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# INTEGRATED INFORMATION

International Conference on Integrated Information

Kos, Greece      September, 29 – October, 3 2011

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**All papers have been peer-reviewed**



**Piraeus, Greece, 2011**

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# **Preface: Proceedings of the International Conference on Integrated Information (IC-ININFO 2011)**

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## **Aims and Scope of the Conference**

The International Conference on Integrated Information 2011 took place in Kos Island, Greece, between September, 29 and October, 3, 2011. IC-ININFO is an international interdisciplinary conference covering research and development in the field of information management and integration.

The conference aims at creating a forum for further discussion for an Integrated Information Field incorporating a series of issues and/or related organizations that manage information in their everyday operations. Therefore, the call for papers is addressed to scholars and/ or professionals of the fields of Library and Archives Science (including digital libraries and electronic archives), Museum and Gallery Studies, Information Science, Documentation, Information Management, Records Management, Knowledge Management, Data management and Copyright experts the latter with an emphasis on Electronic Publications. Furthermore, papers focusing on issues of Cultural Heritage Management and Conservation Management are also be welcomed along with papers regarding the Management of Nonprofit Organizations such as libraries, archives and museums.

One of the primary objectives of the IC-ININFO will be the investigation of information-based managerial change in organizations. Driven by the fast-paced advances in the Information field, this change is characterized in terms of its impact on organizations that manage information in their everyday operations.

Grouping emerging technologies in the Information field together in a close examination of practices, problems and trends, IC-ININFO and its emphases on integration and management will present the state of the art in the field. Addressed jointly to the academic and practitioner, it will provide a forum for a number of perspectives based on either theoretical analyses or empirical case studies that will foster dialogue and exchange of ideas.

## **Topics of general Interest**

Library Science, Archives Science, Museum and Gallery Studies, Information Science, Documentation, Digital Libraries, Electronic Archives, Information Management, Records / Document Management, Knowledge Management, Data Management, Copyright, Electronic Publications, Cultural Heritage Management, Conservation Management, Management of Nonprofit Organizations, History of Information, History of Collections, Health Information

## **Symposia**

The Conference offered a number of sessions under its patronage, providing a concise overview of the most current issues and hands-on experience in information-related fields.

- Symposium on Integrated information: Theory, Policies, Tools
- 4th Symposium on Business and Management and Dynamic Simulation Models supporting management strategies

- Session on Open Access Repositories: Self-archiving, Metadata, Content policies, Usage
- Session on Evidence-Based Information in Clinical Practice
- Session on Business Management and Communication Strategies supporting Decision Making Process in Tourism Sector
- Session on Electronic Publishing: A Developing Landscape
- Session on Information and Knowledge Management
- Session on Information Content Preservation as Outcome of Conservation of Cultural Heritage: Ethics, Methodology and Tools
- Session on Advances Information for Strategic Management
- Session on Information History: Perspectives, Methods and Current Topics
- Session on Divergence and Convergence: Information Work in Digital Cultural Memory Institutions
- Session on Contemporary issues in Management: Organisational Behaviour, Information Technology, Education & Hospital leadership.

The wide range of aspects that the sessions covered, highlighted future trends in the Information Science.

### **Paper Peer Review**

More than 300 papers had been submitted for consideration in IC-ININFO 2011. From them, 91 were selected for presentation, after peer review in a double blind review process. The accepted papers were presented at IC-ININFO 2011.

### **Thanks**

We would like to thank all members that participated in any way in the IC-ININFO 2011 Conference and especially:

- The famous publishing house Emerald for its communication sponsorship.
- The co-organizing Universities and Institutes for their support and development of a high-quality Conference scientific level and profile.
- The members of the Scientific Committee that honored the Conference with their presence and provided a significant contribution to the review of papers as well as for their indications for the improvement of the Conference.
- All members of the Organizing Committee for their help, support and spirit participation before, during and after the Conference.
- The Session Organizers for their willing to organize sessions of high importance and for their editorial work, contributing in the development of valued services to the Conference.
- PhDC Marina Terzi for her excellent editorial work, contributing in the production of the Conference proceedings.

## CONFERENCE DETAILS

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Dimitris Kouis, Greek Ministry of Education, Lifelong Learning and Religious Affairs  
Dionysis Kokkinos, National Technical University of Athens

## KEYNOTE SPEAKER



Professor Amanda Spink

Professor Amanda Spink has published over 340 scholarly journal articles, refereed conference papers and book chapters, and 6 books. Many of her journal articles are published in the Journal of the American Society for Information Science and Technology, Information Processing and Management, and the Journal of Documentation. She is Editor of the Emerald journal Aslib Proceedings. Amanda's research has been published at many conferences including ASIST, IEEE ITCC, CAIS, Internet Computing, ACM SIGIR, and ISIC Conferences. Her recent books include Information Behavior: An Evolutionary Instinct and Web Search: Multidisciplinary Perspectives, both published by Springer. Amanda's research focuses on theoretical and empirical studies of information behavior, including the evolutionary and developmental foundations. The National Science Foundation, the American Library Association, Andrew R. Mellon Foundation, Amazon.com, Vivisimo. Com, Infospace.com, NEC, IBM, Excite.com, AlltheWeb.com, AltaVista.com, FAST, and Lockheed Martin have sponsored her research. In 2008 Professor Spink had the second highest H-index citation score in her field from 1998 to 2008 [Norris, M. (2008)]. Ranking Fellow Scholars and their H-Index: Preliminary Survey Results. Loughborough University, Dept of Information Science Report].

## **Session on Electronic Publishing: A developing landscape.**

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Ministry of Education

Greek Ministry of National Education and Religious Affairs

Co-organizer: Victoria Tsoukala

National Documentation Center, Greece

**Description:** The evolution of technology has always been a driving force of social and economic change and development. Expectedly, advances in Information Communication Technologies and the gradual domination of online technologies in recent years have deeply affected the way scientific and scholarly knowledge is transmitted. Scholarly communication, the ways in which research is communicated, is similar to the nervous system of the human body, affecting the entire research process. Recent studies clearly demonstrate that scholars increasingly rely on online resources and tools to carry out and publish their research. As a result, the modes and formats of scholarly communication, the economics of scholarly publishing and the roles within the scholarly communication system are in transition, and a new landscape is developing in electronic publishing. Technological breakthroughs are achieved on a daily basis (e.g. new formats and standards, new e-reader devices with extra capabilities, new methods of delivery etc.) making developments hard to follow, while the complete digitization, and, in fact, online management, of the publishing life cycle is now a reality. The publication of scientific journals, of data, and e-books (monographs, textbooks etc) and their respective formats and major concerns in current research and practice in e-publishing. This session aims to attract papers dealing with new publishing and delivery models and topics concerning e-books such as end-user perspective/expectations/behavior and requirements, visualization and device technologies overview, security and copyright issues, libraries and information institutes reorganization, creation tools, format standards etc.



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He has worked as a senior researcher (1999-2005) for many EU funded research programs in various program frameworks (i.e. ACTS, FP5, FP6, E-content etc.). He also worked as a project and technical manager in EU funded programs in the context of Hellenic Academic Libraries Link (2004-until today). He is also responsible (main author) for successful competitive proposals in funding frameworks with multi-million euros total budget.

Dr Kouis is the author of five journal papers and more than twenty-seven conference papers. He is also a book co-author regarding computer science and library integrated systems, while he was responsible for many technical reports. His research interests include computer science, computer networks, telecommunication networks, software technologies, library systems, digital databases etc.

# E-journal and Open Access Journal Publishing in the Humanities: Preliminary Results from a Survey among Byzantine Studies Scholars

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**Abstract:** *This paper presents the preliminary results of a survey conducted by the National Documentation Centre/NHRF in the fall of 2010 among specialists in Byzantine Studies. The survey sought to assess needs and satisfaction with the electronic version of the journal 'Byzantina Symmeikta' and to assess scholarly attitudes about and practices in publishing in e-journals and open access journals among scholars in Byzantine Studies. The paper focuses on the latter part. Survey result suggest that scholars in Byzantine Studies increasingly rely on e-journals to carry out their research, they are predominantly positively disposed towards electronic publishing and open access, but most of them have not published in an electronic journal. Use of e-journals, experience with publishing in e-journals and open access journals and positive attitudes toward the above are especially high among younger scholars.*

**Keywords:** *Scholarly communication, Electronic publishing, Open access, Humanities, Byzantine studies.*

## I. INTRODUCTION

Headed by the natural and medical sciences and facilitated by advanced in ICT, recent years have witnessed a transformation in the scholarly communication ecosystem and the way research is conducted. The Humanities are experiencing this transformation as well, albeit in slower rates, on account of the particular traits in research and publishing practices and values that set them apart from those in the sciences, such as slow publication speeds, the significance of monographic publications, publications in languages other than English, heavy reliance on the print medium, among others.<sup>78</sup>

To illuminate scholarly communication practices and views with respect to e-journals in the field of Byzantine Studies this paper presents a preliminary discussion of some of the findings of a survey conducted by the National Documentation Centre/NHRF in 2010. The survey sought to assess the needs and levels of satisfaction of scholars with the

services of the electronic version of the journal *Byzantina Symmeikta*, published online in partnership with the Institute for Byzantine Research/NHRF since 2008.<sup>79</sup> Further, it sought to assess what scholars think about electronic journal publishing and open access in particular, as well as collect and prioritize values held with regard to various features in electronic journals. The paper is concerned with this, latter part of the survey.

The National Documentation Center (EKT) at the National Hellenic Research Foundation (NHRF) is the National Facility for the aggregation, documentation of Science and Technology content and for information and support services on science, research and technology issues. Among other activities aimed at strengthening and supporting digitally enabled research, EKT develops a research e-infrastructure for content that includes e-journals, which are developed in collaboration with the scientific publishers, such as research institutes and scientific societies.

Particular attention is placed in enabling e-publishing in the Humanities in order to improve the relatively slow rates of penetration of the online medium in the work of scholars in the Humanities in Greece, and in order to make the valuable research that mostly focuses in regional (usually Hellenic) studies and is to a great extent produced in the Greek language in print easily accessible internationally, and possibly more effective. The aforementioned characteristics may partly account for the low representation of journal articles in the Humanities produced in Greece in international indexers.<sup>80</sup> Nonetheless, our experience with the online transition of three peer-reviewed journals in collaboration with the Humanities institutes in NHRF and the ongoing transition of ten more journals, is that scholars are positively disposed towards new forms in scholarly communication and that they perceive the benefits of electronic and open access publishing in the Humanities. On this basis, largely confirmed by the results of the survey presented here,

<sup>78</sup> The particular traits and value systems of the Humanities and the transition to new modes of scholarly communication are highlighted in (selection): Maron and Smith (2008); *Ithaka Faculty Survey 2009* (2010); Harley, Acord, Earl-Novell, Lawrence & King (2010); *Communicating Knowledge* (2009).

<sup>79</sup> On the development of *Byzantina Symmeikta* and two other peer-reviewed online journals at the NHRF see Sachini, Tsoukala, Houssos, Stathopoulou, Paschou and Paraskevopoulou (2009)

<sup>80</sup> This may be suggested by the low representation of Greek Humanities journal scholarship in international indexers, see Malliou, Sachini, Houssos, Proedrou and Karagianni (2010), p.18 , p. 62, figure 4.2).

the next step is underway, which comprises expanding the number of e-journals, publishing e-books and standardizing the relevant services.

## II. THE SURVEY AND THE RESPONDENTS

The survey was carried online using a professional survey tool, between September 5 and December 5, 2010. In view of obtaining as many responses as possible, both targeted and simple online survey methods were used. The survey was sent with dedicated links to the emails of 1488 individuals who specialize in Byzantine Studies in Greece and abroad. It was also available to fill online at the journal's website. 133 individuals, or 8.93%, responded to the survey, while another 25 individuals completed the survey online, a total of 10.6%. Anonymized survey data will be deposited in the repository of the NHRF 'Helios' for preservation in the beginning of 2012 and will be openly accessible.

Most of the respondents (approximately 44%) came from Greece, whereas other well-represented countries (above or around 10% of respondents) were USA, United Kingdom, Russia, Germany, Italy. About 60% of the respondents were between 30 and 49 years of age, with approximately the same representation of the 30s and the 40s age groups (Figure 1).

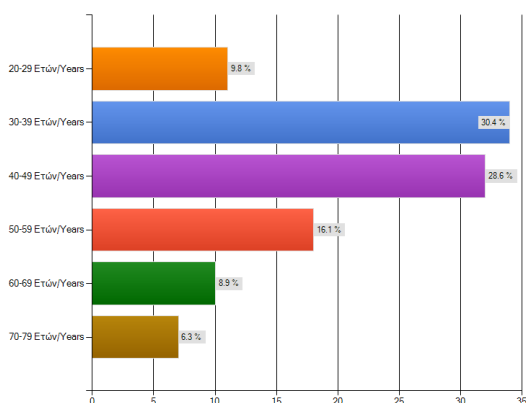


Figure 1. Age groups of respondents

The next best represented age-group was that of scholars between 50 and 59 years of age. Finally, close to 70% of respondents hold a PhD, whereas the largest group of respondents was that of tenured professors/researchers.

## III. FREQUENCY OF USE OF E-JOURNALS IN BYZANTINE STUDIES

Examination of the use of e-journals provides insights into scholars' needs, the increasing reliance on e-publications and the transition away from the print medium. The frequency of using electronic journals was one of the first things that were addressed. Most scholars reported using electronic journals 'very often' (44.7%) or 'occasionally' (44.3%), while a significantly lower percentage apparently relies on electronic journals on a daily basis (9.5%). These very positive numbers are in line with the well-known fact that journals and e-

journals are gradually assuming a more significant place in conducting and publishing research in the Humanities.<sup>81</sup>

The responses were filtered on the basis of the respondents' position in the educational and professional ladder in order to investigate whether rank and age relates to the frequency scholars rely on electronic sources such as e-journals (Figure 2). The two largest categories of respondents, over 50%, were the tenured professors/researchers and the tenure-track professors. Tenure-track professionals use e-journals more intensely (very often) than tenured professors (67.9% versus 29.3%), who use them primarily 'occasionally'.

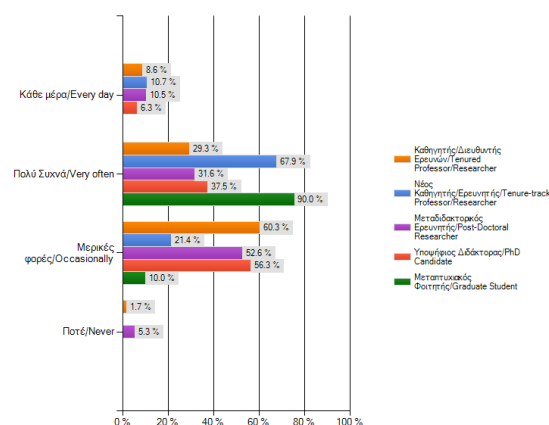


Figure 2. Use of e-journals according to rank

This may suggest that younger professionals with less of a job security (i.e. tenure) and more pressure to publish research may conduct research more intensively and thus use e-journals more frequently for desktop research. Additionally, these researchers are generally younger and perhaps more familiar with online resources. The other group that predominantly uses e-journals 'very often' is that of graduate students (90%), also younger in age. It came as a surprise, however, that PhD candidates and post-doctoral students/researchers both predominantly reported using e-journals 'occasionally' (52.6% and 56.3%) and less so 'very often' (37.5% and 31.6%). However, post-docs and tenure-track professionals displayed the highest scores in terms of using e-journals on a daily basis - 10.7% and 10.5%, respectively. Full professors follow with 8.6% and, surprisingly, PhD candidates with 6.8%. Overall, the percentages of daily use of e-journals were significantly lower than those in the 'very often' and 'occasionally' categories, suggesting that scholars still rely to large extent on print journals and other print resources.

We were interested to compare the overall results, and those according to professional status, with those

<sup>81</sup> Cf. *Ithaka Faculty Survey 2009* (2010); *Communicating Knowledge* (2009).

concerning respondents from Greece since they represent the largest and most coherent country group and since the journal *Byzantina Symmeikta* is published in Greece and has a predominantly Greek audience. A significantly larger percentage of Greek scholars (56.3%) reported using e-journals ‘very often’ and less of them occasionally (32.4%), as compared to the overall results of the survey, in which the two categories of frequencies were almost the same, 44.7% and 44.3%, respectively.

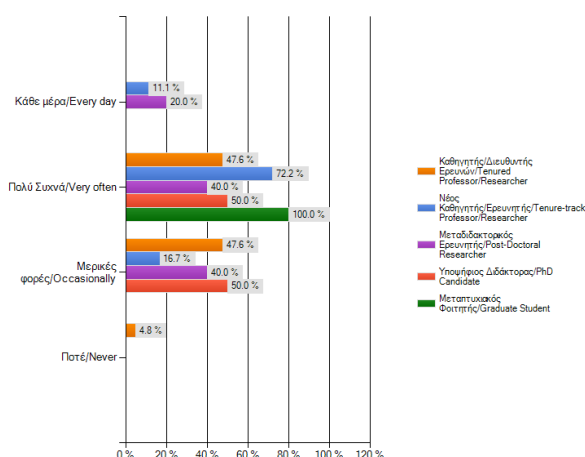


Figure 3. Use of journals according to rank for Greece

Accordingly, the results concerning Greece plotted by professional rank reflect more intense use of e-journals by professionals of all ranks among scholars who reported using e-journals ‘very often’ compared to the overall results. However, only tenure-track professors and post-doctoral researchers reported using e-journals ‘every day’, while in the overall results tenured professors and PhD candidates were also represented. A 20% of the post-doctoral respondents in Greece reported using e-journals every day, as compared to approximately 10% in the overall survey, while all graduate students in Greece who responded reported using e-journals very often, as in the rest of the countries.

The increased frequency in the use of e-journals in Greece, especially among tenure-track professionals and postdoctoral researchers is noteworthy as it indicates an important cultural change with respect to conducting research in the younger strata of Byzantine Studies professionals. Additionally, it may possibly reflect the change of culture brought specifically in Greece by the online open-access edition of *Byzantina Symmeikta*, a journal that publishes primarily in the Greek language. The journal in its print format has been a valued research tool for Greek scholars for the past four decades, and is now a primarily online and open access peer-reviewed journal with all back issues openly available to all.

#### IV. VALUE OF E-JOURNAL FEATURES

The survey sought to illuminate what scholars think about various potential features of e-journals. This helped assess practices of use and values held, as well as determine potential new features to be added to already existing and new e-journals and e-books to be developed by EKT. Scholars were asked to assess how important a series of features are to them in a 5-tier ranking system (Table 1).

	Very important	Important	Indifferent	Not very important	Not important
Addition of data and data sets to articles	17.4%	<b>40.4%</b>	25.7%	10.1%	6.4%
Ability to annotate papers online and save annotations	15.6%	<b>46.8%</b>	21.1%	12.8%	3.7%
Ability to link to cited items in the text and/or bibliography	<b>42.6%</b>	41.7%	13.0%	1.7%	0.9%
Ability to comment on papers	7.2%	<b>30.6%</b>	<b>30.6%</b>	24.3%	7.2%
Download articles to your computer	<b>66.9%</b>	28.0%	2.5%	2.5%	0.0%
Download articles to e-book reader or smartphone	17.0%	25.9%	<b>27.7%</b>	14.3%	15.2%
Printing of articles	<b>55.1%</b>	30.5%	8.5%	4.2%	1.7%
Ability to export bibliographies from articles	27.7%	<b>53.8%</b>	12.6%	5.0%	0.8%
Article-level usage statistics	7.2%	28.8%	<b>37.8%</b>	13.5%	12.6%
Information about works citing an article published in the journal	23.0%	<b>47.8%</b>	17.7%	8.8%	2.7%
Links to work citing an article published in the journal	34.7%	<b>50.0%</b>	11.0%	3.4%	0.8%

Table 1. Values of e-journal features

The survey suggests that the most valued functions for scholars are the ability to download articles to their computer (66.9%), the ability to print articles (55.1%), the ability to link to cited items in the text and/or bibliography (42.6%). They consider important the ability to export bibliographies from articles (53.8%), the ability to link to works citing articles published the journal (50%), and information about works citing an article published in the journal (47.8%). Understanding what scholars are indifferent about is also illuminating: they are mostly indifferent about information on article-level statistics on journal articles (37.8%), about the ability to comment on papers in an e-journal (30.6%), about the ability to download articles to their e-book reader or smartphone (27.7%). Lack of interest in article level statistics and the ability to comment on papers online possibly reflects the hesitancy towards different systems for measuring research performance and for

peer review that are not common in the Humanities, and possibly rightly so. However, these ideas may conceivably change in the future, considering that statistics on each of these particular questions suggest very close distribution of opinions between 'important' and 'indifferent' and significantly lower distributions in the categories 'not very important' and 'not important', which indicates an upwards tendency in the appreciation of these features.

The same values hold true as far as responses from Greek scholars are concerned with slightly different percentages but the same ranking, except for the fact that Greek scholars are clearly in favor of the ability to comment a paper in an e-journal, ranking it as important by 38%.

#### V. E-JOURNAL AND OPEN ACCESS JOURNAL PUBLISHING: ATTITUDES AND PRACTICES

Apart from the issue of the use of e-journals by scholars in Byzantine Studies, other questions were asked to assess the attitudes towards publishing in e-journals and open access journals and actual experience in publishing in them.

A 97.2% of respondents would publish in e-journals and 96% in open access journals. This is significant, especially in a field such as the Byzantine Studies that largely relies on scholarly publications produced long time ago in various languages outside of English, and on rare printed documents that for the most part are not available online in an organized and easily accessible manner. Despite the enthusiasm, only 28.7% of the respondents reported having published in an e-journal or open access journal. The same results were obtained for Greece as well, with a very slight upwards difference of people who have published in e-journals and open access journals (31.4% and 29.4%, respectively) and slightly downwards difference among those who would be willing to publish in e-journals and open access journals (95.7% and 95.3%, respectively).

About 70.6% of those who have published in e-journals are between 30 and 50 years of age, as is a 72.2% of those who have published open access. In both cases, however, it is scholars in the 30s who have the highest percentage in these publications, 38.2% and 47.2%, respectively. This may be interpreted as a positive attitude of younger professionals towards new forms of scholarly communication and open access publishing in particular, despite the fact that e-publishing and open access publishing, may not yet be fully accepted forms of scholarly communication when it comes to the evaluation of professional development, especially when it concerns new and not established journals or e-books and open access monographs available only through print on demand.<sup>82</sup>

<sup>82</sup> However, it does appear that at least in the USA the mechanisms already exist in most institutions for evaluating at least e-journals, as well as other new forms

#### VI. CONCLUSION

The practices and values revealed through this survey are very encouraging regarding publishing in e-journals and open access journals, and we suspect, about e-publishing in general, among the Byzantine Studies community. They suggest that many more developments are to be expected in the future in scholarly communication in Byzantine Studies, whereby the new possibilities afforded by digital infrastructures and already embraced by professionals in other fields will become more embedded in the system of scholarly communication in Byzantine Studies. At the same time, it is well worth taking into consideration that the transition to new forms of scholarly communication also requires changes in established and resilient disciplinary cultures, which affect the ability for change.<sup>83</sup>

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of non-traditional e-scholarship, but young scholars are generally advised to focus on publishing on established venues. Harley, Acord, Earl-Novell, Lawrence & King, (2010), pp. 7-11.

<sup>83</sup> As clearly shown by Harley, Acord, Earl-Novell, Lawrence & King, (2010) through an in-depth study of scholarly values and needs in seven disciplines (pp. 4, 7; executive summary p. i).