Open Access to Legal Scholarship and Open Archives: Towards a Better Future?

Paolo Guarda | November/2011

L’Open Access per la dottrina giuridica e gli Open Archives: verso un futuro migliore?

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Abstract

The logic of Open Access (OA) is gradually spreading in the scientific community, mainly thanks to the help of important areas of public libraries. OA basically describes a phenomenon that sees many scientific communities publishing through the Internet their results (papers, articles, books, etc.) on archives accessible to anyone (and without payment of a price). OA seems to have the possibility to become a very powerful tool for the dissemination of scientific knowledge.

As part of the general phenomenon called “Transfer of Knowledge” (broader category than the more famous “Technology Transfer”), which sees universities and research centers increasingly interested in showing in the market the quality of their scientific production through various activities aimed at exploiting the foreground of their researches (IPRs, licenses, spin-off, etc.), OA plays a pivotal role: it could make transfer of knowledge - previously conveyed (under payment) by private intermediaries - more transparent, fluid, and accessible to anyone.

Despite the initial delay, the OA movement is quickly growing in importance for legal scholarship. Nonetheless, the institutional arrangements and the technological features of OA to legal scholarship are variegated and pose a vast array of problems.

OA to legal scholarship changes the form of the legal publication - e.g., we face new kinds of publications such as blog posts or Wikipedia articles - and shifts the “quality selection” function of the publication system from traditional intermediaries (publishers, learning societies, editorial boards, etc.) to new ones (e.g., search engines, social software, Open Archives, etc.) and readers.

In this perspective, a prominent issue is represented by the Open Archives.
Open Archives, as well as other OA tools (OA journals), increase the reputation of authors and improve the future impact of their articles. A vast literature – although referring to other subjects - shows that papers deposited in OA repositories are cited more often than those which are not.

Moreover, the OA repositories enable a new form of evaluation process. On one hand, it is possible to develop innovative bibliometric indicators. On the other hand, through them you can easily trace the entire life of a scientific product: for example, the OA repositories will allow the display of all the evolution stages of an article from the presentation at a conference to its final version.

Given the enormous power of the Net and the rise of these OA repositories, we are still suffering - especially within the Italian context – the low number of uploads and the lack of innovative tools fit to navigate through the OA legal materials. The governance of legal Open Archives should pay attention to the following main features: interoperability, redundancy, multilingualism, evaluation criteria and tools, policies. This kind of issues can be solved only by using an interdisciplinary law and technology approach which clarifies the various, complex aspects of the relationship between Open Archives and legal scholarship.
Contents

Keywords
Transfer of Knowledge, Open Access, Open Archives, Legal Scholarship, Law and Technology

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Abstract
Da qualche anno si sta gradualmente diffondendo all’interno della comunità scientifica, grazie anche all’impegno di operatori delle biblioteche pubbliche, la logica dell’hui “Open Access” (OA). Questa espressione descrive un fenomeno che vede molti ricercatori pubblicare attraverso Internet i risultati della propria ricerca (saggi, articoli, libri, etc.) su archivi accessibili a chiunque (e senza il pagamento di un prezzo). L’OA è sicuramente destinato a diventare uno strumento molto potente per la diffusione della conoscenza scientifica.

Come parte del più generale fenomeno chiamato “trasferimento della conoscenza”, che vede le università e i centri di ricerca sempre più interessati a dimostrare la qualità della, propria, produzione scientifica attraverso varie attività volte alla valorizzazione delle loro ricerche, l’OA gioca un ruolo fondamentale: esso potrebbe rendere il trasferimento di conoscenze – prima veicolato, a pagamento, dagli intermediari privati - più trasparente, fluido ed accessibile a tutti.

Nonostante il ritardo iniziale, il movimento OA sta rapidamente acquisendo importanza per la dottrina giuridica; ciò sebbene gli assetti istituzionali e le caratteristiche tecnologiche proprie di questo nuovo fenomeno siano variegati e pongano una vasta gamma di problemi.

L’OA cambia, infatti, la forma stessa delle pubblicazioni scientifiche – affiorano, così, nuovi “generi letterari” quali post sui blog o articoli di Wikipedia – e determina uno spostamento della funzione di selezione della qualità del sistema di pubblicazione che dai tradizionali intermediari (editori, società scientifiche, comitati editoriali, etc.) viene sempre più svolta da nuovi soggetti (motori di ricerca, social software, Open Archives, etc.), quando non direttamente dai lettori stessi.
Gli Open Archives, così come altri strumenti di OA (riviste ad accesso aperto), aumentano la fama degli autori ed incrementano l’impatto (citazionale) futuro dei loro articoli. Una vasta letteratura dimostra che i documenti depositati in archivi OA sono citati più spesso di quelli che, invece, non lo sono.

Inoltre, tali archivi permettono di porre in essere una nuova forma di processo di valutazione: da un lato, è possibile sviluppare innovativi indicatori bibliometrici; dall’altro, consentono di tracciare facilmente l’intera vita di un prodotto scientifico (ad es., un repository OA consente la visualizzazione di tutte le fasi dell’evoluzione di un articolo: dalla presentazione in una conferenza alla sua versione finale).

Nonostante l’enorme importanza che l’uso della Rete sta acquisendo e l’ascesa di questi archivi aperti, stiamo, però, ancora soffrendo – soprattutto all’interno del contesto italiano – il basso numero di depositi e la mancanza di strumenti idonei a navigare attraverso i materiali giuridici distribuiti secondo la logica dell’OA. La governance di questi innovativi Open Archives dovrebbe essere volta all’incorporazione dei seguenti principi: interoperabilità, ridondanza, multilinguismo, utilizzo di nuovi criteri e strumenti di valutazione, adozione di nuove policy.

Questo tipo di problematiche possono trovare soluzione solo tramite l’utilizzo di un approccio interdisciplinare di “diritto e tecnologia” che chiarisca i vari e complessi aspetti del rapporto tra gli “archivi aperti” ed il mondo della dottrina giuridica.
Contenuti


Parole chiave

Trasferimento di conoscenze, Open Access, Open Archives, Dottrina giuridica, Diritto e tecnologia

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Open Access to Legal Scholarship and Open Archives: Towards a Better Future?

Paolo Guarda

1. Introduction: Open Access to Legal Scholarship

The logic of Open Access (OA) is gradually spreading within the scientific community, mainly thanks to the help of important areas of public libraries. OA basically describes a phenomenon in which many scientific communities publish their results (papers, articles, books, etc.), through Internet, on archives and journals accessible to anyone (and without payment of a price). OA seems to have the possibility to become a very powerful tool for the dissemination of scientific knowledge.1

1 This paper is going to be published in M.A. BIASIOTTI, S. FARO (eds.), From Information to Knowledge – Online access to legal information: methodologies, trends and perspectives, IOS Press, 2011. The citation system follows the standard of that publication.

OA plays a pivotal role in the broader phenomenon called “Transfer of Knowledge” (a category encompassing also the more renowned “Technology Transfer”), which sees universities and research centers increasingly interested in showing in the market the quality of their scientific production through various activities aimed at exploiting the foreground of their researches (IPRs, licenses, spin-off, etc.): it could make transfer of knowledge - previously conveyed (under payment) only by private intermediaries - more transparent, fluid, and accessible to anyone.

Despite the initial delay, the OA movement is quickly growing in importance for legal scholarship. Nonetheless, the institutional arrangements and the technological features of OA to legal scholarship are variegated and pose a vast array of problems.

OA to legal scholarship changes the form of legal publications - e.g., we face new kinds of publications such as blog posts or Wikipedia articles - and shifts the “quality selection” function of the publication system from traditional intermediaries (publishers, learning societies, editorial boards, etc.) to new ones (e.g., search engines, social software, Open Archives, etc.) and readers.

The logic of OA is echoed by some (solemn) statements and guidelines. Among the many: the “Budapest Open Access Initiative”\(^2\) in 2002, and the “Berlin Declaration on Open Access Publishing”\(^3\) in 2003\(^4\).

This paper is aimed at analyzing the state of the art of the different types of Open Archives used by the doctrine and to identify the

\(^2\) http://www.soros.org/openaccess.

\(^3\) http://oa.mpg.de/lang/en-uk/berlin-prozess/berliner-erklarung/.

\(^4\) In the Italian context see also: “Linee guida per il deposito delle tesi di dottorato negli archivi aperti” (Guidelines for the submission of doctoral theses in open archives) prepared by the “Gruppo Open Access della Commissione Biblioteche della Conferenza dei Rettori delle Università Italiane” (CRUI) of 2007, available at: <http://www.crui.it/HomePage.aspx?ref=1149#>.
key features of a possible, future open repository dedicated to Italian legal scholarship.

The paper is organized as follows. In the second paragraph the main characteristics of Institutional and Disciplinary Repositories will be described with the goal to highlight their peculiarities. Then, the third paragraph is devoted to an analysis of what should be the fundamental features of an Open Archive profiled on the needs of legal scholarship. The final part of the paper is intended to pull all the threads of the discussion together and to identify some strategies, in the short and medium period, to develop new means of distribution and use of legal scientific productions.

2. Open Archives: Types and Main Issues

2.1. Premise

As already mentioned, the OA movement is becoming more and more evident in the field of legal research. The Open Archives are an essential part of this phenomenon. They are defined as collections of digital products of scientific research made freely accessible and interoperable through the use of open standards (OAI-PMH Open Archives Initiative - Protocol for Metadata Harvesting). The contents of digital products of scientific research are stored, managed, and disseminated in repositories known as Open Archives.

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each archive can be surfed by common search engines, thanks to the metadata associated with each individual file⁶.

Without any claim to completeness, in this section I will describe the main features of these open repositories. The first part will analyze the so called “Institutional Repositories” (IR): these are usually managed by a research body (eg. a university), allow immediate self-archiving of scientific research results produced through the filing of pre-prints or post-prints (where possible), and, finally, have a generalist vocation, hosting contributions from different research areas. In the second part of the paragraph I will describe the so called “Disciplinary Repositories” (DR), that are dedicated to specific scientific fields and then profiled on the peculiarities of the different research areas.

2.2. Institutional Repositories

The correct definition of “Institutional Repository” (IR) has engaged scholars at length and the proposals have been many⁷.

At a general level, the IRs could be defined as collections of digital resources created and managed by one or more universities (or other institutions) that contain the results of original research, funded by public and private money, produced as part of the institutional activity carried out by researchers and affiliated persons. The collection is freely accessible on the Web by the community of scholars and readers, and it

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⁶ There are also search engines dedicated to the Open Archives such as: “OAIster” (<http://www.oclc.org/oaister/>), “ScientificCommons” (<http://en.scientificcommons.org/>), and “Pleiadi” (<http://www.openarchives.it/pleiadi/>).

is constituted through the voluntary self-archiving by the authors or by regulations that state a mandatory deposit.

A few examples of this type of Open Archives can be drawn by two Italian experiences.

The first one is the “Unitn.it ePrints”, the official repository of the Università degli Studi di Trento\(^9\). It is an archive with a general nature and is directly “populated” by researchers and scholars of Trento. The research can be done by entering a few key elements of the contribution you are looking for: title, abstract or keywords, name of the author or editor, year, research department. The survey can be immediately refined taking into account the years of storage, topic or reference department. The results are freely downloadable in pdf format.

The second one is the “Archivio Istituzionale della Ricerca” (AIR) of the Università degli Studi di Milano, that was founded in 2006 and uses software DSpace\(^10\). It was created to document and make visible the scientific production of the university. Where possible, the bibliographic data are also associated with the complete text of the research. Since November 2010 all doctoral theses are necessarily stored in it. There are two channels of investigation: a) Simple search, typing the term you want inside the special string; b) Advanced search, entering different types of metadata: author, title, publisher, series, abstract, year, language, type of contribution, etc. The search can also be refined surfing other archives: author, title, journal title, scientific field, type\(^11\).

2.3. Disciplinary Repositories


\(^{9}\) http://eprints.biblio.unitn.it/.

\(^{10}\) http://air.unimi.it/.

\(^{11}\) For further details see P. GALIMBERTI, Verso un nuovo scenario per la valutazione della ricerca: potenzialità dell’Open Access e limiti imposti dal contesto, in “JLIS.it”, vol. 1, n. 1, June 2010, p. 87, pp. 96-104, also available at: <10.4403/jlis.it-16>.
The so called “Disciplinary Repositories” (DR) share the same main features of IRs, but they differ from them with regard to the nature of the organization that is behind the initiative (which usually is not public or institutional, but private) and the fact that they contain only materials from specific scientific fields.

Unfortunately there are no archives of this kind profiled to the Italian legal scholarship yet; then, I will refer to the most used in English. Sometimes DRs are not fully OA, as they may also contain materials to which you can not freely access. Their stated mission (as most of the documents that they provide for consultation), however, is in clear harmony with the logic of OA to knowledge.

Now we will briefly describe two of the most popular and used (even among the Italian scholars) DR.

“Social Science Research Network” (SSRN) is defined as a global collaboration of more than 163,000 authors and more than 1.3 million users. This archive consists of a series of specialized research networks on each of the Social Sciences: Cognitive Science Network, Economic Research Network, Financial Economics Network, Legal Scholarship Network, Social Insurance Research Networks, etc. SSRN supports the OA. All scholars can store their documents for free. The content is made available in pdf format and can be downloaded from various repositories affiliated with this archive. In some cases, however, only the abstract can be viewed (then the full paper will often be sold through the portal). The documents are generally in English, although nothing prohibits an uploading in other languages. The search can be made restricting the scope to specific areas of interest. The graphical interface is easy to use and allows to insert the name and surname of the author

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12 Information is obtained by SSRN home page: <http://ssrn.com/>.
13 Papers can also be linked to payment.
and/or to limit the investigation to particular words present only in the title, or even extending it to the abstract and keywords.\textsuperscript{14}

A second example of DR is represented by “eScholarship – University of California”.\textsuperscript{15} This repository was founded in 2002 as a disciplinary repository dedicated to the social sciences and humanities in collaboration with the Berkeley Electronic Press (bepress).\textsuperscript{16} It uses tools for the storage and management of the processes based on a Web interface (system EdiKit bepress). The eScholarship provides a platform for OA scientific publishing services and research tools that allows departments, research units, and individual scholars affiliated with the university to have a direct control over the creation and dissemination of their scientific production. With eScholarship is possible to publish the following scientific works on a platform of dynamic research made available to scholars around the world: journals, books, working papers, conference proceedings, paper series. eScholarship also offers storage and distribution of previously published articles (post-print). The system allows to manage the processes of peer reviews within the archive itself.

3. Main Features of an Open Archives

3.1. Premise

Given the enormous power of the Net and the rise of these OA repositories, we are still suffering - especially, within the Italian context – the low number of uploads to the IRs and the lack of innovative tools fit

\footnotesize{\textsuperscript{14} For further details see BUSH, “Open Access”, Legal Publishing, and Online Repositories, cit., pp. 127-129; PARKER, Institutional Repositories and the Principle of Open Access: Changing the Way We Think about Legal Scholarship, cit., pp. 32-34.}

\footnotesize{\textsuperscript{15} http://escholarship.org/}

\footnotesize{\textsuperscript{16} Berkeley Electronic Press (bepress) is a service designed and built for the academic world. The foundation was made in 1999 by some professors at the University of California. bepress publishes electronic journals and develops software for the next generation of scholarly publishing. The open access institutional repository is one of the world’s leading.}
to navigate through the OA legal materials. The governance of legal
Open Archives should pay attention to the following main features.

3.2. Interoperability

Institutional actors should promote the interoperability among
institutional and disciplinary repositories which have been too often set
and structured without a clear plan. Interoperability promotes a proper
network effect which, in turn, increases the attractiveness to end users.

The Open Archives have been often characterized by a random
development and directly dependant on the activity of individual users.
Little attention has been placed on the quality of metadata used by those
responsible for the design of the software used for managing the
repositories and by those who have dealt with the service. Finally,
another problem is due to the lack of standardization of text and editing;
this represents a crucial aspect by a legal point of view given the
importance, in this context, of the accuracy of citations.

The accuracy of metadata helps, however, to significantly facilitate
the retrieval of deposited contributions\textsuperscript{17}. The key to success is
represented here by the interoperability of heterogeneous systems\textsuperscript{18}.

In this scenario, the protocol of reference, which characterizes
among others the Open Archives, is the OAI-PMH (Open Archives
Initiative - Protocol for Metadata Harvesting), developed by the Open Archives
Initiative\textsuperscript{19}. It is used to collect the metadata of the documents in a single
archive so that services can be built using metadata from multiple

\textsuperscript{17} See GUERRINI, Archivi istituzionali, cit., pp. 33-46.
\textsuperscript{18} P. GINSPARG, R. LUCE, H. VAN DE SOMPEL, The Open Archives Initiative aimed at the
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applications 2001, National Institute of Informatics, Tokyo, Japan, 24-26 October 2001,
\textsuperscript{19} “The Open Archives Initiative develops and promotes interoperability standards that
aim to facilitate the efficient dissemination of content”, see the home page of the
repositories. The OAI-PMH provides a framework for interoperability, independent from the application in use in the system, based on the re-collection of metadata. There are two classes of participants in the OAI-PMH framework: the data providers, who administer systems that support the OAI-PMH as a means to expose metadata, and the service providers, who use metadata harvested via the OAI-PMH as a basis for building value-added services.

The OAI-PMH protocol has been widely adopted by many digital libraries, institutional repositories and digital archives. Although registration is not mandatory, it is encouraged.

3.3. Redundancy

The Open Archives should also assure the redundancy of data: there is a need for tools capable of finding the information you are looking for on the Net by different mirror repositories from which to download it.

This concept is directly linked to the one, just described, of interoperability. It is pivotal that this new Open Archives will provide an easy access to the materials they stored and guarantee their quality, in order to make them easily available to users through very effective information retrieval systems. It is, therefore, essential that future archives will be interoperable by a technical point of view (through the use of open standards) and associated to others existing repositories through agreements and affiliation.

3.4. Multilingualism

Attention should be paid, then, on multilingualism: the European Union is investing a lot of funds - even if, unfortunately, the results are not very effective - to be able to create search engines of legal materials with query systems regardless of the language used. The

20 For further details with respect to multilingualism, see G. PERUGINELLI, Multilinguismo e sistemi di accesso all’informazione giuridica, Milano, Giuffrè, 2009.
projects are there, as well as the will to implement them: what it is needed now is to finalize the intended goals.

This aspect is even more important when referring to the Open Archives devoted to non-Anglo-Saxon legal systems materials. The ability to look for material published in your native language or to use your own idiom to engage in research on publications written in other languages will be a crucial aspect in the development of these tools and will further strengthen the capacity to research legal materials.

3.5. Evaluation criteria and tools

The open repositories should embody specific citation indexes and Web searches for each platform in order to meet the need - strongly perceived in current times - to evaluate the scientific production and the “value” of individual publications\(^\text{21}\). It is pivotal that this aspect is not left only to the private players (e.g., Google Scholar) and to their not always clearly identifiable market strategies.

Indeed, the OA repositories enable a new form of evaluation process. On one hand, it is possible to develop innovative bibliometric indicators\(^\text{22}\); on the other hand, through them you can easily trace the entire life of a scientific product: for example, the OA repositories will allow the display of all the evolution stages of an article from the presentation at a conference to its final version.

This offers the possibility to follow new paths for the evaluation of the products of scientific research, yet to be explored. Furthermore,


\(^{22}\) For a systematic reconstruction see A. BACCINI, Valutare la ricerca scientifica. Uso e abuso degli indicatori bibliometrici, Il Mulino, Bologna, 2010, pp. 37 ss.
the fact that this kind of tools in the Italian legal arena are not widespread yet guarantees a better chance to improve the structure of an operational environment which is still under construction.

3.6. Policies

Universities and schools of law should adopt policies that clarify the legal and technical frameworks and encourage their members to upload their scientific contributions: only the growth of institutional repositories can trigger a process to improve and simplify access to scientific contents.

Institutional policies, as the ones implemented in the most prestigious universities of the world\textsuperscript{23}, can encourage the "population" of the same repository (currently still very meager) making real the scenario invoked by many\textsuperscript{24}.

The trend is to make mandatory the filing of at least some scientific production (eg. articles) and (raw) data of research. A tool, at this stage of reform of the university system in Italy, could be the possible inclusion of a declamatory clause within the university statutes.

4. Final Remarks: towards a new ecosystem for legal publications?

In this paper I described the characteristics of Open Archives now available and I tried to outline which could and should be the basic features for the construction of instruments designed to transfer knowledge in an effective way and to provide new means for greatly facilitating the access to scientific output produced within the university

\textsuperscript{23} See, for example, the policy of compulsory deposit of scientific papers recently launched by Harvard Law School: <http://cyber.law.harvard.edu/node/4289>.

\textsuperscript{24} See CASO, PASCUZZI, Valutazione dei prodotti scientifici nell’aera giuridica e ruolo delle tecnologie digitali, cit., pp. 18-21.
context. Now I will propose what could be a short term strategy to begin implementing systems of this kind. The intention is to set the stage for a new ecosystem for the distribution and fruition of legal scholarship.

First, we need to work on adoption and implementation of academic policies that focus on (and possibly even require) the deposit of contributions by members of the University into the IRs. The goal is to create a database that is fully capable of representing the real production of the scientific institution and that would bring even the researchers who are not fully aware of the potential of OA yet closer to this new and innovative way of disseminating knowledge.

Secondly, we need to push, especially in the context of the Italian legal science, towards the creation of DRs profiled to the demands of a (legal) knowledge which is characterized by its own peculiarities and needs. The models, in English, are already on the market. The challenge is now to try to build up a tool able to make really attractives these new OA logic to access to knowledge.

The Open Archives represent a crucial step for the development of legal knowledge, and for legal science in particular. They are also able to make clear and transparent the process of creation of scientific reputation and prestige of the members of academy. This in order to guarantee that such prestige will not remain a secret, but that it will be revealed25:

25 The citation reference, freely modified, is due to the famous painter Salvador Dali: “The secret of my prestige will remain a secret”.

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