

Towards good practices of copyright in Open Access Journals

A study among authors of articles in Open Access journals

Esther Hoorn, University of Groningen, Faculty of Law
Maurits van der Graaf, Pleiade Management & Consultancy
2005-08-05

Correspondence to:
Maurits van der Graaf
Pleiade Management and Consultancy BV
Keizersgracht 62
1015 CS Amsterdam
The Netherlands
T: +31 20 488 9397
F: + 31 20 684 7773
m.vdgraaf@pleiade.nl
www.pleiade.nl

Contents

Management summary	4
1. Introduction.....	7
2. Methods.....	9
2.1 Study Objectives	9
2.2 Phase 1: Identification of Good Practices.....	9
2.3 Phase 2: Web Survey among Authors of Articles in Open Access Journals	9
2.4 Boundaries of the study design	9
3. Background: Current Situation of Open Access in Scholarly Communication...	11
3.1 What is Open Access?	11
3.2 Overview Current Situation of the Open Access Movement.....	12
4 Copyright Issues in Open Access Journal Publishing.....	15
4.1 Introduction.....	15
4.2 What is Copyright?	15
4.3 Who is the Original Owner of the Copyright?.....	16
4.4 Relation between Open Access and the Transfer of Copyright.....	17
4.5 Good Practices re Open Access Copyright.....	19
4.5.1 Introduction.....	19
4.5.2 Creative Commons.....	19
4.5.3 Attribution Only.....	20
4.5.4 Commercial Use Limited.....	21
4.5.5 Educational Purposes	25
4.5.6 Share Alike.....	27
4.5.7 National Differences	28
4.6 Copyright Monitoring and Enforcing	29
4.7 Trends and Developments.....	31
4.8 Towards Models of Good Practice in Copyright in Open Access Journals.....	33
4.8.1 Main conclusions from the interviews and literature survey	33
4.8.2 Models re Copyright Management in Open Access Publishing	34
4.8.3 Direct relation copyright policy and business model of the journal	34
4.8.4 What is a good practice?	35
4.8.5 Proposition four Models of Good Copyright Practices in OA publishing..	36
5. Author Attitudes.....	38
5.1 Overview of Other Studies among Authors.....	38
5.2 Results qualitative study	42
5.2.1 Support for Open Access Movement.....	42
5.2.2 Author Fee: Is This a Hurdle to Publish in Open Access Journals?	43
5.2.3 Reuse of the Articles (for educational purposes; self archiving).....	44
5.2.4 Opinions and Attitudes re Copyright Transfer and the copyright models: ..	45
5.3 Results Websurvey.....	46
5.3.1 Methods.....	46
5.3.2 Use and reuse of research articles	47
5.3.3 Interest in copyright issues.....	49
5.3.4 The ideal copyright situation in OA journals according to the authors	51
5.3.5 Four copyright models in Open Access journal publishing.....	55
5.3.6 The respondents	58
6. Summary and conclusions	62
6.1 Open Access and copyright	62
6.2 Four copyright practices	65

6.3 Author study.....	67
6.4 Discussion.....	70
Appendix A: literature list	72
Appendix B: interviewees.....	75
Appendix C: the questionnaire.....	76

Management summary

Study and methods

- *Aim of the study:* This study aimed to identify good practices in copyright management in Open Access journals with an emphasis on the authors' attitudes and viewpoints.
- *Methods:* In preparation of a qualitative and quantitative study among academic authors of articles in Open Access journals both a literature survey and a series of interviews with Open Access publishers and copyright experts were carried out in order to identify the main issues in copyright as well as good practices in copyright in Open Access journals. These results were used in a qualitative study among academic authors of articles in Open Access journals (12 interviews) and a quantitative study by means of a websurvey among 1200+ authors mainly from medical and life sciences (with a response of 355 academics, 29%).

Copyright issues and models

- *The main issues in copyright regarding research articles:* from interviews with publishers of Open Access journals and with copyright experts it appears that the main issues in copyright regarding research articles are:
 - Rights to reuse the research articles for scholarly and educational purposes
 - Rights to reuse the research articles for commercial purposes
 - The demarcation between educational purposes and commercial purposes
- *Four copyright models were identified and studied:* from the literature survey and a series of interviews four models of good practices of copyright in Open Access journals were identified, analysed and studied further:
 - The 'attribution' licence, whereby the author keeps the copyright but gives a broad permission to use and reuse the article. Examples are PLoS and Biomed Central.
 - The commercial exploitation rights are transferred to the publisher through a licence agreement that limits legitimate scholarly uses to some extent. Examples are the British Medical Journal and Nucleic Acid Review.
 - The rights to republish and/or transform (parts of) the articles are granted only if the resulting works are redistributed under an Open Access licence as well. Examples are the EGU journals (Copernicus).
 - All (or most) rights are reserved, but this time not by the publisher but by the author. Examples: Electronic Journal of Comparative Law; SCRIPT-ed

Results of the author survey

- *Many Open Access authors are involved in traditional journal publishing:* 86% of the respondents were referees for a traditional journal, 26% of the respondents were members on an editorial board of a traditional journal.
- *Situation with regard to reuse is unsatisfactory:* the situation regarding the reuse of an author's own articles in traditional journals post publication appears to be unsatisfactory. A large percentage of the authors surveyed (29%) do not ask permission from the publisher, and a significant percentage (19%) state that they feel limited in reusing the article in ways they would like. 4% ask permission for reusing their own article but do not always get it. In addition, asking permission is felt to be cumbersome and time-consuming.

- *Authors want limited copyright role for the journal publisher:* The attitudes of the authors on copyright issues in relation to traditional journal publishers are surprising: although most are involved in traditional journal publishing, only 2% prefer the transfer of copyright to the journal publisher and only 10% think that the publisher should handle permission requests to reuse the article. A large majority (71%) wants the authors to keep the copyright; an equally large majority wants to see the author handling permission requests as well. This is also true for the editorial board members of a traditional journal among the respondents.
- *Authors want unlimited reuse for scholarly and educational purposes for everyone, but limitations on commercial reuse by others:* The ideal copyright situation according to most respondents looks like this: the author keeps all rights to reuse the article for educational, scholarly or commercial purposes. The others (readers, users) have the rights to reuse the article for educational or scholarly purposes, but do not have the rights to reuse article for commercial purposes. In the case of a conflict between limiting commercial rights and permitting educational rights, however, most respondents think permitting educational rights is more important.
- *The copyright model whereby the author keeps the copyright and handles the permission requests to reuse is most popular:* the copyright model in which the author keeps most rights drew most supporters (47%), the copyright models using various Creative Commons licences drew support from 30% of the respondents. Apparently these models, among others used by Biomed Central and PloS, are less popular because of the permission to reuse for commercial purposes to others. A model whereby the commercial exploitation rights are transferred to the journal publisher had 13% supporters.

Recommendations: awareness-raising and standardisation

- *Awareness-raising: through a combination of models and standard licences with editorial board members as an important target group*
 The Zwolle group aims at balancing stakeholder interests in scholarship-friendly copyright practices. Maybe the most important stakeholder in the scholarly communication system consists of the scientific authors themselves. However, this stakeholder seems insufficiently involved in developing new copyright practices: stumbling blocks in reaching the academic community are low involvement and a lack of knowledge among scientists. This can also be concluded from this study, in which 30% of the respondents don't know who initially owns the copyright of their own research articles and in which 26% of the respondents indicate to have a low interest in the copyright issues of their own research articles.
 Awareness campaigns are badly needed. How should such an awareness campaign be focused? It is recommended that it should use models of good practice in copyright, such as the four models identified in this study, to explain and illustrate copyright situations. In the experience of the authors of the study these models were quickly understood by the scientists in the interviews and drew interest in the questionnaire, as can be seen from the relatively high response rate. It is believed that a use of models will prove to be instrumental in awareness raising efforts. The main target group for such awareness campaigns might be the part of the academic community that also functions on editorial boards of academic journals. Editorial board members can compare the various copyright models with the

copyright practice of their own journal and eventually propose improvements to the journal publisher.

It is further recommended to use these copyright models – perhaps supplemented with some good practices for subscription-based journals - to develop standard licences in addition to the present Creative Commons licences. It is believed that a combination of awareness-raising among academics and developing standard copyright licences plus an involvement of all stakeholders in the scholarly communication system will help to achieve the ultimate goal of the Zwolle conference: maximum access to scholarship without compromising quality or academic freedom and without denying aspects of costs and rewards involved.

1. Introduction

The so-called journal crisis in academic publishing – a combination of upward spiralling prices for the journal subscriptions set by the (often commercial) publishers and downward spiralling number of subscriptions by the academic libraries – threatens the accessibility of academic information. Understandably, a number of initiatives within the academic world have been started in order to seek a solution and to maximise access to academic information.

At a practical level two vehicles for delivering universal access to research articles have been started: Open Access journals and Open Access archives or repositories.

At a more theoretical level, a number of initiatives aim to change the present situation of the often complete transfer of the copyright from the author to the publisher¹. Two of these initiatives, the 'Zwolle Group' and the Creative Commons have been very important in scoping this study.

The Zwolle group– a group of academic authors, publishers and copyright experts – has developed seven 'principles' aimed at 'balancing stakeholder interests in scholarship-friendly copyright practices' (see textbox).

Creative Commons springs from a background of sharing information and enabling user empowerment in the internet environment. One of the founders of the concept of the Creative Commons licences is Lawrence Lessig, who popularised the insight from within the community of scholars in the field of law and technology that on the Internet peoples' behaviour is shaped not only by regulation, markets or social norms but also by the code or the architecture of the digital environment. Lessig therefore emphasises the proper configuration of technology, which will contribute to achieve the aims and values that outside the digital world only could be achieved by the copyright law.

The Zwolle Principles

To assist stakeholders—including authors, publishers, librarians, universities and the public—to achieve maximum access to scholarship without compromising quality or academic freedom and without denying aspects of costs and rewards involved.

1. Achievement of this objective requires the optimal management of copyright in scholarly works to secure clear allocation of rights that balance the interests of all stakeholders.
2. Optimal management may be achieved through thoughtful development and implementation of policies, contracts and other tools, as well as processes and educational programs, (collectively “Copyright Management”) that articulate the allocation of rights and responsibilities with respect to scholarly works.
3. Appropriate Copyright Management and the interests of various stakeholders will vary according to numerous factors, including the nature of the work; for example, computer programs, journal articles, databases and multimedia instructional works may require different treatment.
4. In the development of Copyright Management, the primary focus should be on the allocation to various stakeholders of specific rights.
5. Copyright Management should strive to respect the interests of all stakeholders involved in the use and management of scholarly works; those interests may at times diverge, but will in many cases coincide.
6. All stakeholders in the management of the copyright in scholarly works have an interest in attaining the highest standards of quality, maximising current and future access, and ensuring preservation; stakeholders should work together on an international basis to best achieve these common goals and to develop a mutually supportive community of interest.
7. All stakeholders should actively promote an understanding of the important implications of copyright management of scholarly work and encourage engagement with the development and implementation of Copyright Management tools to achieve the overarching objectives.

¹¹ Throughout the report the term ‘transfer of copyright’ is used instead of the more legal term ‘assignment of copyright’, as the first term is more current among scientists and publishers.

The Joint Information Systems Committee (JISC) from the United Kingdom and the SURF foundation from the Netherlands have jointly developed a programme in order to promote the implementation of the Zwolle principles in the academic world. The aim is to improve copyright management and copyright relationships by making examples of good practice available.

This study is part of the above-mentioned programme and aims to identify good practices in copyright management in Open Access journal publishing with an emphasis on the authors' viewpoints. These good practices should contribute to an increase in an awareness and understanding of copyright issues related to Open Access among stakeholders in the scholarly communication area, especially among academic authors.

2. Methods

2.1 Study Objectives

The main objectives of the study are:

With regard to good practices on copyright:

- Identify good practices with regard to copyright in Open Access journals
- Assess the potential of these good practices and related model statements among present publishers of Open Access journals

With regard to attitudes and behaviour of authors of articles in Open Access journals:

- Assess the attitudes and present behaviour of these authors with regard to existing copyright practices and with regard to the good practices as identified above
- Assess the attitudes and present behaviour of these authors with regard to their potential use of the copyright of their own articles after publishing in Open Access journals (such as self-publishing and self-archiving).

2.2. Phase 1: Identification of Good Practices

1. Literature survey into the development of copyright in the Open Access environment, including the copyright models of the main Open Access publishers
2. Six interviews with copyright experts in the United Kingdom and the Netherlands
3. Five interviews with leading publishers of Open Access journals
4. Twelve interviews with authors of articles in Open Access journals.

2.3 Phase 2: Web Survey among Authors of Articles in Open Access Journals

A web survey among 1200+ authors of articles in Open Access journals on the main copyright issues and on the good practices identified thus far. In case of articles with multiple authors the corresponding author was chosen.

2.4 Boundaries of the study design

The study design outlined above has its limitations. However the combined methodology does illuminate opinions and useful indicators with regard to author attitudes to copyright and Open Access journals. Phase 1 was a qualitative study to identify the most relevant good practices in copyright in Open Access journals. The number of interviews, although limited did yield a rich source of material that is representative although it cannot be claimed that these reflect the entire spectrum of opinions among Open Access publishers or copyright experts on these matters. The aim of phase 1 of the study was to scope the quantitative study (phase 2) that was carried out via websurvey among authors of articles in Open Access journals. The limited number of interviews with Open Access publishers and copyright experts might indicate a potential limitation of this study. For example there wasn't a fully systematic overview of all of the copyright practices in the more than 1500 Open Access journals. However, the authors of this report are confident that the most important copyright practices have been considered and are included.

It should be noted that this study has been focused entirely on the copyright of research articles: the rights surrounding database rights - although certainly an issue in the academic community - are not included in this study.

Another potential limitation of this study might lie in the selection of respondents for the websurvey: the Open Access authors invited to participate in this study were for practical reasons primarily authors of articles in journals of Biomed Central - a leading Open Access publisher in the life sciences and biomedical sciences.

Potentially authors from other disciplines might have different viewpoints on copyright issues than those from a life sciences and biomedical sciences.

However, a large number of authors of articles in Open Access journals have responded to the questionnaire about specific copyright issues and this provides an important body of evidence. This can thereby help to inform and enhance the understanding of authors' attitudes and viewpoints on copyright issues in general and in Open Access journals specifically.

3. Background: the Current Situation of Open Access in Scholarly Communication

In this chapter an overview of the current situation of the Open Access in scholarly communication is given, based on recent literature and interviews with the Open Access publishers. This overview should be seen as the background to this study.

3.1 What is Open Access?

Three conferences have been held that could be seen as founding the Open Access movement: these conferences took place in the cities of Budapest, Bethesda, and Berlin. Below the definition of the Berlin conference is given (the Berlin conference being the third to take place and having led to the Berlin declaration which has been signed by many research and education organisations). The main characteristics of the definitions are:

- free online access
- permission to use the Open Access information for any responsible purpose.

An important part of this study relates to which permission barriers should be removed (such as the permission to make copies) and in which way this should be organized.

Definition of an Open Access Contribution Conference on Open Access to Knowledge in the Sciences and Humanities 20 - 22 Oct 2003, Berlin

Establishing Open Access as a worthwhile procedure ideally requires the active commitment of each and every individual producer of scientific knowledge and holder of cultural heritage. Open Access contributions include original scientific research results, raw data and metadata, source materials, digital representations of pictorial and graphical materials and scholarly multimedia material.

Open Access contributions must satisfy two conditions:

1. The author(s) and right holder(s) of such contributions grant(s) to all users a free, irrevocable, worldwide right of access to, and a licence to copy, use, distribute, transmit and display the work publicly and to make and distribute derivative works, in any digital medium for any responsible purpose, subject to proper attribution of authorship (community standards will continue to provide the mechanism for enforcement of proper attribution and responsible use of the published work, as they do now), as well as the right to make small numbers of printed copies for their personal use.
2. A complete version of the work and all supplemental materials, including a copy of the permission as stated above, in an appropriate standard electronic format is deposited (and thus published) in at least one online repository using suitable technical standards (such as the Open Archive definitions) that is supported and maintained by an academic institution, scholarly society, government agency, or other well-established organization that seeks to enable Open Access, unrestricted distribution, inter operability, and long-term archiving.

3.2 Overview Current Situation of the Open Access Movement

Driving factors

The Open Access movement is driven by the following factors:

- An important driving force for the Open Access movement is the continuing journal crisis in academic publishing. Librarians increasingly see the journal crisis - a continuing price spiral of serials leading to cancellations by libraries and thus to a decrease in accessibility of academic information - as a fundamental crisis within the scholarly communication system and look towards the Open Access movement for a solution².
- Another important driving force is of course the technical developments with regard to publishing via Internet: the cost of distribution has been greatly reduced and according to one interviewee, it is now technically more difficult to limit access than to grant access to everyone.
- In addition, the advance of Internet search engines - and the relative standstill of abstract and indexing databases is changing the way of searching and finding information³ and provides an opportunity for the Open Access movement.

The green and the golden roads to Open Access

In the Open Access movement two routes are defined to achieve the ultimate goal of universal access to academic information: the green road and the golden road. The green road refers to (subscription-model) journal publishers that allow some form of the article to be archived in institutional repositories and to be made accessible either directly after publication or with a waiting period of 6 to 12 months. The golden road refers to a change in academic journal publishing: the academic journal itself is an Open Access journal and the business model has to change from the subscription model to the 'author pays' model^{4,5,6}. (It has to be noted that the 'author pays' model seldom means that the authors themselves pay: most often the funding agency or institute may pay the fee).

² The Serials Crisis; A White Paper for the UNC-Chapel Hill Scholarly Communications Convocation Judith M. Panitch, Sarah Michalak; January, 2005
Copyright ownership & the impact on academic libraries; L.N. Gasaway; 13 DePaul-LCA J. Art & Ent. L. 277; 2003

³ 2004 Miles Conrad Memorial Lecture; 46th NFAIS Annual Conference; February 23, 2004; The Battle for Mindshare: A battle beyond access and retrieval; John J. Regazzi;
http://www.nfaais.org/publications/mc_lecture_2004.htm

⁴ The "Green" and "Gold" Roads to Open Access: The Case for Mixing and Matching Jean-Claude Guédon Serials Review 2004; 30:315-328

⁵ The Access/Impact Problem and the Green and Gold Roads to Open Access Stevan Harnad, Tim Brody, Francois Vallières, Les Carr, Steve Hitchcock, Yves Gingras, Charles Oppenheim, Heinrich Stamerjohanns, Eberhard R. Hilf Serials Review 2004; 30:310-314

⁶ 'Author pays' has become a widely used term to describe a model where an upfront payment is made to the publisher when an article is accepted by a journal to be published and made available on an Open Access model. This payment replaces the subscription fee and can be referred to as an 'administration and publishing charge', it might be paid from various sources, such as the library budget, the departmental acquisitions budget or a research grant.

The green road - institutional repositories

Within the Open Access movement there is a lot of discussion as to which of the routes, the green road and golden road, has the most potential to succeed. Recently, the 'green road' has made progress in the academic publishing field through the following developments:

- A large percentage of academic journals now allow self-archiving of the published article by the author in institutional repositories⁷ although some publishers are now qualifying their initial policies on deposit in repositories.
- These institutional repositories have begun to gain greater potential influence by the introduction of Google Scholar. This recently introduced search engine of Google specialises in scholarly information and although it is still in its early developmental stages, it has shown that questions of accessibility and retrievability of the institutional repositories can potentially be solved in partnership with commercial search engines alongside more specialised services. Two interviewees expressed concern about this development. 'It could mean that scientists will choose to keep on publishing in the traditional journals with the subscription model and also archive the articles in the institutional repositories to achieve universal access. Such a development would mean that an important driving force to publish in Open Access journals finds another way of expressing itself'.
- Recently, the National Institute of Health (USA) has implemented a policy encouraging published results of research funded by it to be made available at least 12 months after the original publication via Open Access. The Wellcome Trust (UK) already has a policy in place that mandates Open Access within a six-month period. The Research Councils in the UK (RCUK) are also developing a position that favours the deposit of research they fund in either institutional or subject repositories⁸. These developments show that there is a trend towards Open Access and self-archiving.

The golden road - Open Access journals

With regard to the golden road to achieve the goal of universal access for scholarly information the following developments can be seen:

- There are now approximately 1500 Open Access journals included in the Directory of Open Access Journals⁹. The number of Open Access journals presently increases at the rate of approximately 50 journals per month.
- Over the recent years a number of important subscription-model journals have made the transition to Open Access (only or by choice of the author): among which the British Medical Journal, Nucleic Acid Review (Oxford University Press), Proceedings of the National Academic of Science – signalling a change in thinking among some publishers of traditional subscription model journals. In addition, the large commercial publishers Springer and Blackwell have started programmes whereby authors get the choice to have their articles published in an Open Access way.
- There are controlled studies under way¹⁰ to investigate the indications that articles from Open Access journals reach a wider audience and are cited more often than articles in subscription model journals.

⁷ The JISC funded Romeo project <http://www.sherpa.ac.uk/romeo.php>

⁸ The RCUK statement is still out to consultation.

⁹ <http://www.doaj.org/>

The ongoing debate and the success factors for the green and golden road

In the midst of all these developments the Open Access movement is (often hotly) debated in the journal literature (see appendix A), on websites and discussion lists and at conferences. The debate mainly centres on the following points:

- the long-term viability of the business model of Open Access journals
- the cost effectiveness of the Open Access journal model versus the subscription-based journal model with a special focus on the variation in author fee (the extremes so far: 500\$ Biomed Central versus 3000\$ Springer)¹¹
- other quality aspects (such as accessibility, quality of the peer review, impact factors and digital preservation)
- copyright practices

This ongoing debate seems to be influencing the opinions and policies of higher education institutes and funding agencies to the extent that policy changes are under way: many higher education institutes are setting up on institutional repositories, funding agencies (as seen in the example of NIH, Wellcome and RCUK) are considering changes in their policies. However, the ultimate success of both the green and golden road will depend on the opinions, attitudes and behaviour of the academics themselves:

- Are academic researchers aware of the journal crisis and the Open Access movement?

And, if so:

- Are academic researchers willing to change their publication behaviour?
- Are academic researchers willing to change the practice of transfer of copyright to the publishers?
- Are academic researchers willing to spend time and effort in self archiving?

¹⁰ A controlled study funded by JISC is presently carried out at the BMJ publishing group (Journal of Medical Genetics).

¹¹ See also: 'Business Models for Journal Content' by Rightscom (JISC report 2005; http://www.jisc.ac.uk/uploaded_documents/JBM.pdf)

4 Copyright Issues in Open Access Journal Publishing

4.1 Introduction

It can be argued that copyright is *the* fundamental issue at stake in the crisis in scholarly communication. The practice of transferring copyright to the publishers has resulted in an accumulation of copyrights with the publishers, thereby creating an imbalance of powers between the different stakeholders in the scholarly communication cycle (publishers, higher education institutes, academics as authors, academics as readers).

Therefore, proponents of Open Access are generally opposed to the transfer of copyright and want to replace it with a different practice. This leads to the following number of issues:

- What exactly is copyright?
- Who is the original owner of the copyright?
- Relation between Open Access and the transfer of copyright
- Good practices with regard to copyright in Open Access: what rights should Open Access involve?
- Copyright management: who should manage the copyrights?
- What are the trends and developments with regard to copyright as related to scholarly communication?

4.2 What is Copyright?

Copyright pertains to the exclusive rights to publish and distribute a work. Copyright is a bundle of rights, automatically assigned to the author(s) by legislation in most countries. It is a combination of moral rights (most important: the right as an author to be properly and fully acknowledged) and exploitation rights.

This study does not focus on the moral rights as they are well acknowledged in the scholarly communication system and are upheld even if the copyright is transferred to the publisher. Therefore moral rights are not an issue.

However, the exploitation rights do raise potential issues of ownership exploitation of scholarly material. In the traditional model the exploitation rights are in general fully transferred to the publisher. This means that reuse (often: republication and/or redistribution) of the original article by someone other than the publisher is limited or dependent on the publisher's permission. This is true for author and reader alike.

Exploitation rights are in themselves also a bundle of rights as well and reflect the needs and requirements of the parties involved and the mode of exploitation.

However, in scholarly communication the exploitation options for research articles are in reality rather limited: the main options are reuse for educational purposes and reuse for commercial purposes. Reuse of research articles is in practice mainly limited to:

- republishing and redistribution of the entire article
- reproducing parts of the article in textbooks/ syllabi etc.
- translating (parts) of the article into another language
- similar uses in digital networked environments

While the media for distribution are in practice limited to:

- printed form
- microform

- online access, including databases, virtual learning or research environments
- CD-ROM.

4.3 Who is the Original Owner of the Copyright?

The status of original copyright for research articles in the United Kingdom appears to be unclear: traditionally the scientists themselves acted as if he or she owned the copyright of the article. However, as the work is done as an employee of the university (or academic institute) the university itself could claim the copyright as well. Generally, the copyright of works carried out by an employee during his or her office hours rests with the employer. USA legislation has a similar arrangement: this is called 'work-made-for-hire'. Also in the Netherlands a similar discussion has been taking place. The counter argument to this taking place in practice is that academics are generally not undertaking the research for a specific institutional assignment and they should enjoy 'academic freedom'.

However, a number of interviewees stated that the concern of academic institutes (at least in the UK) about their legal rights is mainly restricted to educational materials and with regard to patents. It should be noted that this report does not include an exploration of university copyright policies. However it is important to acknowledge that the situation regarding universities and the ownership of research output is a complex issue, and that there are a variety of views. For example that it can be considered unreasonable for universities to have to pay royalties to publishers for photocopying articles that are written by their own employee's and that the results of research funded via public universities should be publicly available (the 'public good' argument).

In conclusion: The exact legal position regarding the ownership of copyright of research articles is not clear, for example whether it rests with the university or the academic. However in practice academics act as the rights holders and practically it rests with them. It is unclear if this will change in the near future with the developing intellectual property rights policies of universities and academic institutes¹². In a recent survey among academic authors by ALPSP, 80% of the authors originally held the copyright, with 14.5% the institute or company holding it while with 6.2% the copyright was in dispute.

¹² Many licence agreements make an exception for US government publications - those articles are in the public domain and no licence to publish is therefore necessary.

4.4 Relation between Open Access and the Transfer of Copyright

What is the situation with Open Access journals with regard to copyright transfer¹³?

- *Biomed Central, PloS and other journals: the authors retain copyright:* Two leading Open Access publishers – PloS and Biomed Central - do not ask for a transfer of the copyright from their authors. The author retains the copyright and licences the publisher to non-exclusively distribute his/her article on a non-exclusive basis. The reader/user is not restricted in reusing the article, except with regard to attribution: he is obliged to mention the full source (author and full bibliographic details). These licences are (modifications of) the Creative Commons licences.
- *Some journals offering Open Access as an option still ask for the transfer of the copyright:* a number of traditional publishers recently started journals based on an selective author-pay model for authors wishing to make their articles Open Access. The Proceedings of the National Academy of Sciences (PNAS) gives authors the choice of Open Access and so does the commercial publisher Springer Verlag with its Open Choice programme. In these cases these publishers still want the author to transfer copyright to them. So far the number of ‘Open Access’ articles published in this way seem to be limited¹⁴.
- *Some Open Access journals let the author retain the copyright but claim the commercial exploitation rights:* other (traditional) publishers, such as the British Medical Journal or the Oxford University Press with their journal Nucleic Acids Review leave the copyright with the author, but they do want the exclusive distribution rights and restrict commercial reuse. The difference between, on the one hand, retaining and, on the other, completely transferring copyright seems to be disappearing with this (exclusive) licence. The BMJ website indicates:

‘The Corresponding Author has the right to grant on behalf of all authors and does grant on behalf of all authors, an exclusive licence (or non exclusive for government employees) on a worldwide basis to the BMJ Publishing Group Ltd, and its Licensees to permit this article (if accepted) to be published in BMJ editions and any other BMJ PGL products and to exploit all subsidiary rights, as set out in our licence (bmj.com/advice/copyright.shtml).’

This leaves the lay person wondering what the difference is between total assignment of copyright and this licence. The interviewed copyright experts admit that it all depends on the contents of the licence agreement and/or the copyright transfer agreement. It is possible for a copyright transfer agreement to leave more rights with

¹³ When writing the report some preliminary findings of a survey among Open Access journals carried out by the Kaufman-Wills Group for ALPSP, AAAS and HighWire Study were published on the ALPSP website. This study reported that a considerable number of Open Access journals demand the transfer of copyright and another substantial proportion of the Open Access journals surveyed had no formal agreement with regard to the copyright. See also footnote 9.

¹⁴ When writing the report two examples of journals, where *all* articles can be universally accessed but the publishers require a complete transfer of copyright have been brought to the notice to researchers of this study: the Canadian Medical Association Journal and the Medical Journal of Australia. One can argue if these journals do fulfil the criteria of the definition of Open Access (see 3.1), but they certainly show that also within the traditional copyright transfer model universal access is possible.

the author than a restrictive licence agreement. Still, some interviewees maintain the position that the copyright should not be transferred to the publishers: all rights that are not explicitly mentioned (such as exploitation rights for future media, which can be transferred under Anglo-Saxon law but not under continental European legal systems) stay in a licence agreement with the author. Another argument in favour of a licence agreement instead of the copyright transfer agreement is that the copyright has to be transferred by means of an official agreement signed by the two parties; for a licence agreement such administration is not necessary (an agreement signed by two parties is not necessary).¹⁵

In conclusion: most Open Access journals do not ask for the transfer of copyright from the authors but arrange the transfer of some rights via a licence agreement. There is considerable variation in these licence agreements between various Open Access journal publishers. Some licence agreements can hardly be distinguished from complete copyright transfer agreements in practical terms; however, this does not completely diminish the position of Open Access proponents that copyright transfer is not desirable in scholarly communication.

¹⁵ One possible argument in favour of copyright transfer - the publisher is in a better position than the individual author to carry out the task of monitoring and enforcing copyright - will be explored later in this chapter.

4.5 Good Practices re Open Access Copyright: which Rights should Open Access Involve?

4.5.1 Introduction

As was seen in the definition of the Berlin conference (paragraph 3.1), apart from universal access to research articles, it is also important for users to be permitted 'to use the Open Access information for all legitimate scholarly uses'. Discussions on copyright issues centre on the definition of 'legitimate scholarly uses'. In paragraph 4.4 a number of options regarding licence agreements were shown that already differed considerably. What are the issues? The differences in copyright policies of Open Access journal publishers focus on three topics:

- educational purposes
- commercial purposes
- the 'share alike' clause¹⁶

The options in Open Access copyright policies are greatly influenced by the Creative Commons. Therefore, before going into the three topics, the Creative Commons should be discussed.

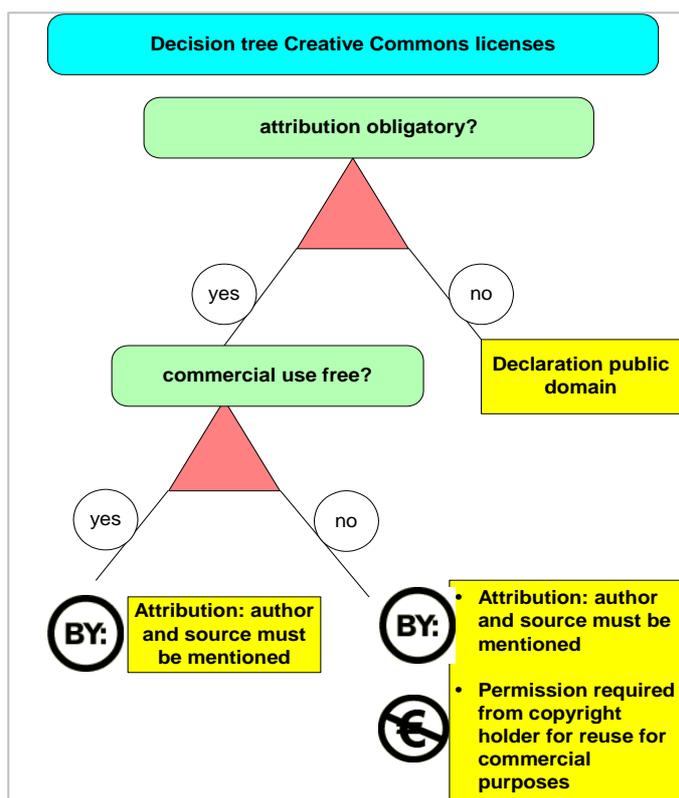
4.5.2 Creative Commons

Creative Commons was founded in 2001, being in part inspired by the open source software movement. Creative Commons has changed the copyright slogan "all rights reserved" into the slogan "some rights reserved". They have created various types of licences whereby the creator can protect his/her works while encouraging certain defined uses. Creative Commons is described by one interviewee as 'a breakthrough: before this the Open Access movement was mainly an open source movement. Now there are more possibilities for parties like my organization to participate'.

On this page a decision tree on the choices for the Creative Commons licences is depicted. The decision tree is based on their website

www.creativecommons.org

If an author wants his work to be part of the public domain, a declaration for the public domain is given. However, since in the academic community an author generally wants to be cited, attribution is obligatory. If the author does not want to have restrictions on commercial reuse, the Creative Commons licence 'attribution' is



¹⁶ Share alike: 'if the user alters, transforms, or builds upon this work, the user may distribute the resulting work only under an Open Access licence'

applicable. If the author wants to have restrictions on commercial use, a licence with a non-commercial clause is chosen¹⁷.

It is also important to note that Creative Commons has an approach consisting of three layers:

- human-readable layer (an explanation of what the licence entails, with an logo)
- lawyer-readable contract (this can to be adapted to the national law)
- machine-readable code (metadata; in this way machines e.g. internet search engines could search for material that is available under a certain type of licence).

Science Commons is an offshoot of Creative Commons and started only a few months ago. An excerpt from their website:

Science Commons' Publishing Project will reduce the legal and logistical effort involved in managing copyrighted scientific publications. Our work includes an exploration of the unique needs of peer-reviewed literature, technical methods to encourage greater legally permissible information sharing, and the construction of a resource library for all stakeholders: commercial publishers, science and medical society publishers, universities, libraries and individual researchers.

Initial projects include pre-print and post-print standard commercial publisher licenses, supporting author self-archiving through education, outreach, and technology, institutional archive licences, and the impact of collaborative annotation and text mining on copyright management in institutional or corporate archives.

Like Creative Commons, we believe that robust interaction between the public and private domains is essential to innovation and progress. Science Commons works with publishers, libraries, universities, and scientists to continue to promote the "some rights reserved" approach of Creative Commons in scientific literature.

4.5.3 Attribution Only

The Creative Commons licence 'attribution' is used by the leading Open Access journal publishers PloS and Biomed Central.

In an interview with him, the publisher of Biomed Central emphasises that in his view the Open Access model is only relevant for research articles (so: NOT for review articles, editorials, news and journalistic articles, textbooks etc.). In this view, it is in the interest of the researcher to have the results of research published: if the results are not published, it is as if the research had not taken place at all. In this view, only the moral rights, the right to be cited through a proper a proper citation, are important for the researcher while the exploitation rights are not important and can only hamper scientific communication about the research results. Thus, the Creative Commons licence 'attribution' is the most suitable licence for research articles. This interviewee warns against the view that copyright is a sort of property right: 'if the research article is the property of the scientific author, then he or she should realize this property is heavily mortgaged: the research is paid by the taxpayer and/or the funding agency'. What is the reason for having no restrictions on commercial reuse? A quote from an editorial¹⁸ in PloS biology: 'PloS has chosen, for reasons both philosophical and pragmatic, to permit the commercial use of works we publish. As a matter of principle, all of our policies reflect the view that scientific publishers are service providers and should not themselves restrict the potential applications of the largely

¹⁷ Creative Commons has other options as well that are not depicted here.

¹⁸ Gass A, Doyle H, Kennison R (2004) Whose Copy? Whose Rights?. PloS Biol 2(7): e228

publicly funded work in their journals. More concretely, if a commercial enterprise is interested in repackaging the articles that PloS has published, we are loath to prevent an author's work from wider distribution. Any risk that a company will use an article for a purpose its author would be uncomfortable with is, in our view, substantially outweighed by the benefits of allowing—not on a case-by-case basis, but across the board—the reproduction of the article for inclusion in online encyclopaedias, or for distribution in countries in which Internet access is unreliable, or, indeed, for creative uses we hope to inspire by making primary research articles legally available to commercial interests'. The interviewee of Biomed Central adds some other relevant examples: in a few instances in Nigeria and India where articles have been taken from the internet and republished it on CD-ROMs with the purpose of selling them to medical doctors in rural areas where internet connectivity is still scarce.

One interviewee from an OA publisher admits that scientific authors, when asked, often 'trip' over the term 'commercial'. In this respect the pharmaceutical industry is often depicted as a potential 'free rider' in the scholarly communication system (see page 22 for a further elaboration of this point). The interviewee believes this is a false argument: there are also many small 'start-up' companies and recent figures indicate that industrial companies already commission an important percentage of academic research.

4.5.4 Commercial Use Limited

A number of other Open Access journals use licences that limit reuse for commercial purposes. Three models can be distinguished:

- the commercial exploitation rights stay with the author - as with, for example: the Electronic Journal of Comparative Law
- the commercial exploitation rights are transferred to the publisher - as with, for example: the British Medical Journal; Nucleic Acid Review
- exploitation rights are limited to Open Access licence only: EGU journals

Commercial exploitation rights stay with the author

The Open Access journal 'Electronic Journal of Comparative Law' lets authors retain their copyright and restricts reuse under the Open Access to educational purposes.

The EJCL started in 1995 with the aim to set up a scientific peer-reviewed journal with a good reputation in the electronic environment. Its copyright policy is simple:

- the author keeps the copyright
- the journal asks only for a licence to publish the article *as the first publisher of it*
- the author is obliged to mention the EJCL as a source whenever he/she later republishes the article on other platforms.

The copyright notice (see below) mentions that classroom use is free but other uses depend on the permission of the authors themselves.

Are there many requests for commercial reuse? The editor-in-chief - interviewed for this study - stated that the journal had no information on this point: the request for reuse goes directly to the author and therefore there is no centrally held data about the number of requests made.

Copyright notice EJCL: Readers are reminded that this work is protected by copyright. While they are free to use the ideas expressed in it, they may not copy, distribute or publish the work or part of it, in any form, printed, electronic or otherwise, except for reasonable quoting, clearly indicating the source. Readers are permitted to make copies, electronically or printed, for personal and classroom use.

The Open Access journal SCRIPT-ed (a journal on law and technology) has a similar policy with regard to copyright: the author keeps the commercial exploitation rights, other rights are given to the users under a specially written licence (<http://www.law.ed.ac.uk/ahrb/script-ed/index.asp>).

Commercial exploitation rights are transferred to the publisher

Two Open Access journals (the British Medical Journal and Nucleic Acid Review – prestigious journals that recently switched to an Open Access model) use licences that keep the copyright with the author but transfer all commercial exploitation rights to the publisher¹⁹. What does this policy mean? The interviewee from the BMJ publishing group explains: in the beginning of 2000 the BMJ publishing group changed their copyright policy, probably as one of the first traditional science journal publishing companies in the world. From 2000 onwards they have left the copyright with the author and they only require an exclusive licence to publish the article first and to claim all commercial exploitation rights. The author retains all other rights. In addition, the BMJ publishing group give the author a percentage of the royalties if they enter into a commercial republishing or redistribution deal on the basis of the author's article.

The advantage for authors is that they can do whatever they want with their own article without asking permission from the BMJ publishing group as long as it does not involve commercial rights. The other advantage of course concerns the potential revenue for the authors from royalties: the interviewee thinks that so far, this is a unique approach in the world of academic publishing.

Nucleic Acids Review

Richard Gedye²⁰ describes the case of the journal Nucleic Acids Review, originally a subscription-based journal that recently switched to an Open Access model. Commercial reuse is restricted under the licence. A quotation: ‘and I agree with many of those views - it is morally desirable that authors should retain their copyright and that readers of those papers be allowed to re-use the content for educational and research purposes. But there are other scenarios where scientific research is used to defend a profitable commercial company’s business interests. For example, pharmaceutical companies often distribute thousands of copies of published research papers purely for marketing purposes. Under a restriction-free Open Access licence, a publicly funded research paper that happens to highlight the efficiency of a company’s products, could effectively be used to further such a company's commercial ends for free. By requiring anyone who wishes to re-use any aspect of a paper for commercial purposes to seek permission and pay a fee to do so, we achieve several things. We ensure that the published content is not misused in any way that would serve a commercial company's business ends at the expense of the integrity of

¹⁹ Two medical journals (Canadian Medical Association Journal, Medical Journal of Australia) do likewise - but within a complete copyright transfer to the publisher.

²⁰ Richard Gedye, Open Access Is Only Part of the Story, *Serials review* 2004;30:271-274

both the researcher and the journal. We maintain another revenue stream for the journal, which allows us to keep author charges as low as possible in the immediate future'. And further on: 'we also keep commercial players, such as pharmaceutical companies, in the financial loop. By being forced to pay for commercial re-use, they can't become the 'free riders' that they are often accused of being in the author-pays OA model'.

Is it an important revenue stream? The interviewee from BMJ states that one should make a distinction between purely academic journals and more clinical journals. With the latter the revenue from reuse for commercial purposes is potentially larger. For the British Medical Journal itself the revenue stream from commercial reuse is considerable and is handled by a special department.

EGU journals

Other Open Access journals use the Creative Commons licence with a restriction on reuse for commercial purposes. Examples of this approach are the journals of the European Geosciences Union (EGU) - published by Copernicus, a German publisher of a number of Open Access journals. The print versions of these journals are subscription-based: logically, commercial reuse of the article is restricted. A quote from their website (www.copernicus.com): 'grant Copernicus the right in perpetuity to make copies for commercial purposes, keep to themselves the right to contribute the article to the collected reprints of any one of the author(s) or their university, educational or research establishment, but otherwise grant Copernicus the sole right to make copies for commercial purposes for a period of five years from the date of publication'. The explanation: 'Copernicus requires commercial rights in order to produce hardcopy volumes of the journal for sale to libraries and individuals. It is the policy of Copernicus the case of their Open Access journals, the cost of such publications for members of Copernicus no more than the cost of printing and postage, and to add reasonable COP office overheads and agencies' discounts for non-members libraries and agencies'.

Overview of the copyright policies of the above-mentioned journals	
Transfer of copyright	No transfer of copyright
Commercial reuse allowed	Commercial reuse allowed
➤ Not found	<ul style="list-style-type: none"> ➤ Biomed Central (CC 'attribution') ➤ PloS (CC 'attribution')
Commercial reuse restricted	Commercial reuse restricted
<ul style="list-style-type: none"> ➤ Springer Verlag Open Choice ➤ PNAS ➤ Canadian Medical Association Journal ➤ Medical Journal of Australia 	<ul style="list-style-type: none"> ➤ British medical Journal; Nucleic Acids Review (Oxford University Press) <ul style="list-style-type: none"> ○ exclusive distribution channel ○ exploitation rights for BMJ ○ commercial reuse after permission by BMJ ➤ Electronic Journal of Comparative Law; SCRIPT-ed <ul style="list-style-type: none"> ○ commercial exploitation rights stay with author
	Share alike
	<ul style="list-style-type: none"> ➤ EGU journals (Copernicus): <ul style="list-style-type: none"> ○ CC: Attribution/ non-commercial / share alike

4.5.5 Educational Purposes

Why all this discussion about limiting the reuse for commercial purposes? Again, one needs to go back to the origins of the Open Access movement: by definition users should have ‘the permission to use the Open Access information for all legitimate scholarly uses’. However, if one wants to keep the commercial exploitation rights (with the author, with the institute, with the publisher), one runs into problems with the demarcation of reuse for commercial purposes and reuse for ‘legitimate scholarly uses’ – also named ‘educational purposes’.

What is reuse for educational purposes? In an earlier project for the Zwolle group a number of rights for possible educational purposes were identified. The BMJ licence (and its explanation on the website of BMJ) also tries to identify educational purposes in order to distinguish them from commercial purposes.

The table below lists these, distinguishing between:

- Copying (for classroom use or for professional use) – the Zwolle group project even distinguishes between copying for distribution inside the institute and outside the institute of the author
- Republishing (the whole article or parts of the article in textbooks etc.)
- Reuse parts of or arguments in the original article to make a derivative work.

Reuse options for educational purposes		
	Rights identified in earlier project for Zwolle Group²¹	BMJ licence
Copying the article	The right to copy the Article or part of the Article for educational use within your employing Institution	Making a reasonable number of copies for personal or non-commercial professional use. This includes the contributor’s own teaching purposes.
	The right to copy the Article or part of the Article for educational use outside your employing Institution	
Re-publishing the article	The right to re-publish the Article in any other publication	Republishing part or all of the article in a book or other publication edited by the author (except for multiple contributions in the same book or publication, for which permission needs to be sought - please email <i>BMJ</i> permissions)
Re-use parts of the article	The right to re-use the content of the Article or create new works based upon the published content (make derivative works).	Using individual figures or tables or extracts of text (up to 250 words) in other publications published by a third party.
		Using the article in a course pack or compilation (whether paper or electronic) in the authors’ institution. This does not apply if a commercial charge is made for the compilation or training programme.

²¹ Courtesy Wilma Mossink, SURF

These three kinds of use will probably be regarded by most proponents of Open Access (and possibly by most scientists) as ‘legitimate scholarly uses’.

In the present situation one has to seek permission from the publisher for republishing an article. In a study where permission was sought to republish articles for Web-based courses (on a closed website) approximately half of the 43 publishers that were contacted refused, asked a fee or did not reply. The process of asking permission was also labour-intensive and thus costly²². This leads to the conclusion that ‘legitimate scholarly uses’ are hampered by the present system.

However, the demarcation of these activities from commercial activities is problematic²³. One interviewed copyright expert stated that the borders between educational use and commercial use are becoming fuzzier. For instance, universities in the UK generally receive only 40% of their income from the government; the other 60% derives from other sources. From a legal viewpoint the nature of activities is what counts rather than the nature of the organisation. Universities and academic institutes - public institutions, generally - are performing more and more commercial activities: they are becoming so-called hybrid organisations. For their commercial activities the rules for commercial purposes apply. Another copyright expert stated that if educational purposes are like a walled garden with commercial purposes being on the outside, this wall is becoming very porous indeed. The Open University UK, for instance, has a wholly owned subsidiary that sells its educational material outside the UK. In this way the commercial markets are becoming an integral part of the ‘core business’ of the Open University. Thus, in case the Open University wanted to reuse an Open Access article for its educational material, a licence in which commercial purposes are excluded would be prohibitive. An interviewee stated that traditionally, face-to-face education is seen as an ‘educational purpose’. However, with the advance of distance learning and with the universities providing courses for Continuous Professional Education, these activities often harbour commercial aspects. ‘The distinction between commercial purposes and educational purposes is extremely slippery’. This interviewee concludes that the distinction between educational purposes and commercial purposes cannot be defined in a clear and easy-to-understand operational criterion.

²² Restrictions impeding webbased courses: a survey of publishers’ variation in authorising access to high quality on-line literature; M. Langlois, R.F. Heller, R. Edwards, G. Lyratzopoulos, J. Sanders; BMC Medical Education 4:7; 2004

²³ The JISC Model Licence might offer some guidance in this. In this licence commercial use is defined as follows: ‘The resource must not be used for any Commercial Use. This means use for the purpose of monetary reward (whether by or for the Institution or by students) by means of the sale or loan of the resource. Use in the course of research funded by a commercial organisation and the recovery of *direct cost* by the Institution from staff and students *does not* constitute Commercial Use.’

4.5.6 Share Alike

The earlier mentioned European Geosciences Union (Copernicus publishers) use the Creative Commons licence with the 'share alike' clause. Below, the picture of the Creative Commons and a short explanation are given.



Share Alike. If you alter, transform, or build upon this work, you may distribute the resulting work only under a licence identical to this one.

The interviewee from the European Geosciences Union explains that this policy is chosen for the Open Access journals from the EGU as an experiment for a number of years. They await feedback from the authors and the readers from their journals. The 'share alike' clause was included because there was a feeling that the combination of the 'attribution' and 'non-commercial' clause don't give enough control to the author(s). It was thought that with the 'share alike' clause one could make it free to the user to use (parts of) the articles in lecture notes or other publications, but that then these should be available via Open Access as well. If this is explained to scientists, the common reaction is that this seems a sensible thing to do. However, the interviewee emphasises that it is an experiment that has vbeen undertaken over a number of years and that no evaluation yet has taken place.

This 'share alike' clause obviously derives from the 'Open Source' movement and was written for cultural expressions, such as music, theatre, literature etc. The interviewed copyright experts were unanimously of the opinion that it should be rewritten to be fully applicable to scholarly communication. Especially the phrase 'built upon' which is a stumbling block as nearly all academic work is built upon earlier academic work.

However, a rewritten clause meaning that one can reuse the article as long as this reuse takes place under an Open Access licence, could draw a number of supporters. One copyright expert (also an author of academic articles) said that: 'An author would like to keep control of his work and be able to choose in which way it will be used. There is an underlying feeling that other people act like free riders' because of commercial purposes. And: 'I would resent it if a third party used my article for commercial purposes, if I meant it to be Open Access'. So, this clause is in line with the line of thinking of the interviewee. However, the interviewee thinks that this model should not be too strict: if someone cites a long quote from an article, he or she should be able to publish in a subscription model journal. This model might provide an interesting way around the difficulties in the distinction between commercial and educational purposes.

4.5.7 National Differences

The differences in national copyright legislation are considerable. These differences have also consequences for the application of Creative Commons licences. In the three layer approach of Creative Commons this means that the lawyer-readable layer has to be adapted to the national legislations. This has been successfully done in 16 countries so far, including England and Wales, Scotland and the Netherlands. This effort can be relatively unproblematic: an interviewee who was involved in this effort for the Netherlands stated that the entire effort lasted a couple of months. National transpositions are especially important for the national cultural and knowledge communities. With regard to the field of scholarly communication (mostly international) two other interviewees have stated that *in practice* these differences between national legislations need not play an important role in copyright licences for Open Access publishing. However, these national differences clearly have to be a point of particular interest when further developing good copyright practices in Open Access publishing.

4.6 Copyright Monitoring and Enforcing

Copyright infringement

Some opponents of Open Access argue that the copyright transfer is necessary to give publishers the function of monitoring and enforcing the copyright. A quotation of the editor-in-chief of the American Journal of Clinical Nutrition ²⁴: ‘On the face of it, the interactive concepts of copyright elimination and Open Access might appear as a rational and solid foundation for the most timely and widest dissemination of new scientific knowledge to humanity. Yet these concepts are strongly opposed by the established scientific community because they could produce the exact opposite result - distortion of scientific findings and increased public confusion’. Further on: ‘the copyright from each published article is transferred to the ASCN, which has the legal obligation to defend all AJCN scientific content against potential misuse and distortion’. What does this entail? The editor-in-chief comes up with a hypothetical example: ‘suppose, for example, that we publish a paper in which the author carefully evaluated the composition, benefits, and risks of a nutritional supplement, in accordance with our stated policies. Without the ASCN-protected copyright, the supplement marketer would simply list and publish the benefits, without the formulation of risks of usage of the supplement, in its promotional advertising. Because average consumers are unlikely to seek out the original basis for advertising claims or original publications of the research, their choices would be based on misinformation taken out of context from an unbiased, published scientific article’. However it can be argued that this is not necessarily the case since:

- 1 – There is no copyright elimination in Open Access.
- 2 – In order to give the publisher the role of copyright guardian, copyright transfer is not necessary: this can also be arranged under a licence agreement. For instance, Oxford University Press licence states: ‘you authorise us to act on your behalf to defend the copyright in the Article if anyone should infringe it and to adjust the copyright of the article in the US and other countries, if necessary’.
- 3 - Such a distortion can probably also take place without republishing parts of the article - even when the publisher has the copyright transferred to them.

Even so, this raises the issue whether a function of monitoring and enforcing copyright within scholarly communication is necessary and, if so, which party within the scholarly communication field is best positioned to fulfil such a function.

Function of monitoring and enforcing copyright necessary?

One interviewee from an Open Access publisher: ‘There are only incidents of copyright infringements - this happens only a few times per year. Recently these were often cases in which companies are using information from our journal on their website, frame it as their own and sell advertisements on the back of it’.

Another interviewee: ‘the legal department handles the copyright questions and copyright issues of the 3500 employees of our institution. In practice this means approximately 50 questions per year, in two or three cases per year on average this will lead to some sort of action by the department’.

So copyright infringements do happen. But an interviewee from an Open Access publisher claims that it all depends on the contents of the licence: ‘the ‘attribution’ licence makes copyright monitoring and enforcing superfluous. Most cases mentioned

²⁴ C.H. Halsted, Copyright protection and Open Access, Am.J.Clin. Nutr 2003;78:899-901

by other publishers are about plagiarism anyway'. Another copyright expert agrees: 'with this type of licence there is hardly any copyright infringement imaginable?' and 'the more the licence spells out, the more possibilities for copyright infringements'. Other interviewees state that - if such a role is necessary within the scholarly communication field - the publisher is best positioned to fulfil this role as publishing houses generally have a greater longevity than authors. In addition, publishers are generally better positioned to guard copyrights by, for instance, hiring legal advice'. Apparently, with licences that restrict commercial reuse, the function of 'copyright guardian' is necessary and best fulfilled by the publisher. In these licences a clause that arranges such a role for the publisher (see the above-mentioned clause of Oxford University Press) should be included²⁵.

²⁵ As earlier mentioned one could argue that the position of the universities and academic institutes is underrepresented in this study because of the lack of interviews with university administrators. Perhaps a possible viewpoint – that universities play a role in monitoring and enforcing copyright – therefore has not been mentioned.

4.7 Trends and Developments

One step back: a broader view on copyright

A quick scan of the present debate among law specialists on copyright was done by surveying the most recent literature²⁶ with the purpose of identifying trends and developments relevant to the field of scholarly communication. The following issues were identified:

- Digitization and mass use are changing the nature of copyright: originally a property right focused on protecting work from being copied, but it has developed into a weighing of different interests. Because of the technical possibilities of Internet and the resulting mass use of information, the industries have reacted with a successful push to extend the copyright in legislation. However, a counter view is now underway. The citizen now encounters the copyright law and its restrictions in his own living-room: citizens' acceptance on limitations in this sphere will be very low²⁷.
- There is a general consensus among law experts that intellectual property rights are now too strong. To counterbalance there are some movements: property-pre-emption investments (some companies are seen to publish research results to offset other companies in claiming patents in this research area – 'defensive publishing') and Creative Commons²⁸.
- The centralised commercial control of information contact has been the driving force behind the expansion of copyright. However, the development of Internet and the widespread use of computers threaten the viability and the desirability of this expansion. Decentralisation and disintermediation are creating a shift in the information world, which makes changes in copyright law necessary²⁹.
- Apart from governmental production and commercial production, Benkler³⁰ distinguishes an emergence of sharing as a modality of economic production. As examples of such sharing as an economic production mechanism he describes carpools and distributed computing. He sees this networked social sharing mechanism as a third model of organising economic production, alongside markets and the state. Policy prescriptions should therefore accommodate this emerging importance of social sharing.

From these recent articles it appears that the Open Access movement in the scholarly communication world is part of a larger countermovement against the extension of intellectual property rights by commercial companies. In addition, decentralisation and the possibilities of sharing and working together via Internet (the keyword here is network) lead to new phenomena with economic and legal implications. This also seems to apply to (parts of) the academic world.

²⁶ The literature was identified among others through a search in Westlaw

²⁷ Een nieuw auteursrecht tussen eigendom van expressiewerken en beleid voor kennisdiensten, Prof. Mr. A.A. Quaedvlieg, from: H. Franken et al, *Zeven essays over informatietechnologie en recht*. pp. 261-315, 2004, Sdu uitgevers

²⁸ A new Dynamism in the Public Domain, Robert P. Merges, 71 U. Chi. L. Rev 183, 2004

²⁹ Reform(aliz)ing copyright, Christopher Sprigman, 57 Stan. L. Rev. 485, 2004

Amateur-to-amateur, Dan Hunter, F. Gregory Lastowka, 46 Wm. & Mary L. Rev. 951, 2004

³⁰ Sharing Nicely: on shareable goods and the emergence of sharing as a modality of economic production, Jochai Benkler, 114 Yale L.J. 273, 2004

Trends and developments in scholarly communications

The interviewees observed the following trends with regard to copyright issues in scholarly communications:

- The repositories of academic institutes will become increasingly important and together with search engines like Google Scholar will offer new ways to disseminate research and scholarly knowledge.
- Open Access will spread and limit the possibilities to build a monopoly in academic publishing.
- Print publications will disappear entirely: this will mean an increasing financial pressure on digital publishing.
- Universities will increasingly become publishers of online educational materials. Because of this, universities will increasingly claim the copyright of educational materials; however, the author will probably keep the copyright of research articles.
- The current practice of transferring the entire copyright to the traditional journal publishers will become increasingly difficult to defend within an Open Access environment.

4.8 Towards Models of Good Practice in Copyright in Open Access Journals

4.8.1. Main conclusions from the interviews and literature survey

Open Access journal publishing only relevant for research articles

The interviewee from Open Access publisher Biomed Central indicated an important limitation for Open Access journal publishing: only with research articles does the interest in publishing lie very much with the author; with other types of articles (such as review articles, chapters in textbooks etc.) this is much less the case. With regard to research articles, the author not only has an interest in getting the research results published, he also has an interest in maximising the impact of his articles. Thus, the Open Access model - with the 'author pays' - business model and its universal access - has obvious advantages for the author. Again, this is much less so with other types of articles - indeed, Biomed Central itself publishes a number of review journals with the subscription model.

Legitimate scholarly uses: demarcation problems between educational purposes and commercial purposes

Apart from universal access the Open Access movement also strives to give the user of the Open Access information the right to use or reuse this information for all legitimate scholarly uses. However, there are serious demarcation problems with defining legitimate scholarly use on the one hand, and defining commercial purposes on the other, as universities and academic institutes increasingly engage in commercial educational activities. From this study it appears that a clear and easy-to-understand demarcation of legitimate scholarly use and commercial use is difficult to formulate.

Copyright transfer to the publisher is not necessary for commercial exploitation by the publisher

In this study a number of journal publishers are described where authors granted a licence to the journal publisher and where the commercial exploitation rights were transferred to the journal publisher. A copyright transfer agreement appears not to be necessary to support the commercial activities of the journal publisher.

The role of monitoring and enforcing copyright infringements is very much dependent on the copyright licence and is, if necessary, best placed with the journal publisher

From the interviews it appears that copyright infringements do occur – albeit at a relatively low incidence rate. In addition, copyright infringements have a direct relation with the content of the licence. The 'attribution' licence - used by a number of Open Access journal publishers - seems to be relatively free from copyright infringements. Other licences could require the function of monitoring and enforcing copyright infringements. It is concluded that such a function is best placed with the journal publishers, since individual authors are not well-placed to carry out such a function at all.

4.8.2 Models with regard to Copyright Management in Open Access Publishing

In this study four copyright practices in Open Access publishing were identified, analysed and further studied³¹. The broad outlines of these practices are:

- A. The ‘attribution’ licence, whereby the author keeps the copyright but gives a broad permission to use and reuse the article. Examples are PloS and Biomed Central.
- B. The commercial exploitation rights are transferred to the publisher by a licence agreement that limits legitimate scholarly uses to some extent. Examples are the British Medical Journal and Nucleic Acid Review.
- C. The rights to reuse and transform the articles are limited to Open Access licences as well. Examples are the EGU journals (Copernicus).
- D. All (or most) rights are reserved, but this time not by the publisher but by the author. Examples: Electronic Journal of Comparative Law; SCRIPT-ed

4.8.3 Direct relation between copyright policy and business model of the journal

It is important to note that there seems to be an important and direct relationship between copyright policy and the business model of the journal. Although this is not extensively surveyed, the examples of copyright policies and Open Access journals that have been studied more closely seem to imply the following relationship:

- Model A and C: the more recently started Open Access journals often use the relatively new licences of Creative Commons. Often publishing organisations are involved (e.g. Plos, Biomed Central, EGU/Copernicus) and author fees are sometimes requested. Model C can be seen as a variant of model A, using another licence of Creative Commons. Some of the journals have a print version as well.
- Model B: journals that use model B-like copyright policies (commercial exploitation rights rest with the publisher) often have important revenue streams which should be protected by the copyright policy. Revenue streams are generated by advertising, by reprinting activities and by membership fees to an association. Author fees are often not requested. Two journals that require transfer of copyright (thus also the exploitation rights) but have a universal access policy, seem to have similar business model (Canadian Medical Association Journal; Medical Journal of Australia)³². Some of these journals have print versions as well.
- Model D: journals that use model D-like copyright policies often Open Access journals that started already a number of years ago (i.e. before the Creative

³¹ It is important to note that other copyright practices in Open Access journals exist but not included in this study.

³² As an illustration of this direct relationship between business model and copyright policy the change in Open Access policy of BMJ might serve as an example: until recently, BMJ.com was totally freely available via the Internet. The larger part of BMJ's revenue stream came from the classified job advertisements and other advertisements. The free availability via the Internet even enhanced their status. Last January this policy was changed. BMJ.com is now accessible to subscribers only, with the exception of original research articles (where universal access is maintained). The reason for the change was a change in government regulations with regard to classified job advertisements. This has led to a drop in revenue from job advertisements and therefore, an additional revenue stream from electronic subscriptions was necessary. Thus, the news sections and editorials, etc in the electronic version are now only available for subscribers.

Commons licences were published). Often these journals are published by the academics themselves - no publisher or publishing organisation is involved. Logically, to reduce the workload as much as possible for the editorial board, the copyright stays with the author and permission requests should be directed to author and not to the editorial board. Also, in these journals author fees are often not requested. The journals seem to be mostly electronic only (no print version).

4.8.4 What is a good practice?

The aim of this study is to identify good practices in copyright in Open Access journal publishing. Which of these copyright practices are good practices?

Below the (potential) advantages and disadvantages of each model are discussed.

Model A

Model A has the following potential advantages:

- legitimate scholarly uses are all possible for everyone: authors are thus maximising the impact of their research article
- a function of monitoring and enforcing copyright infringements is hardly necessary.

From the viewpoint of some model A might have a disadvantage because that industries (read: pharmaceutical companies) may reuse articles without any fee, thereby acting as 'free riders' on the academic community. This argument counts mainly for clinical journals.

Another potential disadvantage might involve a certain risk for the user of material licensed under a Creative Commons licence. The warranty clause of CC licences is somewhat meagre. The wording in the UK version: 'The Work is licensed by the Licensor on an "as is" and "as available" basis and without any warranty of any kind, either express or implied'. Some lawyers take issue with this - in their view insufficient - warranty clause: if the original author did infringe other copyrights in his Open Access article, the legal risks of this infringement could be transferred to the user who republished (parts of) this article.

Model B

Model B has as a potential advantage that an additional revenue stream from commercial exploitation by the publisher might lower author fees.

Model B potentially has also disadvantages:

- a number of legitimate scholarly uses (for educational purposes) might fall under the definition of commercial purposes
- a function of monitoring and enforcing copyright infringements might be necessary.

Model C

The main effect of Model C might stimulate Open Access publishing. The conditions for republishing, redistribution and transformation are very clear: these are permitted when the resulting product or service is also Open Access. This might be important for authors who consciously choose an Open Access journal for their article.

This might at the same time be the main disadvantage of model C: the limitation on republishing - only under an Open Access licence - might lower the potential impact

of the article. Another potential disadvantage might lie in the warranty clause of the CC licence - see model A.

Model D

The main advantage of Model D is that the copyright licence is between the author and the user. The journal is not involved and therefore has little or no workload relating to copyright issues.

However, Model D does have a number of potential disadvantages:

- The function of monitoring and enforcing copyright is in this model placed with authors, who are - according to an earlier conclusion of this study - generally not very well equipped to carry out this function.
- The transactional costs will become high if someone wants to reuse a significant number of articles for commercial purposes: individual authors will be difficult to locate and might have no experience and/or businesslike approach with permission requests.
- In addition, this model might pose ethical questions in journals where the commercial exploitation rights are important: in medical journals pharmaceutical companies sometimes pay enormous sums for the publishing and redistributing reprint of certain articles. This might jeopardize the independence of the researcher(s)³³.

4.8.5 Proposition of four Models of Good Copyright Practices in Open Access publishing

Model	The author has following rights:	The publisher has following rights:	Others have the following rights:
A	all usage allowed including reuse for commercial purposes	not applicable	all usage allowed including reuse for commercial purposes
B	all usage allowed except for commercial purposes	OA publisher receives commercial exploitation rights	all usage allowed except for commercial purposes
C	all usage allowed	not applicable	all usage allowed if republishing then also Open Access
D	author keeps commercial exploitation rights	not applicable	all usage allowed except for commercial purposes

³³ For these reasons this model was initially not included in the qualitative study among authors as a good practice. However, in a workshop with librarians in the Netherlands where the preliminary study results were discussed it was widely felt that this model should be included in the websurvey.

The four models of good copyright practices in Open Access publishing are depicted in the figure above. These models have been used for further research among the authors in this study in order to gauge their opinions and visions with regard to copyright. If these models are acceptable to authors of Open Access articles they could be used as vehicles for awareness-raising. The use of easy-to-understand models is believed to be instrumental in both research and in awareness-raising efforts.

5. Author Attitudes

A significant part of the study consists of a qualitative and quantitative study among authors of Open Access articles. Firstly the results of a literature study of earlier author studies is given in paragraph 5.1, followed by the results of the qualitative study - consisting of 12 interviews with authors of Open Access articles about copyright issues (paragraph 5.2). The results of the web survey among 1200+ authors of Open Access articles are presented in paragraph 5.3.

5.1 Overview of Other Studies among Authors

Survey	Population	Nr. invitations	response rate
ALPSP (2002) ³⁴	academic authors	14643	8.5%
PNAS (2004) ³⁵	PNAS authors	610	34.4%
NAR (2003) ³⁶	NAR authors	331	48%
JISC/OSI (2004) ³⁷	academic authors traditional journals	5000	3.1%
Idem	academic authors Open Access journals	3059	5%
CIBER (2004) ³⁸	academic authors	91500	4%

In the literature overview a number of recent quantitative surveys among academic authors were identified (see table above). In addition, a qualitative study (telephone interviews among BMJ authors) was identified³⁹.

The following topics – relevant to this study – are reviewed:

- awareness of the Open Access publishing model
- support for the Open Access journal publishing model /reasons for submitting papers to Open Access journals
- author fees
- copyright issues and the actual reuse of the articles

³⁴ The ALPSP research study on authors' and readers' views of electronic research communication, Alma Swan & Sheridan Brown, Key Perspectives Ltd, ISBN 090734123-3

³⁵ N.R. Cozzarelli, K.R. Fulton, D.M. Sullenberger, Results of a PNAS author survey on and Open Access option for publication, PNAS, February 3, 2004, 101,5, 1111

³⁶ M. Richardson, C. Saxby; experimenting with Open Access publishing; The exchange (AAUP) 2004, p 4-6

³⁷ JISC/OSI journal authors survey, 2004; Alma Swan & Sheridan Brown, Key Perspectives Ltd

³⁸ Scholarly communication in the digital environment: what do authors want? I. Rowlands, D. Nicholas, P Huntingdon; Ciber (Centre for information behaviour and evaluation of research; City University London), London 2004

³⁹ Schroter S, L. Tite, R. Smith, perceptions of Open Access publishing: interviews with journal authors, BMJ, doi:10.1136/bmj.38359.695220.82 (published 26 January 2005)

Awareness of the Open Access journal publishing model

In the qualitative BMJ study it was found that '24 out of 28 authors reported they were familiar with the term 'Open Access publishing' and defined it accurately when prompted'. The quantitative surveys among academic authors also report a reasonable awareness of the phenomenon of Open Access publishing:

- JISC/OSI survey: 62% of the authors in traditional journals were aware of the concept of Open Access journals, the other 38% was not.
- CIBER survey: 18% of the respondents stated that they knew (quite) a lot about Open Access publishing and 48% stated that they knew 'a little': so, in total 66% was (somewhat) aware of Open Access publishing; 34% stated that they knew 'nothing at all'.

These figures suggest that now a majority of academics are aware of Open Access journal publishing, but that approximately a third of them are still not.

Support for the Open Access journal publishing model/ reasons for submitting a paper to an OA journal

The qualitative BMJ study found a great deal of support among the interviewed authors for Open Access publishing. A quote: 'All authors supported the concept of Open Access publishing. Authors reported benefits for themselves and other researchers, including easier and faster literature searching, reduced costs in terms of time savings, photocopying, interlibrary loans and subscriptions; faster dissemination of results to a wider audience; more equitable access; and the potential for medicine to improve globally. The respondents were concerned that Open Access publishing might lead to vanity publishing (poor quality research being published for a fee) and a flood of non-peer reviewed papers on the Internet. Peer review, they said, is extremely important and resources might be directed away from this to fund Open Access'. The quantitative surveys indicate a broad support among academics for Open Access as well:

- In the CIBER survey the 'free access' argument weighs most in favour of Open Access publishing
- The PNAS survey found 49.5 % of their authors in favour of a transition of their journal to Open Access.
- The NAR survey found 66% of their authors in favour of a transition of their journal to Open Access
- In the JISC/OSI survey among OA authors the following reasons for choosing an OA journal were (very) important for a majority of the respondents:
 - the principle of free access for all readers (92%)
 - the perception that OA journals have faster publication times (87%)
 - the perception that the readership will be larger (71%)
 - the perception that the article will be more frequently cited (64%)
 - the concern about the cost to the library/institution of non-OA journals (55%)

Author fees

In the qualitative study the authors' attitudes towards the author fee were quite negative: 'Authors are mostly against author charges. Many thought there were negative implications of shifting costs to authors and were of the opinion that authors themselves should not be required to pay'. However, the quantitative surveys have more positive results:

- PNAS survey: 49.5% of the authors is willing to pay a surcharge

- CIBER survey: 51% of the authors is prepared to pay an author fee, 49% is not prepared to pay such a fee. Resistance against author charges occurs especially in Eastern Europe and among self-employed authors.
- The JISC/OSI survey (non-OA authors): 53.8% is prepared to pay (25.2% is not prepared to pay; 17% does not know).

Authors who have already published in Open Access journals seem to have solved the problem of the author fee. In the JISC/OSI survey a question on how the fee was paid was answered as follows:

- 36%: no fee was required
- 19%: fee was waived by the publisher
- 25%: fee paid out of research grant
- 8%: fee paid out of departmental funds
- 9%: fee paid out of other institutional funds
- 4%: fee paid by author himself
- 1%: fee paid out of other sources

Copyright issues and the actual reuse of the articles

A key question was asked in the CIBER survey: when you submitted your (last) paper, how active an interest did you take in the copyright implications of publishing with that particular journal? The respondents were clear: 46% of the authors admitted to having taken no interest at all; 41% declared some interest while 13% declared a detailed interest. In a follow-up question the respondents could give their views on copyright: the highest score was for ‘use it freely in teaching and learning’⁴⁰. Also Likewise, other studies mention this as being on the top of the list of author wishes with regard to copyright:

- The NAR survey: ‘In our survey, we asked *NAR* users to tell us what criteria they felt were important for an Open Access model. Of the 1052 individuals who responded, 75% felt that the unrestricted right to re-use Open Access content for educational and research purposes was important. In contrast, 8% felt that unrestricted re-use by others for commercial purposes was important.’
- In the ALPSP survey 89% of the respondents find it very important that the author is able to reuse his article for educational purposes (see table below)

ALPSP survey	Percentage respondents (very) important
ability of author to reuse article for educational purposes	89%
ability of author to include article in course packs	78%
ability of author to put article on own or institution's website	69%
ability of author to re-use article in other publications	54%
ability of author to retain copyright	51%

⁴⁰ Second highest score: ‘pass on in electronic form to a colleague or other interested party’

What is the actual behaviour with regard to self-archiving and reuse of the article?
The JISC/OSI survey finds a relatively low awareness of repositories among OA and non-OA authors alike: 71% and, respectively, 77% is not aware of article repositories at all.

The results of a number of surveys with regard to self-archiving are given below. It appears that around 10% to 25% of the authors actively archive their article in preprint or reprint form in an institutional or subject repository; for authors of Open Access articles this percentage is almost doubled.

Self archiving	preprint	reprint
ALSPS-survey		
deposit in preprint/reprint archive	10.7	11
JISC/OSI non-OA authors		
personal web page	11	12
departmental website	9	8
institutional repositories	3	9
subject repository	5	9
JISC/OSI OA authors		
personal web page	13	24
departmental website	8	17
institutional repositories	7	8
subject repository	11	18

Open Access provision method⁴¹	Total percentage of respondents self archiving in this way
Pre-refereeing draft on personal web page	21
Refereed, published research article on personal web page	31
Pre-refereeing draft in departmental or institutional OA archive	18
Refereed, published research article in departmental or institutional OA archive	25
Pre-refereeing draft in a centralised subject based open archive	13
Refereed, published research article in a centralised subject based open archive	15

⁴¹ 'Open Access self-archiving: an author study'; Alma Swan and Sheridan Brown, Key Perspectives Limited, 2005., Technical Report, External Collaborators, JISC, HEFCE
<http://eprints.ecs.soton.ac.uk/10999/>

5.2 Results qualitative study

In preparation of the websurvey a qualitative study among authors of articles in Open Access journals was carried out. Originally two group discussions with 10 to 15 authors of Open Access articles each (one in Utrecht, one in London) were planned. In order to organise the Dutch group discussion 90 invitations were sent out by e-mail to Open Access authors: the result was zero applications! Many respondents replied to the invitation to say that they could not dedicate a day to the issue of copyright. This reflects the finding of the CIBER-survey mentioned earlier that found the attitude of academics towards copyright issues reflects a general low involvement. For this reason, the group discussions were replaced by 12 interviews with authors of articles in Open Access journals (11 by telephone; 1 personal; 6 from the UK; 6 from the Netherlands).

The aims of the qualitative study were to explore the following:

- the general attitude towards Open Access journals, the role of the Open Access aspect in choosing the journal for publication and the importance and role of the author fee
- actual behaviour with regard to reuse of the articles (educational purposes; self archiving)
- opinions and attitudes with regard to copyright transfer
- opinions and attitudes with regard to the models of good practice in copyright management in Open Access journals⁴²

In this chapter a representative overview of comments received via the interviews are thematically described.

5.2.1 Support for Open Access Movement

All 12 interviewees supported the Open Access movement, the majority could even be characterised as strong supporters.

What are the main reasons to support the Open Access movement?

- Universal access (and a larger audience for the article as a result) is mentioned by most respondents and seems to be the prime argument in favour of Open Access. One respondent: ‘when I click on an icon in Pubmed I want to get to the full text immediately’. Another respondent: ‘in practice you only used articles in journals to which the library subscribes. It is a pity that in this way you don't use articles that might have relevance to you. In other words, information stays unused because it is too costly to get access to it in terms of time and/or money’. Coupled with this argument is the fact that in this way the article can reach a larger audience: one respondent calls this ‘an article with a large impact’ as opposed to articles in journals with a high impact: ‘you can see how many people read your article in Biomed Central, this is many more than would otherwise read it?’. Another respondent: ‘I will achieve greater visibility: when publishing in Open Access, people will know my name and my work so in the end I will make more money than I spend on the author fees’. Lastly, one respondent mentioned especially the universal access to information for developing countries.

⁴² in the interviews only the models A,B,C were discussed. In the websurvey all four models were presented to the respondents.

- The costs of the traditional publishing system to the library and a dislike of commercial publishing companies are mentioned five times.
- Another argument that is mentioned several times is the ‘public good’ argument: the results of research that is publicly financed should be publicly available.
- Lastly, one respondent mentions the fact that Open Access journals are always electronic and therefore never have a page limit so that more (very relevant) data can be added to the journal.

Is Open Access a decision factor in their publication behaviour?

- Most respondents (n=8) stated that the overriding factor in choosing a journal for publishing an article in is the impact factor (and, logically, the field of the journal). One respondent: ‘Mainly publishing in Open Access journals would amount to suicide: the financial streams to our department are dependent on the number of articles published in journals with the high impact factor’. Another respondent and proponent of Open Access: ‘Open Access can only play a minor role in the decision: we are judged on impact factor. With all things being equal, we certainly would prefer an Open Access journal, however, that is a largely hypothetical situation’.
- In contrast, a number of respondents (n=4) do ascribe an important role to Open Access in their decision-making process when choosing a journal for publication. One respondent: ‘I published an article on a subject that is related to Africa: I wanted the article to be accessible to those countries’. Another respondent: ‘we publish enough in this department so we can act rather relaxed. Therefore we choose between the journals with the high impact factor and articles with a high impact (i.e. Open Access). A third respondent: ‘I do prefer an Open Access journal, I also publish a lot on my website: I want people to be able to read what I write!’. The last respondent only published in Open Access journals: ‘I want my papers to be seen by the maximum number of people. The only way to achieve that is to publish through Open Access journals. If I published in a traditional journal, only a limited number of people could access the paper’.

5.2.2 Author Fee: Is This a Hurdle to Publish in Open Access Journals?

Most interviewed authors do not see the author fee as a problem. For most of them the author fee was waived: paid for by the institute/university or even by another arrangement. However, even if such a waiver had not existed, the author fee would not have been a problem. The respondents compared it several times to the page charges of traditional publishers: ‘I worked in an experimental laboratory and I published more than 35 papers there. We had to pay all the time! That is much more expensive than Open Access!’. Another respondent: ‘we often have to pay page charges for colour photographs etc. The amounts of money you have to pay are more or less the same as in Open Access journals’. For other respondents the author fee would not have been a problem either: ‘we would have taken it out of the project funding’ and: ‘we would have paid it out of the departmental budget’ and: ‘you can put this in the research budgets; if this Open Access movement spreads, it will be no problem to reserve 1000 to 2000 euro for publication costs in the budgets of each research project’. One respondent, however, foresees problems when all articles are published in an Open Access journal: ‘I would not be able to pay it out of the present departmental budget’.

5.2.3 Reuse of the Articles (for educational purposes; self archiving)

Educational purposes:

Many respondents reuse their articles in education: ‘of course I use my articles for educational purposes. The university then pays royalties for photocopying’. Another respondent: ‘I always reuse the figures, tables etc. I also use the content of my articles in lectures and courses for educational purposes’. Another response: ‘sometimes we distribute articles among students. If we make a reader, someone fills in copyright forms - but for classroom use we don't do that’.

Another use of published articles concerns writing review articles or using book chapters for textbooks: ‘we have published a number of books. In those cases it is handy if you have the copyright of your articles’. However, more respondents prefer to write a new text:

‘I never use anything again once it is written. If I have to write a review article, most of the time I use new figures. Of course sometimes I reuse old text parts in book chapters, but no one ever says anything about it’.

‘For reprints in dissertations you always get permission. Also for translations in Dutch language journals you always get permission. In textbooks you'd never republish a whole article - sometimes you use a long quote with a proper attribution’.

‘I never reuse the articles. When I write a review article or book chapter, I always make new texts and figures’.

Self archiving:

Two respondents (out of 12) archive their articles in institutional repositories; one of them puts a PDF file of the article on his website as well. Two other respondents put their articles in PDF file on their institutional websites as well. One of them does this ‘even when it is not allowed’. The other respondent states: ‘I try to put the old text of my papers on my website. Once I did it with an article I published in the journal Family Practice, but later this was forbidden by the publisher. So I replaced it with my original lecture on this topic. I think it was stupid of the publisher: these articles only make people think: oh, this is the journal I should look at’.

The other respondents (8 out of 12) don't self-archive; however, two of them indicated that they put links to their articles on their websites.

5.2.4 Opinions and Attitudes with regard to Copyright Transfer and the copyright models:

The responses with regard to copyright transfer vary from disinterest to a slight to strong preference to keep the copyright.

A few remarks indicating disinterest:

- 'I have written more than 200 articles. The transfer of copyright sounds like a problem but in practice this is not a problem at all: I always get permission from journals to republish or reuse things in dissertations or chapters. Also, this topic seems less relevant than five years ago, maybe because many journals have changed their policies under pressure and are now more flexible'
- 'I do nothing with copyright, I am absolutely not interested! I throw the copyright transfer agreements out right away!'

A few respondents with a slight preference to keep the copyright:

- 'I have always found this a strange habit in the medical world. However, it is not very important - I published my own dissertation without asking permission and then later I asked permission just in case'.
- 'In a philosophical way it is important to keep the copyright. Now with Open Access it is allowed to give a colleague a copy of your article - however, everyone did that in the past as well'.

And a number of respondents with a somewhat stronger preference to keep the copyright:

- 'I'd like to keep my copyright if I can: I prefer to know what happens to my articles in the future. However, if you want the copyright, in most cases you cannot publish!'
- 'I want to retain my copyright'.
- 'Most journals act reasonably; we tend not to publish in journals that are very much focused on copyright. It is not that we want it, it is just that we don't want other people to have it!'
- 'Sometimes you want to use a figure again in a review article.'
- 'I prefer to keep the copyright myself. I put the articles on my website and I want to use the articles in review articles and book chapters. You write new articles, but after a while this knowledge is used for textbooks etc. More and more of these are electronic and therefore you increasingly want to be able to reuse your own data'

After an explanation of the three models by the interviewer [Model A: the 'attribution' licence; Model B: commercial exploitation rights transferred to the publisher; Model C: republishing possible if under Open Access licence as well; Model D was not presented during the interviews and therefore is excluded as an option] the respondents were asked for their opinions and preferences. Models A, B and C were found to be understood by all respondents. The models were acceptable by all respondents. Many had no preference at all, most had no strong preference.

5.3 Results Websurvey

5.3.1 Methods

On the basis of the results of the earlier study a questionnaire was developed and tested on two scientists, leading to changes and a shortening of the questionnaire.

In total 1336 names and e-mail addresses of corresponding authors of articles in Open Access journals were collected via a semiautomatic procedure. Most names and e-mail addresses were collected from journals published by Biomed Central: 1234. Another 49 e-mail addresses were collected from the journals Plos Biology, Plos Medicine and the British Medical Journal and 56 e-mail addresses were collected from the Electronic Journal of Comparative Law.

A personalised invitation to participate in the survey - with a coded link to the questionnaire - was sent out on 19 April. A reminder to the non-responders was sent out on 28 April. The questionnaire was closed on 6 May.

In total 355 questionnaires were filled in. The response rate is calculated in the table below: 29%

invitations sent	undeliverable	net sent	response	response rate
1336	110	1226	355	29%

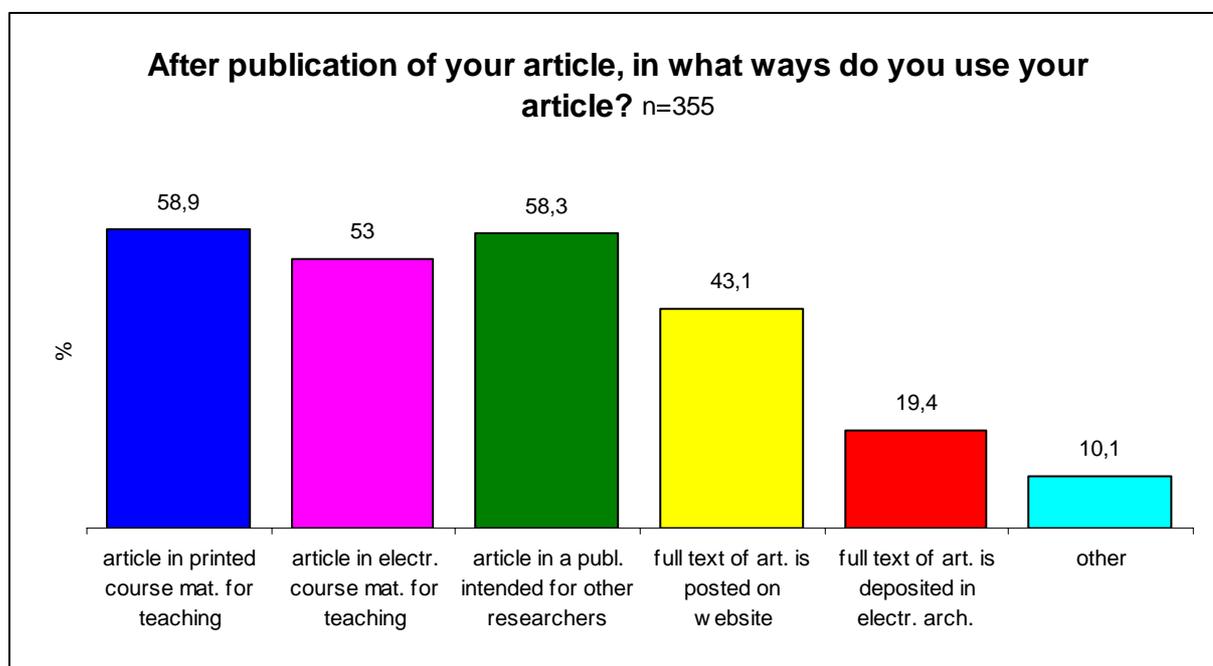
5.3.2 Use and reuse of research articles

The respondents were asked to indicate in what ways they used their articles after publication (whether published in an Open Access journal or not). The results are depicted in a bar diagram below. The results can be summarised as follows:

- 59% of the respondents use (parts of) the articles in printed course materials.
- 53% of the respondents use (parts of) the articles in electronic course materials
- 58% of the respondents use (parts of) the articles in (printed or electronic) publications intended for other researchers (such as dissertations, books, review articles, book chapters)
- 43% of the respondents post the full text of the article on their personal website or the website of their institute
- 19% of the respondents deposit the full text of the article in an institutional repository.

11 % of the respondents (n=41) filled in the open question on this topic: half of them mentioned the distribution of copies (in print or electronic) to other researchers and colleagues. Other uses mentioned were: use in presentations; reuse of figures; depositing in subject repositories (NIH).

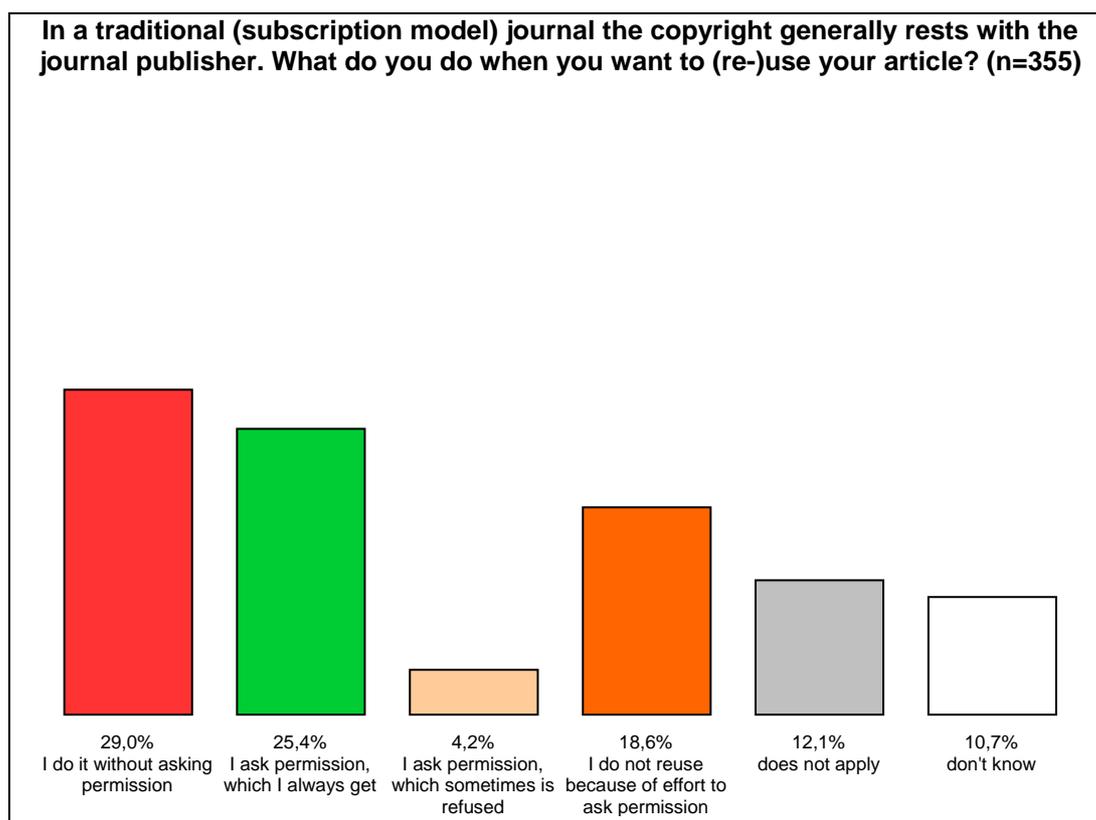
The figures on self archiving (posting on a website or depositing in an institutional repository) are comparable to the recent findings of Swan and Brown (2005 – see page 39).



In the next question the respondents were questioned about their behaviour with regard to permission requests with regard to re-use for research articles they have published in a traditional subscription model journal. The results are depicted in a bar diagram below and can be summarised as follows:

- 29% of the respondents reuse their articles without asking permission
- 25% of the respondents ask permission of the publisher, which they always get
- 4% of the respondents ask permission of the publisher, which is sometimes refused
- 19% of the respondents do not reuse their articles in the way they would like to use it because of the effort to ask permission

In the comments section 20% of the respondents (n=71) filled in a remark. 21 remarks relate to asking permission, mostly complaining about the time-consuming effort of this. 13 remarks relate to not asking permission: this is mostly done for the same reason (i.e. to save time). Other remarks relate to the use for teaching purposes and to redrawing figures to avoid asking permission to republish.

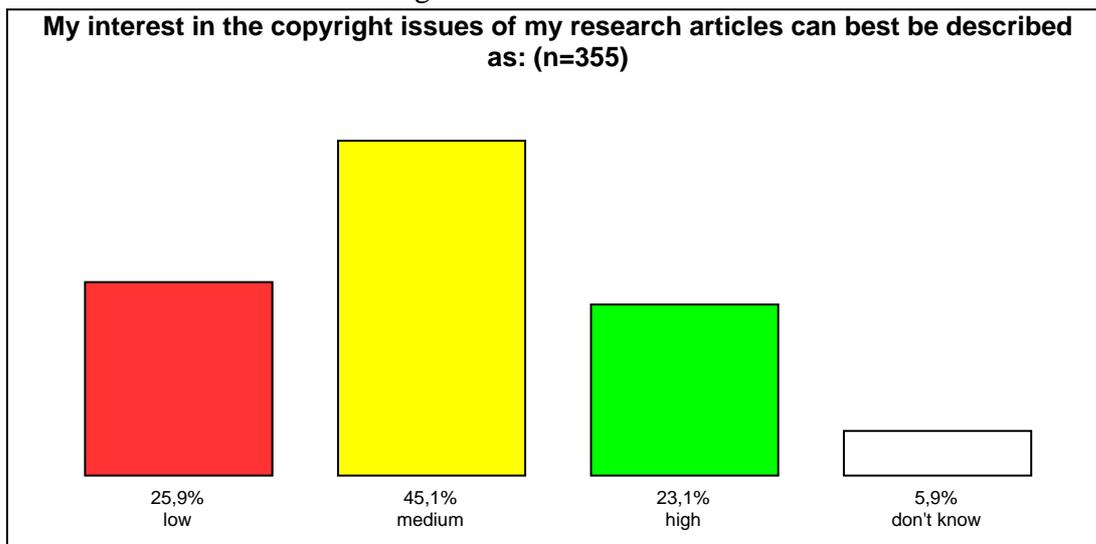


5.3.3 Interest in copyright issues

The next section of the questionnaire consisted of a number of questions about general copyright issues and the opinion of the authors on these.

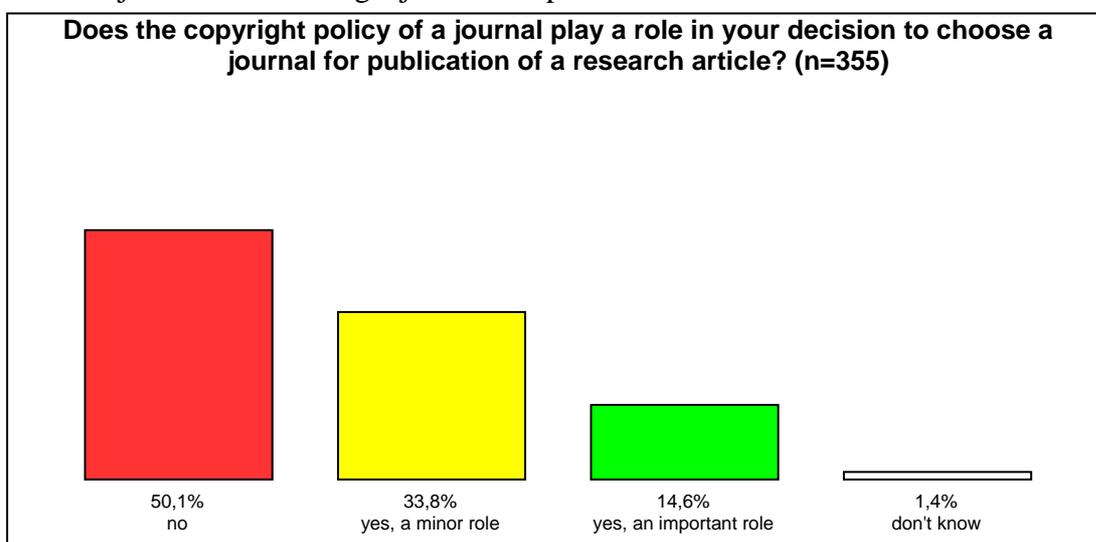
The first question of this section addressed the level of interest in copyright issues of the respondent. The results are depicted in a bar diagram below and can be summarised as follows:

- 26% respondents indicated that their interest in copyright issues of their own research articles is low
- 45% of the respondents indicated that their interest in copyright issues of their own research articles is medium
- 23% of the respondents indicated that their interest in copyright issues of their own research articles is high.



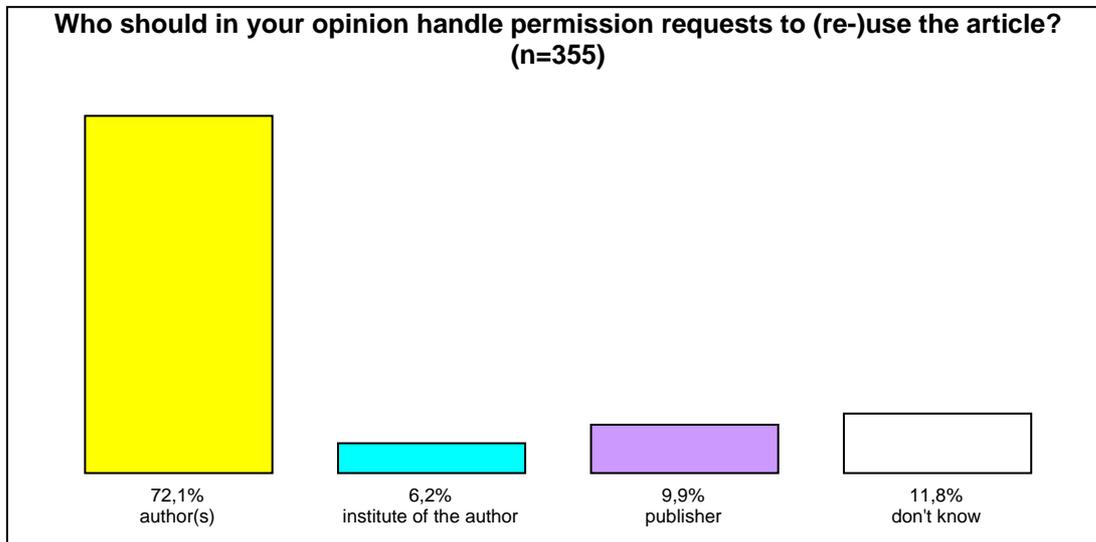
Does the copyright policy of a journal play a role in the decision to choose a journal for publication of the research article? The results (see diagram below) can be summarised as follows:

- 50% of the respondents stated that the copyright policy does not play a role in choosing a journal for publication
- 34% of the respondents stated that copyright policy plays a minor role
- 15% of the respondents indicated that the copyright policy of a journal does play a major role in choosing a journal for publication of a research article.



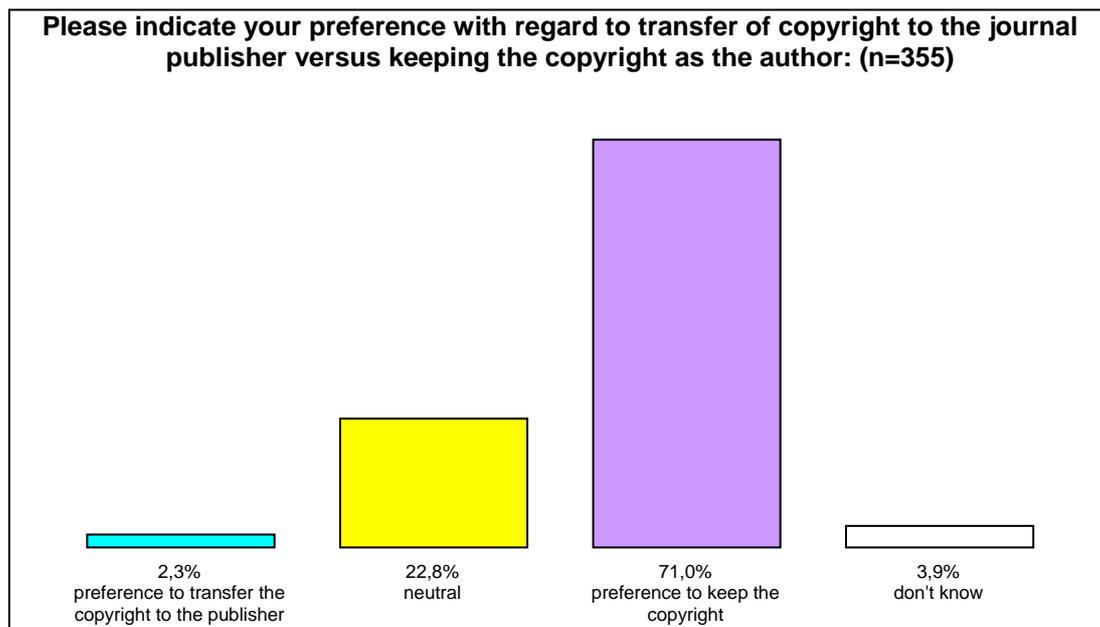
Who should handle permission requests to re-use the article according to the respondents? The results (see diagram below) are as follows:

- 72% of the respondents think the author of the articles should handle this
- 6% of the respondents think the institute of the author(s) should handle this
- 10% of the respondents think the publisher should handle this.



The last question of this section of the questionnaire addressed the topic of transfer of copyright. The results (see diagram below) are as follows:

- 71% of the respondents prefers to keep the copyright as an author
- 2% of the respondents prefers to transfer the copyright to the publisher
- the rest of the respondents has no opinion about this topic (27%: 23% neutral and 4% don't know)

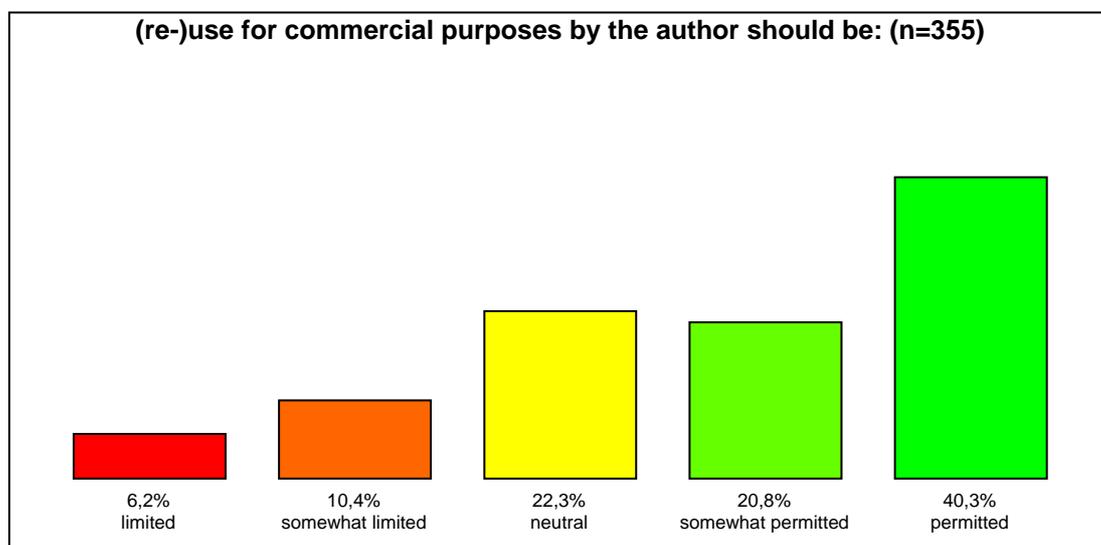
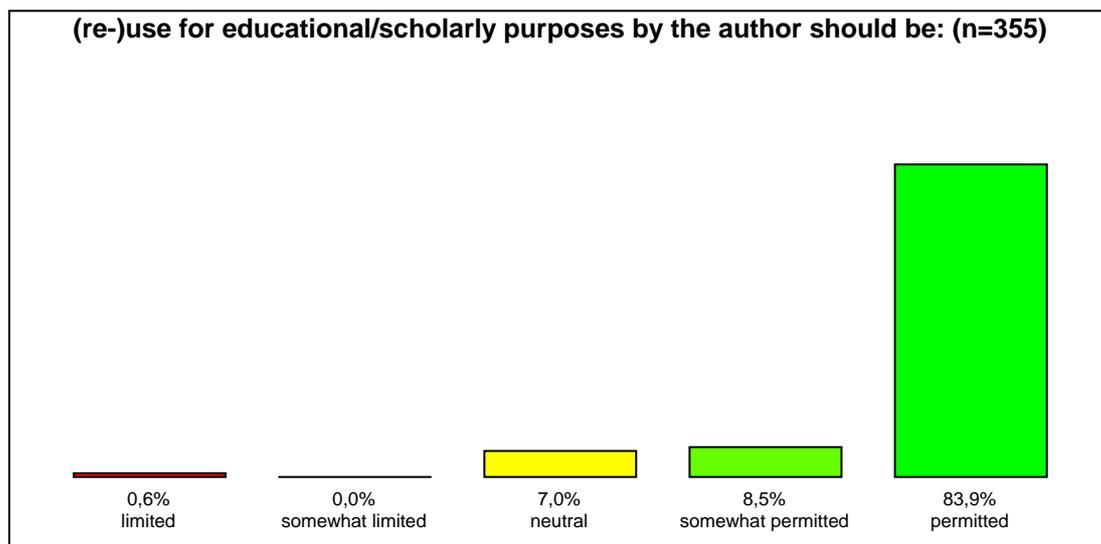


5.3.4 The ideal copyright situation in Open Access journals according to the authors

In Open Access journals the author keeps the copyright of his/her article. How do the authors want to use the copyright? The respondents were asked to give their opinion on an ideal licence agreement for an Open Access journal. A list of possible exploitation rights and related questions was presented with the question if it should be permitted or limited.

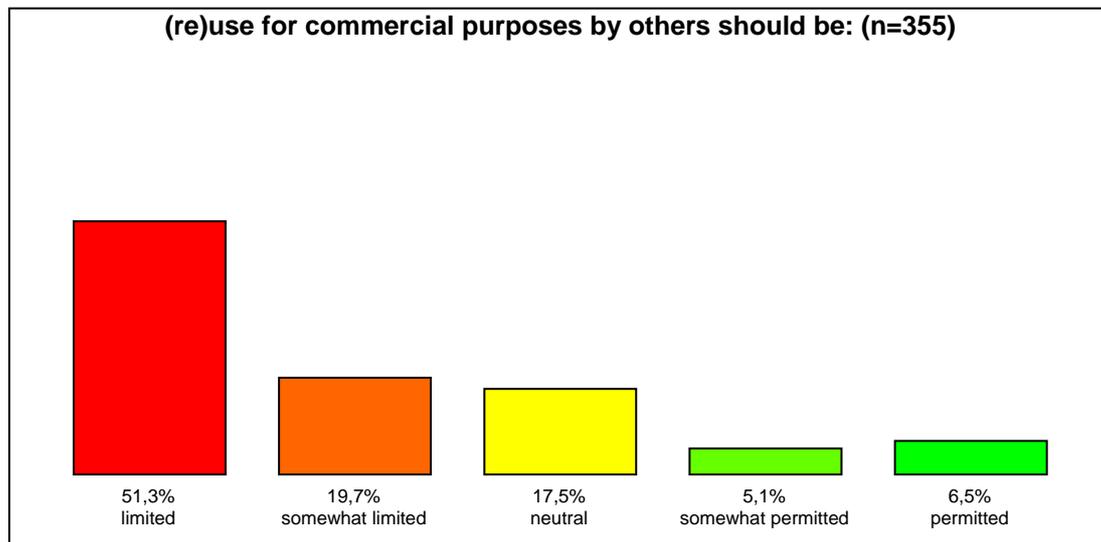
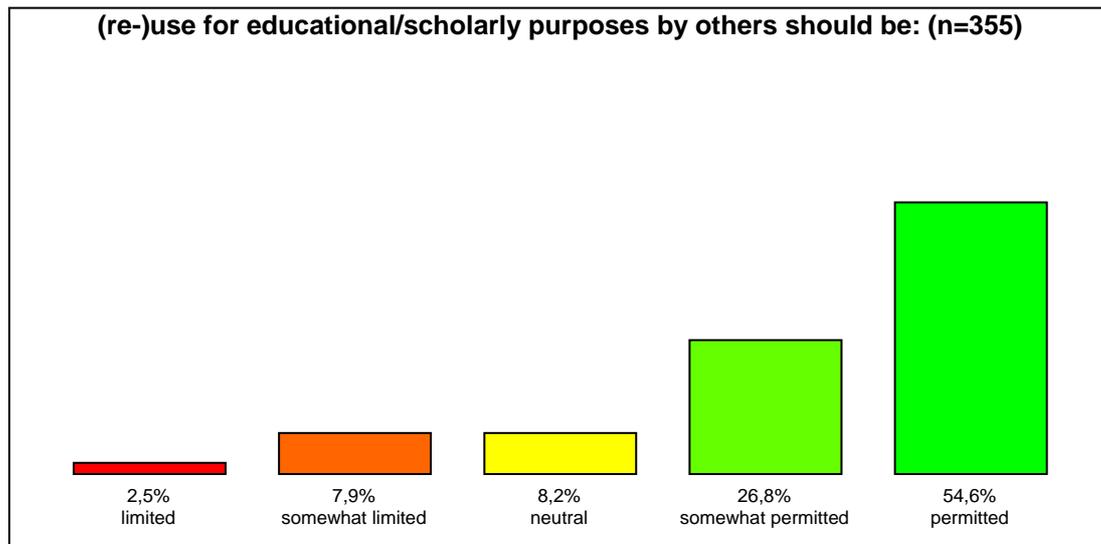
The first items addressed the reuse for educational/scholarly purposes and for commercial purposes by the author himself/herself. The results (see diagram below) are:

- 92% of the respondents believe that the reuse for educational/scholarly purposes should be (somewhat) permitted to the author himself/herself. Hardly anyone thinks this should be limited (0,6%). 7% remain neutral
- 71% of the respondents think that reuse for commercial purposes should be (somewhat) permitted to the author himself/herself. Nearly 17% thinks this should be (somewhat) limited. 22% remain neutral.



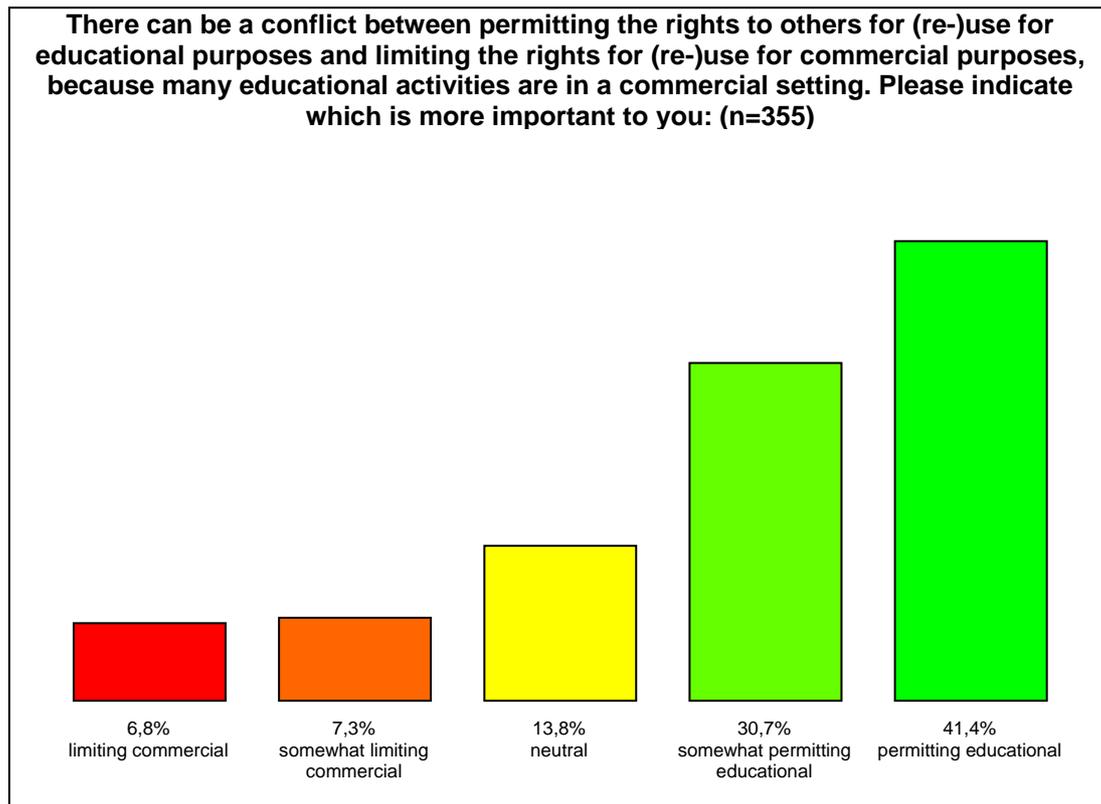
The next items addressed the rights to reuse the research article by others (see the diagrams below):

- 81% of the respondents think that reuse for educational/scholarly purposes should be (somewhat) permitted to others. 10% of the respondents think this should be (somewhat) restricted. 8% remain neutral
- 12% of the respondents think that reuse for commercial purposes should be (somewhat) permitted to others. 71% of the respondents think differently: these rights should be (somewhat) limited. 17% remain neutral.



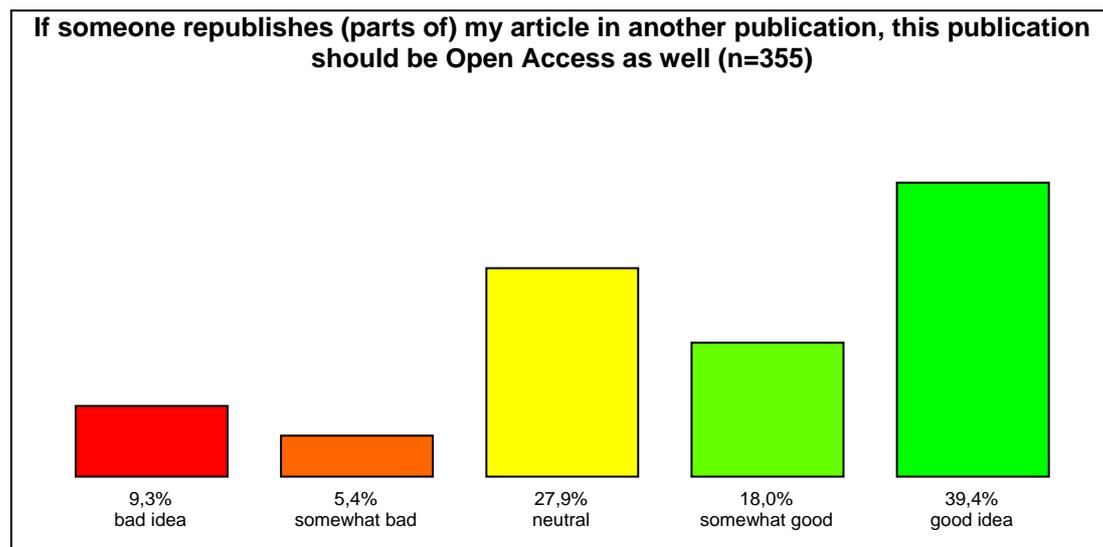
In the next two questions two other copyright issues were addressed. As mentioned earlier, permitting the rights to others for educational purposes and limiting the rights to reuse for commercial purposes are often in conflict with each other as more and more educational settings are also commercial settings. What should prevail in the view of the responding authors? The results (see diagram below) are:

- 72% of the respondents think permitting the rights to reuse for educational purposes are more important than limiting the rights for commercial purposes.
- 14% of the respondents think the other way around; 14% is neutral on this topic.



The next question tries to gauge support for the so-called 'share alike' clause of the Creative Commons licences. The respondents are asked about the possibility that republication of (parts of) the article will be allowed if the resulting publication is Open Access. The results are depicted below in the diagram and can be summarised as follows:

- 57% of the respondents indicate that this is a (somewhat) good idea
- 15% of the respondents indicate that this is a (somewhat) bad idea
- 28% remains neutral on this topic.



5.3.5 Four copyright models in Open Access journal publishing

In the next section of the questionnaire four possible models of copyright practices in Open Access publishing were presented to respondents with the figure below, with the following explanation:

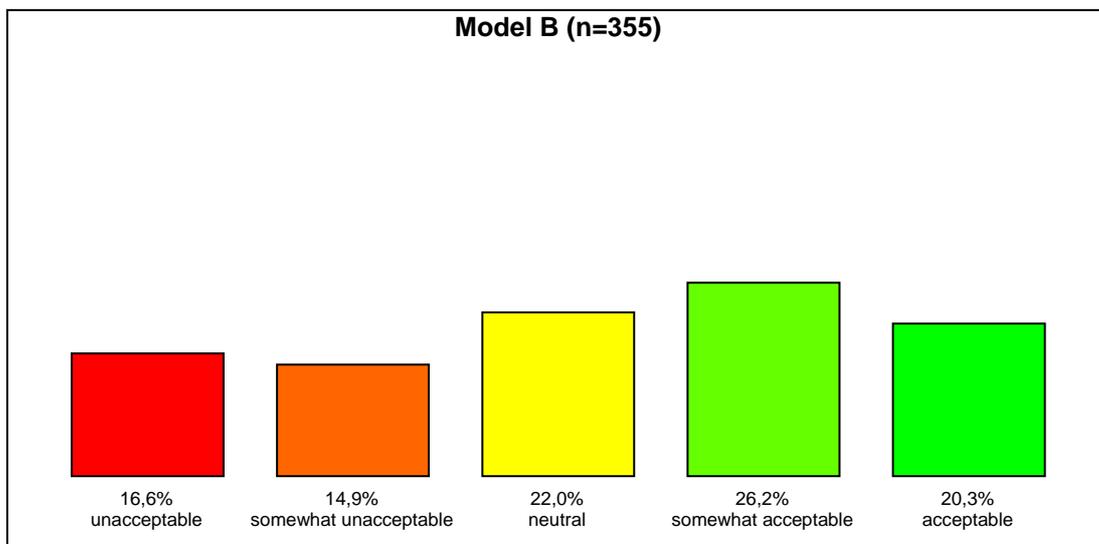
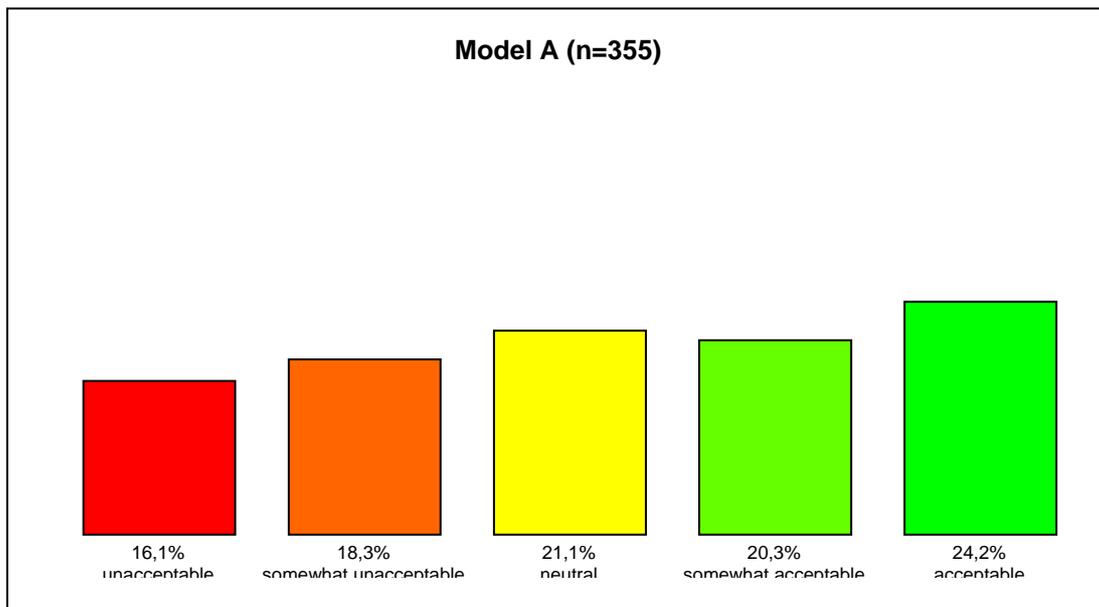
Model	The author has following rights:	The publisher has following rights:	Others have the following rights:
A	all usage allowed including reuse for commercial purposes	not applicable	all usage allowed including reuse for commercial purposes
B	all usage allowed except for commercial purposes	OA publisher receives commercial exploitation rights	all usage allowed except for commercial purposes
C	all usage allowed	not applicable	all usage allowed if republishing then also Open Access
D	author keeps commercial exploitation rights	not applicable	all usage allowed except for commercial purposes

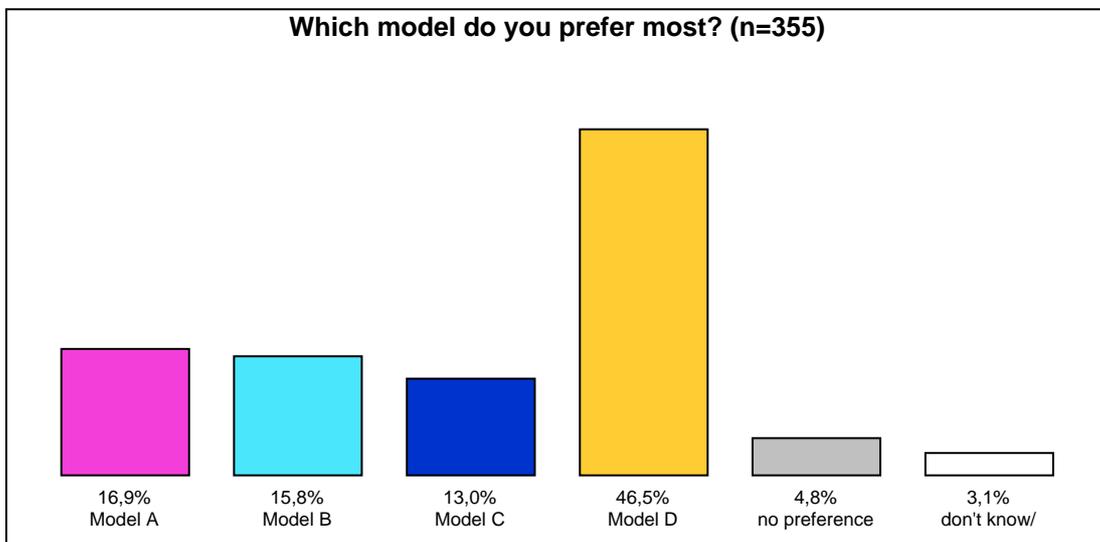
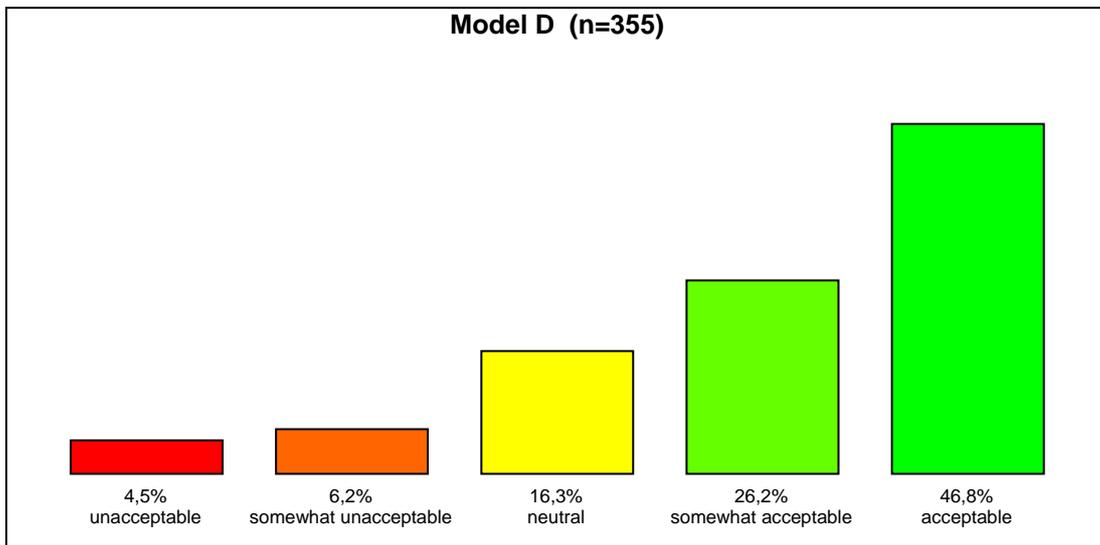
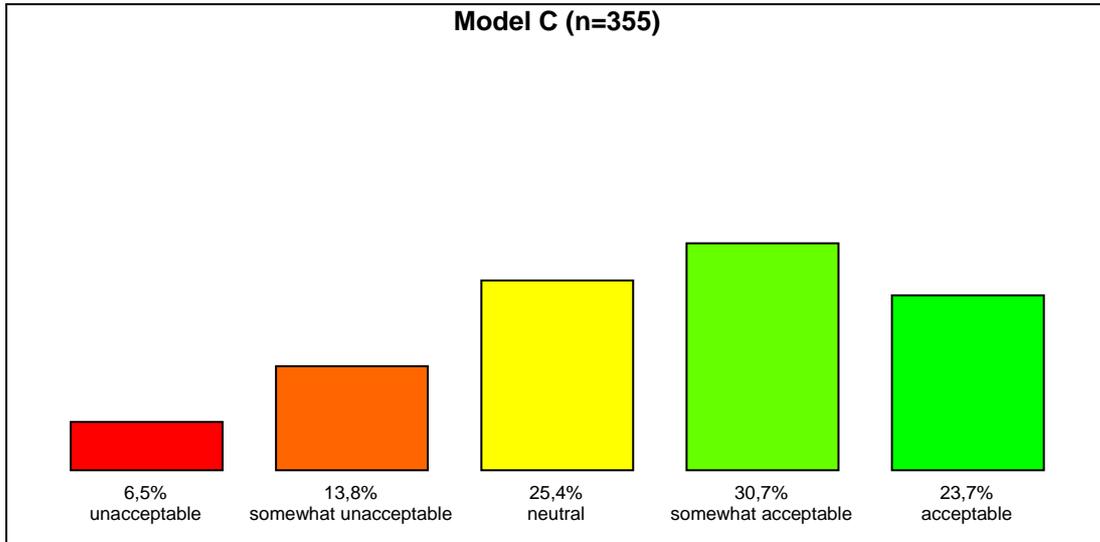
- Model A: The author gives a broad permission to use and reuse the article, also for commercial purposes. This model is based on PLoS and the journals from Biomed Central.
- Model B: The author gives the commercial exploitation rights to the publisher. The author gives permission to the readers/users to use and reuse the article for scholarly and educational purposes (as long as these are not commercial). This model is based on the British Medical Journal and Nucleic Acid Review.
- Model C: The author gives permission to (re-)use the article for all purposes; in case of republishing (parts of) the article this should be as an Open Access publication as well. This model is based on the journals of the European Geosciences Union.
- Model D: The author keeps the commercial exploitation rights and gives permission to the readers/users to use and reuse the article for scholarly and educational purposes (as long as these are not commercial). This model is based on the Electronic Journal of Comparative Law.

First the respondents were asked to rate how acceptable each model to them was. Then they were asked to indicate a preference for one model. The results are presented below in bar diagrams. The results can be summarised as follows:

- Model A: 45% of the respondents think this model is (somewhat) acceptable; 34% think this model is (somewhat) unacceptable. 21% remain neutral.
- Model B: 47% of the respondents think this model is (somewhat) acceptable; 32% think this model is (somewhat) unacceptable. 22% remain neutral.
- Model C: 55% of the respondents think this model is (somewhat) acceptable; 20% think this model is (somewhat) unacceptable. 25% remain neutral.
- Model D: 73% of the respondents think this model is (somewhat) acceptable; 11% think this model is (somewhat) unacceptable. 16% remain neutral.
- When asked to indicate a preference for anyone of the models the results are:

- 47% prefer model D - the model in which the author keeps the copyright and handles the permission requests
- The models A and C (both using Creative Commons licences) together are preferred by 30% of the respondents. Model B (whereby the commercial exploitation rights are transferred to the publisher) is preferred by 13%; 8 percent of the respondents indicate no preference (or don't know).





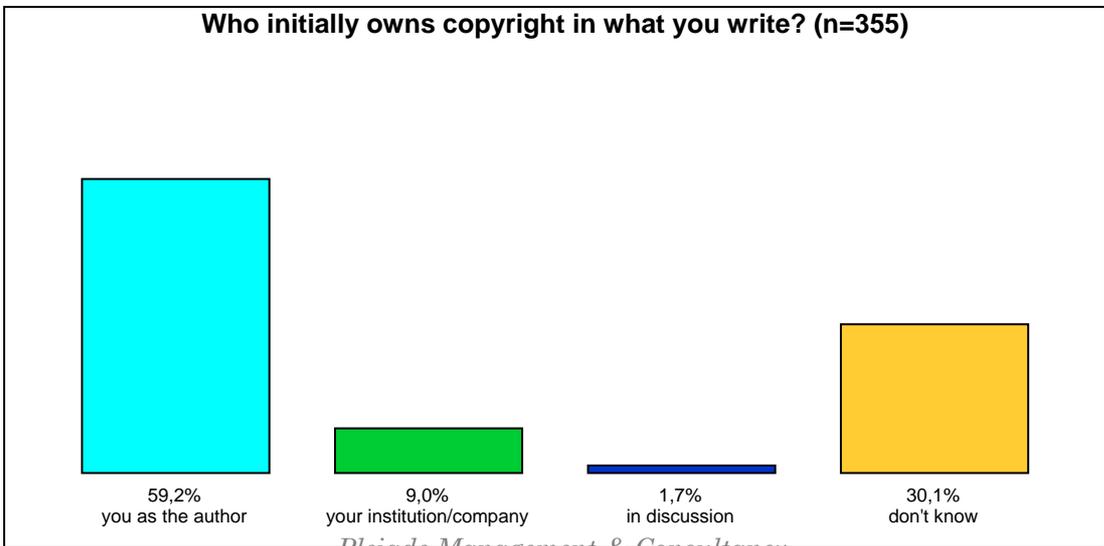
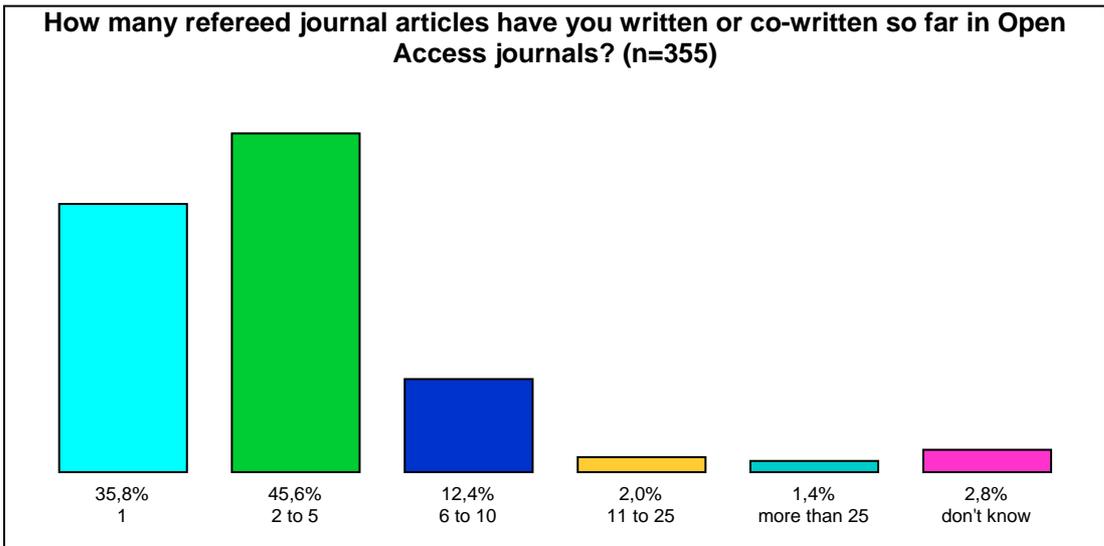
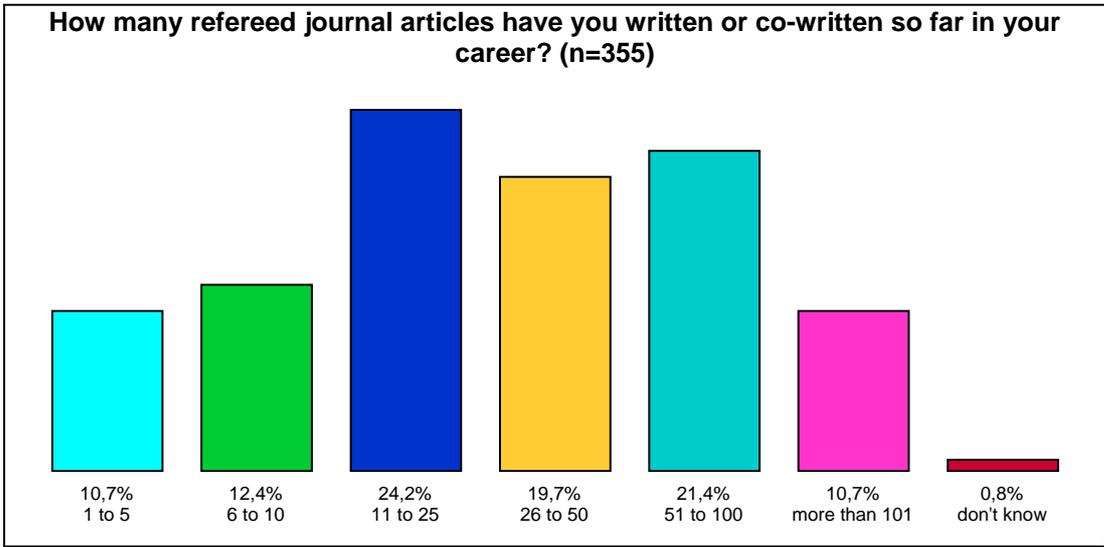
5.3.6 The respondents

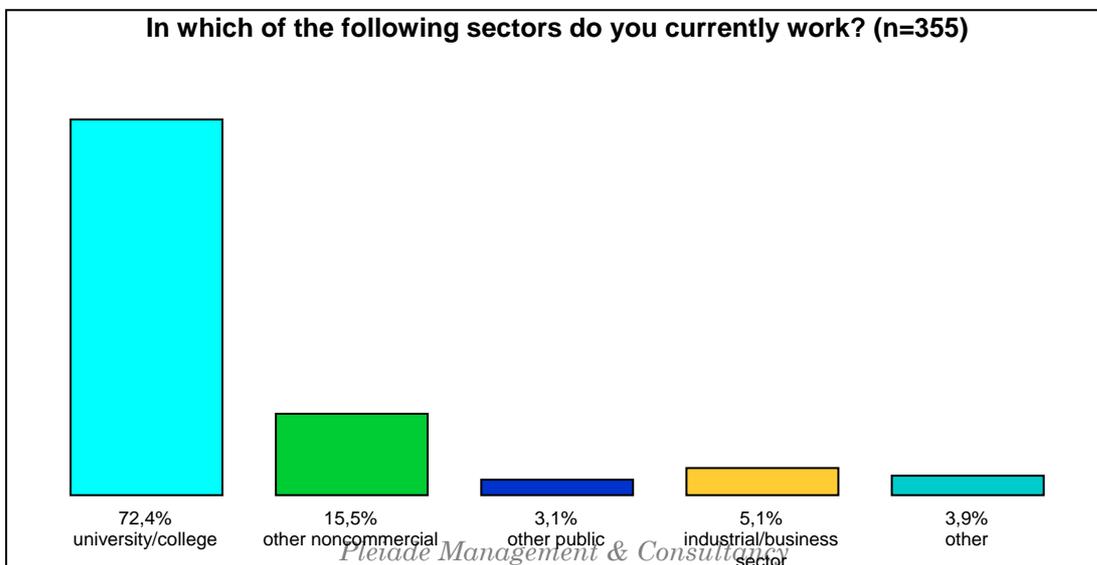
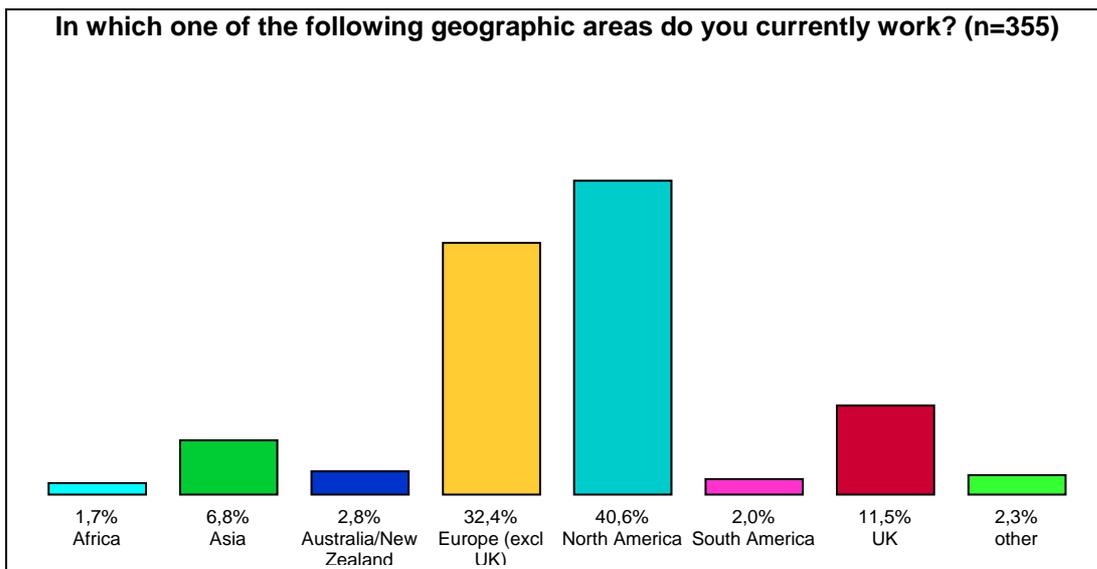
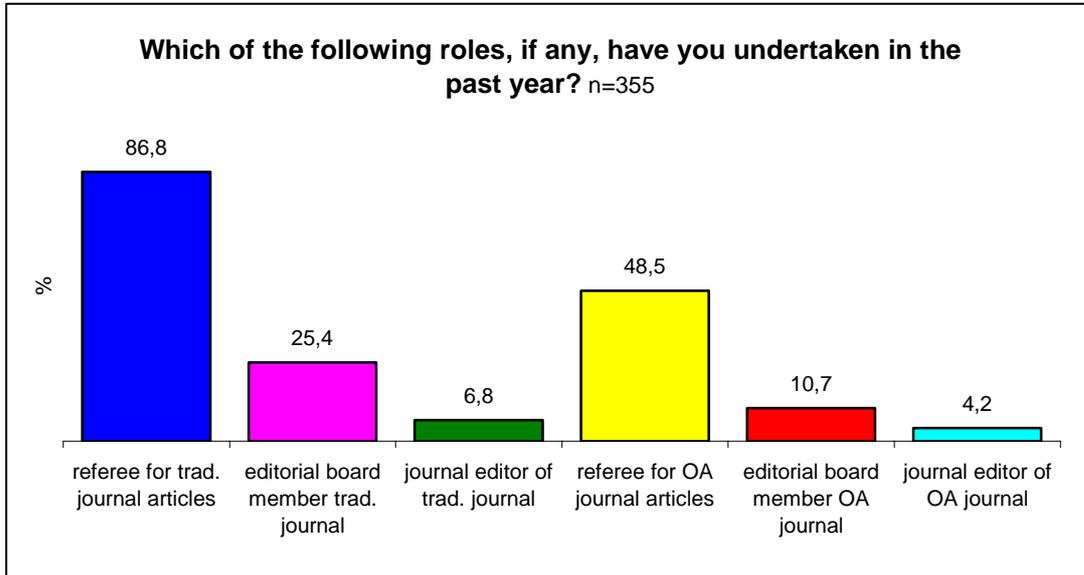
In the last section of the questionnaire the respondents were asked a number of questions about themselves. The results of these questions are listed below in tables and diagrams. The main points are:

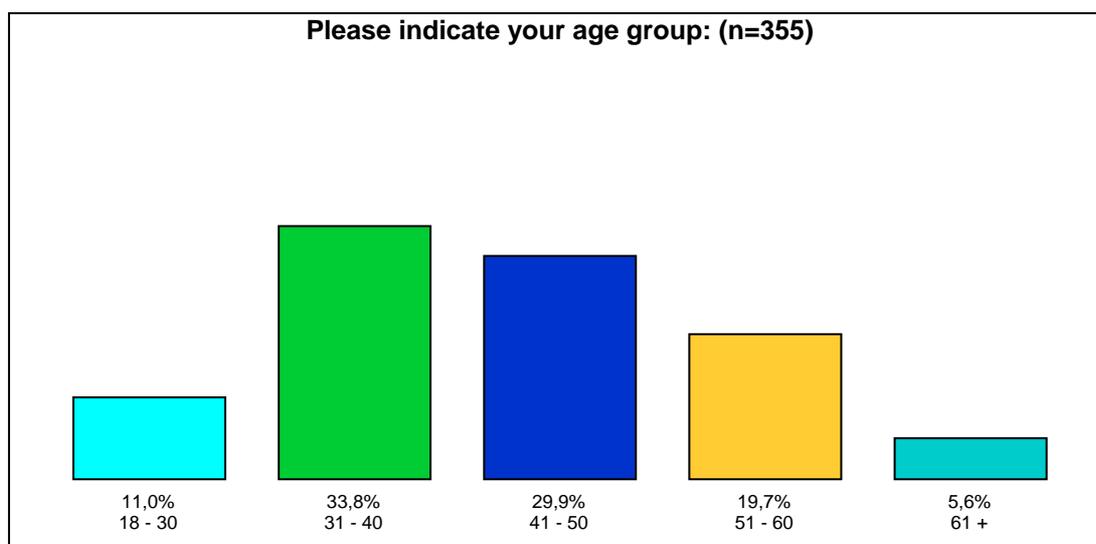
- The respondents are generally quite experienced authors: over 75% of the respondents had published more than 10 articles.
- Their experience as authors of articles in Open Access journals is considerably less: more than 80% of the respondents have published fewer than five articles in Open Access journals. Nearly 16% of the respondents had published more than five articles in Open Access journals.
- Who initially owns the copyright of the article? 59% of the respondents own the copyright themselves; 9% of the respondents state that their institute or company initially owns the copyright of the article. 30% of the respondents state that they don't know who initially owns the copyright of their research articles. 1,7% of the respondents mention that the copyright is under discussion with their organization⁴³.
- Academic journals cannot exist without the cooperation of the academic community itself. Most respondents had some role in journal publishing⁴⁴: by being a referee (87%), or by being an editorial board member or editor in chief/associate editor. A considerable number of respondents (25,4%) fulfilled the role of editorial board member of a traditional journal. A cross analysis was carried out to assess if these respondents - because of their involvement with a traditional journal - had different views on contentious topics like the transfer of copyright to the journal publisher (see table below). No meaningful differences were found between this group of respondents and the others - less heavily involved in a traditional journal.
- With regard to their area of expertise 44% of the respondents mention life sciences, 38% of the respondents mention medical sciences. These disciplines are clearly overrepresented under the respondents because of the e-mail addresses used. Is there a difference between the medical sciences on the one hand and the life sciences on the other hand with regard to their respondents' opinion about copyright issues? This could be the case especially with regard to the commercial rights, because this is generally more important for medical journals. A cross analysis was carried out in which the two groups were compared: no meaningful differences were found with regard to opinions or attitudes on copyright issues. Another cross analysis was carried out to compare the authors from medical sciences and life sciences with the authors from all the other disciplines together: again no meaningful differences were found.
- Other characteristics: over 90% of the respondents work in an academic, public or other non-commercial environment. Most respondents were from North America (40,6%) or Europe (43,9%). All age categories are represented in the group of respondents.

⁴³ One respondent from the USA noticed the absence of an answer category 'public domain'. In the USA articles written by scientists from governmental institutions are not copyrighted, but in the public domain.

⁴⁴ A separate analysis was carried out to assess this: 10,4% of the respondents had no role in journal publishing (whether traditional journals or Open Access journals).







Area of expertise	n	Answers %
agriculture and food science	2	0,6
business and management	4	1,1
chemistry	5	1,4
computer sciences	12	3,4
earth and geographical sciences	2	0,6
engineering, material sciences and technology	6	1,7
humanities	0	0,0
law and politics	13	3,7
life sciences	157	44,2
mathematics	6	1,7
medical sciences	134	37,7
physics	3	0,8
psychology	4	1,1
social sciences and education	7	2,0
355 Answers		100,0

Cross analysis members of editorial board regarding opinion on transfer of copyright [% (n)]	Member editorial board? (Yes)	Member editorial board? (No)	total
preference to transfer the copyright	4,4 (4)	1,5 (4)	2,3 (8)
neutral	18,9 (17)	24,2 (64)	22,8 (81)
preference to keep the copyright	75,6 (68)	69,4 (184)	71,0 (252)
don't know / opinion	1,1 (1)	4,9 (13)	3,9 (14)
Total	25,4 (90)	74,6 (265)	(355)

6. Summary and conclusions

6.1 Open Access and copyright

Introduction

The so-called journal crisis in academic publishing threatens the accessibility of academic information. It can be argued that copyright is *the* fundamental issue at stake in the crisis in scholarly communication. The practice of transferring the copyright to publishers has resulted in an accumulation of copyrights with these publishers, thereby creating an imbalance of powers between the various stakeholders in scholarly communication (publishers, higher education institutes, academics as authors, academics as readers). Understandably, a number of initiatives aim to change the current practice of complete transfer of the copyright from the author to the publisher. One of these initiatives, the 'Zwolle Group' – a group of academic authors, publishers and copyright experts – has developed seven principles aimed at 'balancing stakeholder interests in scholarship-friendly copyright practices to achieve optimal access to scholarly information (see www.surf.copyright or www.surf.nl/zwollegroup.php).

Open Access

At a more practical level the Open Access movement has defined two roads to achieve the ultimate goal of universal access to academic information: the green road and the golden road. The green road refers to (subscription-model) journal publishers who allow some form of the article to be archived in institutional repositories and to be made accessible (directly upon publication or with a waiting period of 6 to 12 months). The golden road refers to a change in academic journal publishing: the academic journal itself is an Open Access journal and the business model has to change from the subscription model to 'author pays' model.

There have been three conferences that could be seen as founding the Open Access movement: these conferences took place in the cities of Budapest, Bethesda and Berlin. The main characteristics of the definitions of Open Access given at these conferences are:

- free online access
- permission to use Open Access information for any responsible purpose.

Study objectives

This study aims to identify good practices in copyright management in Open Access journals with an emphasis on the authors' attitudes and viewpoints. In the first stage of the study copyright practices in Open Access journals were explored by means of a literature survey combined with interviews with copyright experts and Open Access publishers. The second stage of the study consisted of a websurvey among 1200+ Open Access authors, preceded by a qualitative study consisting of 12 interviews with Open Access authors.

Copyright in Open Access journals

The Open Access movement generally wants to replace the present practice of complete transfer of copyright with a different practice. This leads to the following issues:

- What exactly is copyright?
- Who is the original owner of the copyright?
- Relationship between Open Access and the transfer of copyright
- Good practices with regard to copyright in Open Access: what rights should Open Access involve?
- Monitoring and enforcing copyright infringements: is this function necessary and, if so, who should carry it out?

Copyright: the exploitation rights are an issue

Copyright is a set of rights automatically assigned to the author(s) by legislation in most countries. It is a combination of moral rights (most important: the right as an author to be properly and fully attributed) and exploitation rights. The focus is on the exploitation rights. In general, the exploitation rights are fully transferred to the publisher in the traditional model. This means that reuse (often: republication and/or redistribution) of the original article by others than the publisher is limited or dependent on the publisher's permission. This is true for author and reader alike. Exploitation rights in themselves are also a set of rights. In scholarly communication the exploitation options for research articles are in reality rather limited: the main options are reuse for educational purposes and reuse for commercial purposes. Reuse of research articles is in practice limited to:

- republication and redistribution of the entire article
- reproducing parts of the article in textbooks/ syllabi etc.
- translating (parts) of the article into another language
- similar uses in digital networked environments

Copyright ownership generally rests with the academic author:

Although there is a trend that universities are increasingly developing policies with regard to intellectual property rights, it seems that those are mainly concerned with educational materials and patents. The copyright of research articles generally rests, or is perceived to rest de facto, with the academic himself/herself - this is a tradition in the academic world and appears not to be part of these new legal rights policies of universities and academic institutes.

Copyright transfer to the publisher is not necessary for commercial exploitation by the publisher

In this study a number of journal publishers are described where authors granted a licence to the journal publisher and where the commercial exploitation rights were transferred to the journal publisher. A copyright transfer agreement appears not to be necessary to make the commercial activities of the journal publisher possible. The differences in copyright policies of Open Access journal publishers focus on three topics:

- educational purposes
- commercial purposes
- the 'share alike' clause

Creative Commons

Creative Commons was founded in 2001 and has changed the copyright slogan "all rights reserved" into the slogan "some rights reserved". They have created various types of licences whereby the creator can protect his work while certain of its uses are encouraged. Creative Commons can be seen in the light of a more general development in society whereby sharing and working together in networked communities appear to provide a new manner of economic production (in contrast to market economy and state production). The recent offshoot of Creative Commons - Science Commons - strives to develop standard licences for the academic publishing world.

Legitimate scholarly uses: demarcation problems between educational purposes and commercial purposes

Apart from universal access the Open Access movement also strives to give the user of Open Access information the right to use or reuse this information for all legitimate scholarly uses. However, there are serious demarcation problems with a definition of legitimate scholarly uses on the one hand, and a definition of commercial purposes on the other, as universities and academic institutes engage more and more in commercial educational activities. From this study it appears that there can be no clear and easy-to-understand definition of legitimate scholarly uses that excludes commercial uses.

The role of monitoring and enforcing copyright infringements is very much dependent on the copyright licence

From the interviews with the publishers and the copyright experts it appears that copyright infringements do occur – albeit at a relatively low incidence rate. In addition, copyright infringements bear a direct relation to the content of the licence. The ‘attribution’ licence - used by a number of Open Access journal publishers - seems to be relatively free from copyright infringements. Other licences could require the function of monitoring and enforcing copyright infringements.

Open Access journal publishing only relevant for research articles

There is an important limitation for Open Access journal publishing: only with research articles does the interest in getting published lie very much with the authors; with other types of articles (such as review articles, chapters in textbooks etc.) this is much less the case. With regard to research articles authors not only have an interest in getting the research results published, they also have an interest in maximising the impact of their articles. Thus, the Open Access model - with the ‘author pays’ business model and its universal access - has obvious advantages for authors of research articles.

6.2 Four copyright practices

Four copyright practices in Open Access publishing have been identified

From this study four copyright practices in Open Access publishing have emerged meeting the core requirements of Open Access. The broad outlines of these practices follow:

- A. The ‘attribution’ licence, whereby the author keeps the copyright but gives a broad permission to use and reuse the article. Examples are PloS and Biomed Central.
- B. The commercial exploitation rights are transferred to the publisher through a licence agreement that limits legitimate scholarly uses to some extent. Examples are the British Medical Journal and Nucleic Acid Review.
- C. The rights to reuse and transform the articles are limited to Open Access licences as well. Examples are the EGU journals (Copernicus).
- D. All (or most) rights are reserved, but this time not by the publisher but by the author. Examples: Electronic Journal of Comparative Law; SCRIPT-ed

Direct relation between copyright policy and business model of the journal

It is important to note that there seems to be an important and direct relationship between copyright policy and the business model of the journal. Although this has not been extensively surveyed, the examples of copyright policies and Open Access journals that have been studied more closely seem to imply the following relationships:

- Model A and C: the more recently started Open Access journals often use the relatively new licences of Creative Commons. Often publishing organisations are involved and author fees are sometimes requested. Model C can be seen as a variant of model A, using another licence of Creative Commons. Some of the journals have a print version as well.
- Model B: journals that use model B-like copyright policies (commercial exploitation rights rest with the publisher) often have important revenue streams which should be protected by the copyright policy. Revenue streams are generated by advertising, by reprinting activities and by membership fees to an association. Author fees are often not requested. Some of these journals have print versions as well.
- Model D: journals that use model D-like copyright policies are often Open Access journals that already started a number of years ago (i.e. before the Creative Commons licences were published). These journals are mostly published by the academics themselves - no publisher or publishing organisation is involved. In these journals author fees are often not requested. The journals seem to be mostly electronic-only (no print version).

Proposition of four Models of Good Copyright Practices in Open Access publishing

Model	The author has following rights:	The publisher has following rights:	Others have the following rights:
A	all usage allowed including reuse for commercial purposes	not applicable	all usage allowed including reuse for commercial purposes
B	all usage allowed except for commercial purposes	OA publisher receives commercial exploitation rights	all usage allowed except for commercial purposes
C	all usage allowed	not applicable	all usage allowed if republishing then also Open Access
D	author keeps commercial exploitation rights	not applicable	all usage allowed except for commercial purposes

The four models of good copyright practices in Open Access publishing are depicted in the figure above. These models have been used for further research among the authors in this study in order to gauge their opinions and visions with regard to copyright.

6.3 Author study

Author surveys in the literature:

A number of studies among academic authors about Open Access were identified in the literature. The main conclusions:

- Approximately two thirds of the academic authors are aware of the concept of Open Access journals.
- There seems to be widespread support for Open Access among academic authors
- Copyright is not a 'hot' topic among authors: in one survey 46% authors stated to have no interest in it at all, with a mere 13% taking a detailed interest. In this survey the results are somewhat better: 26% state to have a low interest, whereas 23% state to have a high interest.
- With regard to the rights to (re-)use published research articles, the rights to use the articles for educational purposes score high (in one survey 75%; in another survey 89%); about half of the authors wish to retain the copyright

The qualitative research among authors in this study

Twelve authors of articles in Open Access journals in the United Kingdom and the Netherlands were interviewed for this study. The main results:

- *OA authors supportive of Open Access:* The interviewed OA authors all support Open Access. The main argument for supporting Open Access is the universal access combined with the argument that articles reach a wider audience and may have more impact. A sizeable number of respondents in this sample also cite the costs of the traditional publishing system and a dislike for the role of commercial publishers in this as a reason. The 'public good' argument was also mentioned several times.
- *OA support also a factor in choosing a journal for publication for some authors:* For a majority of respondents the impact factor of a journal is the overriding decision factor in their choosing a journal for publication. However, a number of respondents included Open Access as a factor in their decision-making process.
- *Copyright transfer: a wide variation among respondents:* For many respondents copyright is a low involvement issue. A number of respondents were rather uninterested in copyright and copyright transfer because in practice it does not pose any problems: permission for republication is in general easily received from journal publishers. However, most respondents preferred to keep the copyright of their research articles instead of transferring it to the publisher. Most expressed only a slight preference; a few respondents had strong feelings about this.

The websurvey among 1200+ authors of Open Access articles

In total 1226 corresponding authors of articles in Open Access journals were invited to participate in the websurvey. The response rate was 29%: 355 participants. The sample was biased towards life sciences and medical sciences because of practical reasons. The main results:

- *With regard to reuse and the reuse of research articles:*
 - More than half of the respondents use (parts of) the articles in printed or electronic course materials

- More than half of the respondents use (parts of) the articles in publications intended for other researchers
 - More than 40% deposit the full text of articles on their personal website or the website of the institute
 - Nearly 20% of the respondents deposit the full text of the article in an institutional repository
- *With regard to permission interest in case of reuse of their own articles in traditional journals:*
- Nearly 19% of the respondents state that they do not reuse an article in the way they would like to because of the effort to request permission at the publishers
 - 29% of the respondents state that they reuse their articles without asking permission⁴⁵
- *With regard to general copyright issues:*
- 23% of the respondents state that they have a high interest in the copyright issues of their own articles; 26% state that they have a low interest in this matter.
 - Nearly 15% state that the copyright policy of the journal plays an important role in the decision which journal to publish in.
 - A large majority (72%) is of the opinion that permission requests to reuse the article should be handled by the authors themselves.
 - An equally large majority (71%) prefers to keep the copyright as an author; only 2,3% has a preference to transfer the copyright to the journal publisher
- *With regard to the ideal copyright situation in Open Access journals:*
- Re-use for educational and scholarly purposes: nearly all respondents (92%) would like to permit this to the author(s), a large majority (81%) would like to permit this to others as well.
 - Re-use for commercial purposes: a majority (61%) thinks this should be permitted to the author(s) themselves, only a small minority (12%) would like to see this permitted to others.
 - When asked to choose between limiting commercial re-use versus permitting re-use for educational purposes a majority of 72% thinks permitting educational reuse is more important.
 - The idea of the 'share alike' clause - publishing is permitted if the resulting publication is also an Open Access publication - is liked by a majority of 57%.
- *With regard to the four proposed copyright models in Open Access journal publishing:*
- Model D - the author keeps the copyright - is best liked: it is deemed acceptable by 73% of the respondents and for 47% of the respondents it is the preferred model

⁴⁵ A recently published study shows that percentages of up to 30-40% of journal articles of subscription-only journals can be found elsewhere on the Web – maybe a result of this 'not asking permission' (J.D. Wren, Open Access and openly accessible: a study of scientific publications shared via the Internet; BMJ, doi:10.1136/bmj.38422.611736.E0 (12 April 2005).

- The other models A to C are acceptable to 44 – 53% of the respondents; 13% to 17% of the respondents choose one of these models as their preferred model. The models A and C (both using Creative Commons licences) together are preferred by 30% of the respondents; model B by 13%.
- *With regard to the respondents:*
 - Most respondents fulfil some role in journal publishing - most of them with traditional journals
 - A quarter of the respondents are editorial board member with a traditional journal: these respondents did not deviate in their opinions with regard to transfer of copyright and similar copyright issues from the rest of the respondents according to a cross analysis.
 - More than 80% of the respondents have their area of expertise within life sciences or medical sciences. Authors of other disciplines are clearly underrepresented in this websurvey and may possibly have different attitudes and opinions with regard to copyright. A cross analysis in which the respondents from other areas of expertise were compared with the respondents from life sciences and from medical sciences however did not show any differences in attitude or opinion with regard to copyright.

6.4 Discussion

The sample:

Is the sample representative of authors of articles in Open Access journals in general? The answer is no: there is an enormous overrepresentation of academic authors from the life sciences and the medical sciences as mentioned earlier due to the selection of names and addresses. However, a cross analysis could not find any differences between the authors from life sciences and medical sciences and the authors from all other disciplines together. Is the sample representative of authors from life sciences and medical sciences? Because of the number of authors invited and the response rate to the questionnaire, the sample certainly will be representative of Open Access authors from these two disciplines. But are Open Access authors different from other academic authors from the same disciplines, who do not publish in Open Access journals? Apparently not, as the respondents to this questionnaire had published many articles - mainly in traditional journals. Also, it appeared that the majority of the respondents are involved in traditional journal publishing: 86% are referees for a traditional journal, 26% are members, even, of an editorial board of a traditional journal. In other words: many of the respondents are part of the traditional academic publishing establishment.

Situation with regard to reuse is unsatisfactory:

The situation regarding the reuse of an author's own articles in traditional journals post publication appears to be unsatisfactory. A large percentage of the authors surveyed (29%) do not ask permission from the publisher, and a significant percentage (19%) state that they feel limited in reusing the article in ways they would like. 4% ask permission for reusing their own article but do not always get it. In addition, asking permission is felt to be cumbersome and time-consuming - according to many answers of the respondents to the open question.

Authors want a limited copyright role for the journal publisher

The attitudes of the authors in copyright issues in relation to traditional journal publishers are surprising: although most are involved in traditional journal publishing, only 2% prefer the transfer of copyright to the journal publisher and only 10% think that the publisher should handle permission requests to reuse the article. A large majority (71%) wants the authors to keep the copyright, an equally large majority wants to see the author handling permission requests as well. Surprisingly, this is also true for the sub-sample of those respondents, who are editorial board members of a traditional journal.

What authors want in copyright: unlimited reuse for scholarly and educational purposes, but limitations on commercial reuse by others

According to most respondents the ideal copyright situation looks like this: the author keeps all rights to reuse the article for educational, scholarly or commercial purposes. The others (readers, users) have the rights to reuse the article for educational or scholarly purposes, but do not have the rights to reuse article for commercial purposes. In the case of a conflict between limiting commercial rights and permitting educational rights however, most respondents think permitting educational rights more important.

In the light of these wishes it is not surprising that model D - in which the author keeps most rights - drew most supporters. Model A is arguably the purest Open

Access model, will maximise the impact of the articles the best and is used by Biomed Central and Plos, where the large majority of the respondents in this sample had published at least one article. Nevertheless, model A appears to be less popular with the authors because of the permission to reuse for commercial purposes to others.

Awareness-raising: through a combination of models and standard licences with editorial board members as an important target group

The Zwolle group aims at balancing stakeholder interests in scholarship-friendly copyright practices. Maybe the most important stakeholder in the scholarly communication system consists of the scientific authors themselves. However, this stakeholder seems insufficiently involved in developing new copyright practices: stumbling blocks in reaching the academic community are low involvement and lack of knowledge among scientists. This can also be concluded from this study in which 30% of the respondents don't know who initially owns the copyright of their own research articles and in which 26% of the respondents indicate to have a low interest in the copyright issues of their own research articles.

SURF recently started a campaign for awareness-raising among academics on copyright issues (www.surf.nl/auteursrecht). How should such an awareness campaign be focused? It is recommended that it should use models of good practice in copyright, such as the four models identified in this study, to explain and illustrate copyright situations. In the experience of the authors of the study these models were quickly understood by the scientists in the interviews and drew interest in the questionnaire, as can be seen from the relatively high response rate. It is believed that use of models will prove to be instrumental in awareness raising efforts.

The main target group for such awareness campaigns might be the part of the academic community that also functions on editorial boards of academic journals. Editorial board members can compare the various copyright models with the copyright practice of their own journal and eventually propose improvements to the journal publisher.

It is further recommended to use these copyright models - perhaps supplemented with some good practices for subscription-based journals - to develop standard licences in addition to the present Creative Commons licences. Cooperation between Science Commons – the recent offshoot of Creative Commons – and JISC and SURF might be a possible step forward to achieve this. It is believed that a combination of awareness raising among academics and developing standard copyright licences plus an involvement of all stakeholders in the scholarly communication system (especially the academic authors, whose voice has been heard relatively little so far) will help to achieve the ultimate goal of the Zwolle conference: maximum access to scholarship without compromising quality or academic freedom and without denying aspects of costs and rewards involved.

Appendix A: literature list

Open Access is a necessity to preserve knowledge and make it freely available; A white paper for the UNC-Chapel Hill Scholarly Communications Convocation	Bradley Hemminger	A White Paper for the UNC-Chapel Hill Scholarly Communications Convocation, January 2005
Valuing non-traditional vehicles of scholarship	Jeffrey Pomerantz, Bob Blouin	A White Paper for the UNC-Chapel Hill Scholarly Communications Convocation, January 2005
The Serials Crisis	Judith M. Panitch, Sarah Michalak	A White Paper for the UNC-Chapel Hill Scholarly Communications Convocation, January 2005
Institutional Repositories	Wallace McLendon	A White Paper for the UNC-Chapel Hill Scholarly Communications Convocation, January 2005
Copyright protection and Open Access	Charles H. Halsted	Am J Clin Nutr 2003; 78:899-901
Libraries and Changing Research Practices: A Preprint of the ARL/CNI Forum on E-Research and Cyberinfrastructure	Diane Goldenberg-Hart	ARL, Dec 2004, 237
Scholarly Communication; Open Access in the real world: Confronting economic and Legal reality	Rick Anderson	C&RL News, April 2004; Vol 65, No. 4
Open Access publishing - Panacea or Trojan horse?	Mark R. Graczynski, Lynn Moses	Med Sci Monit, 2004; 10(1): ED1-3
Why electronic publishing means people will pay different prices	Andrew Odlyzko	Nature http://www.nature.com/nature/focus/accessdebate/16.html
On being scientific about science publishing	Ann Okerson	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Electronic publishing models and the public good	Bernard Rous	Nature http://www.nature.com/nature/focus/accessdebate/16.html
A professional society's take on access to the scientific literature	Bettie Sue Masters and Judith S. Bond	Nature http://www.nature.com/nature/focus/accessdebate/16.html
What do societies do with their publishing surpluses?	Christine Baldwin and Sally Morris	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Not so quiet on a Western front	Daniel Greenstein	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Scientific publishing: Who will pay for Open Access?	Declan Butler	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Britain decides 'Open Access' is still an open issue	Declan Butler	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Science editor-in-chief warns of PLoS growing pains	Donald Kennedy	Nature http://www.nature.com/nature/focus/accessdebate/16.html
An evidence-based assessment of the 'author pays' model	Donald W. King and Carol Tenopir	Nature http://www.nature.com/nature/focus/accessdebate/16.html
CrossRef launches CrossRef Search, powered By Google	Ed Pentz	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Journal publishing: what do authors want?	Ian Rowlands, Dave Nicholas and Paul Huntingdon	Nature http://www.nature.com/nature/focus/accessdebate/16.html
How journals can 'realistically' boost access	Ira Mellman	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Do Open Access journals have impact?	James Pringle	Nature http://www.nature.com/nature/focus/accessdebate/16.html
The myth of 'unsustainable' Open Access journals	Jan Velterop	Nature http://www.nature.com/nature/focus/accessdebate/16.html

		s/accessdebate/16.html
Is free affordable?	John B. Hawley	Nature http://www.nature.com/nature/focus/accessdebate/16.html
The orthodoxy of Open Access	John Ewing	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Can Open Access be viable? The Institute of Physics' experience	John Haynes	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Analysing the scientific literature in its online context	Jon Kleinberg	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Open Access: yes, no, maybe	Karen Hunter	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Open Access and learned Societies Will Open Access prove a blessing or a curse to learned societies?	Kate Worlock	Nature http://www.nature.com/nature/focus/accessdebate/16.html
The pros and cons of Open Access	Kate Worlock	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Open Access needs to get 'back to basics'	Leo Waaijers	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Open Access ignoring lessons of dot-com bubble	Marie Meyer	Nature http://www.nature.com/nature/focus/accessdebate/16.html
The best business model for scholarly journals: an economist's perspective	Mark J. McCabe and Christopher M. Snyder	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Universities' own electronic repositories yet to impact on Open Access	Mark Ware	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Experimenting with Open Access publishing	Martin Richardson and Claire Saxby	Nature http://www.nature.com/nature/focus/accessdebate/16.html
PNAS and Open Access	Nicholas R. Cozzarelli	Nature http://www.nature.com/nature/focus/accessdebate/16.html
PLoS co-founder defends free dissemination of peer-reviewed journals online	Patrick Brown	Nature http://www.nature.com/nature/focus/accessdebate/16.html
The primacy of authors in achieving Open Access	Peter Suber	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Open Access and not-for-profit publishers	Sally Morris	Nature http://www.nature.com/nature/focus/accessdebate/16.html
The green and the gold roads to Open Access	Stevan Harnad et al.	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Can 'author pays' journals compete with 'reader pays'?	T.C. Bergstrom and C.T. Bergstrom	Nature http://www.nature.com/nature/focus/accessdebate/16.html
Open Access by the article: an idea whose time has come?	Thomas J. Walker	Nature http://www.nature.com/nature/focus/accessdebate/16.html
The Criteria for Open Access	David Goodman	Serials Review 2004; 30:258-270
The Shifting Sands of Open Access Publishing	John Regazzi	Serials Review 2004; 30:275-280
A Not-for-Profit Publisher's Perspective on Open Access	Martin Frank, Margaret Reich, Alice Ra'anan	Serials Review 2004; 30:281-287
Open Access: A Review of an Emerging Phenomenon	Adam Chesler	Serials Review 2004; 30:292-297
Open Access: How are Publishers Reacting:	Sally Morris	Serials Review 2004; 30:304-307
The Access/Impact Problem and the Green and Gold Roads to Open Access	Stevan Harnad, Tim Brody, Francois Vallières, Les Carr, Steve Hitchcock, Yves Gingras, Charles Oppenheim, Heinrich	Serials Review 2004; 30:310-314

	Stamerjohanns, Eberhard R. Hilf	
The "Green" and "Gold" Roads to Open Access: The Case for Mixing and Matching	Jean-Claude Guédon	Serials Review 2004; 30:315-328
Open Access is Only Part of the Story	Richard Gedye	Serials Review 2004; 30:271-274
American and British Lawmakers Endorse Open- Access Publishing	Andrea L. Foster, Lila Guterman	The Chronicle of Higher Education. Washington: Jul 30, 2004. Vol 50, Iss 47; pg. A. 13

Appendix B: interviewees

Open Access Publishers	
Mr. J. Velterop	Biomed Central
Mrs. V. Barbour	Plos
Prof. Dr. J.H.M. van Erp	Electronic Journal of Comparative Law
Mrs. A. Williamson	BMJ Publishing Group
Dr David J Webb	European Geosciences Union / Copernicus
Copyright experts	
Mr. R. McCracken	Open University
Mrs. B. Stratton	CILIP
Mrs. Charlotte Waelde	University of Edinburgh
Mrs. W. Mossink	SURF
Mr. J. Wilbanks	Science Commons
Mr. S. Groeneveld	Nederland Kennisland
Open Access authors	
Prof.dr. P. J Borm	Hogeschool Zuyd
Dr. E. Cuppen	NIOB
Prof. Dr. HFJM Crebolder	Universiteit Maastricht
Prof. Dr. J. P Mackenbach	Erasmus Universiteit
Dr. K. Stronks	AMC
Prof.dr. J. Verhaagen	NIH
Prof. R A Moore	Oxford University
Mr. B A Lopman	Imperial College
Mr. C. Tam	Communicable Disease Surveillance Centre, UK
Mr. N Le Novère	EMBL-EBI
Prof J M Bland	York University
Prof A H Baker	Glasgow University

Appendix C: the questionnaire

Study on copyright issues in Open Access journals

Welcome to this questionnaire.

With Open Access journals the author generally keeps the copyright of article.

This questionnaire explores the various possibilities of how the author can use the copyright of an article published in an Open Access journal.

The aim is to identify good practices in copyright in Open Access journals.

The questionnaire addresses the following topics:

A: Use and reuse of your own research articles

B: Your interest in copyright issues

C: The ideal copyright situation according to you

D: Your opinion about four copyright models in Open Access journal publishing

E: Some concluding questions

Are you not interested in the possibilities in using the copyright of your own articles? Click here to decline participation in this survey: [I Decline / Ik doe niet mee](#)

A: Use and reuse of your own research articles

After publication of your article (whether published in an Open Access journal or not), in what ways do you use your article? [TICK AS MANY BOXES AS APPLY]

(parts of) the article in printed course material for teaching

(parts of) the article in electronic course material for teaching

(parts of) the article in a (printed or electronic) publication intended for other researchers (e.g. dissertations, books, review articles, book chapters)

the full text of article is posted on the website of myself or my institute

the full text of the article is deposited in the electronic archive of my institute (institutional repository)

other

If other, please specify:

--

In a traditional (subscription model) journal the copyright generally rests with the journal publisher. What do you do when you want to (re-)use your article?

- I do it without asking permission
- I ask permission of the publisher, which I always get
- I ask permission of the publisher, which is sometimes refused.
- I do not reuse the article in the way I would like to use it because of the effort to ask permission.
- does not apply
- don't know

Your comments please:

B: Your interest in copyright issues

Generally, the author has to transfer the copyright of this article to the journal publisher. In most Open Access journals this is not the case: the author keeps the copyright, but grants a licence to the publisher. What is your opinion?

My interest in the copyright issues of my research articles can best be described as:

- low
- medium
- high
- don't know / no opinion

Does the copyright policy of a journal play a role in your decision to choose a journal for publication of a research article?

- no
- yes, a minor role
- yes, an important role
- don't know / no opinion

Who should in your opinion handle permission requests to (re-)use the article?

- author(s)
- institute of the author(s)
- publisher
- don't know / no opinion

Please indicate your preference with regard to transfer of copyright to the journal publisher versus keeping the copyright as the author:

- preference to transfer the copyright
- neutral
- preference to keep the copyright
- don't know / no opinion

Your comments please:

C: The ideal copyright situation according to you

In Open Access journals the author keeps the copyright of your article. How do you, as an author, want to use the copyright?

First an explanation about copyright:

Copyright is a set of rights, consisting of moral rights (the right that the author is properly acknowledged, for instance) and exploitation rights. The exploitation rights are the issue here:

- (re-)use for educational and scholarly purposes
- (re-)use for commercial purposes
- the rights to (re-)use by the author(s)
- the rights to (re-)use by others

- the rights to (re-)use by the publisher

What would an ideal licence agreement for an Open Access journal look like? Of course acknowledgement of you as the author is obligatory in any (re-)use. What else do you want?

A list of possible exploitation rights and related questions follows to gauge your views on how far (re-)use should be permitted. Please indicate your preference on the scale by clicking (see figure).



- 2: strong preference item left-hand side
- 1: preference item left-hand side
- 0: neutral / no preference
- 1: preference item right-hand side
- 2: strong preference item right-hand side

(re-)use for educational/scholarly purposes by the author should be: ← limited
 permitted →

(re-)use for commercial purposes by the author should be: ← limited
 permitted →

(re-)use for educational/scholarly purposes by others should be: ← limited
 permitted →

(re-)use for commercial purposes by others should be: ← limited
 permitted →

There can be a conflict between permitting the rights to others for (re-)use for educational purposes and limiting the rights for (re-)use for commercial purposes, because many educational activities are in a commercial setting. Please indicate which is more important to you: ← limiting commercial (re-)use
 permitting educational purposes →

If someone republishes (parts of) my article in another publication, this publication should be Open Access as well ← bad idea
 good idea →

Your comments please:

D: Your opinion about four copyright models in Open Access journal publishing

Four possible models of copyright practices in Open Access publishing are depicted in the figure below.

Model A: The author gives a broad permission to use and reuse the article, also for commercial purposes. This model is based on PLoS and the journals from Biomed Central.

Model B: The author gives the commercial exploitation rights to the publisher. The author gives permission to the readers/users to use and reuse the article for scholarly and educational purposes (as long as these are not commercial). This model is based on the British Medical Journal and Nucleic Acid Review.

Model C: The author gives permission to (re-)use the article for all purposes; in case of republishing (parts of) the article this should be as an Open Access publication as well. This model is based on the journals of the European Geosciences Union.

Model D: The author keeps the commercial exploitation rights and gives permission to the readers/users to use and reuse the article for scholarly and educational purposes (as long as these are not commercial). This model is based on the Electronic Journal of Comparative Law.

co-written so far in Open Access journals? 2 to 5
 5 to 10
 11 to 25
 more than 25
 don't know

Who initially owns copyright in what you write? you as the (co-)author
 your institution/company
 in discussion
 don't know

Which of the following roles, if any, have you undertaken in the past year? [TICK AS MANY BOXES AS APPLY]

referee for (traditional) journal articles

editorial board member of traditional journal

journal editor (editor-in-chief; associate editor) of traditional journal

referee for (Open Access) journal articles

editorial board member of Open Access journal

journal editor (editor-in-chief; associate editor) of Open Access journal

In which of the following sectors do you currently work? university/college
 other noncommercial research institution
 other public sector
 industrial/business sector
 other (please specify below)

If other, please specify:

In which one of the following geographic areas do you currently work? Africa
 Asia
 Australia/New Zealand
 Europe (excluding UK)
 North America
 South America
 UK
 other

If other, please specify:

Please indicate your age group: 18 - 30
 31 - 40
 41 - 50
 51 - 60
 61 +

Which of the following best describes your area of expertise? agriculture and food science
 business and management
 chemistry

-
- computer sciences
 - earth and geographical sciences
 - engineering, material sciences and technology
 - humanities
 - law and politics
 - life sciences
 - mathematics
 - medical sciences
 - physics
 - psychology
 - social sciences and education

Please leave your email address here if you want to receive the results of this study. Incidentally, anonymity is guaranteed while processing the data.

Click the submit button to register your answers. The system will answer with a confirmation message and an overview of your answers.

Thank you very much for your participation in this study.
