

In Search of One Sole Institutional Repository in Greece: Adventures and Solutions for an Integration of Repositories towards Bridging Digital Divide

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Abstract

Access to knowledge bridges in part the digital divide. This paper proposes the integration of all the Greek academic institutional repositories into one, truly accessible to everyone who can reasonably handle a computer. Simple rules of search within this one institutional repository must be applied to permit the access to people with no specific searching skills. Moreover, this paper shows statistical tables of an on-line survey directed to an academic repository in Greece and finally arrives at specific conclusion concerning the possibility and type of an integrated institutional repository we should have in Greece, to bridge digital divide.

Keywords: digital divide, institutional repositories, education, open access movement,

1. Introduction

Institutional repositories and the Open Access Movement (OAM) constitute new scientific currents as far as scholarly communication is concerned. Nowadays, there is particular need of further access to the scientific data with the objective of democratizing the dissemination of research outcomes and reducing the accessibility costs. Additionally, free online access to digital archives in of paramount importance aim of OAM and therefore, this kind of practices should be integrated to government policies.

The Greek research society has always been productive in terms of publications, such as books, articles, monographs, chapters in books, conference papers etc. However, after broad over-viewing of the OAM in Greece and relevant literature, we have observed a gap between possible beneficial results and actual current efficiency of Greek institutional repositories. Certainly, it has not been achieved the maximum collection and access to information. Nevertheless, institutional repositories were recognized as truly representing an essential infrastructure for scholarship in a digital age (Lynch 2003). This paper will examine current circumstances regarding open access, institutional repositories and the open access policies in Greece, in order to highlight possible changes towards bridging digital divide efficiently.

1.1 Open access outcomes and knowledge

Open access practice offers instant and free of charge opportunities to access scholarly communication – is free, immediate, permanent, full-text and online access to digital, scientific and scholar material for any use within world wide web. Open access data became part of the public domain and benefits as an alternative instrument towards social cohesion among societies. Open access can be adopted in order to bridge the 'gap' between 'info-poor' and 'info-rich' users (Koutras, 2013).

2. Institutional Repositories in Greece

The Greek institutional repositories are:

1. National Hellenic Research Foundation (NHRF) *Helios* Repository (<http://helios-eie.ekt.gr/EIE/>), maintained by the National Documentation Centre of Greece,
2. The University of Patras Library has implemented *Nemertes* Repository (<http://nemertes.lis.upatras.gr/jspui/>) which hosts intellectual production of the above institution
3. *Psepheda* Repository, administered by the University of Macedonia Library (<http://www.lib.uom.gr/>),
4. *Eureka* Repository, an online archive which contains the whole intellectual production of the ATEI of Thessaloniki such as scientific, academic, cultural, historical and administrative, as well as other information, directly related to the Institution (<http://eureka.lib.teithe.gr:8080/>),
5. *Pandektis* Repository, developed by the National Documentation Center (<http://pandektis.ekt.gr/pandektis/>) and gathers primary sources concerning Greek History and Culture,
6. *Digital Library of the National Technical University of Athens (NTUA)* which is the repository of NTUA based on Dspace application (<http://dspace.lib.ntua.gr/>),
7. *Pergamos* Repository which is an integrated digital library system that offers a uniform platform for collecting, documenting, preserving and publishing heterogeneous digital collections. It has been developed by the Libraries Computer Center team of the University of Athens. Currently, *Pergamos* Repository, amongst other collections, hosts the Historical Archive of the University of Athens, Folklore Collection, Theatrical Collection and K. A. Psachos Music Library Collection. Additionally, *Pergamos* Repository while being enriched, will be hosting over 10 digital collections of the University of Athens (<http://pergamos.lib.uoa.gr/dl/index>),
8. *Anemi* Repository which is the digital library of Modern Greek Studies. It was founded in 2006 by the University of Crete Library. This repository aims to provide simple and quick access to a rich collection of digitized material related to Modern Greek Studies. Furthermore, this repository embodies the final result of the Program 'Digital Library of Modern Greek Studies' which was funded by the Operational Program 'Information Society' (3rd CSF 2000-2006) (<http://anemi.lib.uoc.gr/>),
9. *Theofrastos* Repository of the Aristotle University of Thessaloniki which constitutes the digital library of School of Geology (<http://geolib.geo.auth.gr/digeo/>),
10. *The Educational Repository* of the University of Patras (<http://repository.upatras.gr/dspace/>)
11. *Estia* Repository which hosts online digital archive of the Harokopio University Library and Information Center (<http://www.library.hua.gr/index.php/en/>) and collection of undergraduate, postgraduate and doctoral dissertations that has been produced by members of the Harokopio University and
12. *Dioni* Repository which assembles the whole intellectual production of the University of Piraeus such as all kind of dissertations and scientific publications (<http://digilib.lib.unipi.gr/dspace/#>)
13. *The Ionian University Institutional Repository (IUIR)* It aims to support and promote the teaching, educational, and research activities that take place within the respective graduate and postgraduate programs of the University Departments. It also aspires at the continuous development and expansion of educational and research objectives, as well as of the broader social role of the Ionian University. The collection of the IUIR comprises more than 80,000 books, 700 magazine titles, more than 3,500 audio-visual records such as CDs, cassettes, vinyl records, videotapes, microfilms, remarkable collection of maps as well as thousands digital documents (<http://iup.ionio.gr>).

3. Access rules of Institutional Repositories

Not only is access free in the sense of payment (free of charge), but it is also free in the sense of registration. Specifically, the aforementioned regulations/ rules are followed to:

- the *Nemertes* repository from the University of Patras - no registration needed, access to full texts by anyone
- the *Eureka* repository of the ATEI of Thessaloniki - no registration required, access to the whole material
- the *Digital Library* of the National Technical University of Athens (NTUA)
- the *Educational repository* of the University of Patras
- the *Pandektis* repository of the National Documentation Center
- the *Pergamos* repository of the University of Athens
- the *Anemi* repository of the University of Crete

Yet, access is not free from the obligation to register in the following repositories:

-the *Helios* repository of the National Documentation Center (sort of registration is requested via repository's website, but it is not a condition of access)

- the *Theofrastos* repository of the Aristotle University of Thessaloniki
- the *Psiphida* repository of the University of Macedonia and
- the *Dioni* repository from the University of Piraeus

The majority of the aforementioned institutional repositories operate under the software platform *DSpace*¹. Surely, Greek repositories are not based on a particular platform, a fact that affects interoperability. In addition, another common trait is that most of Greek repositories follow the same copyright regulations/ rules concerning authors and users. Usually Greek repositories contain a sort of guidelines - not truly aligned to current copyright law - in relation to full texts access. For example, within the site of *Anemi* repository it is clear that digital content is protected by copyright law. Access is provided solely for personal, educational or research purpose. Systematic storage or printing of its content is strictly forbidden. It should be mentioned that commercial is strictly prohibited, also. This is a statement which reflects copyright rules, as in fact, database protection under the L. 2121/1993, and of course, the Directive for the protection of databases forbids in principle storing and/or printing of the whole content of a database. The commercial use of even one article (for example, the reprinting of the article in a collective volume, sold in the market) demands the license from the copyright holder, typically the author or the publisher of the work in which the work has been taken from.

On the other hand, according to the site of *Estia* repository and its copyright rules:

'Copyrights in ESTIA-Copyright owner remains the author, i.e. the master or the PhD owner, or the teacher, who through the deposition form grants the Library with the right to publish the thesis and make it available through the Internet, via the institutional repository'.

Definitely, it is a formidable statement via Greek copyright law/ legislation. Any grant from the copyright holder of a license to publish the work has to be made in writing, as it consists a license to copy a copyrighted work, of course. It is undeniable that uploading process is also copying and thus demands a license/ license is requested. The construction that deposition to *Estia* equals to granting copyright under the circumstance where, as mentioned in the site, the University considers the deposition to the institutional repository a condition of graduation (and therefore, deposition is mandatory at least ten days before graduation) certainly is not in line with current copyright law.

Moreover, a teacher very seldom can be deemed to be the copyright holder along with his/ her student as supervision of a thesis, for example, never equals to co-creation of the work. The student has the copyright of his/ her work. Perhaps the simple statement in the *Dioni* repository, '*all materials of the repository are protected by copyright*', is the best solution on repositories and copyrights we have already met. People applying repositories such as students, teachers etc. are, or should be, reasonably acquainted with copyright and recognize exact definition of a published work - subject matter of repositories - which is copyrighted unless there is strong evidence that it is not. For instance, it dates back to the 1890s, it contains a creative commons license where rules of use are laid out, it is a public domain text like a judicial decision or a statute etc. And another solution, albeit still a bit sophisticated for some, could be the use of creative commons licenses.

4. Open Access in Greece: an Overview

The Greek OAM constitutes an initiative from academic and scholarly communications for further, instant and continuous online access to scientific content. Its significant ambition encourages access to scientific information, supports additional research and use of research outcomes.

Printed formats are the basic subject matter of scholarly publishing in Greece. However, there is an uprising activity regarding e-book market and publishing, while on the other hand, it is more clear and significant growth in journals and e-publishing initiatives.

¹ Other suitable platforms include ARNO, CERN document server software, e-prints, DARE (Digital Academic Repositories from Holland), SHERRA, ROMEO (Rights Metadata for Open Archive), e-scholarship repository, from the University of California and others.

5. Reflections

The obstacles in relation to online digital archive are related to a series of legal issues as well as to the framework of open licensing that regulate these resources.

The upcoming open access content 'system', which is quite familiar in Greece nowadays, will be the 'Achilles' heel' of potential partnerships among bodies, institutions and generally organizations that are already protecting the intellectual rights of their data *via* older legal frameworks.

However, this weakness may be solved, for example by the use of creative commons licenses, which simultaneously offers accessibility opportunities and intellectual property protection of the sort the author refers. There is, anyway, a widespread belief that there can be an effective equilibrium between open access and copyright (Koutras, 2012).

As regards eventual partnerships between educational institutions/educational resources: shouldn't there be a pre-existing kind of 'mutual agreement' on the intellectual property rights and obligations regarding the content and diffused information? At the same time, there may be intellectual property rights on content owned by the educational institution itself. Consequently, and in view of a potential cooperation: Shouldn't use and reuse rights on this specific content be redefined and reconsidered?

Some proponents claim that open access and freedom of teaching are either rivals or fellows (Makridou et al. 2012). Within this framework and in order to ascertain what is going on with the infrastructure of the Ionian University Institutional Repository (open access, informational needs satisfaction and its online services productivity) we conducted an online survey (via www.surveymonkey.com) trying to identify its efficiency and working operation.

6. The Survey

An online survey was conducted within the academic community of the Ionian University and especially addressed to registered members (undergraduate and postgraduate students, academics and external academic fellows) of its IR and Information Centre. In particular, the survey's URL was sent to the registered members' mailing list and was based on a questionnaire of 3 multiple-choice questions (plus one question concerning affiliation). We had 69 responses (out of 681 registered members). Furthermore, data from our online survey has been collected since September 2013. The survey's main objectives were:

- To determine registered members' level of knowledge regarding the digital platform of the IUIR, its publicity and their attitudes towards it
- To determine the frequency of its use by registered members of the IUIR
- To explore registered members' contentment concerning IUIR as an instrument/ tool of digital/ online resources

Collected data has been processed using the application offered from the website www.surveymonkey.com and produced descriptive statistics.

7. Preliminary Results

Table 1 shows the registered members' affiliation. Additionally, there is a significant divergence among affiliation level percentages. In particular, undergraduate students 76,19%, postgraduate students 14,29%, university professors/ teachers 4,76%, administrators 3,17% and external fellows of the Ionian University 1,59%. It seems that undergraduate students were by far more interested to answer a survey on the institutional repository of their University that all other affiliated classes of people.

Table 1

Undergraduate Students	76,19%
Postgraduate Students	14,29%
University Professors/ Teachers	4,76%
Administrators	3,17%
External Fellows	1,59

The first question concerns registered members' opinion as regards IUIR popularity. Its outcome illustrates a positive answer by giving the overwhelming percentage of 85,07% (in subtotal).

Not well-known	14,93%
Quite well-known	37,31%
Well-known (enough)	38,81%
Well-known (more than enough)	8,96%

On whether the participants use or not use the IUIR, more than half respondents answered 'enough' and 'quite enough'. However 31, 34% answered 'no, not at all'. Particularly:

No, not at all	31,34%
Yes, enough	35,82%
Yes, quite enough	23,88%
Yes, very much	8,96%

The last question indicates registered members' satisfaction by the services offered from IUIR. There were no negative ('not satisfied') answers which means that IUIR operates in a proper and effective way for its users. In particular:

Not satisfied	0%
Satisfied (enough)	22,39%
Satisfied (quite enough)	47,76%
Satisfied (much)	23,88%
Completely Satisfied	5,97%

8. Conclusions and Further Discussion

Institutional repositories in Greece could be rationalized, in the sense that they could all unite into one and they all operate under one platform. Access to repositories, also, could necessitate no prior registration but be free and open to all who would need it-not only for users who belong to a particular institution and not only from computers connected to the institution's central infrastructure, as it happens in some cases. The complete ban of registration would not only mean democratic access to information already paid by the Greek citizens, it would not only embody the very sense of open-and anonymous, and hazard/time consuming free-access, but also it would prove truly efficient towards the end of better bridging the digital divide in Greece.

We noted that if a user wanted to have access to all these repositories, and search into every one of them for a particular topic, the user should devote substantial time and effort, note and remember a series of user names and passwords, different perhaps for every one for the thirteen repositories we have in operation in Greece, as password rules are not the same to all. There are institutional repositories of one sole institution which demand a new registration procedure for the same user for every sub-collection of information they contain! Also, one would not be able to select from the bulk of information one would find in every one repository the information one needs as efficiently as, of course, one would be able to, had once been using one only repository.

All repositories could operate under the same copyright rules, correct the copyright rules they contain when they are not in line with current copyright law and offer simple guidance to users so as to perhaps, recruit them also as repository contributors.

The result of our survey in one particular repository shows that students are particularly interested in using a repository, and that they are satisfied from its services. It follows that the magnitude of use and satisfaction from one only institutional repository of all institutions would certainly be greatly augmented.

In this regard the construction of one sole repository from all Greek academic institutions would face seemingly insurmountable political-type objections and confront teams with particular interests, also deal with the separate funding questions from financial sources do arise and are legitimate. However, looking through the future towards lessening the digital divide and opening every possible channel of communication dictates that we make every effort to unite all institutional repositories of public funded Greek Universities into one, simplify its use and make it as user-friendly as possible (eliminating registration and codes, passwords etc) and allow as wider as possible access as we can. This would indeed be a courageous step towards knowledge for all. Besides, it is the same step in nature with its 'brother' step, the step towards offering open data to all citizens, which also demands the same platforms and rules to be followed and a single rule of interoperability to be religiously applied.

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