

Open Access in Arab University Libraries : Think differently about access to science in the South

*Libre accès dans les bibliothèques universitaires arabes :
Penser autrement l'accès à la science dans les pays du Sud*

النفاذ المفتوح في المكتبات الجامعية العربية :
التفكير بشكل مغاير حول الوصول إلى العلم في دول الجنوب



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"To see the world differently, you have to start by thinking
differently"

Olivier Bowden, British writer and historian

Abstract : The aim of the following paper is to rethink the role of information professionals during the open access movement in a local context; and understand the impact of an open information system on the future of university libraries. We raise the questions of the universalism of science and cultural diversity as well as the differences observed between the countries of the South and the North in the process of knowledge production, transfer and free online access to it. Arab librarians in university libraries do not seem to be very engaged in this open access movement, and if they do so it is to perpetuate the imbalance between the editorial offer of the North and the South. The following paper proposes to think about the mediation of knowledge and open access in Arab university libraries differently.

Keywords : Open Access, Universalism of Science, Cultural Diversity, Arab University Libraries.

Résumé : Il s'agit de repenser le rôle des professionnels de l'information dans le mouvement du libre accès dans un contexte local et saisir l'impact d'un système d'information documentaire ouvert sur l'avenir des bibliothèques universitaires.

Nous soulevons les questions de l'universalisme de la science et de la diversité des cultures, les écarts observés entre les pays du Sud et du Nord quant au processus de production des savoirs, de leur transfert et de leur mise en ligne gratuite.

Les bibliothécaires universitaires arabes sont peu engagés dans ce mouvement d'accès ouvert, et s'ils le font c'est pour perpétuer le déséquilibre entre l'offre éditoriale du Nord et du Sud. On s'est proposé de penser la médiation des connaissances et le libre accès en bibliothèques universitaires arabes autrement.

Mots-clés : Libre accès, Universalisme de la science, Diversité culturelle, Bibliothèque universitaire arabe.

مستخلص : يهدف البحث إلى إعادة التفكير في دور أخصائيي المعلومات في حركة النفاذ المفتوح في إطار محلي ودراسة تأثير نظام المعلومات المفتوح على مستقبل المكتبات الجامعية. نتناول هنا المسائل المتعلقة بعالمية العلم والتنوع الثقافي والفارق بين دول الشمال ودول الجنوب فيما يخص عمليات إنتاج المعرفة ونقلها ووضعها متاحة مجاناً على شبكة الانترنت.

ما يلاحظ هنا هو أن المكتبيين الجامعيين العرب لم يساهموا في حركة الوصول الحر إلا باحتشام، وإذا قاموا بذلك فإنما يواصلون تعميق واستمرارية الخلل القائم بين ما

تنشره دور النشر العلمية في الشمال ومثيلاتها في الجنوب. يقترح البحث التفكير بشكل مغاير في إشكاليات نقل المعرفة والنفاذ المفتوح في المكتبات الجامعية العربية.

الكلمات المفتاحية : النفاذ المفتوح، عالمية العلم، التنوع الثقافي، المكتبات الجامعية العربية.

Introduction

The perquisites of open access are widely shared among international scientific community. The scientific literature is full of works dealing with the benefits of open access (OA) for researchers as well as for institutions and society (Suber 2012 and Rubin 2014). Open access is useful because it ensures a quick access to digital content, increases the visibility of scientific research as well as enhances the output of researchers and improves its effect. State institutions which supervise their research funding equally benefit from open access. It gives them indicators to assess publications and schedule perspective research projects. Finally, society also takes advantage of open access thanks to knowledge mediation, and better transparency and good governance in research.

Arabic literature also speaks about all these advantages and stresses the Arab researchers willingness to adopt OA. This paradigm gives them the opportunity to break free from their seclusion and allows them to confront their ideas with the international scientific community; and, finally, helps them to take part in the construction of universal knowledge. This discourse of “intents” has existed for more than 12 years, since the first investigations on OA led by some Arab researchers Gdoura (2006), Ibn Lkhayat (2007) and Jaber (2016) ; but has never been implemented.

The Arab librarian, another actor of scientific communication and meant to play an outstanding role in this dynamics, seems to be little committed in the movement of open access, with a weak contribution in the creation of institutional digital repositories, running of metadata and use of OA protocols. However, Arab information professionals remain fairly active when it comes to selecting and providing foreign resources. In fact, because of the lack of local open access scientific production, their role is usually limited to the abundant free editorial offer from northern countries. The latter, despite its undoubted quality, does not necessarily respond to the needs of scientific research in the Arab world.

The problem of OA within Arab university libraries should not be tackled only from the viewpoint of access to open digital resources, regardless of the research system available, issues related to usage and the utility of the international scientific production. This issue is at the center of the debates between South and North. In northern countries open access is perceived as “political strategy aiming at promoting innovation and stimulating expansion” within knowledge economy (Diallerts 2012) ; whereas in southern countries, we worry about the scientific information unilateral flow. This aggravates the cognitive fracture and accentuates the reliance on the economy of superowers.

Hence, the purpose of the present work, which focuses on the open access in university libraries in the South and the obstacles that prevent librarians from full adhesion to the OA paradigm. It also suggests to think differently about knowledge mediation and open access in Arab university libraries.

Based on the analysis of library literature and the synthesis of the study days around open access in Tunisia (JELA from 2013 to 2018), the present study proposes to rethink the role of university libraries in the open access movement in the local context and understand the impact of an open documentary information system on the future of Arab university libraries. The first part of this study focuses on OA in relation with the intercourse between universalism of science and diversity of research contexts. The second part focuses, mainly, on the role of university libraries in the North in the development of OA. Finally, this study looks at the actions that Arab university libraries could carry on in order to back up the movement, reinvigorate the information mediation and reinstate university space.

1. Open access between science universalism and diversity of research contexts

Modern science aspires to universalism since it is governed by the judgments of reason, the quest for truth and objectivity; we talk about “ideal science”. Nonetheless, science is also a “social production of cognition”. It is generated and renewed by the current knowledge in a given period and of a given culture. Pathy states that science “is also considered in an evaluative context and relies on values which are accepted in the culture within which it is inserted” Pathy 1999. In this pervasive globalization era, how it is possible for science to support universalism without considering cultural diversity and different scientific research contexts Bienavmé (2007). We need to ask this

question because the development of this new type of scientific communication depends on knowledge creation and diffusion.

1.1. Higher education and scientific research: universalism or standardization under the effect of globalization

Systems of higher education and scientific research have undergone deep changes for over two decades because of globalization in order to satisfy the interests of a variety of political and socio-economic interests.

According to experts of UNESCO, Altbach (2009) “by globalization, we mean the reality determined by a global economy which is getting more and more integrated due to the new information and communication technologies, the rise of an international network of knowledge, the role of the English language, along with other forces beyond the control of academic institutions”.

There is a disagreement about globalization. There are two contradictory positions: for some people “globalization is the expression of modernity and human progress with the growing of communication flow and the increase of its volume, Carpentier (2012); whereas for others, globalization “is nothing but the hidden side of economic neoliberalism, the present step of capitalism development” Carpentier (2012).

On an academic level, globalization aims at standardizing structures and performance of higher education and scientific research present systems through definitions of university access modalities, programs, modes of governance, autonomy and mainly by using high standards and norms. In this case, we cannot speak about comparative education, nor about cultural diversity. The international comparisons deal with the ability of higher education and scientific research to apply these standards. Carpentier emphasizes the fact that “it is no longer a question of comparing diversity, but to classify according to a unique system of values elaborated by the center” Carpentier (2012).

Concerning research, globalization is perceived as modern science access created by northern countries according to the priorities and needs of their societies, Piron (2016). International cooperation aims at involving researchers from the South in order to find solution to problems of the North. As an example, the researchers from Maghreb countries, implied in scientific cooperation programs with the European Union, have contributed to European research projects as associates but never as project leaders. Likewise, Maghrebian PhD students have often been used

as a “knowledge workforce” for the benefit of European research laboratories.

This is an alignment with the European research patterns which, if it persists, might lead to “a scientific alienation”. We can argue that scientific universalism might lead, in some cases, to scientific standardization rather than a plural science.

Let us look at the research systems in Arab countries and identify the obstacles to a “balanced” scientific communication between the research communities in the North and the South.

1.2. Research and innovation systems in the Arab world

Most Arab societies are undergoing development problems after a period of decolonization and the establishment of higher education and scientific research systems. These systems were initially devoted to the training of the managerial staff in order to meet the needs of society. Then, they have embarked in an academic research project in order to train doctors before conceiving some research and development (R&D) programs aiming at achieving full partnership with their socio-economic environments.

However, university teachers spend only 5% of their working time on research compared to 33% in the USA and in Japan (ALECSO 2008). They engage in educational activities in order to face the massification of higher education. And, when they do research, this is mainly with the aim of obtaining promotions much more than for the sake of research and development. That is why this research has remained mostly invisible and poorly disseminated.

1.3. Arab scientific edition in difficulty

1.3.1. Arab research edition and diffusion

Some features of the scientific publishing model :

- A Public sector: scientific edition is supported essentially by the public sector. Public universities have created their own edition structures in order to publish their researchers' works. The private sector is little interested in academic publication because of the high costs and its low economic profitability.

- A fragile sector in difficulty : we can advance the following features

- * Scarcity of research
- * Reduced number of productive writers
- * Slow editing process: problems related to arbitration, assembling and financing
- * Limited publication: weak distribution and diffusion channels of academic publications both on national and international scales.
- * Irregular academic journals poorly indexed and not listed in large international databases.

Because of these difficulties, many researchers, mainly in the field of applied and basic sciences, prefer to publish in international reviews and journals.

Arab researchers prefer publishing in international journals in order to benefit from a better visibility and to be able to take part in scientific debates and exchange information with international communities. They remain, nevertheless, subject to constraints in relation with the choice of the subjects which do not necessarily answer local priorities, as well as with the choice of the scientific language of writing (English and French).

Guédon mentions that international reviews “dictate the choice” of subjects and evokes a “misleading opposition” between an international science and a local one: “in a poor country, to carry on research on scientific topics which have little relevance for the country and the region, may lead to the following paradox: expensive and therefore rare laboratories as well as rare researchers who may be brought to contribute to important questions that meet the needs of rich countries but with little interest to their countries. Guédon (2014).

Despite these difficulties, Some Arab universities have achieved some good performances. The latest Shanghai ranking (2018) includes 13 Arab universities from Egypt, Saudi Arabia, Tunisia and Lebanon. Two Tunisian universities appear for the first time: the University of Tunis-Manar and the University of Sfax which are classified in positions 801-900 respectively. (Shanghai ranking, 2018).

1.3.2. Open Access in arab universities

The involvement of Arab researchers and publishers in the movement of open access is weak. Some figures illustrate this little commitment :

Concerning OA Arab academic reviews

- According to DOAJ (2015) we count 611 Arab periodicals, meaning 5.82% of all periodicals reported in the directory. These journals are entirely distributed among the following Arab states: Egypt with 533 periodicals (87.23%) due to the presence of a large Egyptian publisher, Hindawi Publishing Corporation which publishes international non-Arab reviews but that is “suspected of being a predator”. As for other countries, they publish 78 open access reviews altogether (12.76%).
- Free journal distribution by language: English (95%), bilingual (3%).
- Distribution by field of specialization: Medical studies (41%) ; Basic sciences (29%); Social and Human sciences (6%) ; Gdoura (2015).

Concerning Arab Open Archives

- The number of open archives in the Arab world according to DOAR and ROAR: 63 submissions ; Ben Romdhane (2016).
- Yet, self-archiving practices within digital foreign depositories are improving, often due to international obligations. Researchers of the Maghreb, for example, when part of European research projects are obliged to deposit their publications in open access (European recommendation of 17 July 2012).

1.3.3. The Impact Factor, a controversial issue

This model of quantitative evaluation of research citations, which was set since 1961 by Philadelphia Institute for Scientific Information (ISI) is object to criticism. We blame it for some shortcomings:

- **Methods of calculating the impact factor** : based on a two-year period, this is not suitable for all disciplines. Other elements are related to periodicity, changing the title of the journal, failing of the indexing of collective authors ; Barthez Durand (2016).
- **Human factors** in relation to the evaluation of articles and the reading committees excesses: the effect of foreign language (English),

geographic affiliation, and so on. Double-blind expertise may become a double speed evaluation to the disadvantage of scientists from the South.

To overcome this evaluation model, scientific committees have suggested other calculation alternatives (Barthez Durand 2016).

- European Citation Index in Humanities created by the European scientific foundation (2003)

- Cite Base Model belonging to Arxiv.org depository for applied and basic sciences.

- Google scholar offered in 2004 another index deemed insufficient.

- Finally, the latest in the southern countries: The Arab Citation and Impact Factor ARCIF. 2013 (Shorbaji, 2019) and the Arab impact factor .2015(Abdel-Ati. 2017). This new calculation type has been suggested by an Arab academics' teams. The Egyptian Mohamed Abdel-Ati explains the reasons:

- * The absence of a unified Arab scientific body which takes in charge the classification and indexing of Arab language journals based on an impact factor mainly in social sciences and humanities.

- * To reinforce the position of Arabic as a means of scientific communication. Many works in social sciences and humanities related to Arab societies are destined much more for Arab readers than foreign readers.

- * To gather researchers around local and regional research topics. Some issues are not accepted by English journals with high impact. This has pushed several Arab scientists who do not look for international visibility to care for problems related to their countries.

- * Answer to the exclusion policy exercised by Thomson Reuters when dealing with academic journals in Arabic.

- * The Arab impact factor platform uses international methodological tools in order to rank these periodicals. Its first report dates back to 2015 and classifies 167 Arabic reviews within the Arab impact factor.

Other solutions suggested by northern countries researchers for the sake of southern countries:

- Guédon (2014) suggests the creation of autonomous territories around autonomous evaluation forms like a platform for pan-Arab scientific publications.

- Piron (2016) already leads an action in collaboration with several contributors: SOHA Project (open science in Haiti and French speaking African countries): creation of a new African and Haitian journals platform in open access, the initiation of a publishing structure “sciences and commons editors” ESBC, the creation of a MOOC related to research initiation, and so on.

Conclusion

The problem of the open access movement in southern countries, and, precisely, in Arab countries, lies in the fact that science globalization took the place of research internationalization without caring about the development of southern research environments and their upgrading; nor for local scientific production advancement. Consequently, the flow of TSI (Technical and Scientific Information) took a unilateral direction from North to South. It seems important for us to rethink science universalism in the sense of plurality of cultures and research contexts in the different parts of the world. Guédon evokes autonomous territories: “the successful internalization of science will involve a mosaic of scientific territories with relative autonomy concerning research orientation and evaluation of researchers’ methods”. Guédon (2016).

2. Open access in Arab university libraries: knowledge mediation facing the imbalance in editorial supply

In addition to failures in research and in innovation systems in the Arab countries, we intend to consider the obstacles linked to the implementation of open document information systems. Arab university librarians are more and more aware that they are perpetuating this “imbalance” between northern and southern editorial offers. So, how is it possible to think differently about knowledge mediation and free access to information?

2.1. The adherence of American and European university libraries to open access paradigm

Librarians contribute to transform the scholarly publishing model: from an expensive and closed publication model towards an open free model. The issue of OA has been widened to include research data, it is open science.

Recall

Information professionals in American and European university libraries have been involved in the debate round Open Access since the digital revolution. Anxious about the growing number of scientific reviews subscriptions and emergence of oligopolies of commercial publishers, librarians have gathered in order to agree on the measures to be taken to face the rising prices. Thus, in 1989, a newsletter appeared: Newsletter on Serials Pricing Issues (NOSPI). Mahe (2011) created a platform for librarians as well as editors and subscription agencies in order to think about measures to reduce prices.

Library associations contributed in this reflection such as ARL (Association of research libraries) in North America which questions the economic model of scientific edition; and claims an unrestricted access to academic publications. In 1997, it established the SPARC (Scholarly Publishing Coalition) group in order to encourage alternative serials. SPARC has spread in Europe (SPARC Europe) and in Japan (SPARC Japan). France has launched the COUPERIN Consortium.

2.1.1. Founding texts and tools

Aware of OA issues, librarians have joined researchers to develop a supportive discourse on this issue. They signed statements in favor of Open Access like the Budapest Initiative (2002) followed by the IFLA text of 2002 (IFLA Internet Manifesto for Open Access to Information); then in 2004 (IFLA Statement on Open Access to scholarly Literature and Research Documentation). This federation has founded an OA section to develop exchanges and feedbacks on Open Access.

In addition to their discourse to promote OA, librarians took part in the production of tools as well as in the reporting and valuing of this paradigm. We can mention:

- The Open Archive Initiative (OAI, 1991) and the metadata sharing protocol OAI-PMH.

- The search engine OAIster, created in 2002 by Michigan University library and then managed since 2009 by OCLC.

- The Directory of Open Access Journal (DOAJ) founded in 2003 by Lund University in Sweden.

Similarly, they have supported the first initiatives of the creation of Open Archives ARXIV, and open source software: E-Prints (S.Harnad from Southampton University). They have also developed the DSpace platform (Massachusetts Institute of technology University Library, MIT 2002) and California Digital Library (California University 1997) and the platform HAL (Hyper articles on line) of CNRS in France.

2.1.2. The role of university libraries

Let us see the scope of the intervention of university librarians as far as the movement is concerned:

- The creation and management of institutional digital repositories.

- The management of the budgets for the payment of publications costs in Gold Open Access such as APC (Articles Processing Charges). Several universities and research laboratories have entrusted the administration of APC to university libraries which are brought to change part of the subscriptions budget into a budget for the funding of APC.

- The management of institutional repositories metadata by using the OAI-PMH protocol in order to ensure the interoperability of files and to facilitate the search for resources in OA.

- The assessment of free electronic resources: Altmetrics.

- Resource search and monitoring: the librarian accomplishes a selection of free resources, according to users' needs by means of searching for relevant articles, reporting journals in OA and open archives.

Open access has been the engine of change within research libraries. In order to fully engage in this OA movement, university libraries have put forward new management and diffusion structures of free digital contents.

Harvard University founded the Office for Scholarly Communication and manages the Digital Access to Scholarship at Harvard (DASH).

The University of Liege has initiated the PoPuPs portal for the diffusion of the open reviews of the university along with thesis deposit BICTEL and articles ORBI.

Through a review of the literature, we can say that the library is reinventing itself to adhere to open knowledge and open science era. Its role, as well as its functions, are renewing thanks to the reduction of academic pressure on the acquisition budgets and its repositioning within innovation and the research system. The library role, as a mediator, is redefined and strengthened in research environment. A new vision of the research library is presently taking shape. "The management of research data, the OA movement and the active promotion of open science have been determinant for library activities". (Swiatek, 2017). Professional organizations are also promoting libraries by engaging in open science.

"For LIBER, the years 2018-2022 will allow libraries to strengthen their recent services and their digital skills in order to make their actions last, to sustain open science forthcoming development and to perpetuate their central position in the European policy of TSI" (Swiatek, 2017).

2.2. Open access in Arab university libraries

2.2.1. When Arab university libraries "disappear": a mission threatened

The fundamental mission of university libraries is the transmission of knowledge and the protection of informational social values: equal access to knowledge for all, freedom of speech and freedom of movement for all. They help to reach university excellency. Meanwhile, Arab university libraries are nowadays undergoing deep changes and their mission is at stake. Factors which influence this change can be summed up as follows:

- The digital is replacing the physical space of the library. Collections and Information resources are moving towards virtual spaces.
- Users are moving away from librarians towards digital networks and search engines.
- Evolution of the relationship between students and researchers to knowledge. We talk about fragmented digital reading, collective writing of digital content.

- Learning conditions and time are strongly influenced by LMD system (License, Master, Doctorate), which does not allow enough time for personal work within the library.
- Material difficulties, budget cuts and human resources insufficiency in university libraries.

In order to face these difficulties, Arab university libraries should rethink the role of the university library in this digital transition phase by considering two main notions: location and services. The library physical space still exists with its symbolic position as a place devoted to knowledge and memory. It is no longer dedicated to a purely documentary function, knowing that parts of its collections are remotely accessible, but mainly to social and communication functions. We borrow the notion of third place belonging to the American professor of urban sociology Ray Oldenburgh in order to reconsider these functions, Servet (2010). Third place, initially used to indicate a space for social life, designated here the library, a place for intellectual meetings, for relaxation and exchange of ideas. In other words, the university library has become a polyvalent place: both for book shelving, for reading, for debates, for conferences, for expositions, for catering and for leisure. The notion of services must also be reconsidered in order to indicate digital transition: we move from preservation to transmission and from book and journal deposits towards digital resources flows.

Finally, we can say that university libraries will no longer be closed spaces for meditation but open space for sharing and open access to TSI. The public will always need information professionals to carry on analysis, selection and research of digital resources. They help in consolidating information literacy. We should back up a re-intermediation trend within libraries. Meanwhile, the role of Arab professionals should not be limited to knowledge communication, paid or free, especially the one produced in rich countries; but also, to look for, enhance and transmit in OA the knowledge that is produced in Arab countries.

2.3. Think differently open access in Arab university libraries: readjustment of free editorial offer

Thinking about science universalism, and considering cultures diversity, research contexts, priority scientific themes, and evaluation methods for southern countries, we think that a well-balanced open access cannot be achieved without a strong involvement of university libraries. We wonder about the role Arab university libraries might play

in the free transmission of local scientific production allowing thus its dissemination, visibility and promotion.

- Organize campaigns to raise people's awareness about open access: these campaigns should aim at researchers as well as librarians. It is about promoting this paradigm and explaining its utility and its challenges: to solve the problem of local university edition, and make national research outputs freely accessible to all.

- Nevertheless, the implication of librarians and researchers in this movement for more than a dozen years, has not given positive results. Riyadh declaration on OA in 2006 has not been implemented; seminars and professional associations along with universities actions on this topic (AFLI) did not overcome the reluctance of scientific communication actors. Academics are modestly entering the OA movement. Their commitment needs to be confirmed by instructions of public authorities and donors. A recent study day on open access (JELA, 10 April 2018) was devoted to issues related to the implementation of a national policy dealing with open access. Supervising authorities, such as the Tunisian Ministry of Higher Education and Scientific research, has expressed its willingness to put into practice a legal system in order to encourage researchers to join this project.

2.3.1. Creation and management of institutional digital depositories

This function is assigned to Arab university librarians as it is also the case of many of their foreign colleagues. The aim is to assemble all research works belonging to university researchers both in Arabic and foreign languages and then to transmit them to open archives. Thus, these resources, which have been badly communicated will become freely reachable. The Arab university public will draw from national as well as international digital depositories helping information research becoming more comprehensive. This is an essential step to relatively balance the volume of information produced in various research environments.

2.3.2. Metadata management and resource preservation

In order to elaborate certain Arab working tools (Arab OCR, protocols...), it is important to expand cooperation between Arab university libraries, exchange experiences, or write best practice manuals.

2.3.3. Researchers support in OA movement

Some actions are possible: awareness of OA issues, training in research works archiving, legal assistance to explain copyright (creative commons licenses). These actions need new skills regarding information professionals.

2.3.4. Librarians training and skills

In order to adhere to OA paradigm and perform their new duties, it is important to train the existing practicing staff and to provide an initial training for future information professionals. We evoke a new kind of profession: “Open Access Librarian” and new skills linked to open access and to open science, Dehavel (2017).

2.3.5. Management of APC (Articles Processing Charges): the model author-payer in debate

Open access does not always mean free access. APCs are among the economic model, of golden path supported by digital edition multinationals since we continue to pay them in another way. We simply change the publications’ payment modalities: from reader-payer to author-payer. This pattern perpetuates unequal access to scientific information. Hachani assesses that this approach is disadvantageous for southern authors, Hachani (2016). He offers some figures: 28% of open reviews inventoried in DOAJ (2013) impose tariffs mainly “hard sciences” periodicals. Rates vary from 700 USD to 7000 USD depending on the review reputation. These prices are excessively high for southern researchers who are often denied possibility to publish in reviews with a high impact factor.

As for Arab university libraries, they will face new challenges: they continue to support prices of paid journals (paper and digital), added to APCs, not to mention the expenses related to the renewal of computer equipment and staff training.

What solutions to consider ?

The green path

We just reiterate the advantages of institutional or thematic repositories in Open access centralization and accessibility to scientific publications.

An Open access programs in favor of researchers from the south

There are initiatives launched by some American universities, editors and academics in order to offer free access to scientific journals such as the Chicago Emerging Nations Initiative, Research for Life, JSTOR, and so on ; Hachani (2016).

General conclusion

Open access paradigm was conceived within the frame of innovative and competitive research systems in countries of the south in order to meet the needs of the economy of knowledge. Adherence to this paradigm has encountered obstacles in southern countries. These obstacles are not solely linked to problems of visibility and accessibility to on-line open contents. This leads us to examine the constraints related to scientific research systems inside developing countries and knowledge mediation conditions within university libraries by introducing the notion of editorial offer.

Open access cannot be dealt with in Arab countries with upgrading innovation and research systems in order to overcome the lack of scientific publications. The role of Arab university libraries consists in securing some balance in the provision of scientific information resources produced both locally and internationally. University libraries can, thanks to strong engagement in the green way and the digital creation and management of Arab research, help reduce the unilateral flow of TSI and highlight local academic production.

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