitivity²¹, meant as the ability to grasp aspects of the context of decisive and influential reference relative to the analysis of the meanings and interpretation of the data collected. Qualitative surveys are much more open to the context: their great strength lies in the discovery of completely new and even unexpected connections. This

²⁰ *The Sage Handbook of Qualitative Research*. 4th edition, edited by Norman Denzin, Yvonna Lincoln, London, Sage, 2011, p. 3.

²¹ MARIO CARDANO, *La ricerca qualitativa*, Bologna, Il Mulino, 2011.

is particularly significant in our sector: there are different empirical studies, in fact, showing that a bad perception of libraries often depends on the weaknesses in the context of reference, rather than on specific inefficiencies of the library. Understanding the dynamics that explain the profound social behaviour has become an increasingly challenging task. In fact, it no longer is enough to identify the so-called behaviour of “average” users: now it has become necessary to factor in their increasingly sophisticated characteristics, to get to identify in which “long tail”²² of the society they are located. This is because the increase in the heterogeneity of cultural society has led individuals to generate new demands, more and more specific, heterogeneous and articulated ones. For this reason, the major strengths of qualitative research in the library can be recognised in:

- historical awareness, which means ability to contextualise certain expressions and examine historical facts relevant to the library phenomenon;
- contextual awareness that can give an account of the variety of meanings that apparently homogeneous institutions like libraries can take, depending on the context, in the community where they are located²³;
- the ability to make the user the focus of research so as to be both the end that directs the actions in the library and the means of knowledge;
- the ability to create new applications as well as produce valid responses, expanding critical sense and producing useful information to build a new identity the library needs to face the scenario of transformation and change affecting it.

4. *Big Data revolution*

The amount of information produced every day is growing exponentially: smartphones, tablets and smartwatches, devices increasingly available to everyone, objects which are technologically very advanced, able to perceive their environment through sensors and share this information through an Internet connection. The same logic underlies social networks or e-commerce sites.

There are many statistics updating us about the impressive rate of data produced every day worldwide, driven by digitisation, by the multiplication of devices available to users, collaboration 2.0, from

22 CHRIS ANDERSON, *The Long Tail: Why the Future of Business Is Selling Less of More*, New York, Hyperion Books, 2006.

23 C. FAGGIOLANI, *La ricerca qualitativa per le biblioteche. Verso la biblioteconomia sociale*, Milano, Editrice Bibliografica, 2012, p. 227.

the opening date based format Open Data²⁴, the spread of sensors and devices IoT- Internet of Things²⁵. When we use ICT applications in our everyday activities, we are more or less willingly leaving digital breadcrumbs which allow us to record individual and collective behaviour with unprecedented accuracy: desires, opinions, lifestyles, movements, relationships. We leave a trace on the social networks we participate in, each time we put in queries to search engines, in the tweets we send and receive. As our purchases keep track of our lifestyle, our social relations also leave a trace in the network on our telephone calls and emails, and in the links of the social networks we use. It is this abundance of data generated by users and not mediated by intermediaries which gives organizations the ability to target the specific needs of the various niches of consumers and users and, therefore, even in the face of a greater complexity of analysis, improve their supply of goods and services.

But let us go step by step and before we get to address this, let us try to outline the evolution of the concept of Big Data in recent years. Every two days we now create as much information as we did from the dawn of civilisation up to 2003. That is how Eric Schmidt, Google CEO until 2011, described this phenomenon a few years ago, which is producing a real change paradigm in statistics and social research. The term began to circulate systematically in 2011 - as indicated by Google Trends²⁶, the Google tool that shows the amount of searches made on specific keywords - to indicate a sector of the information technology market aiming at the efficient management of enormous information databases, or digital archives that contain such a quantity of data that they require new hardware and software solutions.

24 Among the Open Data made available, for example, we can find economic data of local authorities, those on the progress of urban traffic, geographic institutional datasets etc. They are all information with high added value, that can be used not only for the historical reading of social phenomena and increase the degree of transparency of public administration, but also to design new services. The Open Data portal of the Italian public administrations (<<http://www.dati.gov.it>>) was created to allow citizens, developers, businesses, trade associations and public authorities to benefit of the same public administration information assets in the most simple and intuitive way.

25 The term 'Internet of Things' refers to a family of technologies whose purpose is to extend the capabilities of natively networked devices to any object. Objects can act as sensors, producing information about themselves or the surrounding environment. In this scenario, everyday objects (for example, alarm clocks, washing machines, sneakers, cars) will be connected to the Internet and will be able to produce data to process and analyse. It is estimated that in 2020 there will be 40 billion devices in use, or about 10 devices per person on Earth, and 44 zettabyte (ZB $1=10^{21}$ bytes) of data to process. See http://www.dailyinfographic.com/wp-content/uploads/2014/03/Xively_Infographic-2-1.jpg.

26 <<http://www.google.it/trends/?hl=it>>.

A definition of this phenomenon, however, has not been formalised yet. The following is the most accredited:

Big Data is high-volume, high-velocity and high-variety information assets that demand cost-effective, innovative forms of information processing for enhanced insight and decision making²⁷.

Today we have large amounts of data, of various types and of varying degrees of quality, that we find hard to frame in predefined categories, because they are very different from those we were used to and have interacted with so far. Large amounts of complex data that provide information on phenomena difficult to observe directly, but useful for the decision activity²⁸. To indicate the problems and peculiarities that characterise Big Data, a three-dimensional model was initially developed, known as the 3V model (Fig. 3), and originally proposed by analyst Doug Laney in 2001, even before the term Big Data spread²⁹.

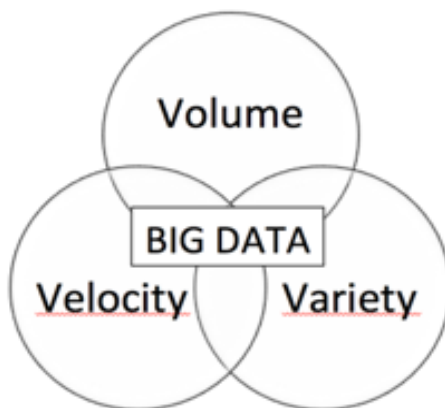


Fig. 3 - Big Data: 3V model

Volume, the same expression that Big Data points out, focuses on the quantity, that is, the overwhelming amount of data you have to deal with and in some ways it is the most easy to understand. According to

²⁷ MARK BEYER - DOUGLAS LANEY, *The Importance of Big Data. A Definition*, Stamford, CT, Gartner, 2012.

²⁸ For further information IAN AYRES, *Super Crunchers*. New York: Random House, 2008; CHRIS SNIJDERS - UWE MATZAT - ULF-DIETRICH REIPS, "Big Data": *Big Gaps of Knowledge in the Field of Internet Science*, «International Journal of Internet Science», 7, 2012, 7, p. 1-5, <http://www.ijis.net/ijis7_1/ijis7_1_editorial.pdf>.

²⁹ DOUGLAS LANEY, *3D Data Management: Controlling Data Volume, Velocity and Variety*, «Gartner. Application Delivery Strategies», February 6, 2001, n. 949, <<http://blogs.gartner.com/doug-laney/files/2012/01/ad949-3D-Data-Management-Controlling-Data-Volume-Velocity-and-Variety.pdf>>.

classic quantitative science, it is the passage from megabytes (10^6 bytes) and gigabytes (10^9) up to terabytes (10^{12}) to petabytes (10^{15}), exabyte (10^{18}), zettabyte (10^{21}) up to reach the Yottabyte (10^{24}). Usually when we talk about Big Data we do not give the actual size of the database because it is likely that what is meant today may seem surpassed tomorrow. A second characteristic that accompanies these data is their *variety*: data can be of any nature (structured, semi-structured or unstructured), resulting from heterogeneous sources and sometimes unconventional, such as text documents, images, audio, video, sensors. Insofar as libraries, think of users' conversations on social networks, their interaction with OPAC, websites, applications, etc. Structured data are those already present in the database standard as the management of libraries. Unstructured data, on the contrary, include social media, blogs, wikis, e-mails, videos, photos, etc. All data that can easily reveal the mood of the user. A third feature is *velocity*, which refers to the increase in data loaded in real time and that, just as in real time, require testing, if they are to be transformed into valuable information with a data-driven view. One of the classic problems when designing databases is the access time to data.

Information technology has developed a number of strategies to reduce waiting times that database queries carry with them. In the case of Big Data, since the amount of information stored is actually huge, you need to approach the access problem in a completely different - parallel rather than serial - way, and with the technologies that are scalable linearly³⁰. In this initial model based on 3V, over time other V's were added to further characterise Big Data, thus reaching, according to some analysts, a new model characterised by a total of 7V's³¹ (Fig. 4).

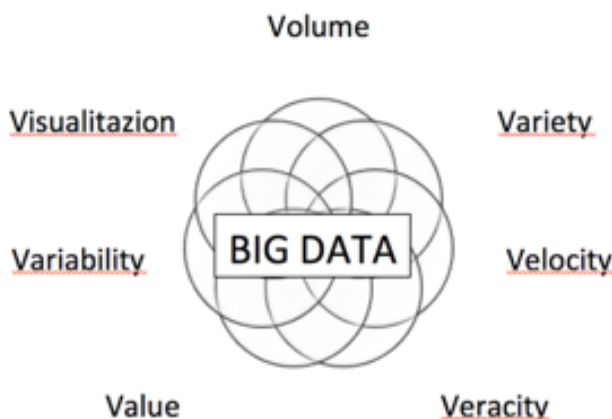


Fig. 4 - Big Data: 7V model

³⁰ DAVIDE BENNATO, *Il computer come macroscopio. Big Data e approccio computazionale per comprendere i cambiamenti sociali e culturali*, Milano, Franco Angeli, 2015.

³¹ MARK VAN RIJMENAM, *Why the 3V's Are not Sufficient to Describe Big Data*, in the blog *Datafloq. Connecting Data with People*, 2014, <<http://floq.to/5Yai6>>.

Some features were added, for example *veracity*³² and *value*³³: we cannot be certain that all data actually have an impact on the data-information-knowledge-decision chain, but we are aware that data, as the first link in the chain, represent the oil of the third millennium. The value refers to the ability to provide interesting and useful analysis that can predict future events and process them through advanced computing tools such as machine learning. The 4V model adds value to the 3V's already examined, and it was used, for example, in 2011 by IDC analysts, according to whom «Big Data technologies describe a new generation of technologies and architectures, designed to economically extract value from very large volumes of a wide variety of data, by enabling high-velocity capture, discovery, and/or analysis».³⁴ *Veracity* refers to one of the main problems: data must be reliable since their use is at the heart of delicate decisions and therefore must be properly cleaned. *Variability* refers to the fact that data flow and their meaning can quickly change, just think of the sentiment analysis³⁵. Finally, *visualization* is not meant as the last step of the research process, but as a prerequisite to data analysis, useful to extract value from data. The display includes not only the realisation of ordinary graphics, such as cakes and histograms, but it requires the creation of complex graphs with many variables, though they must remain comprehensible.

Big Data, therefore, are the data being consciously supplied, in the hedonistic pleasure of wanting to tell others - in social networks, for instance - but also (and more often) unknowingly, in any of our online research and browsing, entry to sites and portals, downloads of data and documents. In practice, it has never been so easy and so cheap to produce and therefore to gain quantitative information, opinion polls and statistics. Companies and institutions in our country are still struggling to figure out how to value these important da-

32 IBM, *What is Big Data? - Bringing Big Data to the Enterprise*, 2013, <<http://www-01.ibm.com/software/data/bigdata/>, July 2013>.

33 Oracle, *Big Data for the Enterprise*, An Oracle White Paper, June 2013, <<http://www.oracle.com/us/products/database/big-data-for-enterprise-519135.pdf>>.

34 JOHN GANTZ - DAVID REINSEL, *Extracting Value from Chaos*, «IDC iView», June 2011, p. 1-12, <<http://www.emc.com/collateral/analyst-reports/idc-extracting-value-from-chaos-ar.pdf>>.

35 This is a very widespread technique abroad that is catching up also in Italy, which consists in the application of data mining in social networks. It is a method that allows you to collect and analyse real-time reactions of members or any tendency of a phenomenon. An accurate tool to detect and listen to online conversations by providing an interpretation of the phenomenon of the subject of study through the analysis of tone, positive or negative opinion, intensity of such opinion, emotion with which this was expressed and relevance. Cf. ANDREA CERON - LUIGI CURINI - STEFANO IACUS, *Social Media e Sentiment Analysis. L'evoluzione dei fenomeni sociali attraverso la Rete*, Milano, Springer, 2013.

tasets and read the digital environment as a place of new opportunities³⁶. But be careful: those who focus on the digital and think that it is essentially a technological change are wrong. What is changing is something more important and is precisely linked to the culture of applied research. Higher numbers do not necessarily produce greater insights. In this deluge of data, a new mentality regarding as their possible use will have to take shape: the ability to see relationships through different data seemingly difficult to assimilate will become more and more central in the future, so as to be able to ask the right questions each time using the various tools available.

5. *Big Data process analysis*

Before considering the merits of the relationship between Big Data and qualitative research, on which we will focus in the next paragraph, it seems useful to briefly summarise the process of managing and analysing Big Data, shown below (Fig. 5), consisting of 6 steps: (1) acquisition, (2) extraction, (3) integration, (4) analysis, (5) interpretation, (6) decision³⁷. In the acquisition stage (1), you should select and possibly compress data, filter them in order to reduce the possible lack of accuracy, generating any metadata associated with the data (for example, how data were measured and acquired) and manage the origins of the data themselves. It emphasises the relationship with Big Data Challenges and opportunities: «Another important issue here is data provenance. Recording information about the data at its birth is not useful unless this information can be interpreted and carried along through the data analysis pipeline. For example, a processing error at one step can render subsequent analysis useless; with suitable provenance, we can easily identify all subsequent processing that dependent on this step. Thus we need research both into generating suitable metadata and into data systems that carry the provenance of data and its metadata through data analysis pipelines»³⁸. Since the data obtained usually will not be already in the format required for analysis, during the extraction step (2) you should transform the data, normalise and clean them in order to improve their veracity, integrate (3) and handle any errors (for example, data partially missing that can be reconstructed). The steps of acquisition, mining and integration can be included in the more general “data preparation”, which is a

³⁶ ENRICO GIOVANNINI, *Scegliere il futuro. Conoscenza e politica al tempo dei Big Data*, Bologna, Il Mulino, 2014.

³⁷ *Challenges and Opportunities with Big Data*. A community white paper developed by leading researchers across the United States, 2012, < <http://www.purdue.edu/discoverypark/cyber/assets/pdfs/BigDataWhitePaper.pdf>>.

³⁸ Ivi, p. 4.

crucial time in the management of Big Data. In the analysis phase (4), data are explored in order to extract information. This exploration requires the adoption of methods that differ from those traditionally used for the statistical analysis of small samples, and which include data mining, machine learning and visualisation. Having the ability to analyse Big Data is of limited value, unless users can understand the analysis. The subsequent interpretation phase (5) requires knowledge of the data scope of reference. Only knowledge of the context, origin of the data can help identify the pattern of interest. The same in-depth knowledge of the context of reference is also crucial in last phase of the decision (6) aimed at improvement. And it is on these last two aspects that we want to concentrate below.

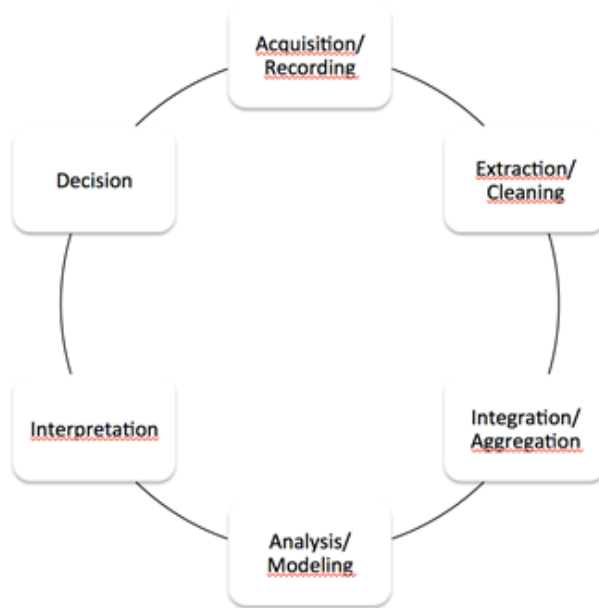


Fig. 5 - Big Data Management and process analysis

6. The value of interpretation: qualitative research and Big Data

Looking at the future of research on the library, Big Data are an unavoidable issue, but it seems there should be a kind of reflection on how this approach should be integrated with other tools in use today, especially with qualitative research. The imperative approach with Big Data is in a nutshell to base decisions on data, not on intuition,

nor experience, nor on a search led by a specific plan, whether quantitative or qualitative. Due to the huge amount of data, according to Big Data supporters, it is as if there was no need for any research design (Fig. 6): we no longer need a valid hypothesis on a phenomenon to begin to understand our world, we have no need of exploratory investigations. Data may reveal through an appropriate correlation analysis, the key aspects to intervene on. The results that would be obtained - supporters say - will be less affected by the prejudices and common sense, and we would certainly have them in a shorter time³⁹. Big Data, according to what has been said, would seem to act on research questions even before the method. The question of the method is indeed secondary to that of the object. The Big Data approach to social research will analyse the way we live and interact with the world - proponents say - the society will leave at least part of his obsession for causality for simple correlations: we will no longer wonder the reasons of things but, in fact, only what the things are, if shown by the data. Big Data basically change the perspective from which we analyse problems, turning the search for causes in a search for connections. That is why this approach undermines - according to the supporters - the very concept of scientific method, as we know it today. Chris Anderson, Editor in Chief of «Wired» in 2008 said, «the data deluge makes the scientific method obsolete»⁴⁰, sparking a lively debate⁴¹.

Proponents/supporters argue that Big Data will see - as we are already witnessing - a continuous production of primary sources. We already have new tools of communication between the researcher and the object of investigation that allow us to create more points of contact between quantitative and qualitative research.

39 VIKTOR MAYER-SCHÖNBERGER - KENNETH CUKIER, *Big Data. Una rivoluzione che trasformerà il nostro modo di vivere e già minaccia la nostra libertà*, Milano, Garzanti, 2013, p. 80 (*Big Data: a Revolution That Will Transform How We Live, Work and Think*, 2013).

40 CHRIS ANDERSON, *The End of Theory: the Data Deluge Makes the Scientific Method Obsolete*, «Wired», 2008, 7, p. 107-108, <http://archive.wired.com/science/discoveries/magazine/16-07/pb_theory>.

41 JOHN TIMMER, *Why the Cloud Cannot Obscure the Scientific Method*, «Ars Technica», June 26, 2008, <<http://arstechnica.com/old/content/2008/06/why-the-cloud-cannot-obscure-thescientific-method.ars>>; DAVID BOLLIER, *The Power and Peril of Big Data*, Washington D.C., The Aspen Institute, 2010, <http://bollier.org/sites/default/files/aspen_reports/InfoTech09.pdf>.

Quantitative research			
Research design: - fixed, close and structured - distance from the object of study	Data collection: - hard data - statistical representativeness	Data analysis: - use deductive methods - descriptive statistics - inferential statistics	Dissemination of the results: - presentation with numerical summaries - generalization
Qualitative research			
Research design: - flexible, open - proximity to the object of study	Data collection: - soft data - theoretical sampling	Data analysis: - use inductive reasoning - analysis of the contents (texts) with or without CAQDAS	Dissemination of the results: - presentation with narration - depth of the obtained and contextualized results
Big Data			
There is no research design. The questions arise from the analysis of data (Big Data analytics) and the display takes on a strategic importance.			

Fig. 6 - Comparison between quantitative - qualitative research - Big Data compared to the 4 phases of research

In general, as the telescope has enabled us to explore the universe and the microscope to discover bacteria, new techniques to collect and analyse huge amounts of data hold the very promising prospect of helping us see the world in new ways.

As said, it seems evident that a change of dimension has also produced a change of state: a quantitative change has produced a qualitative change. The feeling is that this phenomenon, rather than posing a threat to social research, especially qualitative research, could represent a huge opportunity instead. Thanks to the flood of data we have at our disposal indeed an extraordinary amount of information, but this requires an even more extraordinary quality in knowing how to interpret them.

Let us concentrate on the fifth stage of the process of managing and analysing Big Data, described in the previous paragraph: interpretation. Interpretation includes the ability to distinguish the truly relevant phenomena from the noise, accounting for the context and meaning. Is it not, perhaps, the prerogative of qualitative research? If we looked only at the numbers, forgetting the context, we would make a big mistake. Qualitative research is the best tool to map an uncertain territo-

ry. When libraries (like other organisations) want to further examine an unknown reality or phenomenon, they need a vision that Big Data alone cannot explain. They need insights and interpretations that qualitative research inevitably entails. When libraries want to build a strong relationship with their users they need to know their stories. Stories contain emotions, something that is very difficult to maintain and glimpse in the dataset. The numbers alone cannot seize them.

It is difficult to represent only through algorithms the potential of a service, the courtesy and competence of librarians and how these issues impact on the meaning attributed to the attendance of the library over time. For all organisations that aim to have data-driven conversations with their public - including libraries -being able to apply a logic to these qualitative analytical models will be more important than ever in the future. Precisely because we are already in this deluge of data, we need to immerse ourselves in the substance that contextualises them and that allows us to make sense of them.

7. Conclusions: the future of research on libraries

It seems evident that Big Data offer an inescapable perspective in view of a mixed approach towards which we ought to converge. In the future the mixed approach, which today is built on a new paradigm, that is the Big Data one, will have to include Big Data themselves (Fig. 7).

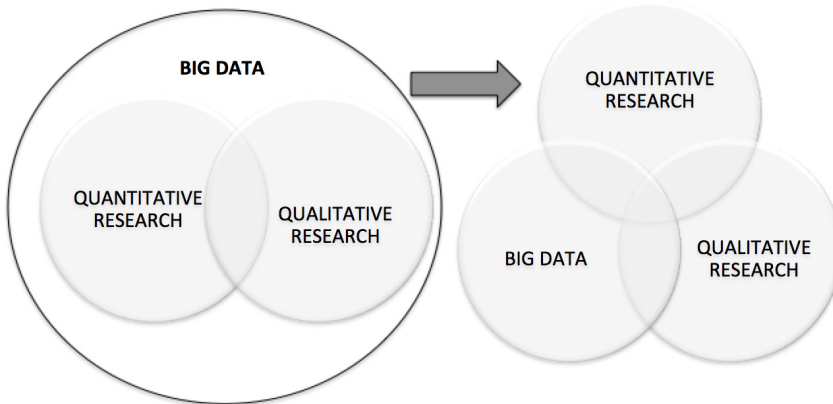


Fig. 7 - From a mixed approach of Big Data integration of Big Data in research

For the variety of nature, Big Data lend themselves to being used in various sectors.

Consider, for instance, the commercial sector, where we have examples of Big Data use for the recommendation of customised purchase suggestions: Amazon uses for this purpose all the data from users, from

their previous purchases, products browsed⁴². In order to approach Big Data in this way, we need first and foremost a cultural change in the library: it is not just about the tools to use when researching, but it expresses an urgency especially on the ability to creatively identify the issues on which we can develop new investigations, in order to advance the understanding of the problems concerning the library. Qualitative research allows us to investigate the effects of attending a library in the life of the single individual and the impact on the community: all of this through the acquisition of the user's point of view. All that through listening. The culture of listening is part of the "culture of the library" along with the culture service, soul and breath of the library, the organisational culture, the culture of results, the quality culture, the culture of communication, seen, in fact, also as a capacity for opening up and listening to users⁴³. After all, librarians have always based their activities on the public, learning as much as possible, seeking common traits and differences between people in order to provide a more tailored service. In order to produce conclusions that transform raw data into new knowledge, in order to use this knowledge to make decisions, the librarian, while doing research, must take effective and rigorous analytical processes in all stages of the investigation process. Librarian researchers cannot merely rely on common sense and cannot make decisions according to the "common man", which means, for example, using the so-called "heuristics" based on experience mental shortcuts⁴⁴, they cannot read data thinking that they want to tell us what we believe is right or not, perceiving reality not for what it is but in the way we are made.

Libraries cannot behave like any individual: they cannot be based on perception. We cannot be satisfied with comfortable data, the kind that we have more easily at our disposal, because these data today are no longer enough. Libraries are sitting on a untapped informational geyser: just trivially think of the opportunities offered by social networks. Facebook provides site operators, a critical tool to learn about and better manage their users: Insights. Data on this dashboard can also be exported. Sections - Overview, Page, Post, People - offer a very detailed summary of the most important statistical data ranging from the number of likes, the demographic composition of users, from the detail of visits to the reach (reach) and engagement (report) that posts

42 ANDREW MCAFEE - ERIK BRYNJOLFSSON, *Big Data: the Management Revolution*, «Harvard Business Review», October 2012, p. 59-68, <<http://ai.arizona.edu/mis510/other/Big%20Data%20-%20The%20Management%20Revolution.pdf>>.

43 GIOVANNI SOLIMINE, *La biblioteca. Scenari, culture, pratiche di servizio*, Roma-Bari, Laterza, 2004, p. 190-199.

44 DANIEL KAHNEMAN - AMOS TVERSKY, *Judgment Under Uncertainty: Heuristics and Biases*, «Science», new series, 185, 1974, p. 1124-1131.

created⁴⁵. For the measurement of Twitter there are some interesting paid applications including Tweetreach⁴⁶, useful to know the impact and scope of our tweets. But not only. Think of the informative scope of the extraordinary disclosure of documents preserved in the archives of libraries that testifies the use people – maybe even important people – make of it, and of how important this documentation is for the history of culture, for example⁴⁷.

These examples once again emphasise that research in the future must not only focus on users and the activities they perform individually (their satisfaction with the service, etc.), but also on the relationships between users themselves and the correlations between what is done in the library with what is done outside. This transformation of the concept of library research is happening against a background where a discipline- social librarianship⁴⁸ – is in turn changing, whose vision is to serve the community, help people live better, increase social welfare, offer every day the tools to know and understand reality.

45 CRISTIANA BAMBINI - TATIANA WAKEFIELD, *La biblioteca diventa social*, Milano, Editrice Bibliografica, 2014, p. 24-25.

46 <<https://tweetreach.com>>. The tool, which allows you to monitor the reach generated by each tweet, is certainly a very appropriate if you are interested in identifying the effectiveness of your tweets based on the number of users that they can reach.

47 ALBERTO PETRUCCIANI, *Dino Campana alla Biblioteca di Ginevra*, «Biblioteche oggi», 32, 2014, 8, p. 4-9.

48 C. FAGGIOLANI, *La ricerca qualitativa per le biblioteche*; C. FAGGIOLANI - G. SOLIMINE, *Biblioteche moltiplicatrici di welfare e biblioteconomia sociale*, in: *Biblioteche in cerca di alleati. Oltre la cooperazione, verso nuove strategie di condivisione. Atti del Convegno delle Stelline*, Milano 14-15 marzo 2013, a cura di Massimo Belotti, Milano, Editrice Bibliografica, 2013, p. 47 -57; G. DI DOMENICO, *Conoscenza, cittadinanza, sviluppo: appunti sulla biblioteca pubblica come servizio sociale*, «AIB studi», 53, 2013, 1, p. 13-25; G. SOLIMINE, *Nuovi appunti sulla interpretazione della biblioteca pubblica*, «AIB studi», 53, 2013, 3, p. 261-271; MAURIZIO VIVARELLI, *Specie di spazi. Alcune riflessioni su osservazione e interpretazione della biblioteca pubblica contemporanea*, «AIB studi», 54, 2014, 2/3, p. 181-199; C. FAGGIOLANI - A. GALLUZZI, *L'identità percepita delle biblioteche: la biblioteconomia sociale e i suoi presupposti*.

COMPLEXITY CHALLENGES

The Role of Libraries Between Fragmentation and Complexity of Knowledge

Giovanni Solimine*

We can start this reflection taking a prophetic statement made almost fifty years ago by Marshall McLuhan: «The next medium, whatever it is - it may be the extension of consciousness - will include television as its content, not as its environment, and will transform television into an art form. A computer as a research and communication instrument could enhance retrieval, obsolesce mass library organization, retrieve the individual's encyclopedic function and flip it into a private line to speedily tailored data of a saleable kind»¹. Rereading his speech, McLuhan appears to have imagined YouTube, a new way of circulating the motion pictures, and has also foreshadowed Google and its search engine, Wikipedia and its ability to mobilize the collective expertise. The Canadian sociologist, interpreting the effects that technological applications in the field of communication have had on society and individuals, had therefore identified as the technologies would quickly grow old all that existed until then.

What is this? This is a “paradigm shift”. A “paradigm shift” (or “revolutionary science”) is, according to Thomas Kuhn, in his influential book *The Structure of Scientific Revolution* (1962)², a change in the basic assumptions, or paradigms within the ruling theory of science. Kuhn used the term ‘paradigm’ to denote a set of theories and methodologies universally accepted by a scientific community, the practices that define a scientific discipline at a certain point in time, until “sci-

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1 MARSHALL McLUHAN, *Technology and Environment*, «Arts Canada», 205, Feb. 1967, p. 5-6, available on Google Books.

2 THOMAS S. KUHN, *The Structure of Scientific Revolution*, Chicago (IL), The University of Chicago Press, 1962.

entific revolutions” emerges. Following Kuhn’s approach, we can say that Italian librarianship is living a “paradigm shift”.

Now we are within a paradigm shift for Library and Information Science (LIS) in Italy. We call the new step of discipline “Social Librarianship”, that deals with the library as a complex social system made by people for people, a natural development of the previous visions of librarianship understood as service management and document management. Social Librarianship provides useful tools to preserve and, at the same time, reinterpret the specific role of libraries, enhancing their vision while accepting the possibility of institutional mission’s development, coherently with the present social transformations. In this way libraries reflect the spirit of our present time. This can be a schematic presentation of evolution of contents and terminological choices in Italian LIS.

These are the different stages of Italian studies in the last half century:

1st step: Library focused on documents (1970’ and 1980’). The discipline essentially perceived the library as a system which selects, preserves and makes documents accessible, and uses methods of transmission and of use of the same. Its field of investigation ranged from the acquisition of the documents to their cataloguing, indexing and conservation; the key instruments of this kind of library science were related mainly to collections development.

2nd step. Library focused on services (1990’). From “Documents Management” to “Services Management”: Library Science combined with management and marketing cultures: the so-called “library management”. Putting the spotlight on the issue of service and management enriched the librarian’s professional expertise with new tools: total quality management, new tools for assessing library services, the evaluation of user satisfaction, and the monitoring of effectiveness and efficiency.

3rd Step. Library focused on users, on citizens, on people (2000). The obvious consequences of the culture of assessment in libraries and of the practices of measurement and evaluation. In the present-day scenario, it seems imperative to ask what social impact libraries have on communities, and how they can help improve the quality of people’s lives.

Fig. 1 graphically represents this evolution:

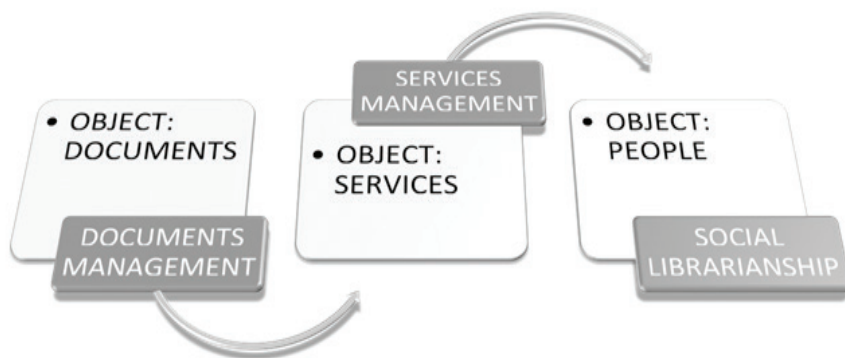


Fig. 1 - Schematic evolution of Italian studies in LIS.

Social Librarianship is a “paradigm shift”: David Lanckes states that librarians must have a vision of the world that is not focused on “artifacts”, but on people: «[...] a library where people are learning and building their knowledge may have no books, no computers, no DVDs, and no building. What it will have is a librarian facilitating the process»³.

Our age is characterized by the enormous opportunities thanks to which - at least in the so-called “advanced” countries - we can enjoy an easy, quick, complete access with huge amounts of data and information. This should not make us ignore, however, that a large difference remains between atomic units of information, data in their specific contexts and documents as carriers of information. I mean, this ability to access large amounts of information does not necessarily produces new knowledge: there is in fact a real contrast, very clear, between smaltering and “culture”, between the fragments of knowledge and complexity and the nature of a real knowledge, including a new form of learning we can get through the Internet and especially basics or rudiments through the use of a conscious approach to knowledge. The following picture (Fig. 2) seems to represent well the two different scenarios that we face.

³ R. DAVID LANCKES, *The Atlas of New Librarianship*, Cambridge (Mass.), MIT, 2011.

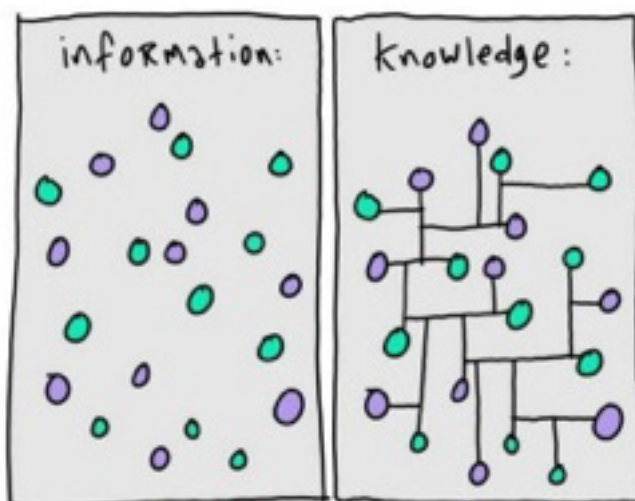


Fig. 2 - Schematic model of information and of knowledge.

What is core business for libraries? Information or knowledge? Library is a knowledge organization? My point of view is centered on the educational function of libraries. Contemporary society has shown its capacity for producing and accumulating an enormous quantity of knowledge, sometimes leading to such a overabundance that it is possible to characterise it as an information overload. The Internet promises to give everything to everyone with a minimum of effort, and tends to generate an intoxicating sense of informational omnipotence. At least apparently it is easy to have a direct, unmediated contact between supply and demand of information and documents, bypassing or totally neglecting the functions of analysing the request, selecting documents, validating contents, directing and orienting the user, guiding access, all of which are proper to the work of mediation historically performed by libraries. There is a concrete risk that this could end in a kind of total disintermediation, without considering that the hazards that this mode of working could lead to.

Social Librarianship provides useful tools to preserve and, at the same time, reinterpret the specific aim of libraries, enhancing their vision while embracing the possibility of the development of the institutional mission in line with present-day social transformations. In this way, libraries can reflect the spirit of our present time. Social Librarianship gives more importance to human relationships than the transaction; it considers the concept of "quality service" as socially and historically determined, and, for this reason, as an in-progress

concept. Social Librarianship has as its primary objective the users' welfare, and user satisfaction becomes the vehicle with which to reach that goal.

The changes we are seeing in the world of libraries are only an effect of broader changes. IFLA wondered whether libraries are riding the waves or caught in the tide⁴. This important document identifies high level trends shaping: it describes the changes (in the global information environment, time moves quickly) and with which libraries will have to deal (Digital trends on course for collision; The algorithm has all the answers - so what's a library?). These are the five "trends" identified by IFLA:

1. **NEW TECHNOLOGIES WILL BOTH EXPAND AND LIMIT WHO HAS ACCESS TO INFORMATION.** An ever-expanding digital universe will bring a higher value to information literacy skills such as basic reading and competence with digital tools. People who lack these skills will face barriers to inclusion in a growing range of areas. The nature of new online business models will heavily influence who can successfully own, profit from, share or access information in the future.
2. **ONLINE EDUCATION WILL DEMOCRATISE AND DISRUPT GLOBAL LEARNING.** The rapid global expansion in online education resources will make learning opportunities more abundant, cheaper and more accessible. There will be increased value on lifelong learning and more recognition of non-formal and informal learning.
3. **THE BOUNDARIES OF PRIVACY AND DATA PROTECTION WILL BE REDEFINED.** Expanding data sets held by governments and companies will support the advanced profiling of individuals, while sophisticated methods of monitoring and filtering communications data will make tracking those individuals cheaper and easier. Serious consequences for individual privacy and trust in the online world could be experienced.
4. **HYPER-CONNECTED SOCIETIES WILL LISTEN TO AND EMPOWER NEW VOICES AND GROUPS.** More opportunities for collective action are realised in hyper-connected societies - enabling the rise of new voices and promoting the growth of single-issue movements at the expense of traditional political parties. Open government initiatives and access to public sector data will lead to more transparency and citizen-focused public services.
5. **THE GLOBAL INFORMATION ECONOMY WILL BE TRANSFORMED BY NEW TECHNOLOGIES.** Proliferation of hyper-connected mobile devices, networked sensors in appliances

⁴ IFLA Trend Report <<http://trends.ifla.org/>>.

and infrastructure, 3D printing and language-translation technologies will transform the global information economy. Existing business models across many industries will experience creative disruption spurred by innovative devices that help people remain economically active later in life from any location.

It will not be easy for libraries to be able to exercise a decisive role within this framework. What may be their specific function? To help build knowledge, I think.

Under what conditions the information can be translated into knowledge? This process can only happen if we mature capacity for critical acquisition, to establish relationships, to grasp the complexity of knowledge; if we “read”, understand, interpret the information to which we access. This capability, this new literacy is called ‘Information Literacy’. «Information Literacy - as stated in the Prague Declaration issued by UNESCO in 2003 - encompasses knowledge of one’s information concerns and needs, and the ability to identify, locate, evaluate, organize and effectively create, use and communicate information to address issues or problems at hand; it is a prerequisite for participating effectively in the Information Society, and is part of the basic human right of life long learning»⁵.

I do not think that the school and the universities do everything in their power to provide students with these skills, these tools of knowledge. We can say that the effectiveness of a school or university library is measured by the contribution that it is able to make to its institution in achieving its objectives. In fact, a library is not only a service in support of activities of teaching and research, with a role that is merely ancillary, but also one of the components of the educational process that is performed in these institutions, a laboratory in which we learn to learn, where we work with the sources, we use contemporaneously primary and secondary instruments, specialised instruments and more general auxiliary instruments.

University and research libraries as basic infrastructures for the creation, dissemination and conservation of scientific research and for the construction of services to support and enhance educational activity: sharing of knowledge, diffusion of open access, research assessment, user education and training.

⁵ UNESCO, *The Prague Declaration. Toward an Information Literate Society*, <<http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CI/CI/pdf/PragueDeclaration.pdf>>.

The Challenges of Public Libraries in the Digital Environment

Ernest Abadal*

Introduction

There can be no doubt that digitization is the main challenge facing the public library at the present time. Society and its habits of culture and information consumption have changed greatly in just a few years and the library is constantly seeking ways to adapt to these new developments. Instead of succumbing to immobilism, the institution and its professionals have, in general, reacted proactively to changes by consistently reorienting their existing services and creating new ones.

Several studies and publications have tried to explain which will be the future of public libraries in the digital society¹. In order to describe more accurately the tests currently being put to public libraries it is necessary, in the first instance, to analyse the production and distribution characteristics of cultural content.

Today, cultural production is typified as having a huge amount of

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1 FRANK HUYSMANS - CARLIEN HILLEBRINK, *The Future of the Dutch Public Library: Ten Years On*, The Hague, Netherlands Institute for Social Research, 2008, <<http://www.scp.nl/english/dsresource? Objectid=21996&type=org>>; ROGER E. LEVIEN, *Confronting the Future: Strategic Visions for the 21st-Century Public Library*, ALA. Office for Information Technology Policy, 2011, <http://www.ala.org/offices/sites/ala.org.offices/files/content/oitp/publications/policybriefs/confronting_the_futu.pdf>; KRISTEN PURCELL, *Libraries 2020: Imagining the Library of the (Not Too Distant) Future*, Pew Research Center, 2012, <<http://www.pewinternet.org/2012/06/07/libraries-2020-imagining-the-library-of-the-not-too-distant-future/>>; *Prospectiva 2020: Las diez áreas que más van a cambiar en nuestras bibliotecas en los próximos años*, Madrid, Consejo de Cooperación Bibliotecaria, 2013. <<http://hdl.handle.net/10421/7460>>.

accessible content, a good deal of which is available in digital format, and as undertaking retrospective digitization processes. It must be said, with regard to how cultural content is distributed, that its availability is immediate (in other words, just after it has been produced or created), it is accessible from an enormous number and variety of devices (computers, tablets, smartphones, etc.) and there exists the possibility of personalized distribution according to profiles which are user-defined or can be predetermined by the system.

Finally, certain popular values in this environment should not be ignored. These include the culture of sharing and of the free dissemination of knowledge (open access), both of which directly affect the production of scientific and cultural content and result in more and more of the latter being available to users free of charge².

Having outlined the context, it becomes clear that the activity and strategy of public libraries is conditioned by the characteristics of this environment and the demands of users who are accustomed to moving within it. What, then, do patrons of the public library want? They want to be able to access all content and services anywhere, at any time and from any device. In short, they want the public library to have the same characteristics as the comfortable settings from which they usually operate.

How can the public library respond to these demands and practices? What can it do to reproduce its users' customary habitat? Furthermore, how can the need for public libraries be assessed in an environment in which access to an infinite amount of content is free, immediate and without intermediaries?

The aim of this text is to offer indications on how to respond to these questions. It will highlight actions relating to content digitization and access to information, while at the same time presenting indicators and methodologies that may prove useful in evaluating library activity in a digital environment.

The academic library, with its specialized content addressed to a non-generalist audience, has already gone some way down this road and may serve as a reference for the actions to be taken by its public counterpart.

2. Actions and strategies

Adapting the public library to the characteristics and demands of its context involves focusing in-depth on several lines of action, five of which will be outlined in the following sections. Content makes up the fundamental element in libraries and comprises two types (the external digital collection and the library's own digital holding).

² ERNEST ABADAL, *Open access: l'accesso aperto alla letteratura scientifica*, Milano, Ledizioni, 2014. <<http://ledibooks.com/openaccess/>>; (<http://hdl.handle.net/2445/53329>)>

Once selected and organized, it must be made available to users via the online catalogue, which should be consistent with the existing website browsing systems. Finally, dissemination activities should be conducted offering virtual services and promoting the presence of the library in social networks.

2.1 External digital collection

The ever-increasing quantity of digital resources available on the Internet is having a direct impact on the definition and creation of library holdings. Collections are no longer made up of documents on tangible mediums which are acquired through the traditional channels, but now also include remote-access documents which the library does not necessarily own.

The public library must continue its commitment to offering quality, well-chosen content. The types of digital documents that form part of this may be many and varied, but are usually:

a) Reference works

Due to the special conditions regarding their consultation, encyclopaedias and dictionaries were the first elements to be offered in digital format.

b) Daily press (digital newsstand)

One of the most usual and frequently accessed types of document in the public library, newspapers made a rapid transition to the digital format and libraries have been able to access a comprehensive selection for some time.

c) Books

Books were a late addition to the digital offering and the selection on offer to the wider public has not yet become as broad or varied as it is with other document types, at least not in Europe.

The diversity of reading devices available today is growing constantly and the one-time monopoly of the computer monitor has been systematically undermined by a number of products, including the e-reader (in mid-2000), the mobile telephone, the tablet (2010) and the so-called 'phablet' (2012). Public-library patrons now use these devices indistinctly and must therefore be able to access electronic documents from any one of them. Despite the ever-greater number of digital documents available free of charge (encyclopaedias, press, etc.), it seems obvious that documents with high production costs will have to be bought (or rented). Library users will thus continue to need access to these "pay-for" documents. As regards the purchasing procedure, there are perhaps three methods that are most used in public libraries.

a) Direct purchase

Especially addressed to the general public and essentially intended for the acquisition of e-books and digital press.

b) PDA (Patron Driven Acquisition)

This recently-developed method of payment is particularly suitable for digital documents, especially monographs. There is a very wide range of titles on offer to users, with effective purchase only being made after libraries have observed that their users access and consult the document online or when the item has actually been requested a number of times. This system ensures that the document is only acquired by the library when it is needed by the user; in other words, it allows for a “just in time” deposit policy rather than the traditional “just in case” version³.

Generally speaking, American public libraries have impressive, broad-based collections of digital books. The following figure shows the New York Public Library digital holdings homepage.

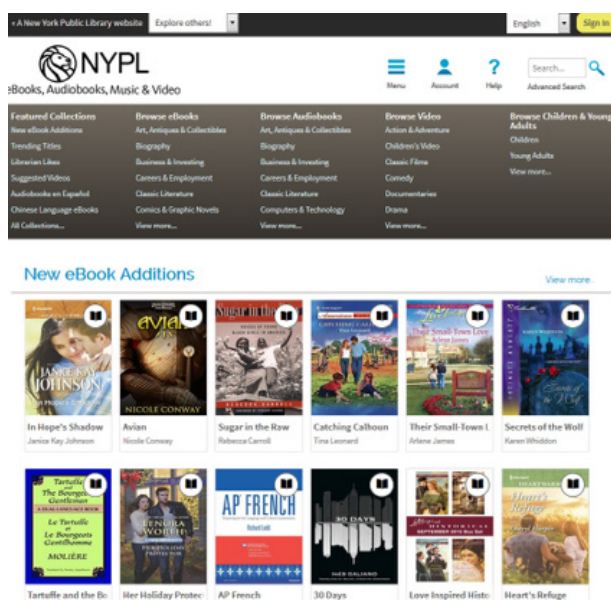


Fig. 1 - New York Public Library eBooks collection.
Source: <<http://ebooks.nypl.org>>.

³ CRISTÓBAL URBANO, *Library Catalog Log Analysis in E-book Patron-Driven Acquisitions (PDA): A Case Study*, «College & Research Libraries», 76, 2015, 4, p. 412-426. DOI: 10.5860/crl.76.4.412.

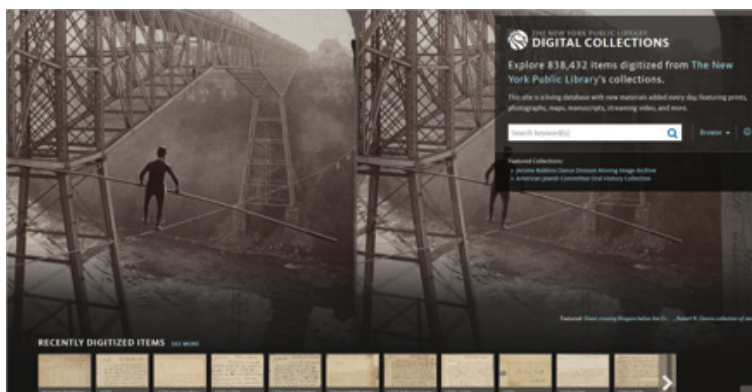


Fig. 2 - New York Public Library Digital Collection.

Source: <<http://digitalcollections.nypl.org/>>.

The trend in this area will be to improve the features of e-readers (inclusion of colour, higher contrast, screen flexibility, etc.) and increase the number of titles offered in languages other than English (Italian, Spanish, etc.).

2.2 Own digital collection

In the previous section we referred to the public library as a consumer or user of cultural content. There is another side to the institution however, which cannot be ignored and which is emerging in the new role libraries play as producers of content through the creation of digital collections. This production is closely related to the traditional task of the library, which is none other than to select, organize, preserve and provide access to cultural content. Not too long ago, this content was only to be found on paper, but now it is in digital format or in the course of being digitized.

Digital repositories created by public libraries are becoming increasingly more common, usually based on collecting content locally⁴. The most frequent types of documents are collections of local newspaper items, historical photographs and, more recently, special collections⁵. Ancient holdings, especially monographs, are rarely present in public libraries but are nonetheless the subject of much attention from their university and national counterparts, in conjunction with such international initiatives as the aggregator Europeana and also Google Books.

4 E. ABADAL - JAVIER GUALLAR, *Prensa digital y bibliotecas*, Gijón, Trea, 2010, pp.138-140.

5 These collections (perhaps more frequent in American libraries than in those of Europe) are made up of “non-conventional” documents and may include materials of any kind (photographs, plans, letters, leaflets, artist’s proofs, etc.). They are often linked to the personal or professional activity of scientists, writers or famous figures.

If such projects are to be successful, various aspects must be taken into account: financial (how to fund them), technological (what kind of repository, which digitization formats, browsing interface, etc.), conceptual (which materials, periods and subjects), documentary (metadata system) and legal (the situation regarding intellectual property rights).

In the coming years, public libraries will continue with their retrospective digitization processes as well as with the creation of value-added products (interrelation of documents, research into the terminology of texts, etc.) which help situate documents in their proper context and facilitate their study. However, this is an area in which human resources must be invested; and the quantity of human resources required is likely to increase significantly in the future, as the contents to be digitized and disseminated are numerous and the processes are also laborious, especially cataloguing with metadata.

Finally, it should be emphasised that many of these products are elaborated in cooperation with other institutions and offered via open access, in line with current digital information dissemination tendencies.

Example

Trencadís is the digital repository of the municipal libraries network of Barcelona's provincial government. It is organized into theme-based collections which contain documents from local holdings preserved by the libraries. The goals of Trencadís are to promote and disseminate the local history heritage and to preserve ancient documents that are in delicate physical condition.

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The screenshot shows the Trencadís homepage with the following elements:

- Header:** Logo of Diputació de Barcelona, the name 'Trencadís', and navigation links for 'Català', 'Castellano', and 'Presentation'.
- Search:** A search bar with a 'Search' button and a dropdown menu for 'All fields'.
- Starred collection:** A featured collection titled 'Diari de les biblioteques populars' with a book cover image. The description below it reads: 'La redacció dels diaris de les biblioteques populars de la Marecnunitat es va iniciar a partir de 1920, any en què Jordi Rubió i Balaguer va accedir al càrrec de director de la Xarxa. Varen néixer com un document de gestió interna, per després per escrit la rutina diària de la feina a la biblioteca: entrades i sortides de documents, les diferents tasques realitzades, visites d'inspecció, etc. En ocasions, però, les bibliotecàries, amb el seu estil personal, també deixaven constància dels fets ocorreguts en el dia a dia, convertint alguns documents en un testimoni de la vida de l'època, des de la Dictadura de Primo de Rivera, l'adveniment de la II República, la Guerra Civil, la desfeta republicana i l'entrada de les tropes franquistes amb la consegüent Dictadura. En total, 54 volums manuscrits dels diaris de 9 biblioteques de la província de Barcelona entre els anys 1920 i 1959.'
- Other Collections:** Five smaller collection cards are displayed below:
 - Arxiu de la memòria i Torelló (1931-1995):** Entre els mesos de maig i octubre de 2006, i gener i novembre de 2007.
 - Cartells de Cervelló:** Recull de cartells de diferents esdeveniments culturals i artístics del
 - Fotografes de Canyelles:** Recull de fotografies del barri de Canyelles, a Barcelona, en el darrer polígon
 - Fotografes de Sitges:** Recull de fotografies del municipi de Sitges, a la comarca del Garraf, que
 - Fotografes de Taradell:** Recull de fotografies del municipi de Taradell, a la comarca d'Osona. Des de

Fig. 3 - Trencadís homepage. Source: <<http://trencadis.diba.cat/>>.

2.3 *The next-generation online public access catalogue (OPAC)*

Library catalogues are the gateway to library collections. Some years ago, these catalogues started to offer search interfaces that reproduced the operating models of the most well-known and appreciated websites (i.e., Google and Amazon). The main features now being offered by the next-generation OPACs are:

- Browsing of the library's various collections through a collective catalogue
Printed holdings are traditionally accessed through the catalogue. If the library has its own digital holdings, they will most certainly be in the repository and, in addition, there may be subscription digital collections on other platforms. The new OPACs facilitate access to these separate collections through one, sole search.
- Results sorted by relevance.
- Filtering of results
Once the list of results has been obtained they can be filtered on the basis of such characteristics as subject, document type, and chronological period.
- Visualization of covers
This is an extremely useful graphic feature which helps guide users in the selection of documents.
- Social participation of users
The new OPACs allow users to record certain information in the catalogue registers, such as labels, scores attributing values to documents, comments, reviews, favourites, and links to social networks. Marshall Breeding⁶, who has named and characterized this type of program, is the leading scholar in the market as well as the foremost expert on the introduction of OPACs. In Spain, Lorena Ávila et al.⁷ have published an article in which they describe the characteristics of web-scale discovery tools, propose a series of criteria for their evaluation and describe their implantation in Spanish university libraries. These programs are increasingly present in public libraries, and may now be found in Queens Library (one of the library systems serving New York City), the Darien Library and many more.

6 MARSHAL BREEDING, *Looking Forward to the Next Generation of Discovery Services*, «Computers in Libraries», 32, 2012, 2, pp. 28-31, <<http://www.librarytechnology.org/ltg-displaytext.pl?RC=16731>>; ID., *Library Resource Discovery Products: Context, Library Perspectives and Vendor Positions*, «Library Technology Reports», 50, 2014, 1, pp. 5-58.

7 LORENA ÁVILA-GARCÍA - VIRGINIA ORTIZ-REPISO - DAVID RODRÍGUEZ-MATEOS, *Herramientas de descubrimiento: ¿una ventanilla única?*, «Revista Española de Documentación Científica», 38, 1, 2015. DOI: <http://dx.doi.org/10.3989/redc.2015.1.1178>.

The screenshot shows the Queens Library website interface. At the top, there is a navigation bar with the library logo and tagline "Enrich your life*", along with links for "HOURS & LOCATIONS", "RESEARCH", "KIDS", "BLOG", "CONTACT US", "ABOUT US", "TEENS", "SIGNUP FOR UPDATES", "ASK-A-LIBRARIAN", "FAQ", "DONATE", and "TERMS & CONDITIONS". A search bar contains the text "italian gastronomy". Below the navigation bar are four colored buttons: "BOOKS" (purple), "ENTERTAINMENT" (green), "PROGRAMS" (teal), and "SERVICES" (red). A "Login To My Account" button is also visible.

The main content area is titled "SEARCH" and displays the results for "Your search found 10 items for 'Italian gastronomy'. Displaying results 1 - 10". Two results are shown:

- Result 1:** "Gastronomy of Italy" by Del Conte, Anna. It includes a "LOG IN TO REQUEST" button and a description: "...First published in Great Britain in 2001 by Pavilion Books Limited"—1.p. verso. Foreword / by Count Capnist, President of the Accademia della Cucina Italiana -- Introduction -- Development of Italian gastronomy -- Regions of Italy...". Metadata includes: Type: Books, BIB #: 743759, Call #: 641.5945 D, ISBN #: 9781586632960, Available: 1 Copy, Year: 2001.
- Result 2:** "The gastronomy of marriage" by Maisto, Michelle. It also includes a "LOG IN TO REQUEST" button. Metadata includes: Type: Books, BIB #: 1391775, Call #: 394.12 M, ISBN #: 9780812979190, Available: 1 Copy, Year: 2009.

On the right side of the search results, there are several filters: "SORT BY" (with options: RELEVANCY, TITLE, AUTHOR, PUB DATE, CALL NUMBER), "CURRENT SEARCH" (Search Found 10 Items, ITALIAN GASTRONOMY), "TYPES" (BOOK & (10)), "LANGUAGES" (ENGLISH (8), ITALIAN (2), CHINESE (1), FRENCH (1)), and "LITERARY FORM" (NONFICTION (10)).

Fig. 4 - Searching "Italian gastronomy" in the Queens Library catalog.
Source: <<http://www.queenslibrary.org/search>>.

2.4 Digital services

There is little to explain about the application of the ICTs in library services, especially in the most basic processes like document reservations or renewals, ordering photocopies or applying for library cards. Nonetheless, mention should be made of the two services which have most grown and developed in recent years: bibliographic information and the loan of digital works.

Attending to information requests has perhaps been the service which has most evolved and whose activities have most improved thanks to technology. The system in which users employ web-forms to make their enquiries is now fully consolidated. Moreover, these practices are organized cooperatively, with regional or country-wide scope. Such is the case with "Pregunte", the pooling service employed by Spanish public libraries or "Biblan Svarar", a similar one from

Swedish public libraries⁸.

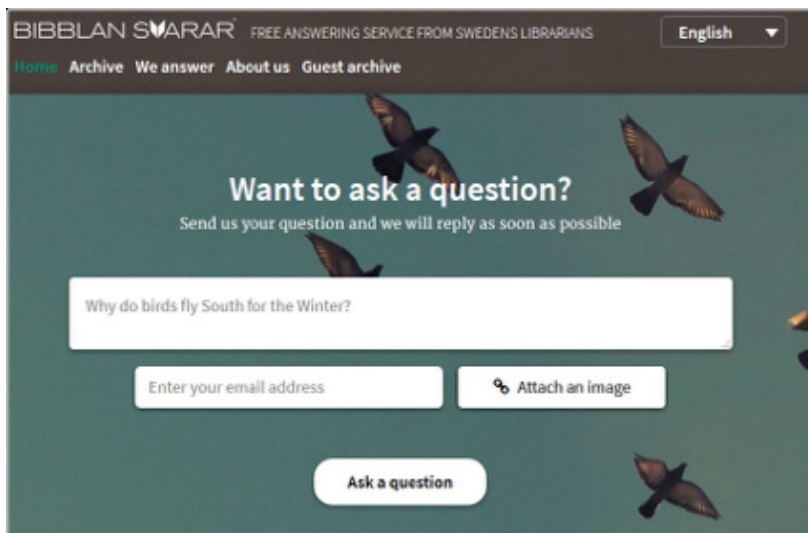


Fig. 5 - Biblan Svarar home page. Source: <<http://bibblansvarar.se/en>>.

The loan service has also been adapted to include digital versions, though this process has been complicated by the reluctance of commercial publishers to allow their e-books to be accessed and consulted. There are now numerous digital lending platforms offering titles to readers and operating with a model resembling that of printed-matter lending: though there is no limitation on the number of copies of digital books a user can have, a limit has been established on the number that can be available for access concurrently.

The US is, without doubt, the most developed country in this field. According to ALA data, 75% of American public libraries lend e-books and also have a huge range of titles on offer.

As regards trends, they would seem to be moving towards the introduction of new equipment, such as 3D printers. An article by Maite Comalat⁹ describes the situation of this service provision in various European public libraries and analyses its potential.

⁸ JOSÉ ANTONIO MERLO VEGA, *Servicios públicos de referencia en línea*, «BiD: textos universitarios de biblioteconomía i documentació», 14, juny 2005, <<http://bid.ub.edu/14merlo2.htm>>.

⁹ MAITE COMALAT-NAVARRA, *Bibliotecas públicas e impresoras 3D: el debate está servido*, «El Profesional de la Información», 24, 2015, 2, p. 185-192, <<http://dx.doi.org/10.3145/epi.2015.mar.12>>.

2.5. *Presence in social networks*

The importance of dissemination activities complements the production side of library functions described in previous sections. This means the institution must remain at the forefront in the use of systems that ensure its audience is aware of its digital collections, in a context of information overload on the Web.

Public libraries have managed to exploit growth of the social and collaborative website, which has reached a high point with the popularization of social networking sites and blogs, to significantly boost the measures they take to disseminate their holdings. Many have become highly adept at using blogs (through WordPress, Blogger and other such platforms), content management systems, photo- and video-sharing sites (Instagram, Flickr, YouTube, etc.), social networks (Facebook, LinkedIn), content curation (Scoop.it) and virtual desktops (Netvibes). News of their activities, products and services can thus be seen by an extremely broad-based audience.

The aims of this active presence in the social networks are diverse and, at the same time, complementary. We would highlight the following:

- to distribute information about the public library's activities, products, and services;
- to offer mediation or advice to users;
- to encourage user participation;
- or to enhance the library's identity and visibility.

To be successful and really have some effect in these areas, however, it is essential to have a clear, social-network marketing strategy that provides for user communities to be created and maintained. These tasks also require constant, permanent dedication on the part of the librarian. Consequently, there can be little doubt that community management should be one of the competencies of the new library professional.

Maria Kronqvist-Berg¹⁰, conducted a practical study of social networks in Finnish public libraries which was based on surveys of both professionals and users. According to her data, only 50% of users considered presence of the public library in such networks positive. They also paid little attention to labelling in the catalogue or the use of chat in the reference service. So what purpose do social networking sites serve in the public library? In theory, the social media can favour interaction between the library and its users. In practice however, this seems far from the case. Users still prefer face-to-face contact with the public library.

Following this review of the five lines of action, it should be pointed out that the presence of digital content and services in the public

¹⁰ MARIA KRONQVIST-BERG, *Social Media and Public Libraries: Exploring Information Activities of Library Professionals and Users*, Åbo, Åbo Akademi University Press, 2014.

library remains scant, as regards both range of products and intensity of use. However, returning to the US, a good example in this area is the San Antonio Public Library (San Antonio, Texas), opened in 2013 and one of the first centres to have no books. The library looks like an Apple shop and provides access to a huge collection of digital works (books, data bases, etc.), wireless internet, computers, tablets and even technology training courses. The Bexar County BiblioTech (also Texas) could also be cited, with similar characteristics. Nonetheless, these two cases still represent isolated instances.



Fig. 6 - BiblioTech homepage. Source: <<http://bexarbibliotech.org/>>.

3. Evaluation

Evaluation of products and services of the classic library is now fully consolidated and extremely useful in assessing the library's contribution to its setting and detecting shortcomings and problems to be resolved. The results of evaluations also serve on many occasions to stifle criticism from the political sphere that questions the cost of public libraries. This is because the public's appreciation of the library generally situates it as one of the most highly regarded public services.

Logically, evaluation processes are equally necessary in the digital environment and all they require is the adaptation of existing indicators to the digital products and services being introduced. It should also be remembered that technology allows for the constant, direct monitoring of all the uses made of digital systems.

The first step to initiate library evaluation processes consists in deciding on the most relevant indicators. For the purposes of sim-

plification, they can be broken down into two types: quantitative indicators, which offer a numerical view of the use of public library products and services, and qualitative indicators, which attempt to explore public perceptions of the value of libraries.

3.1 *Quantitative indicators*

The aim of quantitative indicators is to provide a statistical view of the performance of library products and services based on the results of queries made or actions undertaken by users. The list of indicators is long, but by way of example we would mention the number of documents (books, journals, etc.), visits (to the catalogue, to books, etc.) or loans per user.

Most of these usage statistics are based on the analysis of logs, in other words, the register of each and every transaction carried out in the library by its users. All visits to the catalogue, loans and so on are recorded in the library management system and allow for a detailed understanding of its operation and for its yearly evaluation.

On occasions, opinion polls are conducted about users' interests, such as those published in the study by the Spanish Federation of Societies of Archivists, Librarians, Documentalists and Museology (FESABID)¹¹, which presents figures relating to digital collections and the use of technology in the library. According to these data, only 9.6% of users went to the public library to access digital resources, while the use of its Wi-Fi increased and the use of its computers fell (because visitors were equipped with their own tablet or laptop).

The term 'altmetric' was coined in 2010 to refer to quantitative analysis of the significance of social-web content. Altmetrics are used to measure the impact the public library has on the social web - its visibility on the social networks. Reference indicators include the number of tweets, retweets, mentions in blogs ("likes"), inclusion in social bookmarkers and so on. These enable measurement of the public library's popularity (the number of followers on Facebook or Twitter), and its level of activity (number of posts, tweets, replies, etc.), as well as social appreciation of the library (number of mentions, percentage of positive comments, etc.) and the interaction it establishes with the community of users (number of comments, labels, retweets, etc.). Specific programs exist to measure these indicators, such as Impact story and Social Mention, as they do not yet form part of library management systems. Nieves González has written about social indicators for libraries¹².

11 *The Economic and Social Value of Information Services: Libraries. Report of Findings*. Co-ordinated by José Antonio Gómez Yáñez, Madrid, Fesabid, 2014. <http://www.fesabid.org/documentos/economic_social_value_information_service_libraries.pdf>.

12 NIEVES GONZÁLEZ ET AL. *Revisión y propuesta de indicadores (KPI) de la Biblioteca en los medios sociales*, «Revista Española de Documentación Científica», 36, 2013,

3.2 Perceptions (qualitative indicators)

Qualitative indicators refer essentially to users' perceptions of the public library. They are based, in general, on findings obtained from focus groups and surveys.

We operate socially by means of mental representations or mind sets that are difficult to oppose. This is the concept that George Lakoff introduced in his book *Don't Think of an Elephant!*. Lluís Anglada¹³ dedicates profound reflection to these matters and refers to a 2010 survey according to which some 75% of Americans associate the library with the printed book. This stereotype therefore holds that libraries are spaces for reading printed matter and little more. There is no perception of the comprehensive digital renewal that is taking place. As a consequence of this view of bibliographic resources, users perceive libraries as completely obsolete facilities, seeing them as being useful only to preserve the past, but not for operating in the digital world.

Anna Galluzzi¹⁴ conducted a study into the image of the library in the European press which is also highly illustrative and offers a few clues about its image today. The main features of her description coincide remarkably well with the preceding comments.

So it seems clear that if we want it to be sustainable, a new stereotype of "the library" must be established in people's minds based on the function of providing support in the process of using information and turning it into knowledge. Without this new perception it will be difficult for those in public office to maintain and promote libraries as a social and cultural facility of primary need.

4. Looking to the future

We have reviewed the actions and strategies public libraries are taking to adapt to the digital environment and the systems in place to evaluate their impact. We will now present a few final considerations for the public library if it is to continue playing an essential role in the dissemination of cultural content in society.

- Cooperation

The vast experience of cooperation amongst libraries must be

36, 1. DOI: <http://dx.doi.org/10.3989/redc.2013.1.919>.

13 LLUÍS ANGLADA, *Are Libraries Sustainable in a World of Free, Networked, Digital Information?*, «El Profesional de la Información», 23, 2014, 6, p. 603- 611, <<http://dx.doi.org/10.3145/epi.2014.nov.07>>.

14 A. GALLUZZI, *Libraries and Public Perception. A Comparative Analysis of the European Press*; EAD., *Le biblioteche nella stampa quotidiana. Il caso spagnolo*, «BiD: textos universitaris de biblioteconomia i documentació», 34, 2015, <<http://bid.ub.edu/es/34/galluzzi2.htm>>.

maintained and enhanced if these institutions are to successfully confront the challenges of digitization. It is unlikely that solitary public libraries will be able to respond adequately to the new demands of users.

- **Innovation**
Public libraries must take advantage of the potential of ICTs and quality content to create new products and services that will capture users' interest.
- **Create community**
How can the library be made more visible if all its products and services are on the Web? This is a fundamental issue which cannot be ignored. Though they are not always seen in the flesh, public libraries must be very clear about who their users, community and audience are, and carry out the traditional technical processes (selection, organization and dissemination of content) accordingly.
- **Change perceptions**
Communication strategies are needed to publicize the role of public libraries and their professionals. Generally speaking, change has not been resisted; rather it has been met proactively, with the profession taking on new competences: identifying and locating quality information and the tasks of content curator and community manager, among others. In any case, new mind sets must be created in the general public so that the librarian is clearly perceived as a professional who can help people in the use and localization of information and its conversion into knowledge.
- **Increase the visibility of the profession**
People do not perceive what the librarian's role is or could be. This role is linked, as we know, not only to the preservation and custody of ancient collections, but also to their organization and to disseminating content of any kind, encouraging the consumption of culture and so on. In this respect there is much to be done by professional associations and bodies to rectify this distorted view, and to remedy the profession's lack of social visibility.

A Plural Identity for the Public Library

Giovanni Di Domenico*

I here propose some considerations elicited by the debate on public libraries, which has ignited in the past two years on the pages of «AIB studi». I had opened the debate myself with an article that tried to outline, or rather sketch out, the contemporary scene for public libraries, regarded as places with different purposes and potential: in a nutshell, places of social transmission of competences, shared knowledge, where intelligence, opportunities, relationships and well-being take shape¹. The journal then featured other articles, which have remarkably broadened and closely examined the discourse along different lines². At the same time, a couple of short monographs were published, which are clearly pertinent with the same matter³.

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1 See G. DI DOMENICO, *Conoscenza, cittadinanza e sviluppo: appunti sulla biblioteca pubblica come servizio sociale*, «AIB studi», 53, 2013, 1, p. 13-25. DOI: 10.2426/aibstudi-8875.

2 See SARA CHIESSI, *Il welfare è morto viva il welfare: biblioteche pubbliche tra welfare e valore sociale*, «AIB studi», 53, 2013, 3, p. 273-284. DOI: 10.2426/aibstudi-9146; ANNA GALLUZZI, *E ora facciamo i conti con la realtà*, «AIB studi», 53, 2013, 3, p. 285-296. DOI: 10.2426/aibstudi-9037; WALDEMARO MORGESE, *Biblioeconomia sociale?: certo, per contribuire al nuovo welfare*, «AIB studi», 53, 2013, 3, p. 297-305. DOI: 10.2426/aibstudi-9145; GIOVANNI SOLIMINE, *Nuovi appunti sulla interpretazione della biblioteca pubblica*, «AIB studi», 53, 2013, 3, p. 261-271. DOI: 10.2426/aibstudi-9132; MAURIZIO VIVARELLI, *Specie di spazi: alcune riflessioni su osservazione e interpretazione della biblioteca pubblica contemporanea*, «AIB studi», 54, 2014, 2-3, p. 181-199. DOI: 10.2426/aibstudi-10134; RAPHAËLE BATS, *Biblioteche, crisi e partecipazione*, «AIB studi», 55, 2015, 1, p. 59-70. DOI: 10.2426/aibstudi-11003; STEFANO PARISE, *Appunti per un'agenda delle biblioteche italiane*, «AIB studi», 55, 2015, 2, p. 227-234. DOI: 10.2426/aibstudi-11171.

3 I refer to ANTONELLA AGNOLI, *La biblioteca che vorrei: spazi, creatività, partecipazione*, Milano, Editrice Bibliografica, 2014 and to MARIA STELLA RASETTI, *La biblioteca è anche tua: volontariato culturale e cittadinanza attiva*, Milano, Editrice Bibliografica, 2014.

1. *Identity: a key-word (to handle with care)*

Before moving on to a possible marginal comment, I would like, however, to dwell on the key-word “identity” for a moment. In the paper title I assert/wish for a ‘plural’ identity of the public library. I believe conceiving it is a demand not only imposed by the many purposes of library services in the contemporary world⁴. It is just that some terms become words common to many disciplinary languages, and this may generate some interpretative shift. Identity is one of these words; community is another one. They are frequently used in library studies to indicate all the elements making up a library (hence we refer to an institutional, social, cultural etc. identity of the library) within a given context, defined by human, social, environmental, professional and so forth relationships. On the other hand, identity and community have been for a long time other sociological categories, and one of the most influential sociologist, such as Zygmunt Bauman, actually recalling Siegfried Kracauer, has taught us to handle the connection that holds them together with care, showing us that there are two kinds of community: the lasting ones, like life and destiny, and the ones kept together by principles and ideas. According to Bauman, the issue of identity presents itself only with the latter: «It is because there are many such ideas and principles around which ‘communities of believers’ grow that one has to compare, to make choices, to make them repeatedly, to revise choices already made on other another occasion, to try to reconcile contradictory and often incompatible demands...»⁵. This is to say that identities and the sense of belonging to a group are not cast in stone, but they can be negotiated, revoked, determined by the options that one takes. This goes for individuals as well as for social groups, and I would say it also applies to organisations. The identity of the local library, facing a community which tends to break up and constantly reshape its own system of beliefs, opinions and positions, cannot but be each time ‘acted’ and pervaded by these forms and by the answers the library itself provides. It will be a provisional, negotiable, modifiable identity. It will be an identity to be created rather than inherited. In other words, it will be a plural identity resulting from many ongoing relationships as well as from historically established facts⁶. After all, as Bauman also

4 On the multipurpose library see A. GALLUZZI, *Biblioteche per la città: nuove prospettive di un servizio pubblico*, Roma, Carocci, 2009.

5 Z. BAUMAN, *Identity: Conversations with Benedetto Vecchi*, Cambridge, Polity Press, 2004, available on Google Books.

6 On the relation between relationship and identity see PIERPAOLO DONATI, *I beni relazionali: che cosa sono e quali effetti producono*, Torino, Bollati Boringhieri, 2011; SIMONE D’ALESSANDRO, *L’identità della differenza: ri-pensare la “Relazione” nei sistemi sociali*, Milano, Franco Angeli, 2014.

argues, it is indeed the rigid and closed identities which are the most exposed to the threat of crisis and extinction⁷.

In her paper, Sara Chiessi aptly remarked the identity crisis of libraries, actually attributing it to the introduction of digital and web technologies, and to the widespread use of mobile devices to access information, such phenomena which have stripped libraries of one of their traditional purposes, the informational one⁸. We may here find an identity element – the last three decades have especially focused on and which still is quite popular – that in contemporary complexity, in the «dance of relationships» that Gregory Bateson captured and Vivarelli recalled⁹, tends to fade, disconnect or diverging from the social perception of the public library.

2. *The public library as a social laboratory*

An identity component, in the sense of a socially shared build up of identities of the public library, surfaces today in the concept and practice of citizens, social groups and associations taking part in the planning of spaces and services and in the making of activities and events with the libraries and in the libraries. Antonella Agnoli found in citizens' participation a common ground for the most advanced library experiences in Europe and elsewhere: only with participatory paths involving decision-making processes – she argued – public libraries may really take their roots in the communities they belong to and actually be places of social life, equality, promotion of diffused knowledge, even the most practical one regarding people's everyday life¹⁰.

Indeed, the afore-mentioned book by Maria Stella Rasetti successfully deals with participation and civic activism, closely analysing individual and collective voluntary work and the role such associations like “Friends of the Library” may or should play.

The potential evolution of the public library into a creative laboratory and a work space for the community and each single citizen is a topic referred to in the debate on «AIB studi»¹¹. Whereas Raphaëlle Bats, taking the stock of the current social structure in French public libraries and media libraries, offers us an overview and a reflection on the participatory projects started in the last years, where the laboratory aspect and the experiences of civic self-management are in the foreground.

7 See Z. BAUMAN, *Intervista sull'identità*, p. 28.

8 See S. CHIESSI, *Il welfare è morto viva il welfare!*, p. 276.

9 See M. VIVARELLI, *Specie di spazi*, p. 196.

10 See A. AGNOLI, *La biblioteca che vorrei, passim*.

11 See, especially, S. CHIESSI, *Il welfare è morto viva il welfare!*; W. MORGESE, *Biblioeconomia sociale?*; S. PARISE, *Appunti per un'agenda delle biblioteche italiane*.

The author professes to be convinced that participation is a progressive, democratic answer to social change, and a revolutionary one at that: the best answer public libraries can give to the social, political, economical expression and destruction the crisis has brought on¹². To some extent, I ask myself if a possible extension of this participatory and library-makerspace practices cannot profitably cross the collaborative commons phenomenology or that of collaborative, social and sustainable production of services based on common goods and free access to web resources, which is what some authors - with different approaches - have written about, like Benkler, Bauwens, Rifkin and others¹³. It might be useful to verify if we find any validation of this, and if there any cultural, environmental and operative premises for the public library to persuasively succeed in becoming one of those social and digital spaces wherein we create and share original ideas and experiences of production of goods and services for communities, cities and so-called economy of proximity. Meanwhile, Waldemaro Morgese hopes that libraries may «diventare incubatori di idee da sperimentare successivamente sul territorio: veri e propri *spin-off* su questioni di interesse per la vita (e il benessere) delle popolazioni, biblioteche che ben possono ausiliare lo *start-up* di prototipi di utilità sociale» [“become incubator of ideas to later test on the territory: actual spin-offs on matters of interest to people’s life (and well-being), libraries which can considerably help start up prototypes of social unity”]¹⁴. It is a complex, rather ambitious goal but which can also contribute to repositioning public libraries within the wider consideration increasingly given to culture as a motor of innovation and social and economical growth, on the one hand, and of social inclusion, on the other. After all, in the background we have both Europe 2020 strategy guidelines for an intelligent, sustainable and inclusive growth¹⁵, and, closer to home, Lyon Declaration of August 2014¹⁶, which not only emphasises the reference to information and knowledge as pillars of a lasting development, but it upholds communities participating to the qualitative creation of information and data for a more complete and transparent allocation of resources. The document recognises libraries, archives and museums mainly as

12 See R. BATS, *Biblioteche, crisi e partecipazione*.

13 See YOCHAI BENKLER, *The Wealth of Networks: How Social Production Transforms Markets and Freedom*, New Haven - London, Yale University Press, 2006; VASILIS KOSTAKIS - MICHEL BAUWENS, *Network Society and Future Scenarios for a Collaborative Economy*, Basingstoke; New York, Palgrave Macmillan, 2014; JEREMY RIFKIN, *The Zero Marginal Cost Society: the Internet of Things, the Collaborative Commons, and the Eclipse of Capitalism*, New York, Palgrave Macmillan, 2014.

14 W. MORGESE, *Biblioteconomia sociale?*, p. 302.

15 See the address <http://ec.europa.eu/europe2020/index_it.htm>.

16 *The Lyon Declaration on Access to Information and Development*, <<http://www.lyondeclaration.org/>>.

mediators and guarantees to the access to informational and cultural heritage, but it does not overlook the potential these institutes express towards the education to the informed use of resources and towards the creation of places where people can debate and participate to social life and to the decision-making processes concerning the public sphere.

The library can undoubtedly posit itself as an open laboratory and can in this way enrich its identity. In this laboratory/library we may see several phases of one single participatory cycle, which may include, in full or in part, different processes:

- access to data, information, knowledge;
- developing competences in resource localisation, evaluation and use;
- creating and sharing new knowledge;
- comparing cultures, ideas and opinions;
- integrating separate and diffused knowledge;
- collective planning and realisation of contents, services and material and immaterial goods that can be socially appreciated.

Furthermore, the laboratory/library cannot but live in the laboratory/city and in the problems that concern it. The quality of services and public spaces, digital innovation, environmental and social sustainability are at the core of many urban redevelopment projects.

Now, the attractive, binding force and the social and inclusive value of library spaces in urban and metropolitan areas has been often and rightfully emphasised. However, it would be important that libraries were able to more often act as partners in the processes and projects aimed at introducing innovation and knowledge for the benefit of cities and local communities. I am convinced that they can concur, with their own characteristics, in creating networks and digital environments for an intelligent development of urban contexts and territories¹⁷.

This topic, however, is critically assessed in the article by Giovanni Solimine, who refers to what we may call the vulgate of smart cities, whose undeniable ideological and rhetorical excesses he strongly criticises: «[...] sembra velleitario - osserva - parlare di *smart cities* in assenza di un forte impegno sul terreno della *information literacy* e, più in generale, senza investimenti finalizzati a una riqualificazione della scuola e dell'università e alla creazione di un serio sistema di formazione per gli adulti, che in Italia non c'è mai stato» [“It seems unrealistic - he remarks - to speak of smart cities when there is no commitment in the area of information literacy and, more generally, without any investments aimed

¹⁷ I here sum up some considerations outlined in my *La biblioteconomia in laboratorio*. In *1. Seminario nazionale di biblioteconomia: didattica e ricerca nell'università italiana e confronti internazionali* (Roma, 30-31 maggio 2013), a cura di Alberto Petrucciani e Giovanni Solimine, materiali e contributi a cura di Gianfranco Crupi, Milano, Ledizioni, 2013, p. 92.

at requalifying schools and universities, and at creating a serious learning system for adults, which we have never had in Italy”¹⁸. We cannot but agree with him. I may add that in their limited range of power, libraries should at least take into account the unbreakable bond between information literacy, lifelong learning and citizens participation to projects and decisions affecting their life and social practices. The alternative is to lose those complex relationships Maurizio Vivarelli has called to our attention¹⁹, such relationships that are directly or indirectly mediated by references to texts, knowledge, cultures, and that only in this way constitute identities, negotiations of identity and change in identities.

Public libraries, together with other actors, may fulfill a threefold purpose: help develop diffused competences, relationship networks, inclusive communities; suggest innovative activities and services, oriented to the common good and to improving citizens' quality of life; favour data and resources integration necessary for the goal of digital cities.

3. Information literacy, lifelong learning and critical thinking: public libraries for digital citizenship

In Solimine's paper, the discourse on libraries is part of a reflection on education policies and on lifelong learning for young people and adults in our country, a reflection more thoroughly dealt with in his latest, wonderful book²⁰.

With regard to a great wealth of easily accessible contents, Solimine rightfully insists on the importance of competence and critical interpretation not only in study or work, but also in people's everyday lives. The training purpose and the services for information literacy represent the necessary evolution of that cultural and informational mediation public libraries have built their social identity on: «La biblioteca è un laboratorio nel quale si impara a imparare, si lavora a contatto con i documenti, ci si confronta sui contenuti, si possono condividere esperienze di apprendimento e di crescita individuale con altre persone, accomunate dagli stessi interessi» [“The library is a laboratory where people learn to learn, work on the documents, compare contents, can share experiences of learning and personal growth with others who have the same interests”]²¹. Parise is on the same wavelength: «Forse bisognerebbe finalmente riconoscere, al di là delle etichette e delle definizioni, che la biblioteca pubblica sta ritornando a essere alla luce del sole (ovvero senza doversene vergognare e senza doversi giustificare) ciò che in fon-

18 G. SOLIMINE, *Nuovi appunti sulla interpretazione della biblioteca pubblica*, p. 268.

19 See M. VIVARELLI, *Specie di spazi*, *passim*.

20 See G. SOLIMINE, *Senza sapere: il costo dell'ignoranza in Italia*, Roma-Bari, Laterza, 2014.

21 G. SOLIMINE, *Nuovi appunti sulla interpretazione della biblioteca pubblica*, p. 269.

do è sempre stata: un ambiente di apprendimento le cui forme sono destinate a mutare, le cui dinamiche devono forse essere ripensate radicalmente, ma che rimane palestra di formazione e di aggiornamento, di potenziamento delle competenze individuali e sociali» [“Perhaps we ought to finally recognise, beyond all labels and definitions, that the public library is once more in broad daylight (that is without having to be ashamed of it nor to justify it) what it has always been in essence: a place of learning whose forms are destined to change, whose dynamics should perhaps be radically revisited, but which remains a training ground for the development, improvement and enhancement of individual and social competences”]²².

I think the road ahead is still long and it is a road we should take together with schools, especially with those that want to aim at a hands-on teaching method, oriented to problem solving, supported by digital technologies and resources, and their informed use. The cooperation between public libraries, school libraries and schools could in this field produce some outstanding results from the point of view of the transmission/acquisition of key competences for the society of learning and for digital citizenship, and ultimately from the point of view of the redistribution of learning and social opportunities²³. Information literacy and lifelong learning are different concepts but closely related. The key competences for lifelong learning for young people and adults, established by 2006 European Recommendation (communication in the mother tongue; communication in foreign languages; mathematical competence and basic competences in science and technology; digital competence; learning to learn; social and civic competences; sense of initiative and entrepreneurship; cultural awareness and expression)²⁴, I do not believe can all properly develop without the training and planning input of libraries providing basic services to access information and knowledge.

A third element to be considered, along with information literacy and lifelong learning, is the «critical thinking», in other words the development of intellectual skills to assess sources and information reliability; to judge the soundness and quality of texts and discourses; to be free from prejudice and stereotypes; to be able to argue correctly²⁵.

22 S. PARISE, *Appunti per un'agenda delle biblioteche italiane*, p. 231.

23 On public policies with regard to learning and education as a factor of opportunities see THOMAS PIKETTY, *L'économie des inégalités*, Paris, La Découverte, 2015, p. 73-80.

24 See the address <eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3Ac11090>.

25 See especially, in the hefty literature on the subject, ROBERT H. ENNIS, *The Nature of Critical Thinking: an Outline of Critical Thinking Dispositions and Abilities*, May 2011, <http://faculty.education.illinois.edu/rhennis/documents/TheNatureofCriticalThinking_51711_000.pdf>. Of great interest, even if main-

Exercising critical thinking in human relationships, for instance when using social media, is one of the principal incentives to individual and collective participation and growth. It is useless to discover here the great participatory and democratic potential of networks. The flip side of the coin lies in the contradictions of the Web, especially in its “social” dimension, where forms and instances of new social intelligence dwell together with ‘poor’ relationships and communication exchanges lacking in contents and empathy: some have referred to the digital world as an ecosystem (not a medium, like TV or the press, but an actual ecosystem), wherein to patiently input elements of quality, awareness and articulate thinking²⁶, a hard task, that involves culture, research and learning venues and institutes: university, school, libraries. The continuous exchange of information flows does not create knowledge by itself, or rather it creates incomplete, vague, dull, sometimes wrong information²⁷. Solimine is right: we need education systems that help young people, citizens surf the web in a more informed and critical way. We should all commit to this, including public libraries²⁸.

By the way, exercising critical thinking is a fundamental component of digital citizenship, especially if we welcome Stefano Rodotà’s suggestion, to whom «il diritto di accesso a Internet» [“the right to Internet access”] must be «inteso non solo come diritto a essere tecnicamente connessi alla rete, bensì come espressione di un diverso modo d’essere della persona nel mondo, dunque come effetto di una nuova distribuzione del potere sociale» [“intended not only as the right to be technically connected to the web, but also as the expression of a different way for the person to be in the world, hence as the effect of a new distribution of social power”]²⁹. According to Rodotà, digital citizenship is nothing but the contemporary ideas of citizenship, since it dynamically com-

ly devoted to the teaching of logics at school, is the interview by Armando Massarenti to Marta Nussbaum, published under the title *Maestra del nostro tempo* in the Sunday issue of «Il Sole 24 ore», 25 gennaio 2015, p. 25.

26 See MARINO SINIBALDI, *Un millimetro in là: intervista sulla cultura*, a cura di Giorgio Zanchini, Roma-Bari, Laterza, 2014, esp. p. 96.

27 As an example, think of the outstanding fortune of ‘conspiracy theories’ online and of its often outlandish stories.

28 Recently, LORENZO BALDACCHINI has very effectively countered with the idea of the library as a place of emancipation and awareness to the more careless, comforting and sometimes opportunistic positions and practices of the social library: see his *Siamo scimmie: possiamo leggere: riflessioni sul ruolo della biblioteca*, «AIB studi», 55, 2015, 1, p. 7-14, esp. p.14. DOI: 10.2426/aibstudi-10965. Baldacchini strongly rejects any levelling out to the charitable role of libraries, aimed at substituting the purposes of other kinds of service.

29 S. RODOTÀ, *Il mondo nella rete: quali i diritti quali i vincoli*, Roma-Bari, Laterza; Roma, la Repubblica, 2014, p. 13. Also insisting on these values are the New Clues by Doc Searls and David Weinberger, issued in January 2015, sixteen years after the Cluetrain Manifesto. See at <<http://newclues.cluetrain.com/>>.

bins the bulk of rights citizenship itself is based on. And citizenship is the «precondizione della stessa democrazia» [“precondition to democracy itself”]³⁰. Hence «il principio di neutralità della rete e la considerazione della conoscenza in rete come bene comune» [“the principle of net neutrality and the consideration of knowledge on the net as a common good”]³¹, that public responsibility must absolutely guarantee.

Citizenship and knowledge as a common good are matters which concern also public libraries, their identity and responsibility. If knowledge is a common immaterial and relational good, the purpose of a library is to guarantee, on the one hand, the open and unlimited access to the resources of knowledge itself and, on the other, to create and share physical and digital places for the community. This way, the library social identity may profitably take in the dimension of these new citizenship rights.

4. *Libraries and consensus*

Recently, the AIB has published a collection of writings by Luigi Crocetti, one of the greatest librarians in the second half of the 20th century³². One of these papers, presented at 1996 AIB Conference and appeared in a first edition in 1998, is called *I cittadini e le biblioteche*³³. It is a paper of remarkable substance, with a far-sighted vision on libraries as a place to compare documents and information, a comparison guided by the method: «Il metodo della biblioteca è il metodo del controllo e delle garanzie. Il metodo che sa di dover inquadrare ciascun documento nella sua cornice» [“the library method is the method of control and guarantees. The method which knows that it has to put each document in its own framework”]³⁴. Libraries allow to establish the value of information and put it into context, since they operate within those «addensamenti storici» [“historic settlements”] that cities are. For the same reason, they very much need to identify with the collective power, to mobilise citizens.

After almost two decades, Crocetti’s library functional and social dynamics still hold all their charm and meaning. Namely, especially in a time of crisis and its effects, that strategy of civic mobilisation so strongly invoked, and later never really pursued, is still very relevant. And today Parise rightly says: «L’assenza di consenso da parte dei citta-

30 Ivi, p. 17.

31 Ibidem.

32 L. CROCETTI, *Le biblioteche di Luigi Crocetti: saggi, recensioni*, paperoles (1963-2007), a cura di Laura Desideri e Alberto Petrucciani, presentazione di Stefano Parise, Roma, Associazione italiana biblioteche, 2014.

33 Ivi, p. 73-79.

34 Ivi, p. 76.

dini è certamente una variabile dipendente dell'utilità prodotta dalla biblioteca nei loro confronti: laddove essa è stata scarsa non è stato possibile creare un senso di appartenenza, di fidelizzazione, né consolidare nell'immaginario della comunità l'idea che la biblioteca - con il suo complesso di valori - rappresenti un elemento essenziale dell'identità collettiva» ["the lack of consensus on the citizens' part certainly is a variable depending on how useful a library is to them: when it was poor it was not possible to create a sense of belonging, loyalty, nor strengthen in the community's consciousness the idea that the library - with all its values - is an essential element of collective identity"]³⁵.

Today, notwithstanding all the limits and obligations we know, public libraries can commit to what can be defined as «azioni resilienti» ["resilient actions"], a grassroots response to this crisis, better entrenched in the territories and communities they belong to, giving to the communities themselves the power of to plan, decide and take initiative³⁶, tenaciously seeking collaboration with other subjects, broadening the range of citizenship relationships. I well know that it is not enough and that, as Parise emphasises, «non può esistere un'agenda di settore senza il coinvolgimento dei vari livelli istituzionali che concorrono (o dovrebbero concorrere) a determinare le politiche bibliotecarie a livello nazionale e locale [...]» ["there can be no sector agenda without involving all the different institutional levels, which concur (or should concur) in determining library policies on a national and local level"]³⁷, but I am just as sure that we are unlikely to witness the creation or revitalisation of a real direction and governance policy plan (be it a national or local one) for Italian public libraries, if they are not able to express their unique, and partly unknown, social relevance, and on this gather more visibility, thus fostering a better «reputazione» ["reputation"]³⁸, benefiting from a wider consensus amongst citizens.

5. *Welfare is dead. Or perhaps not*

In the debate on «AIB studi» there was no shortage of references to the relation of public libraries with welfare³⁹. Morgese was perhaps the most

35 S. PARISE, *Appunti per un'agenda delle biblioteche italiane*, p. 229.

36 On the community-led approach to planning and co-producing library services see the excellent JOHN PATEMAN - KEN WILLIMENT, *Developing Community-Led Public Libraries: Evidence from the UK and Canada*, Farnham (UK); Burlington (VT), Ashgate, 2013.

37 S. PARISE, *Appunti per un'agenda delle biblioteche italiane*, p. 227.

38 Ivi., p. 229.

39 This subject is among the matters analysed by A. GALLUZZI for her *Libraries and Public Perception: A Comparative Analysis of the European Press*, Oxford, Chandos, 2014

straightforward in claiming, even for the future, a specific role in local social policies for libraries and «eco-bibliotecari» [“eco-librarians”]⁴⁰.

Most of the reservations came, on the other hand, from Sara Chiessi, according to whom referring to welfare, as far as public libraries are concerned, may indeed reveal interesting perspectives, but is ultimately questionable and counterproductive. Why questionable? Because «il welfare non si fa dal basso, ma è composto di interventi statali di sostegno al lavoro, alla disoccupazione, agli anziani e ai deboli in generale. È fatto di un sistema sanitario nazionale [...] e di un sistema pensionistico equo e sostenibile» [“welfare cannot be made from grassroots solutions, but rather from state intervention supporting jobs, unemployment, the elderly and the weak in general. It consists in a national health service [...] And a fair and sustainable pension system”]⁴¹, nothing like the small activities taking place in the library. Why counterproductive? Because welfare is declining, and so one better not look for shelter under its roof. On the contrary, since the period of cuts is persisting, libraries should rather find elsewhere the economical endorsement they need.

The first objection seems to stem from an interpretation of welfare as a mere system of social protection, which is totally legitimate. However, there are other approaches, based on a different idea of citizenship and more prone to seeing welfare as a set of ‘universal’ social rights, including the right to education, the author also mentions in another point of her text⁴². Education policies are by all means social policies, which indeed result in citizenship services. Then, the problem lies perhaps once more in recognising and emphasising the educational role of public libraries. As often Giovanni Solimine underlines, it is a matter of national relevance, starting from the lack in our country of a policy for libraries and a widespread and solid infrastructural network of basic library services. And the data provided by Cepell (Centro per il libro e la lettura, <<http://www.cepell.it/index.xhtml>>), shrewdly analysed by Anna Galluzzi, are proof of that⁴³.

Moreover, locally based social policy plans define a local – no longer

(see, especially, p. 24-25 and 104-112). The definition of welfare suggested in the monograph is to be agreed with: «The welfare state is a socio-economic and political system based upon the principle of substantial equality and aimed at limiting social disparities. It is intended to provide services and vouch for those rights considered essential for an adequate standard of living, from healthcare to public education, from access to cultural resources to support for the unemployed [...] The aim of the welfare state is to safeguard personal freedom and self-determination, by relieving citizens from material dependence» (p. 107). The author basically lists libraries amongst the merit goods, which in the periods of social policies recession are more than others exposed to instability, crisis of consensus and of political investment.

40 W. MORGESE, *Biblioteconomia sociale?*, *passim*.

41 S. CHIESSI, *Il welfare è morto viva il welfare!*, p. 282-283.

42 See, for instance, CHIARA SARACENO, *Il welfare*, Bologna, Il Mulino, 2013.

43 See A. GALLUZZI, *E ora facciamo i conti con la realtà*.

only national - area of welfare, in which regional and council administrators intervene with choices of direction and governance in order to meet the needs and service demands of a given community. On such a level at least three games are at play: contrasting linear cuts, placing library networks within the priorities of the deciders and the local communities⁴⁴, creating partnerships with other institutes and social actors. They are difficult yet open games, and one wonders what power of attraction and persuasion libraries in social networks might hold or gain, once their bond with these processes is cut loose. These are important questions, especially if we want to tackle the issue of poor resources by broadening libraries scope, planning and partnerships, involving other culture producers, directing towards library activities significant amounts of that widespread social and cultural capital Stefano Boeri wrote about⁴⁵. Not coincidentally, Boeri sagaciously relied on the well-known image of Putnam's social capital/bridge, which can be referred to an open, broad idea of identity, too⁴⁶.

I may add another remark. The welfare crisis (which is blatant, although it has a political-ideological matrix no less than an economical one) does not entail the inescapable doom of its end, rather the one of it being rethought and revived. The twentieth century is well behind us, but the issues concerning rights, citizenship, reduction of inequalities, the workings of wealth redistribution etc. are still all on the table. And they are not issues unrelated to the identity, mission and purpose of public libraries in these dramatic years⁴⁷.

44 In *E ora facciamo i conti con la realtà*, p. 293-294, Anna Galluzzi mentions, in a lucid as well as disillusioned way, a «circolo vizioso che prima fa apparire irrilevanti le biblioteche pubbliche agli occhi della politica, quindi determina la riduzione degli investimenti e delle politiche di sviluppo, infine porta le biblioteche (anche quelle più attive) verso la mera sopravvivenza, che a sua volta rende ancora più difficoltosa la loro possibilità di accreditarsi agli occhi dei cittadini» [“vicious circle that makes public libraries seem irrelevant in the eyes of politics at first, and that then causes the reduction in development policies investments, finally leading libraries (even the most active ones) to mere survival, which in its turn makes their chance to gain some credit in the eyes of citizens even more difficult”].

45 See S. BOERI, *La cultura è un capitale sociale da valorizzare*, «L'Huffington Post», 7 October 2014, <http://www.huffingtonpost.it/stefano-boeri/cultura-capitale-sociale-valorizzare_b_5945160.html>.

46 See ROBERT D. PUTNAM, *Bowling Alone: The Collapse and Revival of American Community*, New York, Simon and Schuster, 2000, p. 22-23: «Of all the dimensions along which forms of social capital vary, perhaps the most important is the distinction between bridging (or inclusive) and bonding (or exclusive) [...] Bonding social capital is good for undergirding specific reciprocity and mobilizing solidarity [...] Bridging networks, by contrast, are better for linkage to external assets and information diffusion [...] Moreover, bridging social capital can generate broader identities and reciprocity, whereas bonding social capital bolsters our narrower selves».

47 This awareness does fall short even in the United States. See PAUL T. JAEGER [et al.], *Public Libraries, Public Policies, and Political Processes: Serving and Transforming*

6. For a social librarianship

Some of the voices in the debate «AIB studi» promoted also touch on relevant topics from the theoretical and methodological point of view, thus affecting the very disciplinary status of library science.

In the afore-mentioned *Specie di spazi*, Maurizio Vivarelli takes the stock of the interpretations of public libraries the Italian scientific and professional community has produced so far, starting from Paolo Traniello's pivotal *Biblioteche e società*⁴⁸. Vivarelli provides us with a very accurate excursus, stretching out to the forefront of international library studies. His opinion is that there is a great variety of differing positions, which is paralleled by a rift between these disciplinary cultures (between their normative models) and the professional practices and, above all, the use of libraries. Hence the need for a holistic interpretative approach, which suspends all judgement on models in a Husserlian fashion and starts from the bottom, i.e. from objectively observing the phenomena and connections between phenomena taking place within the physical and conceptual space of the library. It is a perspective I find very stimulating, for how it redraws the method and use profile of quantitative and qualitative examination criteria, also resorting to observed evidence techniques we are so little used to. And it is a research which can shed some light on relational and interpretative factors, even very important ones, which have been escaped traditional librarian analysis.

Therefore, I do not believe these reasoning and planning lines to be far off from the ones which have urged some (Faggiolani, Galluzzi, Solimine, myself) to rediscover and repurpose a social profile of library science⁴⁹, which comes from afar, at least from the studies by Jesse Shera (let us not forget Peter Karstedt's equally remote sociological contribution to the study of libraries).

On «AIB studi», Morgese and Solimine focused on this topic⁵⁰. The

Communities in Times of Economic and Political Constraint. Lanham [etc.], Rowman & Littlefield, 2014, p. 75: «In striking contrast to the narratives of neoliberal economics and neoconservative governance, public libraries are increasingly central to the lives of patrons without access to or the ability to use the Internet-enabled technologies necessary to participate in contemporary education, employment, and government».

48 See P. TRANIELLO, *Biblioteche e società*, Bologna, Il Mulino, 2005.

49 See G. DI DOMENICO, *Biblioteche, utenti e non utenti: contenuti e gestione di un progetto valutativo*, in: *L'impatto delle biblioteche pubbliche: obiettivi, modelli e risultati di un progetto valutativo*, a cura di G. Di Domenico, Roma, Associazione italiana biblioteche, 2012, p. 19-60; CHIARA FAGGIOLANI, *La ricerca qualitativa per le biblioteche: verso la biblioteconomia sociale*, Milano, Editrice Bibliografica, 2012; C. FAGGIOLANI - G. SOLIMINE, *Biblioteche moltiplicatrici di welfare*, «Biblioteche oggi», 31, 2013, 3, p. 15-19.

50 W. MORGESE, *Biblioteconomia sociale?*; G. SOLIMINE, *Nuovi appunti sulla interpretazione della biblioteca pubblica*.

former, outlining key aspects, areas of interest, professional implications; the latter, retracing some premises already identified with Chiara Faggiolani: for instance, the sensibility to some relational aspects of library attendance and use; the attention for their impact on people's well-being and quality of life; the need to use both qualitative and quantitative methodologies in choice criteria and evaluation processes, and, furthermore, the necessary adjustment of the librarian's professional baggage to these solicitations.

The work we are carrying out, from the point of view of both elaboration and testing on the field, I believe could yield good results. Sure, in order to lay solid foundations for a new social library science, we will need to update the map of its boundaries, its objects and disciplinary methods⁵¹; we will need to better frame the interdisciplinary relations (especially with social sciences); we will need, most of all, to have a serious critical mass of contextualised feedback on the social impact of public libraries. There is much to do, but the path is already traced.

(Translation by Jennifer Cooke)

51 Cf., on this matter, the recent article by C. FAGGIOLANI - A. GALLUZZI, *L'identità percepita delle biblioteche: la biblioteconomia sociale e i suoi presupposti*, «Bibliotime», 18, 2015, 1, <<http://www.aib.it/aib/sezioni/emr/bibtime/num-xviii-1/galluzzi.htm>>.

Towards a Critique of the Concept of Model in Library Science

Alberto Salarelli*

1. From “schemata” to models

Exactly fifty years ago, in 1965, Joseph Licklider published a study for MIT Press entitled *Libraries of the Future*, the outcome of a project commissioned from him by the Council on Library Resources, which saw him occupied for two years on the revolution in information processes brought about by digital technology and, more specifically, on the modifications that libraries would undergo as a consequence of using these systems in carrying out their activities. Licklider, a luminary of extraordinary eclectic intelligence, able to range from his original field of study - psychology - towards the as-yet undefined domain of information science, was convinced that in a not too close future (the prospective deadline was the fateful year two thousand) libraries would have to totally rethink their practices of storage, organisation and retrieval of information in the light of the possibilities offered by digital systems, systems that could suggest a brand new proactivity in the relationship between humans and documents with respect to the rigid passivity of the printed page and the bulky management of library legacies: «if human interaction with the body of knowledge is conceived of as a dynamic process involving repeated examinations and inter-comparisons of very many small and scattered parts, then any concept of a library that begins with books on shelves is sure to encounter trouble»¹. For this reason, Licklider's vision - and “Lick” - really a man of

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¹ JOSEPH LICKLIDER, *Libraries of the Future*, Cambridge (Mass.), MIT Press, 1965, p.4.

great vision if we think of the fundamental role his thinking has had in developing human-machine interfaces and the Internet - suggested a radical rethinking of the approach to managing information not in opposition to the fundamental library function of intermediation but, instead, emphasizing it in virtue of digital technologies' heuristic potential. This inevitable palingenesis was, according to the scholar, so potent that it would even call into doubt the chance of calling libraries by that name, in the future: the locution "precognitive systems", in his opinion, would better signify what he had in mind and what, to tell the truth, he had been reflecting on for many years: in short, the idea of a "thinking centre" where digital information would initially exist alongside analogue versions, to then gradually replace it in a process of total dematerialization of document-style supports: «to transmit information without transporting material»².

Half a century after that study, everyone can weigh things up for themselves by placing on one dish of the scales what part of that prophecy came true and what did not, which dynamics Licklider intuited, at least in a nutshell and, instead, which materials and activities have lasted longer than predicted³. However, beyond the fact that the famous quip attributed to Niels Bohr - «prediction is very difficult, especially if it's about the future» - does contain a grain of truth, it is interesting to observe how this prophecy was expressed and argued. To conceive the library of the future, Licklider uses terminology adapted from the theory of knowledge, and in particular, from the works of Jean Piaget⁴, placing particular attention on the concept of 'schema' (plur. 'schemata'). According to the reflections of the Swiss psychologist, schema should be considered a system of conceptual clusters useful in building an interior representation of the world, a representation that is built by each individual by re-elaborating and organizing what arrives from the outside precisely through these schemata that are not innate, but are produced and transformed based on past experiences. They are interrelated according to a hierarchical logic in which can be identified and singled out high-level schemata (corresponding to the systematic organization of the mind) and low-level

2 Ivi, p. 6.

3 In Italy, some interesting reflections on the contribution of Licklider's legacy have been expressed by MICHELE SANTORO, *Biblioteche e innovazione. Le sfide del nuovo millennio*, Milano, Editrice Bibliografica, 2006, p. 129 and ff. and by PAOLA CASTELLUCCI, *Dall'ipertesto al Web. Storia culturale dell'informatica*, Roma-Bari, Laterza, 2009, *passim*.

4 Cfr. JOSEPH WALSH, *The Psychological Person: Cognition, Emotion and Self*, in: ELIZABETH D. HUTCHISON, *Dimensions of Human Behavior. Person and Environment*, London; Thousand Oaks (CA), Sage Publications, 2003, p. 151-182: 155. Amongst Piaget's work on the theme see, in particular, *The Origins of Intelligence in Children*, New York (NY), International Universities Press, 1952.

ones (related to single concepts). Therefore, each approach to reality is based on a twofold process of assimilation and accommodation of the cognitive structure in order to reach an interpretation that can explain the world we live in and the interaction we establish with it and the creatures that inhabit it.

Shifting his reasoning onto the library science plane, Licklider maintained that a plausible vision for the library of the future need not be hypothesized by eliminating low-level concepts ("component-level schemata") but by using these as the building blocks of an edifice with totally innovative characteristics, corresponding to "upper-echelon schemata".

Thus, this constructionist hypothesis focuses its attention on the information-giving potential of documents with a view to surpassing the physical limitations imposed by a book as an object and by the library as a repository, towards a digital perspective with features surprisingly similar to what we now practise daily. If anything, if we wished to pick out a weak point in Licklider's viewpoint, we should instead consider how this massive imposition of digitalized information and electronic communication services has not led to an annihilation of the analogue physiognomy of books and libraries whose bulky "passiveness", so scorned by Licklider, continues to represent an integral part of contemporary library science that is still immersed in a substantially hybrid dimension. To recap, some might consider this simultaneous presence of analogue and digital information as a caducous phase in the history of the document systems created by humans, while others would have fun demonstrating, books and bricks in hand, that it will be no easy task to carry out indiscriminate scrapping. One thing is certain, however: if Licklider's thoughts on the future of libraries is still a harbinger of food for thought, the terminology he used to express his vision has met a process of obsolescence that seems irreversible. At an international level, contemporary library science literature has completely given up the terms "schema/schemata" in favour of widespread use of the term "model": i.e. every time (for at least the last thirty years) a turning point has been reached in the evolution of library systems, to reason on the libraries of the future, the preference has been to speak of "new library models". Also as regards library science's specific reflections on public libraries, i.e. those institutions most needing an overall redefinition of their functions, there is no departure from this evidence: the presence in the scientific literature of articles or monographs dedicated to new models for public libraries is quantitatively impressive, with particular peaks of production in relation to the appearance of the Internet in the world of libraries, the crisis of the contemporary public library, and the advent of Web 2.0 systems⁵.

5 An empirical test on the use of this terminology can be made, for example,

Clearly, despite the obsolescence of the terminology used by Licklider, the idea that the present and future functioning of libraries can be effectively understood by turning to the “model” concept is a recurring trait in the most recent library science; therefore, given this, it is necessary to understand how this concept is used and, consequently, if it really does remain efficient as a tool of theoretical investigation.

To do so, we must first ask ourselves what we mean by “model”.

2. *What is a model?*

In the sphere of cultural anthropology, speaking of schemata or models means saying the same thing, at the end of the day⁶. Therefore, right from the start, it can be stated that the transition from Licklider’s ‘schemata’ to library science’s more recent predilection for the ‘model’ concept would merely seem a stronger lexical fascination with the latter word, due, most likely, to the spread of operational research methods developed above all in the field of company management⁷.

Nonetheless, if we wish to try to expand the horizon around the model concept, in addition to the current variations being proposed in various fields of knowledge, it is necessary to identify the characteristics common to every type of model, characteristics that are generally shared in formulating generic definitions of this concept. Aware that this is a term with a broad polysemic spectrum that will be considered here only in the sense of a “scientific model”, it can be understood as «a more or less abstract construction that shares certain structural characteristics of the domain being modelled»⁸, or - in greater detail - as

A simplified or idealized description or conception of a particular system, situation, or process, often in mathematical terms, that is put forward as a basis for theoretical or empirical understanding, or for calculations, predictions, etc.; a conceptual or mental representation of something⁹.

through Google Books Ngram Viewer <<https://books.google.com/ngrams>> using the search string “public library model”. One excellent tool to find key passages on the use of the “model” concept in library science is the book by GREGG SAPP, *A Brief History of the Future of Libraries: an Annotated Bibliography*, Lanham (Md.), Scarecrow Press, 2002.

6 BRIAN DERFER, *Mental Models: How Do Our Minds Work?* San Diego, University of California, 1995, <<http://pages.ucsd.edu/~jmoore/courses/schemas.html>>.

7 Cfr. LORENZO SCHIAVINA, *Metodi e strumenti per la modellizzazione aziendale. Come gestire il problem solving e il decision making*, Milano, Franco Angeli, 2006.

8 *Enciclopedia Garzanti di filosofia*, Milano, Garzanti, 1993, s.v.

9 *Oxford English Dictionary Online*, Oxford, Oxford University Press, 2015, <<http://www.oed.com/view/Entry/120577>>.

As can be seen, the salient characteristics of any model are in essence two: the fact of being simpler than the various real cases (i.e. ectypes) it refers to, and the abstract dimension it ends up in precisely because, through simplification, the references to the real world are reduced; references that are fundamental to describe a single case but limited when it comes to theorizing on an ideal type. In other words, it would seem that the level of abstraction of a model can be considered a measure of its scientific nature¹⁰: in fact, if it is true that every attempt to explain the world envisages recourse to determined categories of interpretation, it is equally obvious that scientific models are different from any generic modelling activity in virtue of their capacity to function as tools that are useful in formulating a *corpus* of organically structured knowledge¹¹. Hence, a scientific explanation of the world cannot disregard models:

No substantial part of the universe is so simple that it can be grasped and controlled without abstraction. Abstraction consists in replacing the part of the universe under consideration by a model of similar but simpler structure. Models, formal or intellectual on the one hand, or material on the other, are thus a central necessity of scientific procedure¹².

Having reached this point, i.e. having established the general characteristics shared by all scientific models, it is opportune to note how these cannot all be placed on the same plane. If we take into consideration the distinction proposed at the end of the nineteenth century by Wilhelm Windelband between nomothetic sciences (which seek to formulate laws that are valid in every case) and idiographic sciences (which are interested in the event, i.e. they study phenomena that are unique and unrepeatable)¹³ we can identify two corresponding families of models in use, respectively, in each of the two groupings:

¹⁰ «It is precisely in the *abstract* nature of certain models with respect to others that a criterion of the *scientific* uses of modelling might be sought», GIULIO GIORELLO, *Modello*, in: *Enciclopedia*, Torino, Einaudi, 1980, vol. IX, p. 383-422: 385 (already italicized in the text).

¹¹ «We must remember that models represent constructions featuring a meaning that is more circumscribed than that of scientific laws and theories and have an instrumental connotation. In other words, it is usual to hold that a model has no general connotation, but is limited to a context, and can be judged “good” when it is useful for precise ends (descriptive, explanatory or predictive) and not necessarily when it is held to be “true”», MARIA CARLA GALAVOTTI, *Leggi, modelli causali e manipolabilità*, in: *Il ruolo del modello nella scienza e nel sapere. Conference proceedings* (Rome, 27-28 October 1998), Roma, Accademia Nazionale dei Lincei, 1999, p. 45-64: 46.

¹² ARTURO ROSENBLUTH-NORBERT WIENER, *The Role of Models in Science*, «Philosophy of Science», 12, 1945, 4, p. 316-321: 316.

¹³ WILHELM WINDELBAND, *Storia e scienza della natura*, in: *Lo storicismo tedesco*, a cura di Pietro Rossi, Torino, UTET, 1977, p. 313-332.

- *Nomothetic Models*, which serve to formulate hypotheses and laws based on logical procedures in which every passage must be explicit and verifiable. Since these are independent from the time variable, they can be applied equally to explain what has already happened and to forecast what is going to happen. These then are predictive models whose validity subsists until facts manifest that cannot be explained by them: in this case, according to the fallibilistic principle, it becomes necessary to modify or confute their constitutive traits in order to identify others that are more functional than the previous ones in formulating new hypotheses;
- *Idiographic Models*, whose scope consists in the possibility of ordering and explaining phenomenic reality as it presents itself in a determined historical and social condition. However, given that these are models heavily restricted by multiple spatial and temporal incidents, they should not be seen as predictive since they are structurally incapable of anticipating the future towards which they turn with an attitude that is visionary, if anything.

This subdivision of a strictly methodological nature into nomothetic and idiographic models does not always imply a criterion of reciprocal exclusion when it comes to applying them: in fact, the relationship between a concrete situation and an epistemological investigation can necessitate the use of models from different families¹⁴. From this consideration, it follows that the more complex the experiential reality is, involving natural, ideal and social objects¹⁵, the more knowledge of it can be expressed on different planes examinable with different models, and this is because, as Prigogine and Stengers stated back in 1979,

There is not one unique theoretical language to express the variables a well-defined value can be attributed, which can exhaust the physical content of a system. The various languages possible and the various points of view of the system are complementary. They concern the same reality, even if it is impossible to attribute one single description to them¹⁶.

Considering all of this, a first set of problems might be the division of the objects under study into idiographic and nomothetic; a second one in the choice of suitable models of investigation and, lastly, a third one,

¹⁴ «It is still possible - and it really is true - that the same objects can be subjected to both nomothetic and idiographic investigations. This depends on the fact that the antithesis between the ever-the-same and the singular is, in a certain sense, relative», W. WINDELBAND, *Storia e scienza della natura*, p. 320.

¹⁵ We are following the tripartition proposed by MAURIZIO FERRARIS, *Documentalità. Perché è necessario lasciar tracce*, Roma-Bari, Laterza, 2009.

¹⁶ ILYA PRIGOGINE - ISABELLE STENGERS, *La nuova alleanza. Metamorfosi della scienza*, Torino, Einaudi, 1981, p. 227-228 (*La nouvelle alliance. Métamorphose de la science*, 1979).

examination of the results in order to define an overview that takes into account the complexity of the phenomenon being studied.

In our opinion, the world of library science can be an excellent field of investigation in which to apply this challenge of complexity by checking whether and how different types of models can be applied in a suitable way, according to an analysis plan reviewed from time to time.

3. *The model concept in library science*

First of all, let us ask ourselves why contemporary libraries are complex. The answer, which by now we can consider taken for granted, is that they currently find themselves carrying out their tasks in an increasingly complex world, as Giovanni Di Domenico already underlined a good many years ago:

We live in an era in which knowledge has become the dominant productive factor, in which the contents of work are dematerializing, in which attention is shifting from structures to people (to the subjects who bring sense to the life of organizations), in which complexity has completely changed and is making itself in some way impervious to systemic analysis¹⁷.

If, then, the concept of complexity has become a real stylistic feature of our times, to the extent of feeling the need to dedicate a specific festival to it¹⁸, in the case of libraries it is necessary to reveal how - let us call it - "environmental complexity" has had significant effects not only on the concrete ways of organizing and providing services, but also in the epistemological processes of library science. In other words, the revolutions in techniques and methods in information management, globalization, the waning of great ideological paradigms, the economic crisis, the demographic explosion (at this point, the list could go on for ever) have attacked the theoretical foundations of a discipline that was already weak and insecure, and was searching perennially for an identity that was, if not solid, at least sufficiently stable: a "knowledge without grounds" as Roberto Ventura has defined it, «in the sense that albeit in the presence of substantial professional literature it is difficult to un-

¹⁷ GIOVANNI DI DOMENICO, *Problemi e prospettive della biblioteconomia in Italia*, «Bibliotime», 4, 2001, 2, <<http://www.aib.it/aib/sezioni/emr/bibtime/num-iv-2/didomeni.htm>>. On the relationship between libraries and complexity see also SUNNIVA EVJEN - RAGNAR AUDUNSON, *The Complex Library. Do the Public's Attitudes Represent a Barrier to Institutional Change in Public Libraries?*, «New Library World», 110, 2009, 3-4, p. 161-174; PAOLO TRANIELLO, *Le biblioteche alla luce della teoria dei sistemi*, in: *L'organizzazione del sapere. Studi in onore di Alfredo Serrai*, a cura di Maria Teresa Biagetti, Milano, Sylvestre Bonnard, 2004, p. 421-433; ANNA GALLUZZI, *Biblioteche per la città. Nuove prospettive di un servizio pubblico*, Roma, Carocci, 2009, chap. 3.

¹⁸ <<http://www.dedalo97festivaldellacomplexita.it/>>.

derstand what is, and above all *if* there is, a profound nucleus that can carry out the function of a founding mould»¹⁹. In this panorama that some would define distressing but that, in our opinion, is instead particularly stimulating, one might be tempted to direct library science towards a *cupio dissolvi* in more epistemologically sound disciplines (but which?) or to end up acknowledging that the reflections of Prigogine and Stengers also apply to the world of libraries, which are interpretable in their complexity only if not one but many different languages are admitted, and not one frame of reference (be it bibliographical, institutional, or historical/social) but the concomitant application of several of these, in a stratified - and hence "complex" - reading of the phenomena proper to a library²⁰. Therefore, there are phenomena that can be described and explained with models of a nomothetic nature, based on inductive methods, experimental practice, inferential reasoning and that, as we were saying, make it possible to formulate valid laws not only for the present but also for the future, as when we tackle the statics and dimensions of the building that houses a library by reason of the weight and volume of the library material, or when bibliometric indicators are used to calculate the development of the collections or, again, when assessing the economic benefits that the opening of a library might bring to a particular location. In all these cases, the models adopted are useful precisely in virtue of their capacity to forecast before acting, however it is equally obvious that they occupy a field of application that is somewhat restricted with respect to the complexity of a library; for this reason,

Library science is a term that cannot embrace all library activities with the idea of being able to elevate them to the rank of applications of theories or scientific hypotheses. In library science it is necessary to identify which fields of research are involved, which are not, and which never will be²¹.

At this point, we have to admit that, assessed using the parameters of the nomothetic sciences, as Serrai intends with the term 'science', library science is reduced to very little. Above all, that profound nucleus seems to have nothing of a nomothetic framework, the very foundation of the discipline that Ventura speaks of, a nucleus that we struggle to pin

¹⁹ ROBERTO VENTURA, *Il senso della biblioteca. Tra biblioteconomia, filosofia e sociologia*, Milano, Editrice Bibliografica, 2011, p. 74.

²⁰ A complex, multi-level reading that, with good reason, could certainly be tackled using the theoretical and empirical tools that are characteristic of comparative library science. See GIUSEPPE VITIELLO, *Le biblioteche europee nella prospettiva comparata*, Ravenna, Longo, 1996, p. 11-34.

²¹ ALFREDO SERRAI, *Il bibliotecario e la scienza*, in: *Ricerche di biblioteconomia e di bibliografia*, Firenze, Giunta Regionale Toscana - La Nuova Italia, 1983, p. 67-77: 73.

down, but that intuitively we know exists: a real tangle that contains the threads of those entities that we call text, book, reading, document, information, bibliography: i.e. everything we think of when we say 'library'. Beyond nomothetic implications, as far as the remainder of library science is concerned (a remainder that is actually the larger part) this is why it must inevitably refer to the idiographic sphere, where the value that the *nomos* assumes in its epistemological horizon is to be understood «in the sense of a custom, a habitual procedure, and therefore recommended, rather than in the sense of a law that codifies determined phenomena, that establishes proven and therefore absolute rules»²². This set of rules, or norms, or prescriptions that cannot aspire to the value of generic laws is at one and the same time the limit and identifying characteristic of library science as a discipline, since it does not belong to the sphere of "soft sciences" – particularly the social ones, as Jesse Shera had the occasion to observe when he wrote that, «The library and the librarians deal with ideas and knowledge and their communication; hence librarianship is much closer to the humanities than to the "hard" sciences»²³.

Therefore, using models in an idiographic field means, first and foremost, being aware of their specific limits, those characteristic limits of models seen as «conceptual references»²⁴: they are necessary to sort out the otherwise incomprehensible muddle of phenomena, but upon which, being imperfect tools of an exclusively heuristic value (like Weber's ideal types), we cannot found any hypothesis for the future: paraphrasing Paul Veyne, we might state that library science research is therefore «the terrain of an encounter between a constantly changing truth and some constantly anachronistic concepts»²⁵.

The rapid obsolescence – we might say the "precariousness" – of the conceptual models that we use to understand the reality of libraries has become glaringly clear in these years of turbulent change. The digital communication revolution has brought out the decidedly "glocal", and hence contradictory nature, of the library service which, as Giovanni Solimine wrote, «oscillates between an aspiration to guarantee unlimited accessibility to all the knowledge of the world and the need to base its existence on a concrete context to satisfy the information needs of its own particular users»²⁶. An interpretation that translates into library sci-

22 A. SERRAI, *Biblioteconomia come scienza. Introduzione ai problemi e alla metodologia*, Firenze, Olschki, 1973, p. 9.

23 JESSE H. SHERA, *Philosophy of Librarianship*, in: *World Encyclopaedia of Library and Information Services*, Chicago (Ill.), American Library Association, 1993, p. 460-464: 463.

24 G. GIORELLO, *Modello*, p. 419.

25 PAUL VEYNE, *Come si scrive la storia. Saggio di epistemologia*, Roma-Bari, Laterza, 1973, p. 246 (*Comment on écrit l'histoire*, 1971).

26 GIOVANNI SOLIMINE, *La biblioteca. Scenari, culture, pratiche di servizio*, Roma-Bari, Laterza, 2004, p. 49-50.

ence terms that dichotomy between the “space of flows” and the “space of places” already identified in the 1990s by Manuel Castells as one of the most significant traits of contemporary society; because, if on the one hand digital networks have given rise to new spatial forms characterized by the global convergence of information (with everything that ensues in terms of effects on the markets, and cultural and political practices), on the other, the fact remains that «most of human experience and its sense still have a local basis»²⁷. The heterogeneity of reference users, of its own property, of the buildings that house the libraries and the forms of organizing and displaying its documents (from classifications to OPAC interfaces), the institutions that oversee them, this heterogeneity²⁸ - we were saying - represents the real characteristic of all libraries in a broad sense, and the public library in particular.

Let us take the Italian case as an example. What does the history of public libraries in Italy tell us? Let us ask, in particular: how was the Anglo-Saxon style public library received in Italy? In a purely preventive vein, and while awaiting more in-depth investigations, it seems that we can state that the debate over public libraries in the 1960s²⁹ can also be understood as a comparison between two different ways of understanding a model: on the one hand, the centralist position of Virginia Carini Dainotti, supporter of a ministerial intervention of a nomothetic nature according to which, given determined presuppositions, the result will always be in accordance with expectations independently of local variables; on the other the attitude of Renato Pagetti, more prone to see the Anglo-Saxon public library model in an idiographic sense, i.e. as a conceptual reference to look at but not imitate slavishly, given the enormous differences in the contexts of application. In fact, one particular type of library imported from abroad, hence designed within a particular geographical context for determined objectives, was welcomed into a country, Italy, with a story of completely different (and very problematic) traits behind it with respect to the Anglo-Saxon world, obtaining as a result - today even more obvious in times of crisis for public libraries around the world

27 MANUEL CASTELLS, *Il potere delle identità*. Milano, Università Bocconi, 2003, p. 196 (*The Power of Identity*, 1997).

28 A heterogeneity that Traniello has defined even better as dishomogeneity, a trait which «in the end, depends mostly on the very wealth of the cultural history of our country [Italy], marked also in the library field by many contradictory aspects: undeniable record breakers and discouraging examples of backwardness; a wealth that sometimes appears unparalleled in terms of memories and documents, and a tendency to dispersion and oblivion; vivacity and originality in preparations and perspectives in the circulation of ideas and in the genesis of movements and organizational dysfunction; innovative passion and exasperating conservatism», P. TRANIELLO, *Storia delle biblioteche in Italia. Dall'Unità a oggi*, Bologna, Il Mulino, 2002, p. 315-316.

29 Ivi, p. 239-245.

- a marked fragmentation between its various institutes, some able to better metabolize the characteristic traits of the public library, others finding greater difficulty in the attempt to combine old and new applications. In any case, it is interesting to observe how the Italian case can be considered paradigmatic of the risks that the use of the model concept in library science can bring with it. These risks are in essence two.

The first consists in attributing to determined models characteristics of prediction that are outside the nomothetic sphere. This is what happens, for example, when on purely idiographic issues such as local demands or financing or staff skills we pass from the level of guidelines (i.e. from a communicative dimension in which what prevails is a tone of suggestion and recommendation), to the desired - but not certain - improvement in personal performance, to the plane of prescription and presumptuousness. For example, as regards problems linked to change management, the IFLA guidelines define a precise role that the most competent and knowledgeable managers should have in overseeing the actual change which, therefore, should not be a forced obsessive maintenance in respect of technological innovation times, nor imposed by decisions taken by popular demand³⁰. Exactly the contrary of what can be read in various articles, often under the form of a proclamation, in which the destiny of the inescapable Library 2.0 model is magnified, thereby asserting, with disconcerting populism, that «as communities change, libraries must not only change with them, they must allow users to change the library»³¹, or again, «thanks to Web 2.0 and social media tools, users are now able to do the jobs of librarians»³².

In addition: we might agree on the fact that, as can be read in the IFLA guidelines, a library will probably function better if its staff's skills feature «the ability to communicate positively with people; the ability to understand the needs of customers; the ability to co-operate with individuals and groups in the community»³³; but how could we define a statement such as the following, other than bizarre and unfound-

30 «Library managers should be aware of developments both within and outside librarianship that are likely to have an impact on service development. They should make time to read and study so that they can anticipate the effect of changes, particularly technological, on the future shape of the service. They should also ensure that policy-makers and other staff are kept informed of future developments», International Federation of Library Associations and Institutions. Section of Public Libraries, *IFLA Public Library Service Guidelines*. Edited by Christie Koontz and Barbara Gubbin, Berlin - New York, De Gruyter Saur, 2010, p. 102.

31 JACK M. MANESS, *Library 2.0 Theory: Web 2.0 and Its Implications for Libraries*, «Webology», 3, 2006, 2, <<http://www.webology.org/2006/v3n2/a25.html>>.

32 LINH CUONG NGUYEN - HELEN PARTRIDGE - SYLVIA L. EDWARDS, *Towards an Understanding of the Participatory Library*, «Library Hi Tech», 30, 2012, 2, p. 335-346: 337.

33 *IFLA Public Library Service Guidelines*, p. 84.

ed: «those who are not anti-conformist, creative and audacious have no place in tomorrow's library»³⁴? Also because, if the guidelines state the necessity of combining the above gifts with sound library science training, Antonella Agnoli completes the definition of her ideal library with a warning that it is «better to ignore the traditional professional profiles in favour of new figures from different backgrounds»³⁵. Perhaps Agnoli may even be right, however, the model that ends up generating this type of apodictic statement is not predictive but conceptual, and can be corroborated at a phenomenal level by some positive examples, which can be countered by hundreds of cases of equally good library management thanks to (and not despite of) the fact that the staff hold a specific qualification. Only in the sphere of law, and by force of circumstances, can conceptual models generate statements that lay the grounds for a successful future, for example by obliging librarians to take a degree in a “different sphere” and not in a library science discipline, a situation forestalled in Italy by the lasting indolence of the legislator as regards this specific question.

These considerations now lead us to examine the second risk that models bring with them, i.e. the ideological use that can be made of them. Clearly, this is a risk that belongs not only to the library science sphere, but that concerns the model concept in general: «Every model always has something sinister about it», stated Elias Canetti, «because it harks back to a meta-model whose nature is invariably polemical and hostile»³⁶. Speaking of meta-models means shifting the reasoning onto the plane of modelling philosophy and, therefore, considering cultural paradigms - i.e. that framework of beliefs, values, and aspirations - within which every model is developed and used. Contextual variables need to be borne in mind as much for nomothetic models as for idiographic ones, however, if for the former it is a comparison with reality that demonstrates their validity, to the extent that they can explain a fact and forecast a determined effect given certain conditions, and so need to be improved or substituted. Meanwhile, for idiographic models, the question remains open as to where to set the limit of acceptability in outlining the vision they should be aiming at. The “State of Law” (*Rechtsstaat*), like religions or any other form with which a community decides to express a shared framework of values has, amongst its objectives, precisely that of identifying certain limits and not others (something that, obviously, irritated Canetti, who was allergic to every established power) within which a model of action

34 ANTONELLA AGNOLI, *Le piazze del sapere. Biblioteche e libertà*, Roma-Bari, Laterza, 2009, p. 158.

35 Ibidem.

36 Cited by FRANCO FARINELLI, *Il paesaggio di Humboldt*, «Il Sole 24 Ore», 31 agosto 2014, p. 18.

and development can be deemed legitimate or otherwise. This sort of social bargaining does not exclude the sphere of idiographic disciplines which, at first sight, would appear much freer, not to say anarchic. Certainly, everyone can propose the models he or she prefers according to whatever is suggested by their own culture and personal sensibility, nonetheless, their acceptance by a reference community will be commensurate with their conformity to those standards, ethical codes, and charters of principles that are the expression of a search for common values on the basis of a comparison that is as wide-ranging and mutually shared as possible. Clearly, one of the objectives, at times not in any sense secondary, in proposing an alternative model, might consist in provocation designed to question the value frameworks of a scientific community. However, it is equally expected that such a community will be more or less resistant to accepting a new model depending on the extent to which it will undermine the ontological foundations of the discipline itself. In the library science sphere today, we find ourselves faced by one of these attempts, i.e. we find ourselves in one of those historical moments of crisis for libraries which, as such, imposes the need to come up with new solutions for new problems. And who would not wish, in the face of the objective difficulty that library institutions find themselves in, to discover a model that could ferry us safely from the old to the new? Well, one of the most convenient solutions consists in proposing library models that radically break away from the past, as happens with the Bookshop Model, with Library 2.0, with Knowledge Centres, models that – albeit distinguished by different and quite specific features – share the questioning, as Riccardo Ridi wrote, of the “fundamentals” of the profession and the service³⁷, i.e., in short, of that bibliographical vocation that has historically characterized them. These models have enjoyed remarkable success in the media (beyond the eternal fascination of subversion, they nonetheless have the merit of having identified incontrovertible crisis factors that need to be tackled) but, on the other hand, it is important to underline the circumspection with which their contributions have been greeted so far by international associations, and the pressing criticisms they have received from a theoretical point of view³⁸. This is resistance that

37 RICCARDO RIDI, *La responsabilità sociale delle biblioteche: una connessione a doppio taglio*, «Biblioteche oggi», 32, 2014, 3, p. 26-41: 34.

38 See, for example, the works of DAVID McMENEMY, *Telling a True Story or Making it up. Discourse on the Effectiveness of the Bookshop Model for Public Libraries*, «Library Review», 58, 2009, 1, p. 5-9; ANTHONY GRAFTON, *Future Reading*, «The New Yorker», 5 November 2007, <<http://www.newyorker.com/magazine/2007/11/05/future-reading>>; CARLO REVELLI, *La biblioteca pubblica come luogo sociale. A proposito di Le piazze del sapere*, «Biblioteche oggi», 27, 2009, 7, p. 7-11; TOM KWANYA - CHRISTINE STILWELL - PETER G. UNDERWOOD, *Library 2.0: Revolution or Evolution?*, «South African Journal of Libraries and Information Science», 75, 2009, 1, p. 70-75.

has grown inside the scientific world and the profession, which some might define as merely misoneist, but that, in our view, is consistent with that notion of library complexity that we began from.

Personally, I do not believe in simple solutions to complex problems such as those concerning today's public libraries, and I fear that the three new models mentioned above tend, albeit in a praiseworthy effort of renewal, to deaden the «specific documentary and communicative languages of a library, in the absence of which there is no dialogue between people, spaces and collections, which is the preliminary condition for producing a concrete tension towards freedom, on the part of those who choose to share in constructing that dialogue».³⁹

4. *Towards a new type of model*

«Libraries are desperately in need of new models for the future»⁴⁰, stated Murray S. Martin at the dawn of the great revolutions at the end of the last century. Thirty years later, it appears to us that this necessity remains unchanged, on the one hand because - as we said - it is required on the theoretical plane by a library science that seeks to attain its own specific scientific nature⁴¹, and on the other, because it is demanded by libraries, today tackling an unprecedented identity crisis, as unprecedented as the major transformation in course in the societies they operate in.

The problem, therefore, consists first and foremost in seeking a type of model that can, or rather, that tries to respond appropriately to the complex needs of the contemporary world, avoiding solutions that are pre-packaged in terms of organizing spaces, services and functions and, at the same time, are reductionist on the plane of the dialectic between tradition and change. On the contrary, the peculiar traits of the organizational models that best answer the characteristics of a post-industrial context would seem to include: the ability to adapt to changing environmental conditions, consistent hybridism in living with the old and new, and the centrality of communication as a structural element of an organization's life⁴². Do we have available, in the library science sphere, a type of model that satisfies these characteristics? The answer, from our viewpoint, is positive, as shown by the two examples we are about to propose, both linked - albeit with necessary distinctions - to a model concept that, even though corrob-

39 MAURIZIO VIVARELLI, *Retoriche dello spazio. Testo e paratesto della biblioteca tra sociologia, architettura, biblioteconomia*, «Biblioteche oggi», 28, 2010, 2, p. 7-22: 10.

40 MURRAY S. MARTIN, *A Future for Collection Management*, «Collection Management», 6, 1984, 3-4, p. 1-9: 5.

41 G. VITIELLO, *Le biblioteche europee nella prospettiva comparata*, cit., p. 30-31.

42 FABRIZIO MAIMONE, *Dalla rete ai silos: modelli e strumenti per comunicare e gestire la conoscenza nelle organizzazioni flessibili*, Milano, Franco Angeli, 2007, p. 46.

orated by concrete applications, excludes every predictive certainty, presenting itself instead as a tool to be used to instigate a specific development plan that can be applied to each single library.

The first model, known to Italians since it was proposed by Anna Galluzzi in *Biblioteche per la città*, is that of the Multipurpose Library. This is characterized by the possibility of: a) reconciling small and large dimensions; b) creating personalized services; c) increasing leisure time facilities and, at the same time, those of study and research; d) focussing on functional, experiential and metaphorical components; e) relaunching the library as a public place that is a part of the city⁴³. As you will observe, these salient traits fully harmonize with the directives of the organizational models we have just mentioned: playing on an ability to combine four basic roles - the library as *culture centre*, *knowledge centre*, *social centre*, and *information centre* - each institute being put in the condition to design «a personal path of meaning»⁴⁴ that will allow it, given the peculiar physiognomy characterizing it (and which makes it a unique example as regards its own history, way of management, the building housing it, the collections it holds and the reference community), to tackle complexity efficiently. Curiously, Galluzzi defines this approach to the Multipurpose Library as something that goes beyond modelling, while in reality what is being proposed is actually a different type of model which, in contrast with what the author says, does not turn into a mere sum of preceding ones, but that all of them subsume in an overall dialectic, without remaining restricted to the predictive vocation of each single one.

In fact, Jochumsen, Hvenegaard Rasmussen and Skot-Hansen in presenting their “four spaces model”⁴⁵ - and here we are at the second example - do not abandon the term “model” but, on the contrary, deem it totally appropriate to emphasize its function in stimulating theoretical discussion («the model could be used as a framework for the discussion of the library’s overall purpose and legitimacy internally in relation to its employees, but also externally in relation to politicians, users and partners»⁴⁶) and, contextually, «an instrument for arranging or rearranging libraries as well as a tool in plans for building new libraries»⁴⁷). This model too, like the previous one, is based on a mixture of functions referable to four specific spaces (*cultural centre*, *knowledge centre*, *social centre* and *information centre*) to be identified and calibrat-

43 A. GALLUZZI, *Biblioteche per la città*, p. 136.

44 Ivi, p. 168.

45 HENRIK JOCHUMSEN - CASPER HVENEGAARD RASMUSSEN - DORTE SKOT-HANSEN, *The Four Spaces - a New Model for the Public Library*, «New Library World», 113, 2012, 11-12, p. 586-597.

46 Ivi, p. 594.

47 Ibidem.

ed in each single structure, spaces that are in fact not too dissimilar from those proposed by Galluzzi. The planning activity carried out on the basis of the “four spaces model” should therefore allow the definition of a personalized profile for each institute which, in accord with citizens’ delegations, could function as a lever to improve services.

In conclusion: a type of model that allows the maximum degree of flexibility is, nowadays, the sole possibility that can seriously be taken into consideration to avoid «the blurring of regional or national singularities and the absorption of anomalous situations within a homogeneous and rectilinear scale of progress for libraries»⁴⁸. In a phase of uncertainty like the present one, which characterizes both the macro-contexts in which possible library models should be applied and the micro-contexts of the various local situations, there is no other road that attempts to carry out its tasks in the best way possible with the scarce resources available⁴⁹: recognizing the different nature of these “lacks” and understanding how to exploit them to the full would already be a major result for a tool of theoretical investigation. For the rest, it would be opportune to tune in, to observe single concrete experiences and draw inspiration from these for library science practice: as Paul Krugman wrote, this is the most suitable time to «tell stories rather than demonstrate theorems»⁵⁰.

(Translation by Alex Gillan)

48 G. VITIELLO, *Le biblioteche europee nella prospettiva comparata*, p. 33.

49 In this sense, we solicit, with her incurable optimism, Maria Stella Rasetti, *Il bibliotecario tra resilienza e “coopetizione”: avventurarsi nella crisi alla ricerca di nuove opportunità* (*The librarian between resilience and “coopetition”: venturing into the crisis in search of new opportunities*), in: *Verso un’economia della biblioteca. finanziamenti, programmazione e valorizzazione in tempo di crisi*, a cura di Massimo Belotti, Milano, Editrice Bibliografica, 2011, p. 177-191. Proceedings of the conference held in Milan, 11-12 March 2010.

50 PAUL KRUGMAN, *Raccontare storie più che dimostrare teoremi*, «Il Sole 24 ore», 26 ottobre 2014, p. 23.

WORK IN PROGRESS

Libraries in Tuscany: Some Considerations on the Early Results of a Survey

Maria Pagano*

1. Fieldwork: observing the space, interpreting the library

The shifting documentary, relational, social and cultural dynamics taking place in the physical space of contemporary public libraries prompts researchers to start new paths that could help examine and familiarise with today's and tomorrow's public in these places, now undergoing continuous changes when compared to the traditional library paradigm from last century. The author has chosen, within the broader scope of her master's thesis research, to explore a rather unknown avenue in library studies, but already amply explored in the past years in the museum world with so-called visitor studies, a course that can be ascribed to a specific interpretative framework, which can on the one hand be traced back to social semiotics, and on the other to the analytical perspectives based on ethnographic observations¹. With the help of the theoretical grounds illustrated in specialised literature and of the applied ones provided by the main results of this kind of research heretofore published, we have attempted to study and analyse the identity of the library and its

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¹ Also see the interesting studies by CARLOTTA MARGARONE, *Conoscere per valutare*, in *Lo spazio della biblioteca. Culture e pratiche del progetto tra architettura e biblioteconomia*, a cura di Maurizio Vivarelli; collaborazione di Raffaella Magnano; prefazione di Giovanni Solimine; postfazione di Giovanni Di Domenico, Milano, Editrice Bibliografica, 2013, p. 434-438 and by ANNA LA FERLA, *Dall'analisi del pubblico alla possibilità di nuovi modelli organizzativi. L'esperienza di Palazzo Madama (2006-2012)*, ivi, p. 438-441.

users focusing on three cases in Tuscany: the Biblioteca delle Oblate (Florence), the Biblioteca della Ginestra in Montevarchi (Arezzo) and the new institute MMAB. Montelupo Museo Archivio Biblioteca in Montelupo Fiorentino (Florence), within the methodological framework introduced and outlined in this volume². The aim of this short paper is to introduce, in a non-comprehensive manner, a preliminary part of the results obtained at this early stage of the dissertation, involving fieldwork and quantitative and qualitative data collection, to give a sense of the direction we are taking, leaving all final interpretative considerations to a later stage, and to a broader reflection. The survey method adopted was developed in two separate but contemporary stages, and it is characterised by the use of an ethnographic research technique, i.e. distant or naturalistic observation, and of anonymous questionnaires handed out to both users and operators in the libraries covered³. Based on these premises the survey was carried out in some areas of the three libraries examined and namely: in the Biblioteca delle Oblate, the reference room on the first floor, the reading room on the second floor and the terrace, in a span of a week (from 16/6/2014 to 20/6/2014); in the Biblioteca della Ginestra, the entrance hall and the reading room on the second floor, narrowing down the observation to only three days because of the smaller spaces (from 24/11/2014 to 26/11/2014); and finally, in the MMAB, the entrance hall and the three reading rooms, again over a period of three days (from 27/11/2014 to 29/11/2014). Abiding by the workings typical of this kind of ethnographic approach, I kept aside from the events taking place, pretending to be one of the many students who go to the library every day to study for an upcoming exam, equipped with textbooks and a notebook. I made my remarks, structured ones too, using a grid about the most common typified actions of library-goers that I had devised during my bachelor's dissertation⁴, and I kept a sort

2 Cf. M. VIVARELLI, *The Identity of the Contemporary Public Library. Theories for a Holistic Perspective of Interpretation*.

3 For an accurate description of observation criteria and techniques cf. AURORA GONZÁLES-TERUEL – MAITE BARRIOS CERREJÓN, *Métodos y técnicas para la investigación del comportamiento informacional. Fundamentos y nuevos desarrollos*, Gijón, Trea, 2012, p. 159 - 182. The criterion for sampling is random and characterised by the fact that it «selecciona a los individuos en función de la posibilidad de acceder a ellos y de su voluntad de participar en el estudio y no por el echo de que sean representativos de la población» (ivi, p. 68-69). Distant or naturalistic observation intends to «osservare la realtà sociale e i modi di vita da una prospettiva "esterna": il ricercatore osserva i fenomeni così come si manifestano spontaneamente, nel modo il più possibile neutro, senza intervenire a modificare il naturale svolgimento degli eventi e dei comportamenti delle persone» (FRANCESCO RONZON, *Sul campo. Breve guida alla ricerca etnografica*, Roma, Meltemi Editore, 2008, p. 63).

4 Apologising for my self-reference, for those interested in a further analysis showing both the grids structure that cannot be reported here, and the meth-

of “logbook” where I could freely note down what happened in that space-time lapse within my range of vision, following the flow and not interfering in any way with the reality I was in. Letting space-user and user-user interactions and their ensuing behaviours carry on, as if the researcher were absent, would allow to verify the occurrence of such typical phenomena when using a library space and identify others that would help re-invent and re-interpret the actual role of the institution, in connection with its public and the use it makes of the facility. Each of the three libraries covered obviously has its own characteristics, however, some common elements have emerged from filling out the grids on the typified actions, even though a large and historical library in central Florence, such as the Oblate, and two smaller suburban situations, recently opened and with fewer users, like the Ginestra and the MMAB, were considered. First of all, this survey showed the already amply documented fact that most of their library-goers are young high school and university students, who use the premises to consult library material mainly with their own books and computer, staying in the facility throughout the whole day. Moreover, closely related to this survey, the bibliographic and digital resources of the three institutions are scarcely used by this large part of their public, whereas more elderly users or those aged 10 to 15 are more prone to loan or consult books, documents and magazines that belong to the library book collections. The remarks noted on the logbook partly confirm what the grids show, but they mostly give back the author’s point of view on the facilities and their use: they are traces engraved in the observer’s mind, which seen from an overall perspective convey what quantitative data are not able to tell. Taking into account that, like every experience based on observation and free human interpretation, this too cannot be unbiased nor exempt from inaccuracies, I hereunder report some of these impressions, once more pointing out that only some of the research project results will be here anticipated.

The Biblioteca delle Oblate ought to be treated separately because of its peculiar spaces and users, and at least in this case, after wandering around its roomy and usually – for those who venture in them for the first time – labyrinthine spaces, one could state that the library is not merely frequented but “inhabited”, “lived”: its operators and regular goers are likely to see youths sitting on the terrace or cloister parapet repeating aloud what they are studying, maybe barefoot to find some solace from the summer’s heat or consuming food and drinks;

odology underlying their creation, refer to M. PAGANO, *La biblioteca Archimede di Settimo Torinese. Un approccio sociosemiotico all’uso dello spazio*, Dissertation in Library Studies, Università degli Studi di Torino. Corso di laurea in Beni culturali archivistici e librari, advisor prof. Maurizio Vivarelli, a.y. 2012-2013.

these youngsters also often move tables and chairs around to form small study groups or simply to be able to gaze at Brunelleschi's dome, flanked by tourists sipping a cocktail and taking pictures of the romantic Tuscan sunset. After a week spent at the Oblate, even the author is not surprised by the crowded and fully occupied areas, to the point of having to sit on the floor on the green wall-to-wall carpet covering the reading room on the top floor (the former children's room), yet absolutely quiet and extremely well run by those who study in this building, and then behind a glass door one may see the crowded and noisy terrace, showing how lively a place of study and culture such as a library can be. These considerations take on an extra meaning if one thinks that in the past this very same building hosted a monastic order like that of the Oblates, where nuns lived in seclusion. The users' appropriation of the spaces and decor connoting Florence library cannot be seen in the other two facilities, and this is probably because they were recently opened, thus preventing users and citizens from feeling already part of the library, and because smaller spaces allow a closer control on the operators' part, which inhibits any behaviour different from the traditional and obsequious silence pervading the mind of most people when they think of a library. If, for example, at the Oblate the contrast silence vs noise is striking, at the Ginestra there is a calm vs movement one: in the three days I spent at a desk in the reading room on the second floor, it seemed to me that everything was marked by fixed times and methodical situations. The people frequenting the library were always the same, with small differences, and some of them always sat in the same spot and took coffee/cigarette breaks at fixed times, with a few minutes difference (at around 10:30 am and 4:30 pm). Alongside this calm, typical in the average university student's routine, one notices on the other hand the movement of those attending the Ginestra to follow seminars, workshops, book clubs organised and run by the library operators, which are very popular in terms of public, also on days like Saturday and Sunday when libraries are usually less or not at all frequented. The last library taken into consideration is the MMAB (Montelupo Museo Archivio e Biblioteca) in Montelupo Fiorentino, for which it is not so easy to find a marked contrast between opposing situations, as is with the Oblate and the Ginestra, probably because its comparatively fewer potential users and smaller spaces make it difficult to pinpoint a clear divide between the different phenomena occurring. However, in this preliminary and cursory approach to results, I believe it is interesting to emphasise the feeling of easiness and somehow freedom one feels when walking and studying in its spaces. Indeed, there are no doors separating a reading room from another, not even to divide children's rooms from those of adult users, and if this makes the library noisier than usual on the one hand, it does not prevent those who visit it from perusing and moving around it, on the other.

Observing users' behaviours and motions has led me to form a personal opinion on the relationship between architecture-design and users in MMAB specific case: the reading rooms where the library bibliographic collections are on display (from Italian and foreign fiction to art books, nonfiction and children's books) feature a modern design, walls in pastel colours like blue, green and yellow, and the prevailing type of users is mixed, made up of middle and high school students, adults and elderly people. The reference room on the left of the entrance desk has wall bookshelves, like the rest of the library, containing bibliographic material on local history, the walls are cream white and the lighting is more dimmed than in the other rooms: this space, together with the upper mezzanine area with a dark wood ceiling, is filled almost exclusively with university students and adults, who need more concentration to carry out their study or research work. Now, if one were to compare the library to a house, the noisy and colourful reading rooms would be the children's bedrooms, whereas the afore-described part would be the living room, and it may be for this more "elegant" design that adults and those accustomed to more academic environments like university students are inclined to occupy this area, which is consequently the most quiet one.

All these considerations, resulting from the appraisal grids and the interpretation of what noted day by day, can be further elaborated with the graphs obtained analysing the questionnaire submitted to users and operators (cf. Appendix A), which is articulated into four macro areas. From the questions in the first two areas (for a total of 33 questions) one may analyse from the users' point of view what are the most important aspects that guarantee the quality of library services and what are the most useful one to assess library staff's competence, in the broadest sense of contemporary public library; whilst the other two macro areas focus on the specific features of each library examined and they precede the final part of the questionnaire, aimed at collecting information on the compiler (age, educational qualification, nationality, number of books read in the past year and use of social media). In the first macro area of the questionnaire many of the aspects characterising both the traditional concept of *public library* and *reference library* are described, in a way easy to understand and quick to fill out, and the modern evolutions and contaminations of those same models, following a structure articulated into four further subsections, featuring questions about:

- architectural space (question 1, connected to the third macro area on the assessment of the space in each specific library);
- custom services (questions 2 to 7);
- extension and social-relational activities (questions 8 to 20);
- cooperation and shared activities and services (questions 20 to 24).

In order to let users voice their opinion we thought of adopting Likert scale technique for the questionnaire structure, where to every question - technically called "item" - there is an answer expressed through a 5-point agree/disagree scale, from "extremely" to "not at all"⁵. The simple sum of the different opinions collected and their graphic elaboration permit to outline users' overall point of view on a specific topic analysed in a reasonably accurate manner, however in the following research project we intend to account for the variables of data cross-referencing, thank to a section containing the information on the compiler, thus allowing us to evaluate any possible variations to each answer according to a specific group of respondents (age, educational qualification, etc.). By cross-referencing different information in the questionnaire we can obtain more accurate indicators and create a network of relations underlying the data themselves, which could not otherwise be seen by simply going through the single answers. Taking into consideration users' overall opinions, comparing and cross-referencing them with some specific points of view related to certain features, all this by starting from the ground up, without any a priori knowledge nor direct interference, are all actions perfectly falling under the theoretical framework at the basis of the research hypothesis here outlined along two key parallel conceptual lines, i.e. holistic observation on the one hand, and phenomena observation on the other. Embracing a "holistic" point of view, considering all the different types of practices and techniques previously applied to the study of library institutions, connecting them to other techniques and methodologies coming from fields seemingly far away from library studies, such as the sociological, ethnographical one, etc., would give an overall picture of the analysed situation, whereas starting from ground up, from phenomena and not ideas, to study what happens in the physical and digital space of a public library would allow us to identify in perspective a more realistic interpretative model⁶. The goal is not to judge the type of answers against a given model, but to look for the appraisal of the different "phenomena" taking place in the documentary space, both bibliographic and extra-bibliographic ones. Therefore, the questions try to probe into the perception of relevance, both of custom "services" and of emerging activities, not yet fully included in the "model" that is being re-defined. Moreover, special attention is given to the perception and

5 For a description of the method cf. A. GONZÁLES-TERUEL - M. BARRIOS CERREJÓN, *Métodos y técnicas para la investigación del comportamiento informacional*, p. 91, 17, 221.

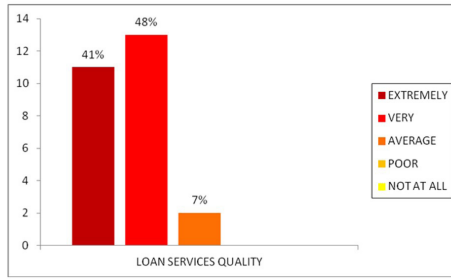
6 To further analyse the reflections that have yielded this research hypothesis refer to the study by M. Vivarelli, *Specie di spazi. Alcune riflessioni su osservazione e interpretazione della biblioteca pubblica contemporanea*, «AIB studi», 54, 2014, 2/3, p. 181-199. DOI <http://dx.doi.org/10.2426/aibstudi-10134>.

appraisal of library staff skills, not only according to traditional standards but also in a more relational sense.

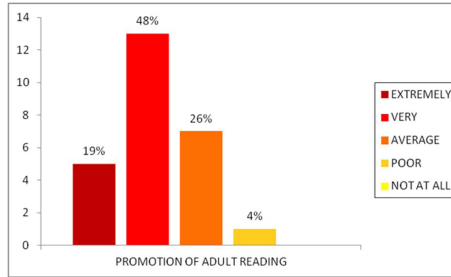
The questionnaires were handed over both to users going to the loan desk in all three the libraries under examination and to their operators, during the period between 24th and 27th November, through a random sampling that considered the size of each single institution. Given the nature of this article we have decided to show, in the following bar graphs, the data relative to twenty-seven questionnaires filled out by users of the Ginestra library in Montevarchi. We have singled out some of the questions making up the structure of the questionnaires, pertinent to the degree of importance users give to some aspects of the library, which guarantee the quality of the library service provided (architectural space, quality of the online catalogue and loan services, activities to promote reading and information literacy, cooperation with other libraries and with charities, staff's skills and professionalism). Because of the widespread use of social networks we have tried to analyse also if they were used or not by questionnaire compilers and which amongst the popular ones they used the most (*Facebook, Twitter, Foursquare, Pinterest, LinkedIn*).

1. Architectural space quality

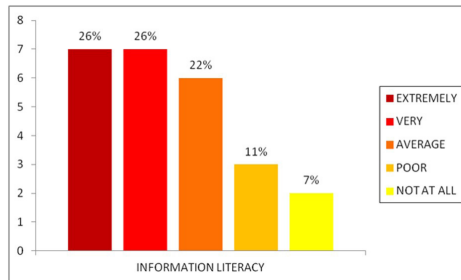
2. Online catalogue quality



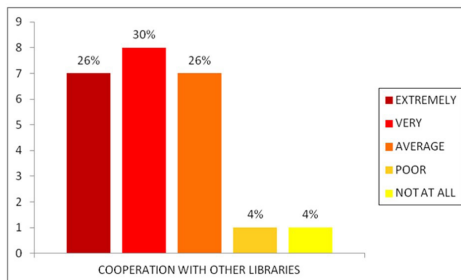
3. Loan services quality



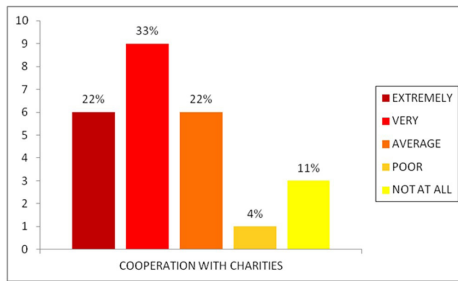
4. Promotion of adult reading



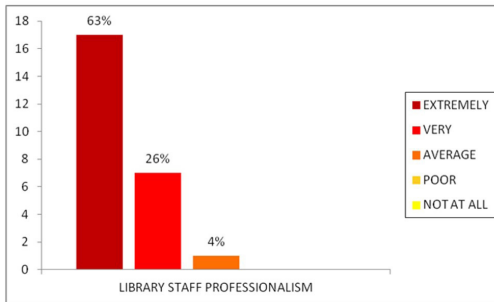
5. Information literacy



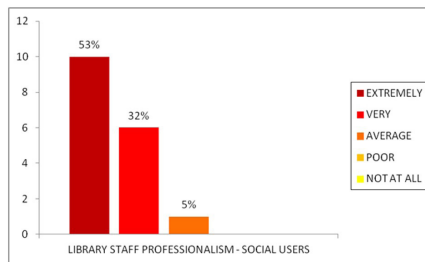
6. Cooperation with other libraries



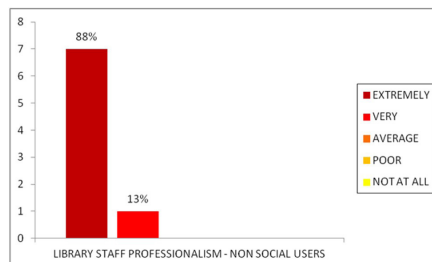
7. Cooperation with charities



8. Library staff professionalism



9. Library staff professionalism. Social web users



10. Library staff professionalism. Social web non users.

2. Preliminary remarks

These first excerpted charts show the answers in percentage, graduated according to response modulation provided for by Likert scale, while the last two charts account for the answers about library staff professionalism by so-called social users, i.e. those who declared they use social networks, and by non-social ones, those who do not use them. What emerges from a preliminary assessment of these early and partial results obtained can be summed up in few concise points:

- the architectural space is not perceived as a key factor in the library overall appraisal (only 30% out of the total interviewees answered “extremely”), like what happens when judging collaboration and co-operation projects with other libraries or charities;
- unlike what we may be led to believe by the time we live in and by the idea that the staff’s skills are nowadays unnecessary and little used, it clearly emerges that most of the Ginestra users (63%) think the presence of qualified and skilled staff is paramount in guaranteeing the quality of library services. This fact is confirmed by the large number of users (26% indicate “extremely” while 26% indicate “very”, thus confirming this is a sensitive topic) giving importance to information literacy activities, which obviously would not be able to take place without a qualified library staff. Therefore, it seems that in spite of the strong drive to modernisation, users still feel the need and are willing to rely on someone they trust like a librarian to expand their knowledge or simply untangle that confused bundle of information they deal with every day and that they cannot turn into knowledge on their own.
- Cross-referencing the data appraising “library staff professionalism” item and “social user” and “non-social user” profiles shows that for the latter category (formed by 8 interviewees) library staff professionalism is paramount (88% of them chose the option “extremely”), while the percentage of social users deeming qualified and skilled professionals to be of key importance is not so outstanding (out of 19 interviewees only 53% chose the option extremely). This diversity could indicate, if compared to other parameters, that those who are more versed in using new technologies feel less the need to have someone with specific informational skills, since they are able to find what they need on their own, perhaps a little bit presumptuously.

Through this multidirectional approach, given the complementarity and integration of the tools used, we believe it is possible to gain a more comprehensive knowledge of the library studied, and by so doing acquire a wider and more articulated view on its phenomena, assessing the different perspectives from which the complex reality of a library can be analysed. (Translation by Jennifer Cooke)

Appendix

Questionnaire (each item is related to the values of Likert scale)

A) Which aspects do you believe are the most important to guarantee quality library services?

1) Quality of the architectural space (design, climate factors, "atmosphere", informal sitting area)

2) Quality of collections (paper and electronic ones)

3) Quality of the online catalogue

4) Quality of services (loan, interlibrary loan, document delivery)

5) Quality of the reference service

6) Quality of digital services (Internet access, wi-fi)

7) Quality of services addressed to local culture

8) Quality of the use of social media (Facebook, Twitter etc.)

9) Services promoting children and youth reading

10) Activities promoting adult reading

11) Reading groups

12) Quality of cross-cultural services

13) Information literacy activities (learning to use digital technologies)

14) Educational activities

15) Classes, seminars

16) Theatre/music performances and artistic events

17) Library staff competence and skills

18) Refreshment services (cafeteria etc.)

- 19) *Chances to establish meaningful human relationships*
- 20) *Cooperation with other libraries*
- 21) *Cooperation with archives and museums*
- 22) *Cooperation with cultural associations*
- 23) *Cooperation with schools*
- 24) *Collaboration with charities to run some services (surveillance etc.)*

B) Which aspects do you believe are the most important to judge the library staff's professionalism?

- 1) *Cataloguing skills*
- 2) *Reference services skills*
- 3) *Skills for reading promotion activities*
- 4) *Skills to manage digital services*
- 5) *Skills for information literacy activities*
- 6) *Skills for educational activities*
- 7) *Skills to organise classes, seminars, events*
- 8) *Kindness, congeniality, relational skills*
- 9) *Managerial skills (marketing, fundraising etc.)*

C) The library space is:

- 1) *Welcoming, pleasant*
- 2) *Well organised, functional*
- 3) *Too busy and noisy*

- 4) *Well equipped with paper documentary sources*
- 5) *Well equipped with documentary sources and digital services*
- 6) *Suitable for studying*
- 7) *Suitable to meet people*
- 8) *Effectively run*

D) The library space I prefer is (Example taken from the questionnaire used for the Biblioteca delle Oblate):

Cloister
Reading room
Internet services area
Periodicals reading room
Children's area
Cafeteria
Other

Remarks, complaints, suggestions:

Information on the questionnaire compiler

- A. Age**
- B. Educational qualification**
- C. Nationality**
- D. Number of books read in the past year**
- E. Use of social media**
- F. Other**

Public Libraries in the Social Accountability of Local Administrations

Ilaria Giglio and Maria Maiorano*

1. An overview

The situation of Italian public libraries is actually rather disparate: some examples are close to the best European experiences, but the best part of them fail to meet international standards. Computerisation and disintermediation characterise our society, they tend to reduce the value of librarian institutions and undermine their social role with the local administration they belong to. For these reasons, public libraries need to find a way to validate their position in the eyes of their stakeholders. A possible solution could be to implement self-assessment and communication, using social accountability and namely drafting a social report.

According to a 2006 *Direttiva* issued by the Ministero della Funzione pubblica¹, social accountability is the tool public administrations can use to satisfy the informative need of their stakeholders, giving them the chance to judge the effects of the administration: therefore, it is the principal means to relate to stakeholders and especially to local communities. The tools through which the public administration carries out its accountability report are final statements, whose purpose is to inform the community on its work in a specific time lapse.

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¹ ITALIA. DIPARTIMENTO DELLA FUNZIONE PUBBLICA, *Direttiva del Ministro della Funzione sulla rendicontazione sociale nelle amministrazioni pubbliche*, 2006, <<http://www.funzionepubblica.gov.it/TestoPDF.aspx?d=16887>>.

The main documents are:

- balance of mandate: covering the finished period of administrative mandate;
- social report: it is the tool communities use to get information about the administration policies, choices and results achieved in the local area, described in an accurate and thorough manner.

Public administrations can get some advantages from an effective social accountability that can be extended to all the institutions involved in drafting the social report (hence also to libraries). These advantages are relative to the integration and revitalisation of the accounting dimension through a more transparent report on economic-financial resources; optimisation of communication flows with stakeholders; empowerment of institutions responsibility by focusing on administrative transparency and on citizens' assessment; better working of administrations and responsible consciousness of public expenditure; bodies structural reorganisation, taking into account planning processes and users' needs; promotion and development of expertise and professionalism; increasing employees' motivation and satisfaction. Public bodies can be accountable for their actions and can give users the chance to evaluate them following some indicators, as they are suggested by the same *Direttiva*: goals pursued (quantifiable and measurable changes that can be expected, compared to the initial situation); actions undertaken (plans, projects, services and regulatory measures), describing process indicators (activities, times, progress ranking); used resources; final outcomes (their quantity and quality); efficiency (used resources / final outcomes); effectiveness (success in obtaining a desired result); effect (social effect of achieved purposes); beneficiaries' judgements; future commitments.

Therefore, social reports are the main tool public administrations can use for social accountability, and they could be applied also to inner management and communication. The report is the final step of the accountability process and its "social" characterisation may refer to the impact and the immaterial consequences the local authority has had on its community, but also to a shared report, created with the support of citizens or other stakeholders. Public administrations should resort to social reports as the only means for evaluation, self-evaluation, communication of their social effect. Unfortunately, social reports are currently not mandatory in Italy².

2 For an in-depth analysis on accountability and social report, refer to the following: LUCA ANDRIOLI - CRISTIANA SERAFINI, *Il bilancio sociale: obiettivi, principi e principali esperienze in atto*, Roma, Enea, 2002; LUCA BARTOCCI, *Il bilancio sociale negli enti locali: fondamenti teorici e aspetti metodologici*, Torino, Giappichelli, 2003; LUCIANO HINNA, *Il bilancio sociale nelle amministrazioni pubbliche*, Milano, Franco Angeli, 2004; ILEANA STECCOLINI, *Accountability e sistemi informativi negli enti locali*:

2. Methodology

Public Italian libraries should look to public administrations and use social reports to account for their actions and be more worthy in the eyes of their stakeholders. The Italian professional literature has so far failed to make its point about the importance of libraries social accountability³ and there has not been a standardisation of the necessary practices, even if there are some cases which can be used as reference⁴.

However, before suggesting a specific model of application of the social report libraries could use to express their identity, it would be interesting to verify what is the actual Italian perception of the role libraries play. If one analyses the national recent professional literature, it seems that contemporary libraries are always too complex and lacking in flexibility to be able to adapt to the contexts they have to relate to. The result is a cultural facility, seen not “only” as a place to access and store information, but as a makerspace, where users can feel an active and creative part. Therefore, there is the chance for public libraries to start to compete not only with similar cultural facilities, but also with the educational and training world, thus positing themselves as an educational workshop, where the creative experi-

dal rendiconto al bilancio sociale, Torino, Giappichelli, 2004; ANGELO TANESE, *Rendere conto ai cittadini: il bilancio sociale nelle amministrazioni pubbliche*, Napoli, ESI, 2004; GBS. GRUPPO DI STUDIO PER IL BILANCIO SOCIALE, *La rendicontazione nel settore pubblico*, in *Il bilancio sociale: standard di base e documenti di ricerca*, Milano, Giuffrè, 2005; *La nuova comunicazione dell'ente locale: organizzare l'ascolto, l'informazione e la partecipazione degli stakeholder*, [Texts by] Alfredo Alessandrini [et al.], Milano, F. Angeli, 2006; GBS. GRUPPO DI STUDIO PER IL BILANCIO SOCIALE, *Gli indicatori di performance nella rendicontazione sociale*, Milano, Giuffrè, 2007; GBS. GRUPPO DI STUDIO PER IL BILANCIO SOCIALE, *Il bilancio sociale. Standard: la rendicontazione sociale nel settore pubblico*, Milano, Giuffrè, 2007; ITALIA. MINISTERO DELL'INTERNO. OSSERVATORIO PER LA FINANZA E LA CONTABILITÀ DEGLI ENTI LOCALI, *Linee guida per la rendicontazione sociale negli enti locali*, 2007; ALBERTO ROMOLINI, *Accountability e bilancio sociale negli enti locali*, Milano, F. Angeli, 2007; PAOLA ORLANDINI, *Rendicontazione e responsabilità sociale*, Torino, Giappichelli, 2008; GBS. GRUPPO DI STUDIO PER IL BILANCIO SOCIALE, *Il bilancio sociale. Standard: principi di redazione del bilancio sociale*, Milano, Giuffrè, 2013.

3 Refer to: PIERALDO LIETTI, STEFANO PARISE, *Il bilancio sociale della biblioteca*, «Bollettino AIB», 46,2006, 1/2, p. 9-21, <<http://bollettino.aib.it/article/view/5131/4898>>; STEFANO PARISE, *Il bilancio sociale come strumento di progettazione e valutazione in biblioteca*, in: *Vitamina biblioteca: quanto cresce la città: impatto sociale delle biblioteche, valutazione costi/benefici degli interventi culturali*, domanda di cultura, atti della giornata di studio (Scandicci, 3 aprile 2009), [edited by Serena Borgi and Stefano De Martin], Firenze, Centro stampa Giunta Regionale Toscana, 2009, p. 26-31; GIOVANNI DI DOMENICO, *La responsabilità sociale nella gestione delle biblioteche*, «Bibliotime» 14, 2011, 1, <<http://www.aib.it/aib/sezioni/emr/bibtime/num-xiv-1/didomenico.htm>>.

4 Refer to the social reports edited by the Biblioteca San Giorgio di Pistoia, by the Fondazione per Leggere and by the municipality of Pordenone.

ence could involve both librarians and users alike⁵.

To this aspect one may add libraries social vocations, as they are described in the recent ISO 16439:2014 (E)⁶:

Impact on social life, influencing social inclusion and unity.

Access to information and education, giving free access to information and the Internet; education and life-long learning; local culture and identity.

Cultural diversity, giving different groups the chance to preserve their cultural heritage while promoting community identity.

Community development, they are a focus point for many activities and programmes supporting the community or society at large.

Individual well-being, libraries are not only a quiet place where people can read and study, but also a meeting place where they can take part in events.

Preservation of the cultural heritage, the potential value of libraries for next generations, preserving the documentary heritage.

These are the profiles the professional world actually acknowledges for libraries, but it could be interesting to understand how they are really recognised by their stakeholders and, above all, by their local public administrations.

3. Accountability in Italy: analysis, answers and examples

In order to get a realistic overview of the Italian situation, a specific analysis of the accountability tools used by the municipalities of province capitals was carried out. The study was divided into three phases: the first one consisted in a preliminary search focused on the accountability tools public administrations can use; in the second phase, the documentary tools they utilise were singled out and analytically verified; in the third, the data from the social reports completed are thoroughly analysed. Out of the total of 110 municipalities examined, only 31,18 % filled out the social report, while 61,82 % did not (Fig. 1).

5 Cf. GIOVANNI SOLIMINE, *Nuovi appunti sulla interpretazione della biblioteca pubblica*, «AIB studi», 53, 2013, 3, p. 269, DOI: 10.2426/aibstudi-9132.

6 ISO 16439:2014 (E), *Methods and Procedures for Assessing the Impact of libraries*, p. 14.

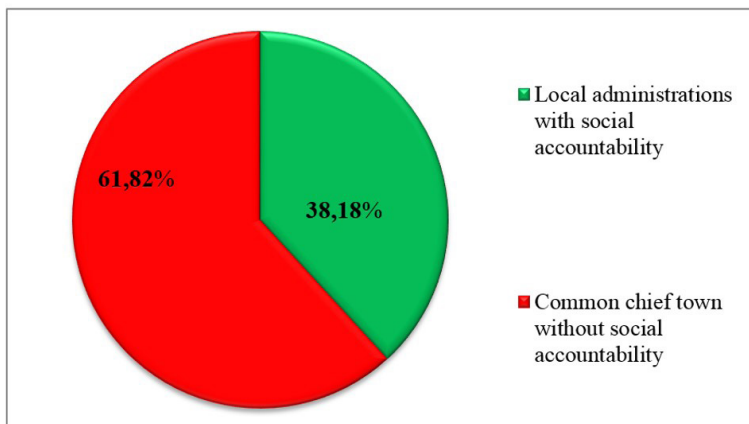


Fig. 1

Out of this 38,18 % , 67,28 % did not include references to public libraries in their social report, while 32,72 % also provided quite specific information on librarian institutions, their activities and on the potential community attendance (Fig. 2).

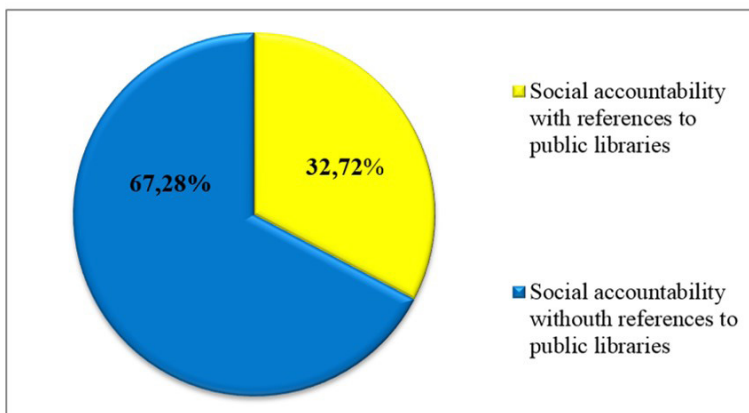


Fig. 2

It is also interesting to observe what is the geographic distribution percentage within that 38,18 % of municipalities with social reports. In Italy the reported cases of social accountability are: 71,42 % in the North, 16,66 % in central Italy, 4,77 % in the South and 7,15 % on the islands (Fig. 3).

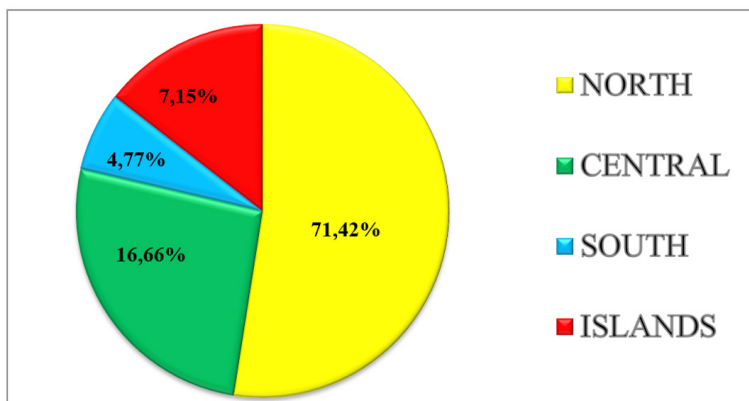


Fig. 3

4. Italian best practices

In light of the data resulting from the analysis, we decided to consider some examples of social reports complete with many of the parameters previously indicated, and the cases selected are the documents of the Biblioteca San Giorgio in Pistoia, the Fondazione per Leggere and the social report of Pordenone municipality. The Biblioteca San Giorgio in Pistoia completed its social report⁷ in 2011, focusing on efficiency and effectiveness, with the intent and purpose to offer the community a public library with collections and services; a day care centre and a place of sharing, with free access to new technologies; a centre to promote reading, culture and information, and a forum of local identification. In completing the document some parameters on the facility and how it operates, the services it provides, and also on users' satisfaction and their relation with the library, were considered. These data referred to:

- Facility: total area; area accessible to users; total seats for reading/reference/ audio-video;
- Employees;
- Resources: types of documents; purchases and donations; periodicals; pictures; multimedia material; *desiderata*; latest publications; rejected and restored documents.
- Services: number of people registered; newspapers and periodicals

⁷ *La San Giorgio risorsa per la città. Bilancio sociale della biblioteca anno 2011*, final report 22/01/2013, p. 2-18,

<<http://www.sangiorgio.comune.pistoia.it/assets/files/download/files-vari/bilancio-sociale2011.pdf>>.

reading; loans; interlibrary loans; collection use; suggestions and complaints; events; web portal and social media.

- Activities: reading promotion; educational projects; bibliographic exhibitions; publications; cinema exhibitions and projections; library promotion; conventions and seminars; guided tours.
- Costs: employees; paper and stationery; subscriptions; purchases; furniture; advertising; restorations; communication and signage; employees training; maintenance and cleaning; electricity, heating, water, telephone and garbage; insurance; taxes and refunds. They also include the revenue generated by the San Giorgio for the local community and its administration.
- Appreciation: expressed by users, employees, friends and fellows of the library.
- The mission of this document is to underline the social, cultural and economic role that the San Giorgio plays in the city of Pistoia.

Unlike Pistoia accountability model, the social report completed in 2013 by the Fondazione per Leggere - south-west libraries of Milan - is more focused on the economic aspects, based on the activities of the libraries involved (http://www.fondazioneperleggere.it/docs/istituzionali/Bilancio_2013.pdf). Indeed, the document features references to the accounting period, to the relating incomes and savings resulting from the foundation projects. Moreover, the report highlights such commercial aspects as sponsorships, courses, workshops, merchandising, etc., in view of an economic-financial result. More detailed information regarding the libraries can be found only in small part, and it mainly concerns the regular expenses for services and management of the facility, and the activities daily performed therein. A further example of report, very different from the two previously analysed, is the social and environmental budget promoted by the Municipality of Pordenone in 2011 covering the five-year period 2006-2010, where libraries are included in economic-financial contexts defined with the prospect of gain/revenue justifying their existence. The document analyses all the areas affected by the action of the municipal administration and it is organised in three sections. The first has an introductory character, or rather it describes the reference templates and the structure of the document; the second section outlines the mission of the institution and the social and environmental policies carried out during 2006-2010; in the third section, the actions undertaken by the Municipality in the different areas of family, knowledge, common goods, economic activities, networks, communication, resources, organisation are introduced. The sub-section "knowledge" analyses the museums, libraries, historical archives, the University, the Verdi Theatre and cultural events. The partition concerning libraries presents the goals the administration reached during

the reference period, which make the library a place open to the city and its territory, capable of accommodating the demand for culture and information, give answers and, finally, propose new stimuli and interests. The priority decisions made by the Administration included the establishment of new headquarters for the central library (opened in June 2010), and the creation of a cutting-edge librarian institute, both from the point of view multimedia, with access to SBN and RFID technologies, and from the point of view of the services provided, taking into consideration all the types of users. An improvement of the quality of library service in the territory prompted the online connection of some of the holdings of 5 district libraries, and other cultural organisations present in the territory.

Pordernone librarian institution has promoted numerous cultural initiatives having also a social relevance. Special sections were created, such as that for children and young people, young adults, music and comics archives. In addition to the cultural activities dealing with books and the promotion of reading, there are also numerous initiatives targeting immigrants and prison inmates. The budget is accompanied by tables reporting the data on the increments in the course of the years of attendance; active cards; loans; average of loans per user; opening days; attendance per opening day; circulating volumes; guided tours; students participating in guided tours; cultural events; participants in the cultural events. The investigations also concern the libraries in the districts of Torre, Mary della Schiava, Jolanda Turchet, North and South constituencies and their users; opening hours; animated readings; participants in animated readings and multimedia library with their opening days; accesses; books supplied in consultation; requests made.

5. New proposals

Every library willing to grapple with social accountability must take into consideration some mandatory steps. The elements that characterise social accountability are:

- voluntariness;
- statement of commitments, results and social effects produced;
- identify and build up a dialogue with stakeholders.

The social accountability report, after an introduction to the document and a methodological note on the reporting process, contains information related to:

- reference values, vision and programme administration;

- policies and services rendered;
- used and available resources.

The process of implementation of the balance presupposes a prior definition of the areas examined and it is divided into:

- definition of the accounting system, through informative elements and indicators;
- collection of information;
- drafting and approval of the document;
- communication of the social report.

Each social accountability report must: express the sense of the action of the administration, by describing the decision-making and operational processes which characterise it and their impact on the community; be made on a regular basis, allowing a periodical comparison between the goals set and the results achieved, by favouring the definition of new goals and commitments of the administration; be integrated with the planning and control system and with the entire accounting information system; focus on the different types of speeches delivered by the administration in the exercise of its duties and within the extent of its authority; give an account of the activities of public and private bodies that contribute to the implementation of the administration goals; address the administration interlocutors. When carrying out each of the phases in the process, it is necessary to ensure:

- the involvement of the facility;
- the connection with the planning and control system⁸.

The final draft of document must in essence convey the communicative nature of social accountability, making the information therein contained relevant to its recipients. The editorial layout, the choice of language, the description and representation of informational content of the social accountability report should be designed according to each specific recipient. In general terms, one should use a simple, flowing and non-redundant language; avoid using concepts, terms, and references typical of the administrative, technical, sector-based language; the meaning of any foreign words and acronyms should be explained; whenever possible, mainly use quantitative data, set forth with the help of tables and graphs accompanied by explanations that would make interpretation clearer. Before dissemination, the social accountability report must be approved or acknowledged

⁸ Cf. *Direttiva del Ministro della Funzione Pubblica sulla rendicontazione sociale nelle Amministrazioni Pubbliche*, p. 4-5.

by the governing body of the administration⁹.

After these general considerations, one may establish a set of parameters that could guide public libraries when drafting their respective social accountability reports. The comparison of information provided by the rules ISO 2789:2013, *International Library Statistics* and ISO 11620:2014, *Library Performance Indicators* has allowed us to devise a prototype evaluation scheme, suitable for public libraries to justify their existence and communicate their impact on the local community.

	ISO 2789		ISO 11620
Code	Required statistical data	Code	Name of the indicator
6.3.2	<i>Books and serials (printed material)</i>	B.1.1.1	<i>Required Titles Availability</i>
6.3.3	<i>Manuscripts</i>		
6.3.4	<i>Microforms</i>		
6.3.5	<i>Cartographic documents</i>		
6.3.6	<i>Printed music documents</i>		
6.3.7	<i>Audiovisual documents</i>		
6.3.8	<i>Graphic documents</i>		
6.3.9	<i>Patents</i>		
6.3.10	<i>Other library documents and items</i>		
6.3.11	<i>eBooks</i>		
6.3.12	<i>Other digital documents</i>		
6.3.13	<i>Database</i>		
6.3.13	<i>Catalogue records</i>		
6.4.7	<i>eBooks readers</i>		
6.2.12.2.1	<i>Number of rejected accesses</i>	B.1.1.3	<i>Percentage of Rejected Accesses</i>
6.2.4.1.1	<i>Interlibrary loan requests received from other libraries</i>	B.1.2.4	<i>Percentage of Successful Interlibrary Loans</i>
6.2.4.1.2	<i>Interlibrary loan requests made to other libraries</i>		
6.4.8.1	<i>Net usable area for library functions</i>	B.1.3.1	<i>User Area per Capita</i>
6.4.8.2	<i>Net usable area by function</i>		

⁹ Ivi, p. 14-15.

6.4.8.3	<i>Gross floor area of library buildings</i>		
6.4.8.4	<i>Shelf counts</i>		
6.4.3	<i>User places</i>	B.1.3.2	<i>User Places per Capita</i>
6.4.4	<i>Public access workstation</i>		
6.4.1	<i>Opening hours</i>	B.1.3.3	<i>Hours Open Compared to Demand</i>
6.4.2	<i>Days open</i>		
6.7.2	<i>Total staff</i>	B.1.4.1	<i>Staff per Capita</i>
6.7.2.1	<i>Professional staff</i>		
6.7.2.2	<i>Qualified staff</i>		
6.7.2.3	<i>Other staff</i>		
6.7.3	<i>Volunteers</i>		
6.7.6	<i>Staff allocation to service areas/working areas</i>		
6.7.7	<i>Staff allocation to special services</i>		
6.2.12.1	<i>Number of searches</i>	B.2.1.4	<i>Number of Content Units Downloaded per Capita</i>
6.2.12.2	<i>Number of accesses</i>		
6.2.12.4	<i>Number of Internet accesses</i>		
6.2.12.3	<i>Numbers of downloads</i>	B.2.1.5	<i>Number of Downloads per Document Digitized</i>
6.2.12.5	<i>Use of the digitized collection</i>		
6.2.2	<i>Users</i>	B.2.2.2	<i>Percentage of External Users</i>
A.2.1.1	<i>Types of users</i>	B.2.4.1	<i>Percentage of the Target Population Reached</i>
		B.2.4.2	<i>User Satisfaction</i>

The indicators listed in the table were shortlisted from a set of statistical data and performance indicators suggested in the two standards. The choice was made based on the information regarding the value and social impact of library services, derived from cross-referencing data. In particular, the table provides the correlation between performance¹⁰ indicators (ISO 2789) and corresponding quantitative data (ISO 11620). The aim is to obtain data that can implement the set

¹⁰ With regard to performance indicators and quality measurement please refer, among others, to: ROSWITHA POLL - PETER TE BOEKHORST, *Measuring Quality: Performance Measurement in Libraries*, München, K. G. Saur, 2007.

of information on the social impact of the library. To this quality and quantity set, we may add the analysis methodologies resulting from impact assessment.

6. Methodologies for social impact evaluation

The balances evaluated are characterised by a generally widespread use of “classic” indicators, notably quantitative ones, whereas that of the methodologies necessary to express the value of public libraries and communicate their impact on local communities is very limited. Among the documents in question, there are few which deal with the issue of impact evaluation, including the social accountability report of the Biblioteca San Giorgio in Pistoia, which describes the general criteria followed:

There are plentiful methodologies to measure the social and economical impact of cultural services on local communities [...] they are all Anglo-Saxon and seldom known in our country. Because of the lack of Italian models applied to public libraries, we chose to utilise two kinds of tools [...] able to clearly emphasise the most significant facts in the relation between San Giorgio and the town: how much citizens save with the services it provides and the level of satisfaction - one may even say of affection - of its goers. To obtain the first datum the method used was ROI (Return On Investment), [...] to measure the appreciation level and the critical import, with the necessary set of indications and suggestions, users, stakeholders and employees were interviewed¹¹.

To highlight the social impact of its work, the Biblioteca San Giorgio has resorted to some interviews to all of the subjects who have in some way interacted with the facility. From the Balance, it is possible to note that three different questionnaires were submitted, dealing with respectively: staff, partner associations and users. Insofar as the users, the questions were: reasons for using the library; frequency of use; an assessment of the services provided; level of satisfaction with respect to the various disciplinary areas covered; activities of the library the interviewee knew of and his/her level of satisfaction.

Regarding the staff: survey on the sense of pride and belonging; assessment of the relationship with the management and with the other members and users; identification with the library mission; evaluation of the library user-friendliness; an assessment of transparency and of the effectiveness and efficiency of the services provided; influence of the working experience on the interviewee's own baggage of professional skills; adequacy of his/her past formative experiences. Regarding

¹¹ Cf. *La San Giorgio risorsa per la città*, p. 26.

friends and allies: effectiveness of their work with regard to the library goals; quality of the relationship with the staff, with the other members of the group, with users; identification with the goals of the library community; evaluation of the library user-friendliness; an assessment of transparency, and of the effectiveness and efficiency of the services provided. In addition to the interviews, also first-hand testimonies of relevant stakeholders from the different groups were given, with respect to the value of the library and its actions on the territory¹².

The model presented by the balance of the Biblioteca San Giorgio is a good starting point to propose some additional considerations on social impact assessment, as suggested by ISO 16439:2014. A public library willing to evaluate its own impact on the community, should first choose an adequate population sample. Therefore it is necessary to choose between real and potential users, individuals or people belonging to certain groups, demographically determined or selected through criteria specific for the situation. Then one has to identify which qualitative techniques to prefer, i.e. individual interviews, focus groups, or even self-assessment of the user. In case one opts for individual interviews, the standard traces the path to follow through some guidelines. Since the social value of the impact of the library will have to be emphasised, the questions asked will focus on: free time, school and learning, information on health, job search, information for business and commerce. It is important to ask the time saved using library services, and solicit feedbacks on how to expedite and make them more efficient. Also part of the questions will focus on the role of the library as a physical space for reading, studying, but also as a place to socialise.

Some of the questions proposed in ISO standard concern: obtaining useful information for school or study; receiving relevant information on health and welfare; improving work efficiency thanks to the library; time saved; approval of the visit; experience of the library as a quiet place to read and study. If the questionnaire does not address the whole population but a specific group, questions should be tailored on the needs and interests of that group. The results of the questions, as soon as they are submitted, could then be validated by asking respondents their opinion on a replacement for the library (or for some of its services). The ISO standard contains an example question, with the satisfying alternatives between which the user should choose:

- “If this library did not exist, would you be able obtain the same information and help elsewhere?”
- From another library.
- By purchasing relevant material.
- On the Internet.

12 Ivi, p. 12-21.

- From teachers, colleagues, friends.
- Through the medias.
- Perhaps, but it would require more time and commitment.
- No, I don't think I would have the same information.

Questions of this kind should not give the impression that the library is about to close, since their purpose is to demonstrate the relevance and perhaps the indispensability of a specified library to an individual user¹³.

On the other hand, with respect to the use of focus groups, the norm suggests different topics on which to set the debate, through an exemplifying sample of questions, which should bring out the view of the participants on the general value of libraries (1) and the benefits users receive from using the services provided (2).

Example (1):

- How do you see the educational role libraries play?
- Do you think that libraries can influence the economy of their local communities?
- Do you know how libraries could support social inclusion?

Example (2):

- Why do you usually visit the library?
- What are the advantages (or disadvantages) you encountered when using the library?
- Are there other points that you would like us to highlight in relation to the influence of the library on your work or study or leisure¹⁴?

Also interesting is the point of view of the rule with respect to the use of assessment questionnaires that could, for example, show the results of training courses for users or even of the reference service and that, in order to be effective, should be carried out by the user before and after using a service. In the model of the questionnaire proposed by the standard, respondents are asked to indicate their level of familiarity with the different types of services offered, by identifying a value on a scale from 1 to 5. From the comparative analysis of each questionnaire one may highlight the general levels of skills achieved by the identified target¹⁵.

Finally, for those libraries which are able to provide digital and on-

13 ISO 16439:2014(E), p. 36-37.

14 Ivi, p. 41.

15 Ivi, p. 42-44.

line services so as to have a constant reference target, the rule proposes to use also Log Analysis as a possible tool to replace first-hand observation, with regard to the use of electronic resources and services. It serves to highlight the interaction between the user and the system and the information that it is possible to obtain is about:

- domain name users;
- date and time of the transaction;
- time spent researching or visiting;
- pages linked and accessed;
- words in search queries;
- number of searches;
- number of downloads¹⁶.

7. *Conclusions*

This work represents a preliminary reflection on some key-points such as:

- the importance of social reporting, and in particular the use of social accountability for Italian public libraries, in order to more effectively communicate their values to the general public; since the effectiveness of the balance for the purposes of reporting is generally recognised, there does not seem to be any reason why libraries should not take advantage of such a tool;
- a higher visibility of public libraries, perceived not only by the professionals in the field, but also by public administrations, in order to make libraries more significant key-players within their local administrations, as agents of change in the community and hence a necessary service;
- analysis of today's best practices, in order to highlight the methodologies and the main features of some excellent Italian examples;
- proposal of a research methodology, through which the information necessary for the preparation of a social accountability report can be retrieved, based on standards such as ISO 2789, 11620, 16489.

The topic is very wide and complex, and our contribution is intended as an input for the professional research with respect to a certainly interesting field of investigation that could allow Italian public libraries to gain a more significant role, in their communities, and within the public bodies they belong to.

(Translation by Jennifer Cooke)

16 Ivi, p. 48.

APPENDIX

About the Contemporary Public Library. A Short Selective Bibliography

Maria Senatore Polisetti*

This short work was drawn up after the Turin conference (12 December, 2015), in which speakers discussed very important issues, all related to the theme of the identity of the contemporary public library. With this paper, my purpose is limited and modest, and offers a short survey of publications in Italy, Spain and France concerning the topics discussed at the conference, and presents a brief selective bibliography. I believe that this tool will be useful to broaden the debate. I would like to present some possible paths of research that could be followed in future. This bibliography is designed to provide a further extension to this book, a selection of essays and articles, published between 2010 and 2014 in Mediterranean Europe. This work, as has already been said, of course, does not aspire to the completeness and comprehensiveness, and offers a selection of bibliographic contributions based on these simple criteria:

- the areas examined are Italy, France and Spain;
- the period under review is between 2010 and 2014;
- the contributions examined must have a number of pages exceeding 5;
- they have not been included articles devoted to the analysis of individual libraries;
- they were included items articles devoted to cooperation between public libraries;
- in the bibliography are also articles published in monographs or conference proceedings.

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- authors who have written contributions on public libraries in several languages, were placed according to their nationality;
- the item of bibliography are arranged in alphabetical order.

The research was carried out on line, using the following OPACs and other search engines, for example: *Karlsruher Virtuelle Katalog (KVK)*, *Bibliothèque nationale de France (BNF)*, *Biblioteca Nacional de España (BNE)*, *Servizio Bibliotecario Nazionale (SBN)*, and Internet sites of serial such as *Catalogo Italiano dei Periodici (ACNP)*. These are the magazines surveyed, subdivided by national areas:

Italy

- Bollettino AIB
- AIB studi
- Biblioteche oggi
- Nuovi annali della Scuola speciale per archivisti e bibliotecari
- JLIS.it

France

- Bulletin des Bibliothèques de France
- Bibliothèque(s)
- Bulletin de l'ABF

Spain

- Anales de Documentación
- Boletín de la Asociación Andaluza de Bibliotecarios
- BiD. Textas universitaris de Biblioteconomia i documentació. Universitat de Barcelona
- Educación y biblioteca
- EPI. El Profesional de la Información
- Anuario ThinkEPI
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