

Faculty of Humanities, Social Sciences and Education

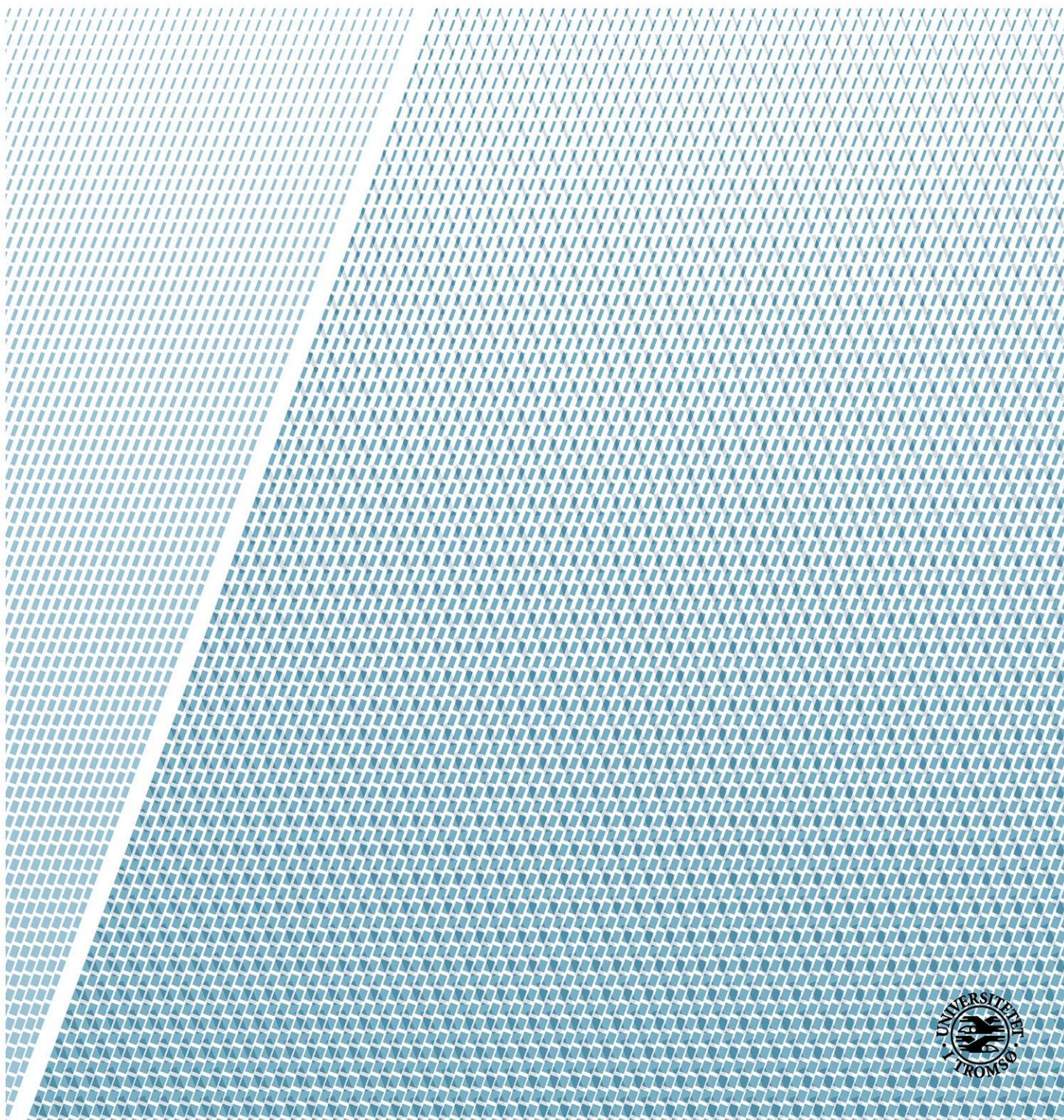
## **Open Access as publication method at the Faculty of Humanities, Social Sciences and Education, UiT**

*A feasibility study conducted among academics at the faculty to determine usage and consensus regarding Open Access publishing practices*

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**Sivert Martin Myrvang Grenersen**

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## Abstract

This master thesis explores the landscape of scholarly publishing by presenting a study done at the Faculty of Humanities, Social Sciences and Education (HSL) at UiT the Arctic University of Norway to assess publication practices and attitudes with the focus being on Open Access (OA). For this study, 444 journal publications from the faculty in 2016 and 2017 were analyzed alongside a survey asking about attitudes to OA sent to researchers at the faculty which received 164 responses. The findings showed that respondents overall were very positive to OA and that one out of four publications in 2016 and 2017 were published OA. More detailed analyses revealed that women published OA to a higher degree than men in terms of percentages but that men in overall published more than women. Across all age groups, attitudes towards OA were positive to similar degrees. An important finding was that researchers reported a lack of OA publication channels in some academic fields, an issue that causes problems in relation to Plan S, a campaign launched by the EU to mandate that all research financed by the EU is to be published OA from 2021.

# 1 Introduction

Open Access (OA) is an emerging field within academic publishing. With OA is meant the universal access to all scientific publications regardless of who is trying to access them. A simple concept at the surface but complicated at its depth. This thesis presents a study done at the Faculty of Humanities, Social Sciences and Education (HSL) at UiT the Arctic University of Norway to assess publication practices and attitudes with the focus being on OA.

OA has become a central theme in academic debates in recent times, as the European Union (EU) launched a campaign titled Plan S which intends to mandate that all research funded by the EU shall be published Open Access by the year 2021 (European Commission, 2018a, p. 4). The Norwegian Research Council (NFR) has so far chosen to partake in Plan S, which affects Norwegian researchers. In the thesis, Plan S and its potential effects are explained and explored.

HSL is a diverse faculty, including many departments and covering many fields within the humanities. It houses social sciences, information sciences, philosophy, education, culture and language as well as history, religion and archeology. There are more areas the faculty covers, as it spans nearly all fields within the humanities.

For me, this study is one that I have had an interest in doing for a while. I have been curious about the current standing of OA in the academic community. I limited the project to encompass the HSL faculty at UiT, but the project could have been scaled up to map OA publication practices and attitudes at the university in its entirety. Such a project, however, would have been more prudent for a ph. d. What motivates this study for me is the proximity to my own faculty, as well as the interest both the university library and the university itself may have in the results.

Throughout the thesis, datasets with data on publication practices at HSL is presented along with results from an anonymous online survey intended to map the academic consensus on OA publishing among researchers at the faculty. The goal was to determine whether academics at the faculty currently prefer to use OA or Toll Access (TA) platforms for publishing, and whether they believe OA will be more relevant in the future.

Research question:

*What were the Open Access publication practices of researchers at HSL for the years 2016 and 2017 and what were their opinions on Open Access in 2018?*

The theoretic outline for the thesis is based on various forms of literature surrounding the areas of publishing and OA. The book *Open Access* (2012) by Peter Suber forms a basis for the most common terminology surrounding OA. There has also been a large survey, internationally, on scientists' opinions of OA, summarized by the journal article "Highlights from the SOAP project survey. What Scientists Think about Open Access Publishing" (Dallmeier-Tiessen et al., 2011). The survey gives insight to international scientific consensus surrounding OA, but also gives information regarding method, as the survey is a large-scale version of my survey at HSL. Some of the questions asked in the survey work as reference questions for my survey.

The data analysis is separated into two parts. The primary analysis uses a dataset from the database called Current Research Information System In Norway (Cristin), which contains information regarding publication practices at HSL in 2016 and 2017. The analysis focuses on OA and how OA publications at the faculty relate to factors such as gender, department and journal ranking<sup>1</sup>.

The secondary analysis is of the results from an anonymous web survey I conducted at the faculty, where researchers were asked their opinions on OA and its potential impacts on academic publishing, peer-reviews and their own fields of study. Employing Likert-scales<sup>2</sup> on most questions, the survey was initially intended to be purely quantitative in nature, but it included an optional comment box at the end of the survey for people to write down their thoughts, opening up for the survey to contribute qualitative qualities to the analysis.

The results from both analyses should be of value to HSL as the faculty will look to assess the impacts of the European Union's new policies on OA. The university library of Tromsø expressed their interest in the data while I had my internship period there as a part of the master's course.

The data study of the publication practices gives an indication as to the faculty researchers' practices and norms regarding publishing. I chose to pair the data analysis with a survey in order to allow the publication data from 2016 and 2017 to be complemented by a parallel study which offers a sense of social relevance to the data. The survey allows us to place the

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<sup>1</sup> See chapter 2.6.3 for information regarding the Norwegian publication ranking system (tellekantsystemet).

<sup>2</sup> A Likert-scale is a survey method developed by psychologist Rensis Likert, in which a scale (in my case from 1 to 5, or "very negative" to "very positive") is used to quantify responses to a survey question.

publication data in a context, demonstrating how the emergence of OA publishing may have impacted perspectives on academic publications at HSL.

For the analysis, the two parts are presented separately at first, then we look closer at potential connections between publication data and the survey in order to unveil correlations.



## 2 Theory and background

### 2.1 Academic publishing – a brief explanation

Historically, philosophers and scientists were reluctant to share their hard-earned knowledge with the outside world for fears of plagiarism, adulteration or loss of income from harnessing unique knowledge. When the first scientific journals were published during the Enlightenment, the Royal Society's *Philosophical Transactions* in the U.K. and the *Journal des sçavans* in France, they brought along a paradigm shift in the field of science, as they focused attention on the sharing of models and practices that became instrumental to modern scientific culture. However, peer-reviewed papers are largely confined to the scientific community, and not essentially made for the public (Grand, 2015, p. 1).

In the centuries that followed from the advent of the first scientific journals, the field of academic publishing became more dominated by journals as opposed to books, which were the norm during the earlier years. Some areas of study retained the books as their primary medium of exchange, many of them in the humanities, but for most areas, the journal was the medium of choice. Since the first scholarly journals were published, the field of scholarly publishing has exploded in size and it is estimated that, since the mid-seventeenth century, the number of academic journals has doubled every fifteen years. This expansion has been particularly visible in the aftermath of World War II, after which public research funding to natural and technological sciences increased, in addition to increased focus on scholarly publishing. The war also caused a shift in the concentration of academic influence from Germany to the Netherlands, the United States and Great Britain, the countries in which we will find some of the most profitable and influential academic publishers today (Francke, 2008, p. 28).

Changes in technology have forced the publishing industry to undergo a paradigm shift as providers of knowledge. Business models, services and copyright policies among publishers are different today than before the advent of digital technologies (Padmalochanan, 2019, p. 8). The cornerstones of academic publishing have traditionally been printed journals and books. The transition to electronic formats has changed how users access and utilize scientific information.

The business models of some of the largest publishers, such as Reed-Elsevier, have shifted from traditional subscription services to so-called 'Big Deals' that bundle together many of their publications into mega-packages libraries are encouraged to buy if they want discounts on journals. These deals make it difficult for libraries not to subscribe to many of the publications

the publisher has to offer, even if the library only needs publications from a specific academic field (Brown & Boulderstone, 2008, p. 15; Lemley & Li, 2015, p. 4). Usage statistics for libraries subscribing to Big Deal bundles can often show numbers of zero downloads for many of the journals the libraries are subscribing to, and the inflationary rate of journals is typically in the 6-8 % range, meaning that libraries with flat budgets, or those facing budget cuts, can have a difficult time achieving equity and satisfying their users at the same time (Horava, 2018, pp. 16-17).

Scientific publishing is an important pillar in the construction of modern science. Through various publications, scientists share their ideas, experiences and discoveries with other scientists, and in some cases, with the public. However, gaining access to scientific publications can be hard for the public, as scientists often publish their works in journals owned by publishers who seize the copyright of the publication, making it their property. As long as the publishers own a publication, they can charge money for it. Already by 2012, prices had become so stale that even Harvard, one of the worlds' wealthiest universities were struggling to pay their bills, which cost the university library about \$3.5 million a year for subscriptions to scientific papers (Sample, 2012). During my internship period at the university library (UB) of Tromsø, I learned that the library allocated as much as 49,2 million NOK on subscriptions to academic journals in 2019 (Universitetsbiblioteket, 2018). 10 million NOK of UBs literature budget, about 20 % of the budget, went to Elsevier, whom coincidentally owns 20 % of the global academic publishing market (Larivière, Haustein, & Mongeon, 2015, p. 4).

The modern landscape of academic publishing is in a discursive struggle<sup>3</sup>, where proponents for traditional publishing and proponents for Open Access are fighting for hegemony<sup>4</sup>. The goal is to convince the public and the academic communities to support their cause. Traditional

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<sup>3</sup> The term 'discursive struggle' is an abbreviation of the term 'discourse'. The word 'discourse' can be hard to define, but Jørgensen and Phillips make it a little easier for us by giving it a definition that can easily be discerned. The general idea is that as social beings, we partake in different social settings wherein the communication mechanics of each setting harbor their own unique language and jargons. We can distinguish between 'political discourse' and 'medical discourse' much like 'academic discourse', or different academic discourses, and different social discourses (Jørgensen & Phillips, 2002, p. 1). With the term 'discursive struggle', we are talking about different discourses with different ways of understanding and talking about the social world, engaged in a constant struggle for hegemony (Jørgensen & Phillips, 2002, pp. 6-7).

<sup>4</sup> A hegemony can be defined as the dominance of a certain perspective, often at the cost of alternative perspectives (Jørgensen & Phillips, 2002, p. 7).

academic publishers fear for their profits, while Open Access-activists within and without public institutions seek to reduce the largest publishers' domination over the academic publisher landscape.

## 2.2 Open Access – terms and definitions

Open Access (OA) is a term for open publications of academic articles. Articles that carry the label "Open Access" are free of charge to anyone who wish to read them. On the contrary, articles that are Toll Access (TA) require payments per article or to subscription services to be read.

With the advent of the Internet, Open Access as a means of publishing the works of researchers and academic authors has entered academia, as modern digital technologies make it possible to store and share documents online without the cost of printing. Throughout the thesis, I refer to Open Access as OA, as the term is used frequently.

OA was defined in a series of public declarations over a short period of time by the Budapest Open Access Initiative (February 2002), the Bethesda Statement on Open Access Publishing (June 2003), and the Berlin Declaration on Open Access to Knowledge in the Sciences and Humanities (October 2003) (Suber, 2012, p. 7). The most general paragraph from the statement issued by the Budapest Open Access Initiative explicitly states that OA counts mainly for scholarly publishing and not the publishing of novels, biographies and other forms of literature outside the realm of academia. Aside from that, it assists in providing a general description of OA:

The literature that should be freely accessible online is that which scholars give to the world without expectation of payment. Primarily, this category encompasses their peer-reviewed journal articles, but it also includes any unreviewed preprints that they might wish to put online for comment or to alert colleagues to important research findings. There are many degrees and kinds of wider and easier access to this literature. By "open access" to this literature, we mean its free availability on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors

control over the integrity of their work and the right to be properly acknowledged and cited (Chan et al., 2002).

### 2.2.1 Definitions on central terms

- Preprint
  - Any version of an article prior to peer review, such as a draft circulating among colleagues or the version submitted to a journal (Suber, 2012, p. 100)
- Postprint
  - Any version of an article approved by peer review (Suber, 2012, p. 100).
- Rowsean flip
  - Media and publishing entrepreneur Mark Rowse found that by redirecting funds towards OA publishing by reinterpreting the role of payments, the financing of journals could be redirected from being seen as subscription fees to being interpreted as publication fees. Thus, subscription fees for a group of readers is flipped to become a publication fee for a group of authors (Suber, 2012, p. 147). An example of such a flip is a deal made between Unit<sup>5</sup> and Elsevier in 2019 allowing Norwegian researchers to publish OA in Elsevier's journals (Unit, 2019).
- Embargo period
  - An embargo period is a period in which a publication is placed behind a paywall for a limited period of time before it is made openly accessible to the public. The usual time is six months or a year. Embargoes may also be imposed on institutional archives depending on publisher policies. When the institution financing the researcher mandates archiving of the researcher's publication for public accessibility (green OA), the publishing company may have policies demanding that the institutional archive does not grant accessibility to the publication for a given period of time after it was published in the publisher's journal.
- Article processing charges (APCs)
  - Article processing charges, APCs for short, are the fees OA and TA publishers charge for peer-review, processing, formatting and publication of articles. There are some misconceptions regarding APCs: One is that the pricing is usually very

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<sup>5</sup> The Directorate for ICT and Shared Services in Higher Education and Research in Norway.

high for OA journals, the other is that most OA journals charge APCs (Solomon & Björk, 2012).

- Many OA journals do not charge any author-side fees at all. If there are fees, the payment is covered by the institution financing the author in most instances. Additionally, processing fees are not exclusive to OA. Many TA journals charge author side fees as well (Suber, 2012, pp. 136-139).
- Directory of Open Access Journals (DOAJ)<sup>6</sup>
  - The DOAJ is an independent, community-curated online directory that indexes peer-reviewed OA journals and publications and provides access to them. The DOAJ plays an important role in validating the legitimacy of OA journals and is amongst other organizations economically sponsored by national education agencies from all Scandinavian countries.
- Sherpa/RoMEO<sup>7</sup>
  - Sherpa/RoMEO is an online resource that aggregates and analyses publisher Open Access policies from around the world and provides summaries of self-archiving permissions and conditions of rights given to authors on a journal-by-journal basis.
  - Sherpa/RoMEO provides a color (or in their case “colour”) code by which a person looking for information regarding a publisher’s policies on green OA archiving can browse for said publisher’s policies in their database rather than having to contact the publishers or read their policy statements. Sherpa/RoMEO is an important feature for those who register publications to institutional repositories, such as Munin, which is run by the university library of Tromsø.
  - Do not confuse the *green RoMEO color code* with *green OA*. They are labels with similar names, but from different systems.
  - The distinction between green and blue RoMEO codes is that green allows the author or institution to archive *any* version of the article, including preprints, whereas blue distinctly disallows preprints for the sake of securing that the *green OA version* (not to be confused with the “green” RoMEO color code) is *not a*

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<sup>6</sup> Website: <https://doaj.org/>

<sup>7</sup> Website: <http://www.sherpa.ac.uk/RoMEO/>



*preprint of the gold OA version* (the version published in the publisher's journal).

Read the next chapter for definitions on green and gold OA).

Table 1: The different RoMEO color codes and how they imply what institutional repositories are allowed to do with their version of a scientific publication.

ROMEEO colour	Archiving policy
green	can archive pre-print <i>and</i> post-print or publisher's version/PDF
blue	can archive post-print (ie final draft post-refereeing) or publisher's version/PDF
yellow	can archive pre-print (ie pre-refereeing)
white	archiving not formally supported

### 2.2.2 Different forms of Open Access

There are different forms of OA, depending on the platform publications are published in, the origin of the publications, the method of publication, whether the publication is published in an OA journal, an OA archive or a web page of a different form. The definitions were initially worked out by Peter Suber, one of the leading authorities on OA.

To some OA-scholars, gold OA refers to OA publications published in OA journals. Gold OA journals are peer-reviewed in the same way as TA journals. In cases where an OA publication never made it to a journal however, the institutional repository version will take the role as the *primary publication*. For most dissertations or theses, this is the case. In some cases, the only existing publication is uploaded to a simple web page. The important aspect of gold OA is that all publications must retain a *main peer-reviewed version*, a *primary publication* to which students and researchers can refer and cite.

Green OA publications can be defined as *parallel publications*. They are often archived in OA repositories (archives). Most TA publishers permit authors to archive their publications in OA repositories, so even if a publication is accepted by a prestigious TA publisher, it is still possible for the author to provide the publication as green OA. This is mandatory when their funding agencies or universities demand that all research and articles they produce are to be OA.

To elaborate and simplify<sup>8</sup>:

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<sup>8</sup> These definitions were given to me by scholar Helena Francke.

*Table 2: A simple explanation of the differences between Gold and Green OA.*

Gold OA	Green OA
Primary publication	Parallel and/or primary publication
Published and made available	Archived and made available

Some of the drawbacks to green OA is that publications uploaded to OA repositories can have permission barriers that hinder them from being accessible for the public for a while (embargos). When a publisher wants to keep the publication accessible solely in their journal for a period, an embargo is set, meaning that the publication will not be accessible in the repository until the end of the embargo period, which is usually six months or a year.

Unlike peer-reviewed journals, institutional repositories may not offer the peer-reviewed (postprint) version of the publication, if the publisher does not allow it, or if the institution has accidentally archived a preprint (not peer-reviewed) version of the publication (Suber, 2012, pp. 53-54).

As a result of this, OA repositories may host peer-reviewed publications, but they may also just as well host the preprint version of a publication rather than the peer-reviewed version, or they may host preprint publications that never underwent peer-review in order to be published, making the publications unsuitable for scientific usage. Publications downloaded from green OA repositories may often not show page numbers, nor belong to a particular journal even if their postprint version does, which may or may not be easily accessible depending on publication form (OA or TA) or tell the reader if they are peer-reviewed or not, making them difficult to cite for researchers or students. Many publishers do, however, allow, or even mandate, the postprint version to be archived.

Between fields of study, publication practices differ greatly. Within some areas, sharing preprints may be practical for quick exchanges of knowledge. Within the humanities, it is not so common to use preprints for scientific applications.

The benefits to green OA is that some OA repositories comply with the Open Archives Initiative (OAI) Protocol for Metadata Harvesting (PMH), making them easily findable by major search engines on the Internet (Suber, 2012, p. 56). However, should these repositories contain preprint versions of publications, finding them via search engines may not be so beneficial after all.

Here is a table explaining different forms of OA:

Table 3: Different forms of OA.

Methods of publication	Gold OA	<p>Gold OA publications can be regarded as <i>primary publications</i>. The gold OA version of a publication is the main publication. This is the version to which it is most prudent to refer or cite.</p> <p>The gold OA version of a publication should always be peer-reviewed. If a publication is gold OA, then no version of the publication should exist behind a paywall.</p>
	Green OA	<p>Green OA publications can be regarded as <i>parallel publications</i>. Green OA versions of a publication may exist in many different places, from institutional repositories to blogs and social media sites. Some researchers upload their publications to their personal web sites.</p> <p>The green OA version may be a <i>parallel publication</i> to a TA publication as well as a gold OA publication. It does not have to be peer-reviewed and may therefore be impractical to cite or refer to.</p> <p>In cases where the publication lacks a gold OA version, the green OA version may also be defined as the <i>primary publication</i>.</p>
	Hybrid Toll Access/OA journals	<p>Journals that provide Open Access to some publications and Toll Access to others, dependent on the preference of the author. Most hybrid OA journals charge a publication fee in order to publish OA. Authors who can afford to pay are allowed to publish OA, and those who cannot afford it, or prefer not to publish OA, publish Toll Access. A low risk option for publishers (Suber, 2012, pp. 140-141).</p> <p>It is important to note that TA publications may also require a publication fee from the publisher to the author or the respective institution.</p>

	Toll Access (TA)	Paywalled journals and publications in the conventional, traditional form of academic publishing.
Levels of permission	Libre OA	Libre OA removes price barriers and at least some permission barriers. Preferably, libre OA should provide open licenses for users, so that there is no confusion as to what can be done with content of a publication regarding citations, use of data and general fair use. The work should be as usable and useful as can be (Suber, 2012, p. 75).
	Gratis OA	Gratis OA removes price barriers but not permission barriers. The OA movement has been able to persuade the majority of TA publishers and TA journals to allow green gratis OA, meaning that many publishers now permit institutional repositories to host publications and distribute them freely or keep them behind embargoes issued by the publisher (Suber, 2012, p. 71).
Piracy	Black OA	Introduced as a term by OA-researcher Bo-Christer Björk in 2017, black OA involves pirated papers from subscription services <sup>9</sup> (Björk, 2017).

### 2.3 SOAP and other surveys related to OA publishing

The Study of Open Access Publishing (SOAP) ran a large-scale survey on the attitudes of researchers regarding OA publishing. The survey collected close to 40 000 answers from researchers across different disciplines all around the world in 2010. This makes it a somewhat old study as the politics of publishing have changed quickly the last nine years, but it is

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<sup>9</sup> The papers may have been retrieved by donations from academics disgruntled by expensive subscription services or through phishing for credential information to publisher web sites from universities. The leading academic pirate web sites are currently Sci-Hub and Library Genesis, but the field of academic piracy also involves academic social networks (ASNs) such as Research Gate, Mendeley and Academia.edu. Another effective method for retrieving pirated papers for individuals has been to post #icanhazPDF on Twitter and request a specific paper (Björk, 2017).

important for my analysis, as it is the only survey to highlight global and general attitudes toward OA.

One of the central questions of the survey was that of benefits to the researchers' own scientific fields: "Do you think your research field benefits, or would benefit from journals that publish Open Access articles?"

To this question, 89 % answered "yes", 3,7 % answered "no", 6,3 % responded "I have no opinion" and 1 % responded "I do not care". Looking at disciplines, the graph revealed that language and literature studies, mass communications and documentation and education were the most positive disciplines answering "yes" in about 93-95 % of instances. Physics, astronomy and chemistry were the most negative disciplines, answering "yes" in 78-82 % of instances (Dallmeier-Tiessen et al., 2011, p. 4).

The respondents who were positive to OA were given the options to list their reasons for why they thought OA positive or negative with a free text box. 17 852 opted to make use of this text box, with 16 734 having a positive response. The respondents produced about 500 000 words on the subject. The responses were tagged and indexed based on the words used in the responses. 36 % responded it was a "scientific community benefit", 20 % mentioned "financial issues" with library budgets and subscription prizes being the primary concern, 18 % thought it as a "public good", 10 % listed an "individual benefit" and 9 % mentioned "accessibility" as a reason, citing OA as a road to securing ease of access to researchers who already have access to publications through their institutions, referring to the prospect of not having to log in, use VPNs or approve credentials every time they needed to access publications outside of their institutions. The scientific community benefit refer to seamless sharing of research results, methods and information as well as providing the ground layer for social exchanges between researchers, allowing for scientific publications to join the modern standard for digital information sharing (Dallmeier-Tiessen et al., 2011, p. 5).

29 % of the respondents to the survey had not published OA, with 42 % having specific reasons for not doing so. 4 976 respondents contributed their opinions on why they had not published OA during their time as researchers. This time, as well, the responses were tagged and indexed according to recurring terms. 39 % had problems with "funding" which involved publication fees or lack of funding for OA publication, 30 % mentioned "journal quality" as a problem, 8 % lacked "accessibility" to OA journals in their fields, 7 % mentioned "unawareness" as a



reason and 4 % had “habits” for publication that did not involve OA publications (Dallmeier-Tiessen et al., 2011, pp. 7-8).

52 % had experienced publishing OA, totaling 22 977 scholars ready to give answers on their experiences with OA publishing. The first question these researchers received was on the nature of publication fees, of which 50,2 % answered that they paid nothing to have their previous publication published OA. 7,2 % answered that they had paid up to €250, 6 % had paid €251-€500, 12,6 % had paid €501-€1000, 9,9 % had paid €1001-€3000 and 0,2 % had paid more than €3000. 14 % did not know how much they had paid for their last publication at the time.

Furthermore, the distribution of answers by publication fees were distributed on the different scientific disciplines. More than 80 % of respondents from language and literature studies, historical and philosophical studies and mass communications had paid nothing to have their last publication published OA, whereas for biological sciences, less than 25 % could say the same. For Earth sciences, medicine and dentistry, less than 42 % were allowed to publish their last OA publication for free. The 9 645 people who had to pay APCs were asked how they were financed. 28 % answered “My research funding includes money for paying such fees”, 31 % answered “I used part of my research funding not specifically intended for paying such fees”, 24 % answered “my institution paid the fees” and 12 % answered “I paid the costs myself” (Dallmeier-Tiessen et al., 2011, pp. 8-9).

Following up on the question of publication fees, 8 208 respondents were asked of the difficulty of finding funds for publishing OA. 31 % answered that it was “easy” to find funds for OA publishing, 54 % answered that it was “difficult”. The remaining 15 % answered that they did not use the respective funds. There were large differences between disciplines and institutions in this area. When it came to ease of access to funds, respondents from Earth sciences, mathematics, computer sciences and physics found it easy in more than 35 % of responses. For psychology, architecture and language and literature studies, less than 21 % had an easy time finding funds. Regarding institutions, industrial and commercial institutions easily allocated funds for 60 % of respondents, research institutes for 40 %, government institutions for close to 40 %, universities for close to 30 % and hospitals or medical schools for slightly more than 20 % of respondents (Dallmeier-Tiessen et al., 2011, p. 10).

The SOAP survey is yet the largest survey to touch upon questions of attitudes and experiences towards OA publishing. The most important aspect of the survey is the question of how researchers believed OA will impact their field of research, with close to 90 % answering that

they believed the impact would be positive. At the same time, their previous study revealed that only 8-10 % of articles were published yearly in OA journals. The SOAP survey indicates that this discrepancy was caused by funding and a perceived lack of high-quality OA journals in certain fields. Many researchers published OA publications for free, however, those who were faced with publication fees had a variety of experiences regarding funding (Dallmeier-Tiessen et al., 2011, p. 11)

For his dissertation at UiT, Lars Moksness, together with Svein Ottar Olsen, researched researchers' intentions to publish OA and their potential motivations for choosing to publish OA, arguing that a researcher's intention to publish OA is made well in advance of doing so, and is unlikely to change such a decision unless the publication is rejected by an OA publisher or the researcher is being forced to resubmit (Lars Moksness & Olsen, 2017, p. 5).

Moksness argued that someone's inclination towards accepting novel ideas is linked to their level of innovativeness, as innovativeness facilitates adaptability to new technological solutions, such as digital OA publishing. General innovativeness may also affect intentions to participate in web-surveys (Lars Moksness & Olsen, 2017, p. 10), suggesting a possibility for biases towards OA in web surveys.

Moksness' survey was sent by e-mail to 2971 employees at UiT, of whom he received a response percentage of a little over 10 %. Moksness employed a seven-point Likert-scale for statements to which respondents could answer one = "strongly disagree" to seven = "strongly agree". His survey established that attitude among researchers was a major predictor of intention to publish OA, which is a result similar to previous OA research employing attitude-type questions. Social norms seem to have an effect on intentions to publish or not publish OA, as the survey showed that the perceived pressure, expectations and encouragement emanating from people important to the researchers have a larger effect than the publishing practices of other peers, though publishing practices also affect intentions (Lars Moksness & Olsen, 2017, pp. 18-19).

An interesting aspect of Moksness' survey is the notion that the researcher's perception of the fact they can control their option to publish OA or not seems to have a *negative* effect on intentions to publish OA, as the perceived control gives an impression of OA publishing as *easy*, lacking the sense of prestige associated with high-order traditional publishers (Lars Moksness & Olsen, 2017, p. 20). Respondents said that they find OA publishing useful with a factor loading of 0,79, where proximity to 1 indicates positive answers and proximity to 0

indicates negative answers (N = 303 for all factor loadings). If asked if they felt it was expected of them that they publish articles in OA journals, the factor loadings became 0,94, indicating that almost all respondents felt a sense of expectations to OA publishing from their surroundings (Lars Moksness & Olsen, 2017, p. 15).

In 2019, Moksness and Olsen published an extended study on all Norwegian universities, receiving 1 588 responses. Among the findings were that the intention to publish OA within the next two years had a factor loading of 0,99. The intention to publish non-OA within the next two years *also* had a factor loading of 0,99, strongly indicating that almost all 1 588 respondents were intending to publish both OA and non-OA in the near future (L. Moksness & Olsen, 2019, p. 6).

They asked if it is important for a journal to enjoy a high status within its field of research when choosing a journal for publishing. This question had a factor loading of 0,83. The question of whether it is important for a journal to be prestigious had a factor loading of 0,82 (L. Moksness & Olsen, 2019, p. 6).

#### 2.4 The modern Open Access movement – Plan S & the EU

Open Access to scientific information is gradually becoming a cornerstone of public policy in the European Union (EU), with a commission recommendation devised to lay the foundation for Open Access publishing to become the norm in the EU. The commission recommendation states, among other statements, that:

Open Access is a means of dissemination for researchers who may decide to publish their work, in particular in the context of publicly-funded research. Licensing solutions should aim at facilitating the dissemination and re-use of scientific publications (European Commission, 2018a, p. 2).

With this, the EU is making it clear that Open Access ought to be the default mode of publishing for all science funded by it. The Norwegian Research Council has followed suit, placing itself as a part of Science Europe's cOAlition S (Lund, 2018), which is a coalition currently consisting of the European Commission and national research organizations from 11 European countries. cOAlition S has developed Plan S, wherein the ambition is to mandate that all research funded by their members shall be made openly available to the public immediately upon publication, without any possibility for monetization of the research material itself. Plan S also calls for immediate OA, and thus, will not be compatible with any embargo period on articles put forth by publishers (Schiltz, 2018).

The Norwegian Ministry of Education and Research determined in point three of the “National goals and guidelines for open access to research articles” that

Institutions and consortia that negotiate agreements with publishers shall ensure that these agreements promote open access without increasing total costs, and that the terms and conditions are open and transparent (Kunnskapsdepartementet, 2017).

Plan S received some attention in Norwegian press for its briskness and lack of compromise to established norms of publishing within certain fields. Many people in the academic community wrote their opinions on the topic. Beneath are some of the arguments for and against Plan S.

Some opponents argue that the process behind Plan S is based upon ideology rather than knowledge or research, and that it could have unknown consequences. What attracts a fair share of attention is the mandated copyright license all publications financed by partners of cOAlition S will demand: Creative Commons CC BY. The CC BY license states that anyone can “Share — copy and redistribute the material in any medium or format. Adapt — remix, transform, and build upon the material for any purpose, even commercially”. The opponents argue that the “adapt”-part of this license could undermine the integrity of researchers by allowing commercial actors to misrepresent the contents of academic articles for the purpose of promoting their products. In addition, it has been claimed that Plan S restricts academic freedom by hindering researchers from publishing their works the way they want them to be published (Torvund, 2018).

On the opposite side in the debate, proponents argue that Plan S does not go far in enough in lowering the profit rates of established traditional publishers. As Plan S does not introduce a fee cap for APCs, it still does not stop traditional publishers from charging more money than universities can afford to pay, even if the publishers did a Rowsean flip (switching from subscription prizes to publication prizes). Proponents argue that the problem resides with the established process for peer reviewing, and some advocate for Open Science and the changes to the quality control system proposed by the San Francisco Declaration on Research Assessment (DORA)<sup>10</sup> (Rice, 2018).

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<sup>10</sup> DORA aims to have the quality of research be assessed on the merit of the actual body of work and its scientific quality, rather than the merit of the journal in which the work has been published. Among other aims, one is to eliminate the use of journal-based metrics, such as the Journal Impact Factor (DORA, 2012).

As of 2018, the European Union is employing its plan for Open Science and integrating it as a central part of its Horizon 2020 Work Programme 2018-2020. In the Programme, they introduce the concept “Citizen Science”. It aims to increase the level of public participation in science by raising awareness about science, encouraging citizens to participate in scientific processes and participate in developments and implementations of science-related policies (European Commission, 2018b, p. 35)

## 2.5 The Economics of Open Access publishing

Part of what incentivizes the work for OA is the rising subscription prizes that university libraries have to pay in order to gain access to TA journals. In the digital era, profit margins and market share for the 6 largest academic publishing companies<sup>11</sup> have increased to the point that they owned about 50 % of all academic papers published by 2013 (Larivière et al., 2015, p. 4).

The big challenge for OA, however, is not only to challenge established publishers, but to finance OA-publishing without a subscription service to pay for publication and accessibility online. OA journals often finance publication with help from publication fees, often paid by the author, sometimes called an “author pays” business model. The term “author pays” is a little misleading though, as the majority of OA-journals charge no fees, and if they do, the publication fee is usually paid for by the institution employing the author (Suber, 2012, p. 138).

There are different ways to finance OA publishing, and they are intimately connected to the different forms of OA, as well as questions of whether or not an article is to be published preprint or postprint. In an OA repository (green OA), an article can be deposited as a preprint whilst waiting for peer-review. However, institutions prefer to have the postprint version uploaded to the repository. The repository is often run by the institution financing the author. In spite of the article existing in a green OA repository, it may well be published in a journal, and that journal can either be OA or TA (Suber, 2012, p. 60). Article processing charges (APCs) are a central part of funding OA publishing, as they are the primary model for charging money when publishing OA articles.

As mentioned earlier, a simple shift in the interpretation of the role of payments in the publication and subscription process can render a TA journal OA. With institutions subscribing

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<sup>11</sup> Reed-Elsevier, Wiley-Blackwell, American Chemical Society, Springer, Taylor & Francis and Sage Publications. As of 2013, Reed-Elsevier owned close to 20 % of all academic papers published.



to TA journals, a Rowsean flip can allow TA publishers to interpret payments as financing for OA publishing. However, such a flip depends on the well-meaning of both parties and runs the risk of institutions canceling their subscription if they believe that they can receive peer-reviewed articles for free from someone they initially paid to receive articles and journals from. In addition, publication fees are not going to help researchers from poorer institutions get their articles published if their institutions cannot afford to pay said fees.

One way to generate income for OA journals is to accept advertising on the web page of the journal. As OA journals are published on the Internet, advertising via web-based advert providers does not have to be difficult. It is, however, not a common practice to accept advertising among scholarly publishers. Open Access adviser Jan Erik Frantsvåg at the university library of Tromsø did a survey on advertising in the OA publishing industry and found that about 20 % of OA journals accepted advertising, and that the practice of accepting advertisements was mostly found among larger publishers. Mostly the reasoning for not accepting advertisements had to do with policies that rejected advertising in academic journals for ideological reasons. Many academic publishers stated that they feel scientific publishing and advertisements don't fit well together (Frantsvåg, 2010a).

## 2.6 Quality levels, citation advantages and academic cultures

### 2.6.1 Citation advantages

Concerning the impact of OA articles based upon citations from other researchers, the results from surveys done on the subject vary depending on field of study, methods used and type of data. Questions of impact, quality and citation advantages are a challenge to address, as the metrics of measurement are dependent on quantifiable data. Within the field of OA, many publishers are new. Garnering a reputation for being a good publisher or a good journal takes time, and as some publisher's may have worked to improve their standing in the academic community, some numbers may be lacking from studies done in previous years.

Impact is not necessarily quantifiable, but citation counts are. Even so, studies of potential citation advantages for OA publications over TA publications show varying results. As of 2015, 70 studies on the impact and citation advantage of OA publishing had been conducted. Of those studies, 46 found that OA publishing offered a citation advantage to researchers, 17 found no advantage and 7 were inconclusive (Zhang & Watson, 2017).

In 2016 Karen Antell, Joe S. Foote and Jody Bales Foote, researchers from the University of Oklahoma published their study of the 2013 Impact Factor for journals in the six disciplines

geology, meteorology, physiology, social psychology, business and communication. They found that on average, the 26 DOAJ-listed journals had an Impact Factor of 2.198, which was higher than that of all 447 journals involved in the study. However, they stress that the number is misleading, as meteorology's DOAJ-listed journals were highly ranked and that the total number of DOAJ-journals in the study was relatively low (Antell, Foote, & Foote, 2016, p. 317). They went on to measure the Impact Factors of journals with RoMEO green and blue color codes, which qualify for green OA and thus, public accessibility to the respective publications. In this part of the study, the data was more robust, with 278 out of 447 journals having a green or blue RoMEO code. The 278 green OA journals ranked slightly lower than the overall average at 1.733 against 1.833 for all journals, indicating that there was no increased or even a lower Impact Factor for green OA-legible publications among the abovementioned academic disciplines (Antell et al., 2016, p. 318).

In 2018, Pablo Dorta-González and Yolanda Santana-Jiménez at the University of Las Palmas de Gran Canaria published a comprehensive study of 3 737 OA journals (16.8%) and 18 485 non-OA journals (83.2%) published in 2015 and their respective Impact Factors. Their conclusion was that there was no general citation advantage for gold OA over TA at a journal level (Dorta-González & Santana-Jiménez, 2018).

Going back quite a few years, we find a study comparing self-selective self-archiving with mandatory self-archiving for 27 197 articles published between 2002 and 2006 found that institution-mandated OA and self-archived articles had citation advantages of approximately the same size for the four institutions first to mandate OA self-archiving: Southampton University (School of Electronics & Computer Science) in the UK (since 2002), CERN (European Organization for Nuclear Research) in Switzerland (since November 2003), Queensland University of Technology in Australia (since February 2004) and Minho University in Portugal (since December 2004) (Gargouri et al., 2010, p. 3).

The study indicates that the OA citation advantage was statistically significant for these institutions, and that OA correlated with an independent positive increase in citation counts regardless of article age and journal impact factor. The study split self-archived OA articles into 4 categories: OA and non-OA articles mandated by the institutions financing the research and OA and non-OA articles not mandated by the institution, thus self-archived by the authors' own initiative. This was to highlight the possible selection bias that may occur in the research on OA citation advantages, one which might have been caused by authors selecting their best

works for OA self-archiving. The results showed that OA articles were cited more than non-OA articles, and found no evidence that mandated OA had a smaller citation advantage than self-selected OA (Gargouri et al., 2010, pp. 4-11).

It is difficult to extrapolate from this old study to conclude that OA publications have a higher citation rate than non-OA publications, especially considering the more recent studies that show otherwise.

The studies that debunked the statements of OA citation advantages seem just as valid as those that indicated the existence of OA citation advantages, despite their lower numbers. These contradictions between studies imply that there may have been methodological fallacies in some of the studies. In addition, each academic field has different publication practices, and citation advantages for OA publications might be prevalent within some fields, whereas the opposite may be the case for other fields.

#### 2.6.2 Fake journals and publishers

The debate surrounding the impact and quality of OA journals compared to traditional journals is still an ongoing debate. As late as August and September 2018, the debate raged in the national Norwegian newspaper *Aftenposten* on whether or not OA is guilty of having caused the rise of fake academic publishers (Fevang, 2018). Whether or not the rise of unsolicited publishers comes as a result of OA is difficult to answer.

DOAJ works as a directory on legitimate OA journals and publishers. An academic who considers publishing his or her work in a journal can check if the journal is legitimate by searching for it in DOAJ. Not all OA publishers can be found in DOAJ, but most can.

#### 2.6.3 The Norwegian publication ranking system (tellekantsystemet)

One of the reasons why Plan S causes tensions to arise in the Norwegian academic community might be attributed to the Norwegian publication ranking system (tellekantsystemet) for academic publication channels. The term “publication channels” involves specific platforms for publication, which are journals, websites, serials and book publishers that are organized by their editorial for the sake of spreading *original* results from scientific research projects (Universitets- og høyskolerådet, 2004, p. 27). The reason this form of specificity for the terms is used is to distinguish scientific publications from other publications. In this system, peer-reviewed scientific publications are labeled “counting publications”, meaning publications that are formally accepted as scientific.

For the sake of balancing the weighting of publications in relation to the ranking system based on the workload behind a publication, publication type is also considered. The publication types are scientific monographs, scientific articles in anthologies and scientific articles in periodicals and serials (Universitets- og høgskolerådet, 2004, p. 49).

The system splits scientific publication channels into two categories: level 1 and level 2. The criteria for being regarded as a level 1 channel is that the publications from the channel are peer-reviewed and can be defined as scientific channels as per the definition required by Universitets- og høgskolerådet (UHR for short, Universities Norway in English)<sup>12</sup>. Level 2 was to consist of the distinguished 20 % of the channels, those that are regarded as the leading channels in each field of study. The way that the top 20 % are determined varies depending on field of study, as publication practices between the fields differ based on tradition and *publication patterns*<sup>13</sup>. UHR split fields of study into three separate groups<sup>14</sup>, group A, B and

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<sup>12</sup> UHR determines that a scientific publication must fill all the following criteria (Universitets- og høgskolerådet, 2004, p. 25): it must present a new insight, the results must be testable or usable in new research, the publication must harbor a language and come in a distribution that makes it available to most scientists who might have an interest in it and it must be published in a publication channel with routines for peer reviews

<sup>13</sup> The publication pattern of a field of study is determined by which channels for publications that are most widely used, which format the publications generally come in, the average rate of citations for publications in the area of study and how large a share of publications from the field of study which is findable in publication indexes such as ISI's Web of Science.

<sup>14</sup> Group A: publications are mostly done in major scientific journals that have an international network of authors covered by ISI. The most influential journals have often large annual volumes and cover broader areas of study than other journals. Estimations of citation frequencies for journals is viewed by UHR as a useful tool for drafting nominations for Level 2, however differences in citation frequencies between areas of study have to be taken into account (Universitets- og høgskolerådet, 2004, p. 44).

Group B: Scientific publications are mostly in article formats and are usually published in publication channels with an international network of authors. However, articles can be found in journals and conference serials, and monographs can occur. The publication pattern is more spread out via different publication channels specialized in different fields of study, some of which are not covered by ISI. Ranking by Impact Factor give more random results in drafts for Level 2 than in group A (Universitets- og høgskolerådet, 2004, p. 44).

Group C: Publications are more often released in book form than in the other groups. In all countries, scientific publishing is done more on a national level. Journals are in high numbers, but are small and specialized, and whether they can be found in the ISI-index is random. If they are, they are most usually dominated by articles from the US. In this group, Journal Impact Factor is not a sufficient tool to nominate leading journals for Level 2 (Universitets- og høgskolerådet, 2004, p. 45).

C based on the publication patterns of each field of study, after an empirical examination performed by NIFU. UHR emphasize that it is not scientific subjects that are to be nominated for level 2, it is publication channels, thus, the grouping between the fields of study is not based on whether they have similarities in terms of discipline, only whether they have similar publication patterns. The table below is the table provided by UHR in order to map the publication patterns for different disciplines (Universitets- og høyskolerådet, 2004, p. 42):

*Table 4: UHR's table over which publication pattern group the different disciplines belong to.*

<b>Group A</b>	<b>Group B</b>	<b>Group C</b>
Astronomy and astrophysics	Business administration, finance, management	Anthropology and ethnology
Biology	Library- and information science	Work research
Nutritional science	Informatics	Archaeology
Pharmacology	Mathematics	Architecture
Toxicology	Media and communication	Philosophy
Fishery	Social economics	Classical studies
Chemistry	Social work	Geography, demography and regional development
Physics	Statistics	History
Geosciences	Technology	Humanistic media research
Sports research		Criminology
Agriculture		Art history
Materials science		Linguistics
Medicine		Literature research
Environmental research		Musicology
Food technology		Pedagogy
Dentistry and oral biology		Jurisprudence
Psychology		Sociology
Drug abuse		Political science
Nursing science		Theater science
Interdisciplinary natural science		Theology and religious studies
Veterinary medicine		Interdisciplinary humanistic research
		Interdisciplinary social research

The rules for the nomination process is that nomination bases itself upon an authoritative registry of publication channels, in this case the journal index Web of Science at Institute for Scientific Information (ISI). UHR hosts a list of ISI journals on their website, and nominations to Level 2 are taken from this list and placed on a *draft*. The nomination happens based on rankings dependent on *Journal Impact Factor (JIF)* for group A and partly for group B, a ranking that is to be updated every year with new numbers for articles and citations. Indicators for the average number of citation frequency for each field of study are used to even out differences in citation frequencies between fields of study. For group C, JIF is not sufficient for determining nominations for Level 2. Based upon the guidelines for nominations from UHRs project report, Level 2 receives an annual update on the basis of an academic consensus process (Universitets- og høgskolerådet, 2004, pp. 39-45).

For publication channels without impact factor numbers available, UHR nominate channels with the help of boards of representatives for different fields of study. The representatives for these boards are central in the qualitative selection process of which journals deserve to be considered level 2 journals.

#### 2.6.4 Cultural differences between academic disciplines

As my study explored publication practices at the entirety of the HSL faculty, a focus on differences between disciplines was in order, as HSL is a cross-sectional faculty, including many fields of study. A brief exploration of differences between humanistic and natural sciences may also be helpful. We start by looking at a model on the taxonomy of disciplinary cultures devised by British education researcher Tony Becher (Fry & Talja, 2004, p. 23):

*Table 5: Becher's matrix of disciplinary cultures.*

	<b>Hard</b>	<b>Soft</b>
Pure	Physical sciences: “hard-pure” knowledge structure (e.g. physics)	Humanities and pure social sciences: “soft-pure” knowledge structure (e.g. history)
	Disciplinary culture: cumulative, atomistic; concerned with universals, quantities, simplification; resulting in discovery/explanation	Disciplinary culture: reiterative, holistic; concerned with particulars, qualities, complication; resulting in understanding/interpretation.
Applied	Applied sciences: “hard-applied” knowledge structure (e.g. mechanical engineering)	Applied social sciences “soft-applied” knowledge structure (e.g. education)



	Disciplinary culture: purposive, pragmatic (know-how via hard knowledge); concerned with mastery of physical environment; resulting in products and techniques.	Disciplinary culture: functional, utilitarian (know-how via soft knowledge); concerned with enhancement of [semi-] professional practice; resulting in protocols and procedures.
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Becher's matrix is very simplified in relation to our job of working out a general overview of the potential cultural differences between academic fields at HSL. We want to know the cultural differences between fields at HSL in relation to publication practices, though we do not have such a study at hand, so we look into more general tendencies from established theorists to get an overview of what are the predominant trends. According to Becher, pure versions of natural sciences ("hard" sciences) are cumulative and atomistic whereas humanities and social sciences are reiterative and holistic. Applied natural sciences are pragmatic and result in products and techniques and applied social sciences are utilitarian and result in protocols and procedures.

If we look closer at the right side of Table 5, where we find most of the social sciences and humanities that are our point of interest in relation to Becher's theory, what can the table tell us about potential cultures and traditions relating to journal usage and publication practices at HSL?

Extending upon Becher's model, we can take a look at a theory by Professor of Organizational Sociology Richard Whitley. OA researchers Jenny Fry and Sanna Talja present Whitley's theory as a graded distinction between two concepts such as "task uncertainty" and "mutual dependence". Along the axis between these two points, some fields of research may have a high task uncertainty and low mutual dependence while others may have a low task uncertainty and a high mutual dependence. With task uncertainty is meant the degree to which research processes have a clearly defined goal and work cycle. Mutual dependence is the field's tendencies to depend upon research produced elsewhere in addition to the researchers' dependencies on one another within the field (Fry & Talja, 2004, p. 24).

Charting Whitley's theory, Fry and Talja devised a table linking it to scholarly communication practices and journal usage (Fry & Talja, 2004, p. 26):

Table 6: Implications of Whitley's dimensions for information practices.

<b>Features of the Universe of Documents</b>	<b>High mutual dependence and low task uncertainty</b>	<b>Low mutual dependence and high task uncertainty</b>
Literature review	Formalized; requirement to demonstrate how tin: contribution fits in with existing research.	Based on choice of theory and discourse communities; researcheirs are able to make contributions to a variety of goals without needing to incorporate specific results and ideas to existing literature in the field in a systematic way. Heavy reliance on personal informal networks in reputation building, and in choice and interpretation of literature.
Density of relevant literature	Due to the relative stability of the research object the density of topically relevant literature is lower.	Due to the relative instability of the research object there is a greater density in the universe of topically relevant documents.
Scatter	Relevant material is concentrated within core disciplinary resources.	Relevant material can be found and is produced across diverse fields and resources.
Primary relevance criterion	Topical relevance. Searches are more focused on the phenomenon or substance being studied rather than a particular philosophical or methodological perspective.	Paradigmatic relevance. Scholars attach their search strategies more to particular conversations or paradigms. The choice of theories or methodological approaches limits or widens the range of materials considered as relevant independently of the topic or phenomenon being studied.
Primary search method	Directed searching, searching. Conducting descriptor-based subject searches in databases whose materials have been indexed, catalogued, and classified.	Chaining from seed documents and directed or semi-directed browsing. Difficulty to rely on traditional documentary languages that do not map the structure of scientific conversations related to a particular topic.
Book versus article orientation	Predominant reliance on articles, centralized resources such as preprint archives, conference papers, and resources developed in collaborative projects. Preference for e-journals.	Books, articles, conference papers, newspapers, grey literature, and decentralized locally produced web based resources are used. Valuing print-based journals, as much as, or more than, e-journals.

For fields with high mutual dependence and low task uncertainty, research processes are highly coordinated and conformity to linguistic and communicative norms is high in relation to

correspondences and publications. Relevant scientific content can often be found in specific, specialized journals. For fields with low mutual dependence and high task uncertainty, research processes are less coordinated and communicative norms can be subject to challenging practices between researchers or groups of researchers. The publication landscape can offer more topically relevant literature, but publications tend to be more contestant and disagreeing amongst each other than in fields with high mutual dependence and low task uncertainty (Fry & Talja, 2004, p. 27).

Humanistic fields and social sciences have a tendency of falling into the category of low mutual dependence and high task uncertainty. In media and cultural studies, for example, the publication landscape is divergent and can offer an abundance of wide-ranging topics (Fry & Talja, 2004, p. 27). This can be a product of large differences in publication practices among researchers within the same field. Depending on their area of focus, researchers within fields with low mutual dependence and high task uncertainty can often publish in different journals and publication channels depending on their area of study. This was important to keep in mind when analyzing publication data.

With high mutual dependence and low task uncertainty follows a publication landscape of relevant literature concentrated in fewer publication channels. With low mutual dependence and high task uncertainty, the publication landscape looks more divergent (Fry & Talja, 2004, p. 27).

#### 2.6.5 Gender differences in academic practices and career outcomes

Studies done in higher education institutions suggest that there are differences between men and women regarding usage of social capital, publication practices and career choices and opportunities. Studies show that women generally are more horizontally oriented than men and take upon altruistic tasks and administrative roles to a greater degree for the betterment of their academic communities. Men have, more often than women, access to vertical social capital and are generally shown to harbor more competitive mentalities than women, which affect their career choices (Angervall, Gustafsson, & Silfver, 2018, pp. 1104-1107).

A study done across 140 institutions in the USA in 2014 showed that women performed significantly more internal services for their institutions than men. Although differences between faculties, institutions and fields of study were there, the overall statistic showed clearly a difference in number of services performed between the genders. Prior research also indicates

that women receive lower wages than men and have a harder time receiving funds and resources for research projects (Guarino & Borden, 2017, p. 672).

In chapter 4.1.3, the analysis of the dataset from HSL reveals that women published less than men during 2016 and 2017 but had a higher percentage of OA publications.

#### 2.6.6 OA mega journals and questions of size-distribution

One aspect of OA publishing is the rise of OA mega journals (OAMJs for short). For the sake of having a reference point from which to define the term mega journal, OAMJs have been referred to as PLOS ONE-like journals. The output of journals PLOS ONE and Scientific Reports each were more than 20 000 in 2017 (Wakeling et al., 2019, p. 755). Article processing charges (APCs) are known to be the primary form of financing for most OA journals of this size (Solomon & Björk, 2012) and it is conceivable that economic incentives can fuel the rise of journals of large sizes.

Figures show that a large number of major OA journals such as PLOS ONE, Scientific Reports, BMC Research Notes, BMJ Open, AIP Advances, Medicine, SpringerPlus, PeerJ, SAGE Open, F1000 Research and FEBS Open Bio grew considerably in the period between 2006 and 2015 (Spezi et al., 2017, p. 268). Despite some of the challenges following large publication outputs, there are also some benefits to OAMJs.

A survey answered by 11 883 academic authors, of whom 5 751 had published in OAMJs, in 2017 showed that their most important criteria for choice of journal when publishing were journal quality and quality of peer reviews (Wakeling et al., 2019, p. 760), indicating that authors will look for publishers who ensure high quality control of content even if they are large-scale publishers.

Jan Erik Frantsvåg argued that OA publishing is best organized in larger publishing institutions, and that the specialization and experience that comes with working with large-scale publishing makes the process of publishing more economically efficient, explained by the economic theory of “economies of scale”. The theory proposes that, as production increases, the effort to produce new units of the same product type decreases. This theory could also be applicable to the field of publishing. One indication that the theory holds merit is that smaller publishers seemed to struggle to make the metadata for their articles available in the Directory of Open Access Journals (DOAJ), while larger publishers generally made sure that their content metadata is found in DOAJ (Frantsvåg, 2010b).

## 2.7 Copyright

As a theme, copyright is instrumental to the field of academic publishing, as copyright is the legal backbone of traditional publishing, and thus is an aspect of publishing that is quite different in the realm of OA publishing. In most cases the author of a work published OA holds the copyright to that work. With subscription based journals, the publisher company will hold the copyright, unless a judicial agreement between publisher and author states otherwise (Park & Qin, 2007, p. 59).

This is a general statement and does hold true in most cases, but often, TA publishers give blanket permissions for authors to submit their works to green OA repositories. When authors transfer their rights to the publisher, as is the case for TA publishing, then the decision on whether to make a publication OA resides with the publisher and not the author. However, even if the publisher does not harbor a blanket permission to make publications green OA, most publishers agree to special requests from authors to make their works green OA. There is a distinction between when authors transfer all their rights over a publication and when authors retain the right to authorize OA themselves. Whether or not TA publishers have the right to deny authors to publish their work OA depends on the initial conditions of the agreement between the author and the publisher. This is why OA mandates from institutions financing the author is so important, as OA mandates reinforce rights-retention policies that allow authors to submit their work in green OA repositories without having to consult the publisher (Suber, 2012, pp. 126-127).

If an author publishes his or her work in a TA journal without retaining rights to submit it OA, and then proceeds to do so, the publisher has the legal right to sue the author over copyright infringement. However, if the author retains the right before entering the agreement, then the publisher can do nothing but refuse the article. However, they seldom do so if the retention of rights is reinforced by the policies of the institution financing the author (Suber, 2012, p. 126). In fact, in the United States, publishers did attempt to outlaw rights-retention policies with a bill called Fair Copyright in Research Works Act, introduced by Representative John Conyers of the Michigan Democratic Party in September 2008 and again in the next session of Congress in February 2009. In both cases, the bill died without so much as a single vote (Suber, 2012, p. 206).

One example of a major institution that practice rights-retention for OA publishing is the National Institutes for Health (NIH) in the US. Among others, their policy for public access to

research results was what publishers aimed to outlaw with the Fair Copyright in Research Works Act (Suber, 2012, p. 128). The NIH Grants Policy Statement reads that the public is to have access to the published results of NIH-funded research via their archive, PubMed Central (PMC). Under the policy, NIH-funded researchers are required by Federal law to submit an electronic version of the peer-reviewed manuscript to be made publicly available no less than 12 months after the official date of publication (National Institutes of Health, 2018, pp. IIA-116).

Traditionally, copyrights on research articles protected publishers and not authors, as authors transferred copyright to publishers. The reason for this being that the incentives researchers and academics have for writing scholarly articles usually are not for monetary gain, but the sharing of knowledge, building of reputation and expanding ones curriculum vitae for developing a respectable career in academia. The incentive for scholarly authors has almost never been revenue, and in most cases, authors do not even know how much income their works have generated for publishers (Suber, 2012, p. 130).

The reason why rights retention policies work is because the grant deals institutions establish with researchers is drafted before publishers reach their agreements with the authors. By being upstream from publishers in the process of academic publications, institutions can second-guess publishers policies on copyright and implement pre-emptive measures to secure public availability to the research they finance (Suber, 2012, p. 129).

### 3 Method

Both parts of this research process were primarily quantitative in nature. None of the two parts required personal indicators to yield results. This means that the process of applying to authorities, in this case the Norwegian Centre for Research Data (NSD), for permission to use personal data in my research was not necessary. There is one aspect of qualitative measures in my thesis, as a product of an optional “comments” box in my survey. The designs of both studies adhere to the ethical guidelines established by The Norwegian National Research Ethics Committees<sup>15</sup>. The guidelines can be summed up by these three points (Johannesen, Tufte, & Christoffersen, 2010, p. 91):

- The informant’s right to self-determination and autonomy.
- The duty of the researcher to respect the privacy of the informant.
- The responsibility of the researcher to avoid causing harm.

I analyzed a dataset which covers all counting publications in 2016 and 2017 from the database Cristin at the Faculty of Humanities, Social Sciences and Education (HSL). Within the data, I tried to figure out how many percentages of publications that are OA, what types of OA these publications are, and how publication practices relate to institute, field of study and gender.

The second part is an anonymous online survey which were issued to employees at HSL. The survey consists of questions regarding OA and gives potential insight to some knowledge about the current consensus regarding OA at the faculty. It was inspired by SOAP and was formed to make it possible for me to tie the results to it. Considering the size of the SOAP survey, my survey is essentially a local extension of SOAP. My method differs slightly. I analyzed a dataset from past publication practices and my survey contains less questions than SOAP.

For the analysis of both the dataset and the survey data, I used a program called SPSS Statistics by IBM, version 25. It allowed me to count the number of entries in a row or a column and featured an output document which presented the relationships between quantities in different rows on a table. Additionally, SPSS can cross-reference several rows and columns to create tables that outline in-depth relationships between several variables.

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<sup>15</sup> [www.etikkom.no/en](http://www.etikkom.no/en)



### 3.1 Acquisition and analysis of dataset

The dataset was derived from a database made by Current Research Information System In Norway, in short, Cristin<sup>16</sup>. Cristin is a national research information system which specializes in gathering knowledge on Norwegian research and making it accessible.

To obtain the dataset showing data concerning all counting publications from HSL during 2016 and 2017, I sent an e-mail to a consultant at Unit (see attachment 1 for the application and attachment 2 for the correspondence). I asked for data on all counting publications and received an Excel-sheet at the size of 137 kilobytes, containing 869 entries, of which 444 were the journal publications that I were to analyze. The dataset consisted of a large number of variables, 45 in total, of which not all are relevant to the analysis. The variables can be found with translations in attachment 4.

The acquisition and analysis of the dataset follows a traditional four-step research process (Johannesen et al., 2010, p. 32):

#### 1. Preparations

Writing an application and making decisions on the type of data I needed for my analysis was my preparation for the research project.

#### 2. Data gathering

The publication data had been gathered by Unit, allowing me to extract it from their database.

#### 3. Data analysis

The data was analyzed and interpreted. Regarding the analysis, I had to choose what data to deem relevant and how to interpret it.

#### 4. Reporting

My thesis is then the report on the analysis and its findings.

#### 3.1.1 Reflections on weaknesses with the dataset

The analysis is anonymous, which means that the data sheet only contains aggregated data and no details on any of the publications. A weakness of this aspect is that it does not provide any data on the individual publications and the potential qualitative factors governing the decision-making related to the choice of publication channel for the author(s) of the publications. It is

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<sup>16</sup> Website: [www.cristin.no](http://www.cristin.no).

important to acknowledge that there are great differences between academic fields within the humanities that cannot be determined from the data, as the data is of a superficial nature.

### 3.2 Development and beta-testing of survey

The survey was a crucial part of the data gathering for my thesis, wherein the design choices were inspired by SOAP. It would have to conform to the standards of proper research design. It covered a moderately short space of time, and is therefore classified as a cross-sectional survey (Johannesen et al., 2010, p. 74). The survey was sent to employees December 12<sup>th</sup> 2018 and was open for two months. A reminder was sent to the employees January 7<sup>th</sup> 2019.

We refer to those who are examined as *respondents*. The topics examined are called *variables*, in this case opinions on OA. The variables can be classified by different *levels of measurement*, which affects the way the data can be analyzed (Johannesen et al., 2010, p. 239). The respondents to my survey were researchers and employees at HSL. The variables can in simple terms be defined individually by the topics of the survey questions, whereas the response options can be seen as *values* (Johannesen et al., 2010, p. 249). The levels of measurement dictating the responses to the graded survey questions were of an *ordinal* nature, meaning that they were arranged in a logical ranking system (Likert-scales ranging from 1 to 5, or “very negative” to “very positive”). The response options to these questions are called ordinal variables, meaning that they followed an orderly ranking system (Johannesen et al., 2010, p. 253).

Prior to sending the survey to its intended recipients, the survey was tested by experts on OA at the university library at UiT the Arctic University of Norway, where I had my internship period for three weeks between November and December 2018. Some important points on formulations and clarifications were pointed out, as well as a suggestion to expand with more questions regarding Plan S. I chose to keep the part on Plan S to one question. The reason for that was that the rest of the survey had a general and cursory approach to OA, making it natural for the question regarding Plan S to be a cursory question. The advantages of keeping the survey superficial was that the survey took a minimum of work and time for respondents to answer. A part of the positive feedback received from the experts was the shortness and convenience of the survey. The other important part was that the survey would yield clear and concise data that would be easy to disseminate.

Just after my internship period, I reached out to my fellow students for advice and a final beta-test, and received some highly important feedback, such as employing a Likert-scale on

questions that invite the recipients to rate their attitudes towards a certain concept or question, in the case of this survey, mostly OA and its eventual impacts on science. They also found some conflicts that arose once a question was answered that held a similar meaning as a previous question, if the recipient was to answer with opposite values to said similar questions. The answer conflicts are not easy to avoid, and the survey needs the recipients to answer different questions regarding the same topic, enabling him or her to give conflicting answers. My response to the problem was to make sure the questions were as clear and easily understandable as possible, and to be on the lookout for major divergences while analyzing the data from the survey.

Questions with an even number of possible answers were found to make it unclear what the difference between the answers “Neutral” and “Not sure” would entail, as the two alternatives both contain a perceived null-value. Both options contained a value that would represent an absence of opinion from the respondent regarding the respective question. The solution was to eliminate the “Not sure” option and let “Neutral” be the option for those uncertain of the effects of OA.

The type of survey performed is classified as a *semi-structured* survey. A survey that only involves graded response options is seen as a *pre-structured* survey. However, the comment box at the end of my survey gave the respondents an *open* question. The benefit of this was that the survey was capable of capturing issues that were lacking from the pre-structured part of the survey (Johannesen et al., 2010, p. 261).

The survey form was distributed to nearly all employees at HSL, which was done by asking the different departments for permission to use their e-mail-lists. The e-mails were sent out to a total of 790 recipients, of which 574 were researchers. It contained a short description of my project and links to the Norwegian and the English version of the survey form (the content of the e-mail can be found in attachment 3). The survey received 164 responses of whom seven were unfamiliar with OA and four responded that they do not work as researchers. That left an active response count of 153 out of 574 researchers, a percentage of roughly 27 %, though the additional four administrative respondents were also entitled to respond to the survey. If we count all potential respondents, the percentage is closer to 21 %. Usual numbers for surveys are 30-40 % (Johannesen et al., 2010, p. 245).

The survey form was called “Nettskjema” in Norwegian and was hosted by the University of Oslo. The introduction texts, questions and guidance to the survey’s layout can be found in attachment 6.

### 3.2.1 Analysis of qualitative survey data

For the analysis of the qualitative survey data, there are three main ways to organize it (Johannesen et al., 2010, p. 165):

- Cross-section- and category-based division of the data
- Contextual data-organization
- Usage of diagrams and tables

My analysis consists of a division into categories and a usage of a diagram to visualize the distribution of topics, highlighting what are the most prominent concerns among respondents. The categories are cross-sectional, as comments yielded recurring themes. Some comments touch upon multiple concerns and topics.

### 3.2.2 Reflections on the weaknesses and drawbacks of the survey design

Some weaknesses of the survey are that of bias and superficiality. I asked the recipients if they believe OA will have a negative or a positive impact on academic publishing and research, inviting them to take a stand on an issue which is fundamentally positive, but has some flaws upon closer inspection. In terms of bias, I did not ask if they think traditional publishing has a positive or negative impact on science and academic publishing. It would be interesting to see a survey done on the same people, which flipped the focus the other way, replacing the term OA with “traditional publishing” or TA.

One flaw of the survey rests on its focus on the potential effects of impact. Questions such as “Do you believe [said concept] has a positive or negative impact on [said concept]?” are going to have a positive bias as long as the described concept is fundamentally positive in its ideal form, meaning that TA might score just as well as OA in a flipped survey. There is little wrong with TA if universities and the public are given fair prices tailored to fit the growing scale of academic publishing.

Cultural differences between different academic fields may also play a role in how respondents choose to answer the questions. Some may have a culture which already embraces OA and modern forms of electronic publishing, whereas some areas of study may prefer a more traditional approach to publishing as a whole.

## 4 Results

In this chapter, publication data from HSL from the years 2016 and 2017 and the survey is presented. Succeeding this chapter is a discussion on the various findings in relation to the theory and research presented earlier in the thesis.

### 4.1 Data analysis – HSL publications from 2016 & 2017

The analysis focuses primarily on OA and RoMEO colors. 425 publications out of 869 publications were published as books, book chapters or in anthologies. These entries lacked data on OA and have therefore been excluded from the analysis. As some fields of study, such as history, for example, have a higher output of monograph, book and anthology publications, some data may be lacking from these fields in the analysis. English is a predominant language for OA and there are less OA publication channels for local languages such as Norwegian, New Norwegian and Sami than for English. Aspects such as these affect the data for some departments in particular.

#### 4.1.1 Publications registered in DOAJ

The dataset revealed that of the 444 journal publications from the years 2016 and 2017 registered in Cristin, 113 entries were registered in Directory of Open Access Journals (DOAJ, see chapter 2.2.1). That accounted for 25,5 % of all publications from HSL during these two years.

All journal article entries were registered with a value for DOAJ registration and Sherpa/RoMEO color, making it fairly straightforward to analyze the relationship between their DOAJ status and other parameters, such as institute, gender and their level in the Norwegian publication ranking system. Unfortunately, the dataset did not specifically determine whether or not the articles were OA, only if they were registered in DOAJ and Sherpa/RoMEO. Many journals that offer green OA are not registered in DOAJ, however, their RoMEO color codes will tell us how many articles that are eligible for green OA. What the RoMEO color codes will *not* tell us, is what the respective authors have chosen to do with their publications in terms of submitting them to green OA repositories, such as Munin. In other words, we do not know for certain if publications with green and blue RoMEO color codes are actually available online. With DOAJ-registered publications, we can be almost certain that they are available for free on the web.

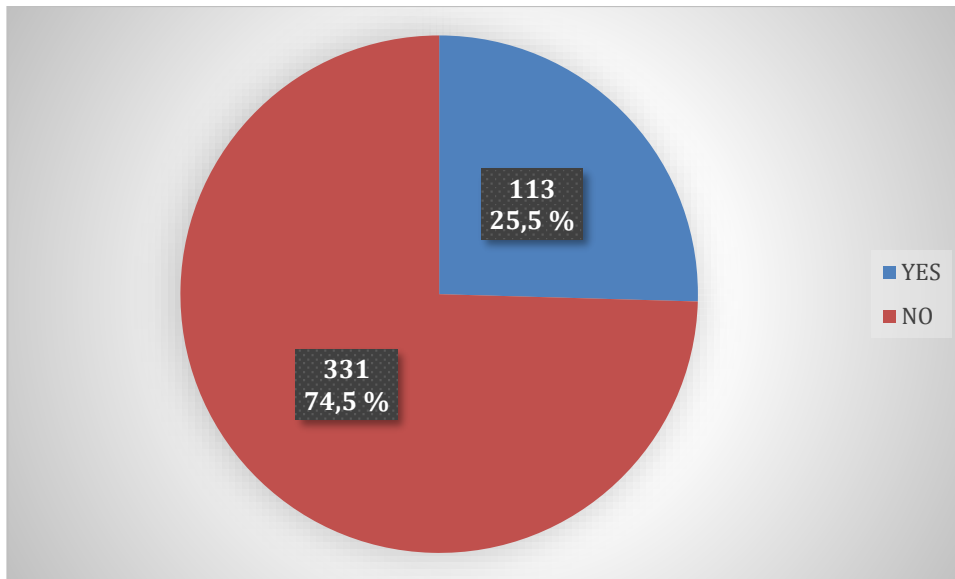


Figure 1: Number of journal articles submitted by authors at HSL which were registered in DOAJ.  $N = 444$ .

All publications by employees at UiT are mandated to be uploaded to UiT's own institutional repository, Munin, which is a green OA repository for all publications from UiT. Unless the RoMEO color states that an article published in a certain journal has an embargo time or certain restrictions, then the article will be openly available in Munin, either as a preprint, a postprint or a publisher's version.

We can establish that the 113 articles registered in DOAJ were *gold OA* articles.

DOAJ not containing all OA journals used by academics at HSL during 2016 and 2017 is somewhat unlikely, as it is a comprehensive database. The publications mentioned in this dataset are referred to as DOAJ and non-DOAJ articles, as the dataset referred to DOAJ as its primary reference to determine whether a publication was OA or not.

#### 4.1.2 RoMEO color codes of HSL publications

With Sherpa/RoMEO in mind, we can move on to determining how many entries that were given a green or blue color in the RoMEO system. As we remember from chapter 2.2.2, green and blue color indicate that postprint and publisher's version can be archived and made available green OA, whereas yellow indicates that a preprint can be archived. White indicates that archiving is not formally supported. Some entries were marked as gray, a color code in the Cristin system which indicates that Sherpa/RoMEO do not know their policies. NULL indicates an absence from the RoMEO system.

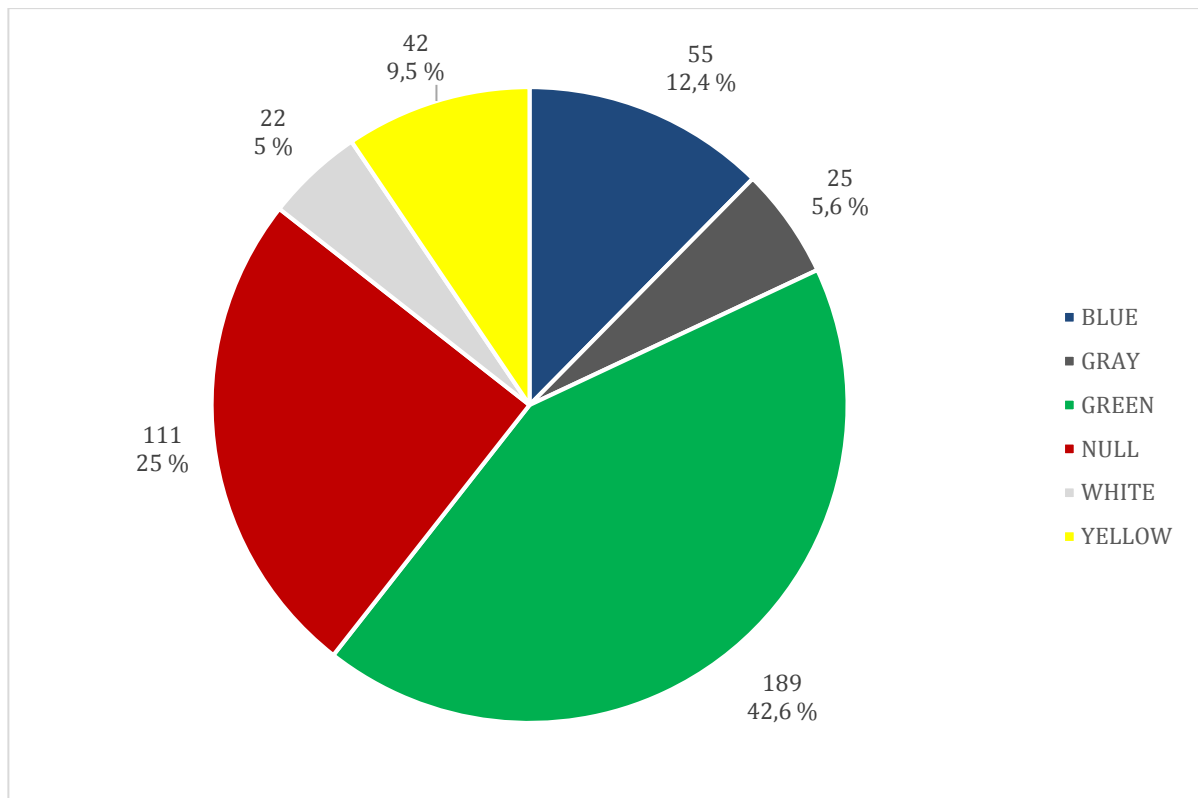


Figure 2: RoMEO color codes for articles published at HSL in 2016 and 2017. N = 444.

As we can see, 189 (42,6 %) of the entries have a green RoMEO color, whereas 55 (12,4 %) are blue, making 244 articles ready for green OA archiving on the fly, about 55 %. There is, however, a significant difference between the green and blue RoMEO codes, as the blue code only allows archiving of postprint versions. This distinction illustrates a statistical difference in choice of policies between OA and TA publishers, where OA publishers more often demand postprints be archived.

42 entries are yellow, which only make them eligible for their preprints being archived green OA. A lower number of entries are white at 22, while 25 are gray (ungraded).



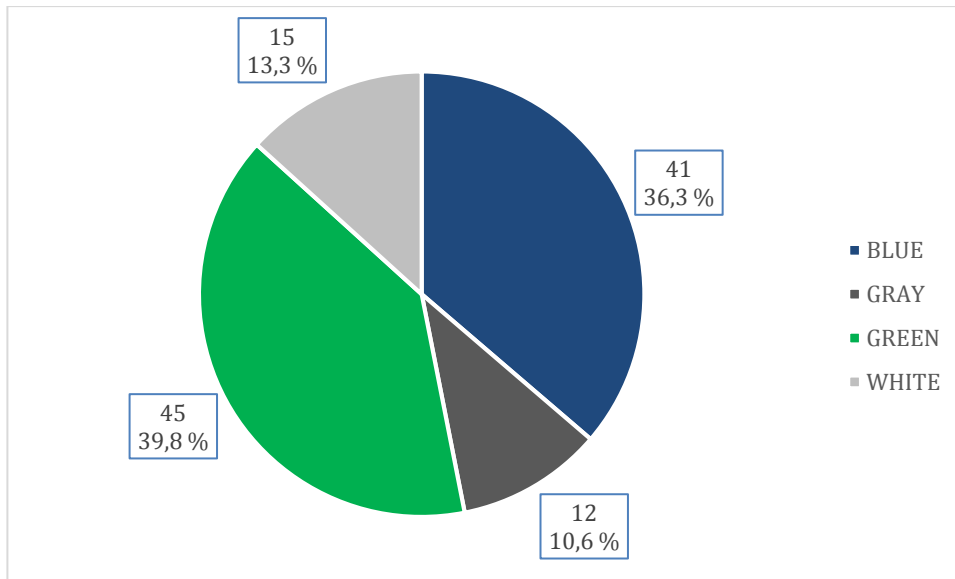


Figure 3: RoMEO color codes for articles registered in DOAJ. N = 113.

For articles registered in DOAJ, 86 of 113 (76,1 %) are either green or blue in the RoMEO system. The rest are gray or white. None are yellow. The middle road was no option for OA publishers in this case. The reason that I am showing archiving policies for OA publishers in spite of their publications already being OA, is to illustrate the differences between OA and TA publishers in terms of green OA policies and to highlight that some OA publishers do not formally support archiving, as we can see with 15 (13,3 %) of DOAJ publications having a white RoMEO code.

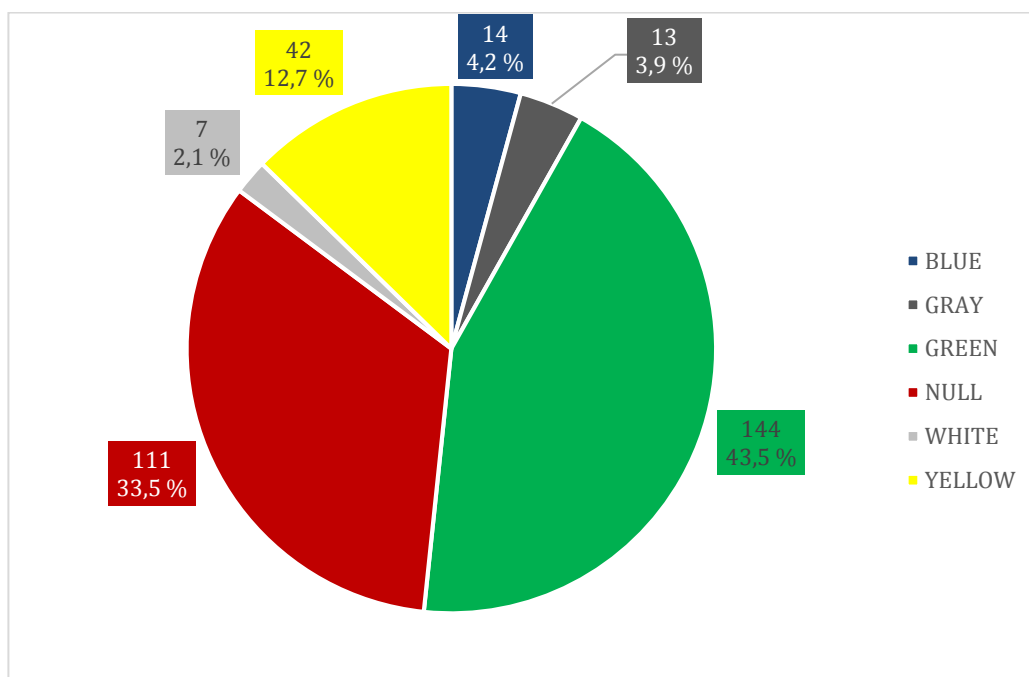


Figure 4: RoMEO color codes for articles not registered in DOAJ. N = 331.

For articles *not* registered in DOAJ, 144 (43,5 %) are green, whereas only 14 (4,2 %) are blue. Looking at Figure 3: RoMEO color codes for articles registered in DOAJ., we can see that green and blue color codes (45 to 41) are fairly evenly distributed, which is not at all the case for non-DOAJ articles. It seems that TA publishers did not care as much as OA publishers whether the self-archived version was peer-reviewed in this case. 41 publications (36,3 %) of the DOAJ articles that HSL academics submitted to publishers in 2016 and 2017 were explicitly stated not to be archived as preprints. 14 publications (4,2 %) of all the non-DOAJ articles were given the same guidelines by their publishers. See chapter 2.2.1 for an explanation on the distinctions between green and blue RoMEO color codes.

#### 4.1.3 OA habits by gender

When considering the relationship between men and women in terms of publication practices at HSL, we should first take a look at these numbers from the Norwegian Database for Statistics on Higher Education (DBH), run by NSD<sup>17</sup>.

*Table 7: The distribution between men and women at HSL during 2016 and 2017, presented in full-time equivalents (FTEs).*

2016		2017	
Men	Women	Men	Women
241 (43,66 %)	311 (56,34 %)	251 (44,44 %)	314 (55,56 %)

We can see that for both 2016 and 2017 there were about 311 women and 241 men working at HSL if we round the numbers from the closest FTEs. For 2017 the numbers were about 314 to 251.

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<sup>17</sup> The data can be found following this [link](#)

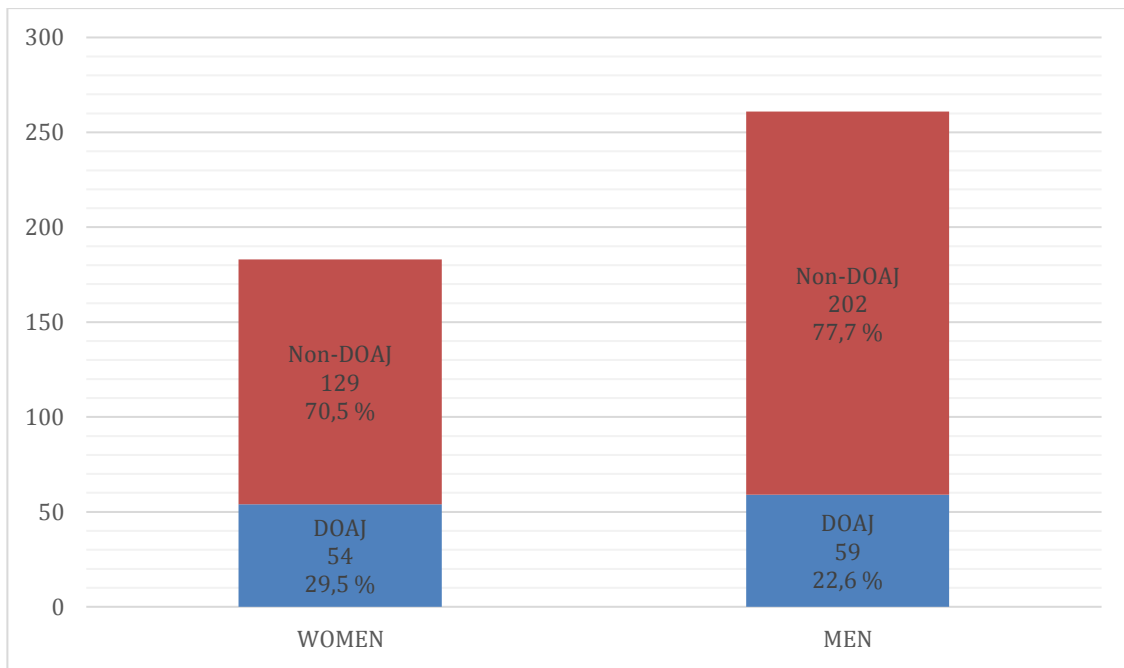


Figure 5: Distribution of men (M) and women (K) at HSL publishing articles at HSL 2016-2017.  $N = 444$ .

We start by establishing that men and women were very close in their publications of DOAJ articles, if we count by sheer quantities. There was a slight majority of men with 59 against 54. Women, however, published more DOAJ articles than men if we look at percentages of publications, where 54 out of 183 is 29,5 % whereas 59 out of 261 is 22,6 %. The data sheet did not give information on the exact distribution between how many male and female researchers at HSL who have been publishing these two years, neither are we given numbers on how many publications each person produced. Some individuals publishing more than others may affect the statistics, and as the data is aggregated and anonymous, it solely provides indicators to potential gender differences.

In Figure 5, we see that men published 261 journal articles over these two years, while women published 183. Men published more than women in total despite their lower numbers, however, there may be reasons related to profession and field of research that causes this gap, reasons undisclosed by the data at hand. There may be more women in administrative positions, or some men may have professions requiring them to publish more than others. See chapter 2.6.5 for theories on why this may be the case.

The men published more journal articles in total than women did, 261 against 183<sup>18</sup>. Their percentage of DOAJ articles, however, was lower than the women's, at 22,6 % against 29,5 %. RoMEO codes: 52 % of the women's article publications at HSL these two years had either a green or blue RoMEO color code. The number was 56,3 % for men.

In conclusion, the ratio of DOAJ publications were 6,9 % higher for women than for men during 2016 and 2017. It is important to remember that non-DOAJ publications might still be eligible for OA if their publishers allow green OA or are small enough to pass beneath DOAJs radar, which is unlikely, but not impossible. Green and blue RoMEO color codes put together totaled 56,3 % for men whereas it was 53 % for women, indicating that, when it comes to eligibility to green OA, men had a slightly higher proficiency than women, though green OA policies among publishers do not yield indications of eventual intentions to publish OA among researchers the same way as gold OA publications do.

#### 4.1.4 Publishing practices by department

Publishing practices vary depending on department and area of study. Unfortunately, the dataset did not distinguish between fields of study, but it did give us data on which department the different publications came from. Some departments, such as the Department of Education, are cross-disciplinary. Therefore, there are differences in publication practices between different groups within the departments. This affected the data. Not all employees publish, and for some departments, publishing in monographs or books may be more common than in other departments<sup>19</sup>. The data I present is only the 444 journal publications<sup>20</sup>.

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<sup>18</sup> Note that this data does not include the 425 books, anthology contributions and book chapters which lacked data on their status as OA publications.

<sup>19</sup> The number of FTEs in Table 8 excludes the faculty administration and is therefore lower than the numbers presented in chapter 4.1.3.

<sup>20</sup> A fusion between the Department of Archaeology and Social Anthropology and the Department of History and Religious Studies means that the total number of FTEs for both departments can be found under the 2017 column of the Department of History and Religious Studies.

Table 8: Number of DOAJ publications by department at HSL in 2016 and 2017.

			FTEs 2016	FTEs 2017	DOAJ	Non-DOAJ	Total
DEPARTMENT	Barentsinstituttet	Count	4,5	7	1	3	4
	The Barents Institute	%	0,8%	1,3%	0,9%	0,9%	0,9%
	Institutt for arkeologi og sosialantropologi	Count	29,4	No data	0	15	15
	Department of Archaeology and Social Anthropology	%	5,7%	No data	0,0%	4,5%	3,4%
	Institutt for filosofi og førstesemesterstudier	Count	36,6	42	7	26	33
	Department of Philosophy	%	7,1%	8,0%	6,2%	7,9%	7,4%
	Institutt for historie og religionsvitenskap	Count	45	61,65	15	35	50
	Department of History and Religious Studies	%	8,8%	11,7%	13,2%	10,6%	11,3%
	Institutt for lærerutdanning og pedagogikk	Count	187,64	203,38	35	39	74
	Department of Education	%	36,6%	38,6%	31%	11,8%	16,7%
	Institutt for sosiologi, statsvitenskap og samfunnsplanlegging	Count	52,95	62,64	8	38	46
	Department of Social Sciences	%	10,3%	11,9%	7,1%	11,5%	10,4%
	Institutt for språk og kultur	Count	131,6	126,7	44	155	199
	Department of Language and Culture	%	25,7%	24,0%	38,9%	46,8%	44,8%
	Senter for fredsstudier	Count	7	7,9	0	3	3
	Centre for Peace Studies (CPS)	%	1,4%	1,5%	0,0%	0,9%	0,7%
	Senter for kvinne- og kjønnsforskning	Count	5,52	4,5	0	8	8
	Centre for Women's and Gender Research	%	1,1%	0,9%	0,0%	2,4%	1,8%
	Senter for samiske studier	Count	12,6	11,4	3	9	12
	Centre for Sami Studies	%	2,5%	2,2%	2,7%	2,7%	2,7%
Total		Count	512,81	527,17	113	331	444
		%	100,0%	100,0%	25,5%	74,5%	100,0%

Table 8 shows two columns with the approximate number of employees for each department. The numbers were gathered from DBH<sup>21</sup> and are measured in full-time equivalents (FTEs).

There are some weaknesses to measuring publication practices by FTEs rather than by counting the number of workers. The positions of employees at smaller institutes may have involved high degrees of publication activity. Large institutes may have imposed a large degree of lecturing onto scientific workers. Some institutes harbor large numbers of smaller subjects, which some employees may have been partly responsible for, affecting their work load depending on how demanding the subjects were. Some employees may have been hired part-time to administer subjects. Aspects such as these affect publication data, and FTEs give a superficial understanding of publication practices in relation to institute rather than a detailed understanding.

By cross-referencing departments by the DOAJ column in SPSS and asking for percentages, we can show a table showing the number of DOAJ articles per department (Table 8). The first numbers of particular notice are those of the Department of Education, where researchers published nearly half of all their articles in gold OA journals during 2016 and 2017.

The most active department when it comes to publishing journal articles these two years was the Department of Language and Culture with 199 articles published. Out of these, 44 were DOAJ articles, a percentage of 22.1 %. The Department of History and Religious Studies had a notable percentage of 30 % DOAJ articles. Among the larger departments, the Department of Social Sciences had the lowest percentage of DOAJ articles at 17,4 %.

Below, I present a table containing RoMEO color codes by department. The number of color codes matched up with the number of departments made Table 9 a little complicated.

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<sup>21</sup> The link to the website containing the data on FTEs by department can be found [here](#)

Table 9: RoMEO color codes for publications by department at HSL in 2016 and 2017.

Dept.			ROMEIO COLOR					Total	
			Blue	Gray	Green	No data	White		Yellow
The Barents Institute	Count		0	0	3	1	0	0	4
	%		0,0%	0,0%	75,0%	25,0%	0,0%	0,0%	100,0%
Department of Archeology and Social Anthropology	Count		0	1	4	9	0	1	15
	%		0,0%	6,7%	26,7%	60,0%	0,0%	6,7%	100,0%
Department of Philosophy	Count		7	0	17	2	0	7	33
	%		21,2%	0,0%	51,5%	6,1%	0,0%	21,2%	100,0%
Department of History and Religious Studies	Count		9	2	12	13	3	11	50
	%		18,0%	4,0%	24,0%	26,0%	6,0%	22,0%	100,0%
Department of Education	Count		18	10	19	17	5	5	74
	%		24,3%	13,5%	25,7%	23,0%	6,8%	6,8%	100,0%
Department of Social Sciences	Count		6	3	19	10	2	6	46
	%		13,0%	6,5%	41,3%	21,7%	4,3%	13,0%	100,0%
Department of Language and Culture	Count		13	7	102	56	12	9	199
	%		6,5%	3,5%	51,3%	28,1%	6,0%	4,5%	100,0%
Centre for Peace Studies	Count		0	0	3	0	0	0	3
	%		0,0%	0,0%	100,0%	0,0%	0,0%	0,0%	100,0%
Centre for Women's and Gender Studies	Count		0	1	5	1	0	1	8
	%		0,0%	12,5%	62,5%	12,5%	0,0%	12,5%	100,0%
Centre for Sami Studies	Count		2	1	5	2	0	2	12
	%		16,7%	8,3%	41,7%	16,7%	0,0%	16,7%	100,0%
Total	Count		55	25	189	111	22	42	444
	%		12,4%	5,6%	42,6%	25,0%	5,0%	9,5%	100,0%

The Department of Language and Culture (ISK) had a 57,9 % green OA proficiency with a high tally of 102 green RoMEO color codes and 13 blue publications. Alongside the Department of Philosophy (IFF), ISK published more than 50 % of their publications with green RoMEO codes, whereas the Department of Social Sciences published 41,3 % with green RoMEO codes. However, other major departments such as the Department of History and Religious Studies



and the Department of Education had a lower overall count of green RoMEO codes and a higher count of blue codes. Overall, green OA policies amounted to slightly more than 50 % for most departments, but preferences in green OA policies (green vs. blue RoMEO codes) varied between the aforementioned departments. In terms of percentages, IFF had the highest amount of green OA publications, if green and blue color codes were put together.

Among departments with smaller outputs, we can see that Centre for Women's and Gender Research had no DOAJ articles out of eight publications, but five of the publications had green RoMEO color codes. At the Centre for Peace Studies, all three publications had green color codes even when none of them were in DOAJ.

At the Centre for Sami Studies, three out of twelve publications were registered in DOAJ, while seven out of twelve had a blue or green RoMEO color code. The Barents Institute had one out of four publications registered in DOAJ, while three out of four had a green color code.

The Department of Archaeology and Social Anthropology produced 15 publications during 2016 and 2017, none of which were registered in DOAJ. Out of the 15 publications, four were eligible for green OA, making it the department with the overall lowest percentage of open availability for their publications at 26,7 %.

#### 4.1.5 OA-ratios by journal rating

The Norwegian publication ranking system is explained in chapter 2.6.3. A short recap: level 1 accounts for peer-reviewed publication channels, while level 2 accounts for the top 20 % within a field which distinguish themselves as holding a higher standard than the rest, according to UHR.

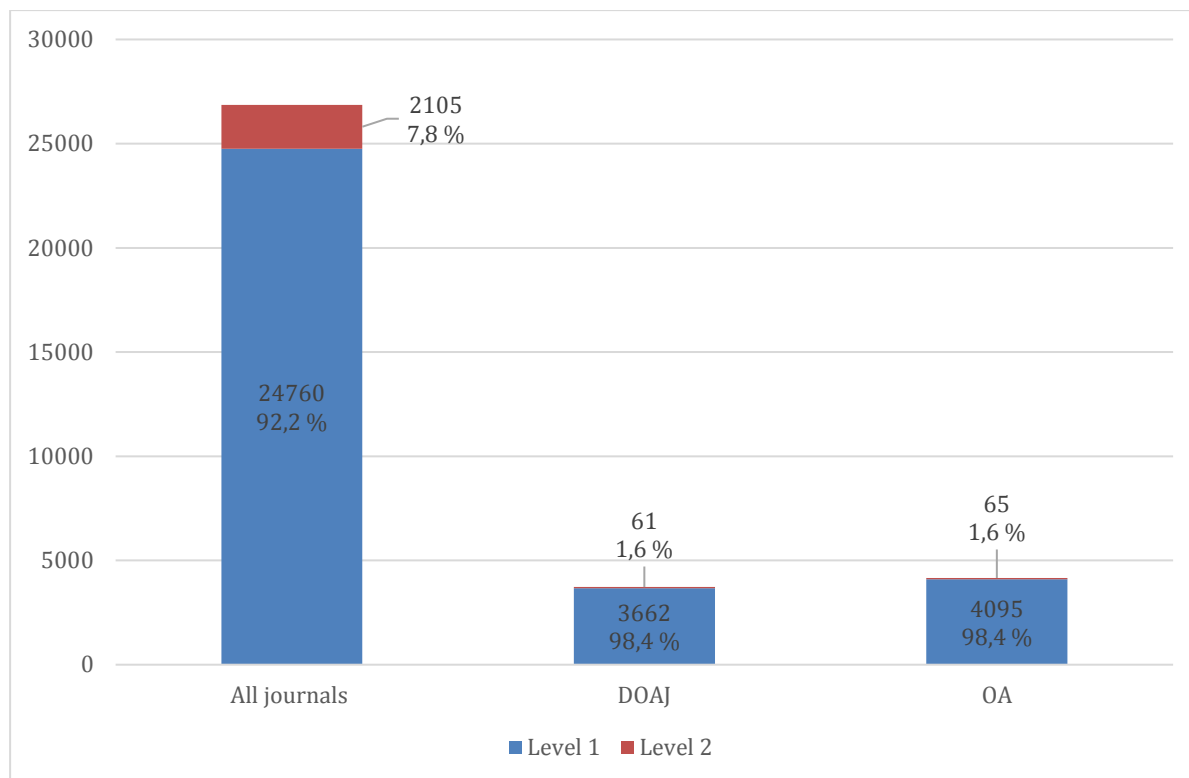


Figure 6: Total distribution of level 1 and level 2 journals in NSDs database in October 2019. N = 26 865.

In NSDs own database<sup>22</sup>, only 61 (2,9 %) out of 2 105 level 2 journals were registered in DOAJ in October 2019. 65 (3,1 %) level 2 journals were OA in total. As visualized by Figure 6, level 2 DOAJ and OA journals were barely visible when compared to the total number of journals.

Let us look into the relationship between publication channel ranking, in this case journal ratings, and DOAJ articles at HSL. We start by cross-referencing the number of DOAJ articles by journal ranking, then proceed to count non-DOAJ articles by journal ranking. The total number of level 2 publications at HSL was 96 out of 444 at 21,6 %. This seems proportionate with the NSD recommendation that 20 % of journals within a given field should be level 2 journals. If we compare DOAJ publications to non-DOAJ publications at HSL, it seems that non-DOAJ publications had a higher percentage of level 2 publications than DOAJ publications had.

<sup>22</sup> Link to NSDs search site can be found [here](#). It was accessed for the presentation of Figure 6 on October 18, 2019.

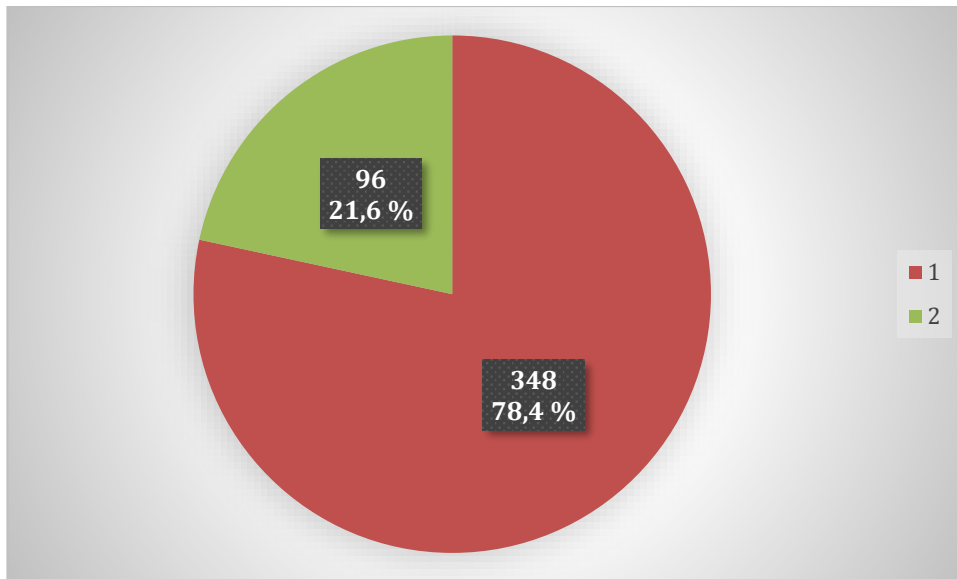


Figure 7: Total number of level 1 and 2 publications at HSL during 2016 and 2017. N = 444.

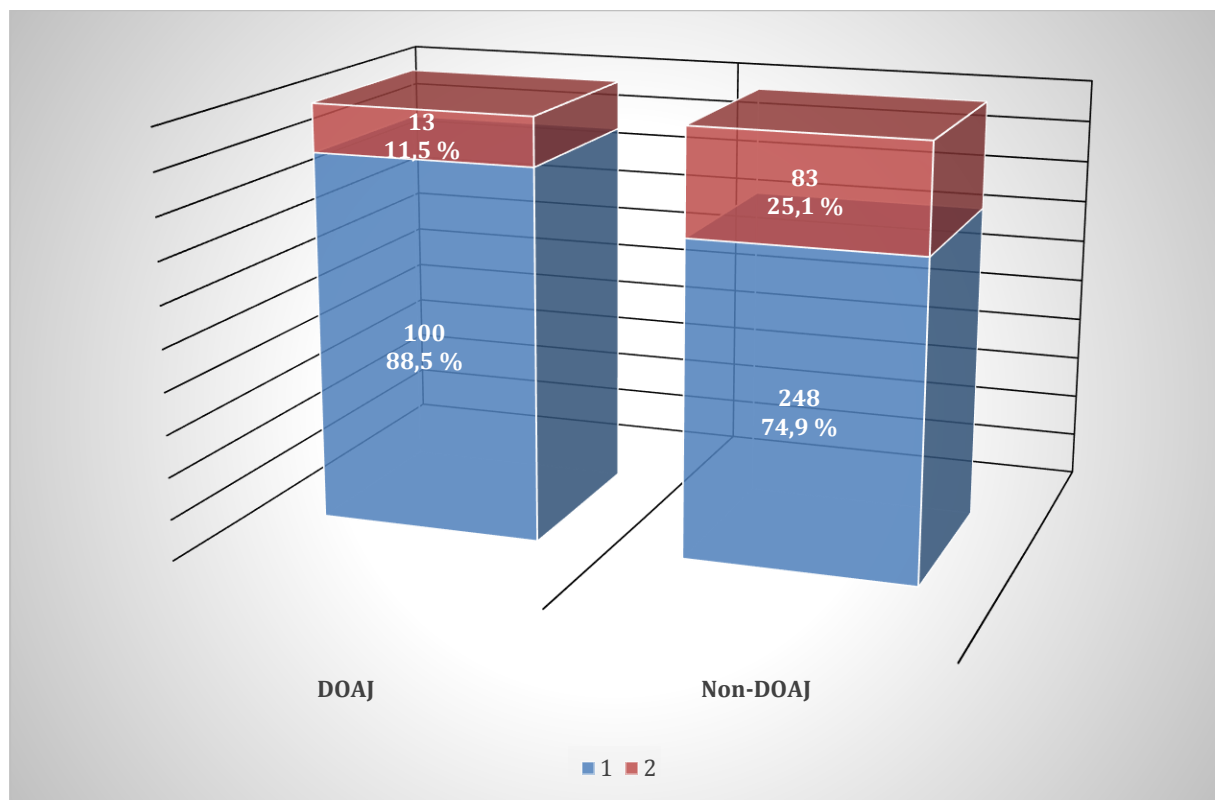


Figure 8: The distribution of DOAJ and non-DOAJ publications at HSL during 2016 and 2017 and their respective distribution of quality levels. N = 444.

The academics who published non-DOAJ articles at HSL during 2016 and 2017 were more successful in getting them published in level 2 journals than those who published DOAJ articles. The discrepancy is significant, with 11,5 % against 25,1 % of all articles published in level 2 journals. However, Figure 6 shows us that only 1,6 % of all DOAJ channels were level 2 as of

2019, which goes to show that some researchers at HSL have actually defied the odds, doing a good job of finding relevant level 2 OA journals within their fields.

According to respondents to the survey, some fields within the humanities lacked OA journals at level 2 and some even at level 1. This makes it difficult for many researchers to choose OA for publication, as publications dependent on journal prestige affect financing opportunities. This aspect is further elaborated upon in chapters 4.2.3 and 5.1.1.

As journal names were anonymous in this dataset, we do not know which or how many different OA and TA publishers that have been used among academics at HSL, so we cannot see how the relationship between publishers used affected these numbers.

For academics who published in TA journals, about one out of four publications made it into a level 2 journal. This may be a product of established practices. Among other aspects of questions relating to the relationship between OA publishing and publisher prestige, it may be noted that OA is an emerging field, and that OA publishers may yet have to work hard if they are to cover the different specialized fields of the humanities and earn a place as researchers' publishers of choice, particularly within fields where established publishers traditionally have a respected base.

The journal ranking of publications affect decisions of financial support when applications for research grants are processed by various foundations and institutions, such as the Norwegian Research Council (NFR) and the EU, who presently are the most powerful proponents for OA in Norway. Traditions and values within different fields of study matter as well.

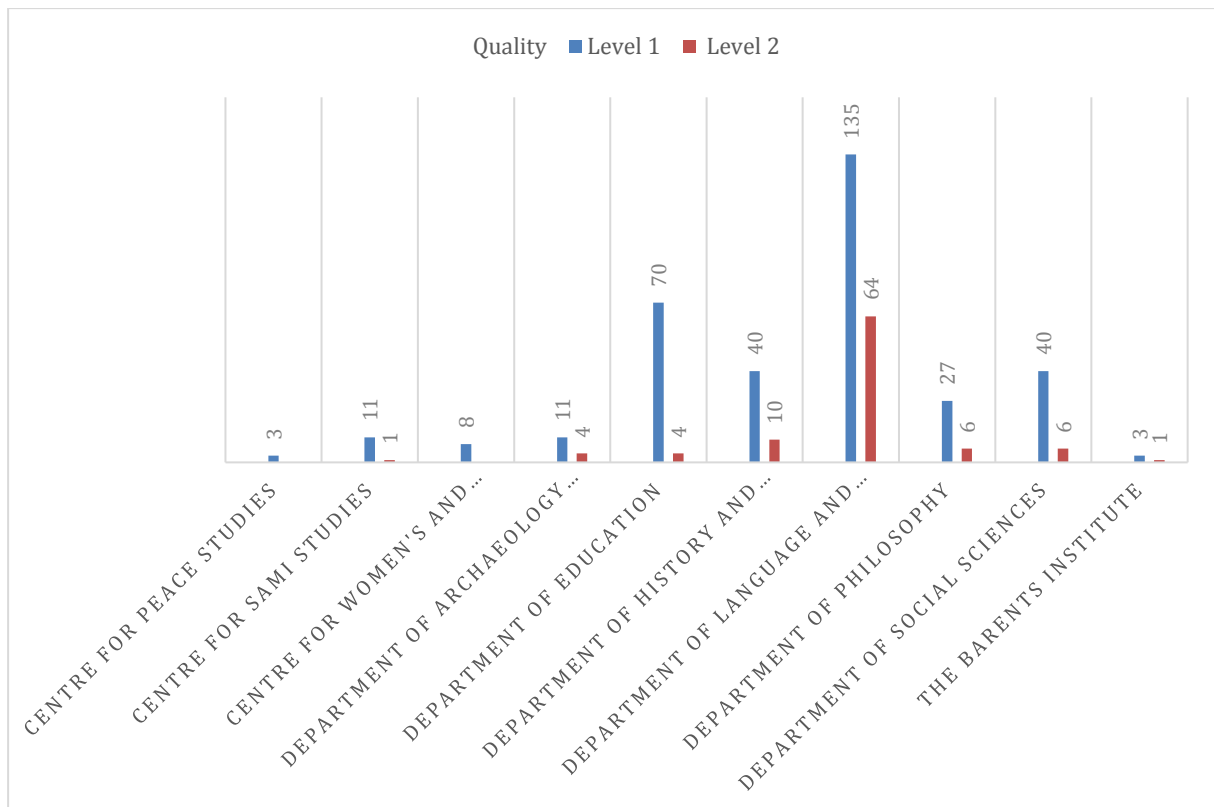


Figure 9: Number of publications for quality levels 1 and 2 by department. N = 444.

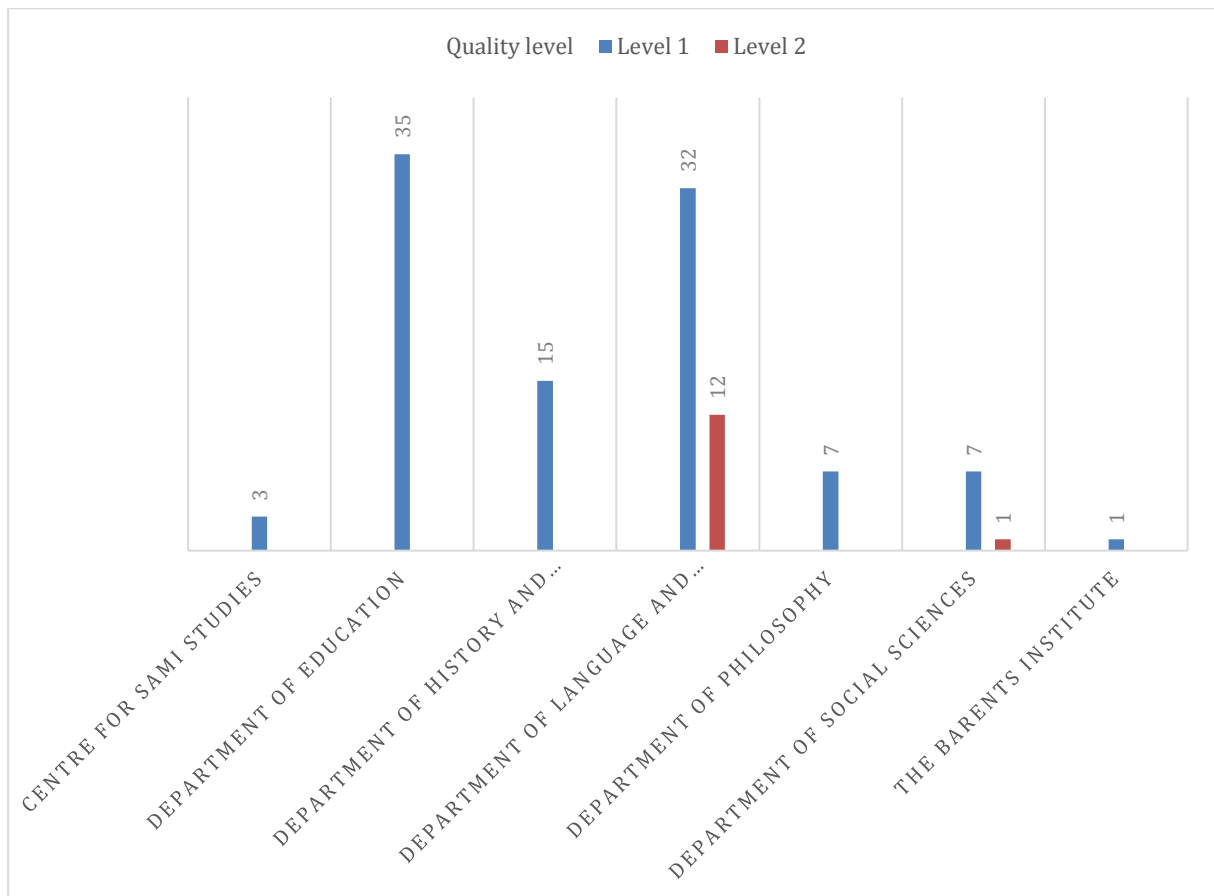


Figure 10: Quality levels for DOAJ publications by department. N = 113.

Upon closer inspection of Figure 10, we can see that almost no departments published DOAJ publications in level 2 journals. The Department of Language and Culture did, and in their department, the number of level 2 publications was as high as 12 of the 32 (27,3 %) publications registered in DOAJ, illustrating that differences between fields of study ensue regarding quality levels and DOAJ status. As we can see with the Department of Education (ILP), they published the largest number of publications in DOAJ-registered journals at 35, none of which were level 2 journals. However, from Figure 9, we can see that only 4 out 74 (5,4 %) journal publications at ILP were level 2 publications. The numbers may look different for book and anthology publications.

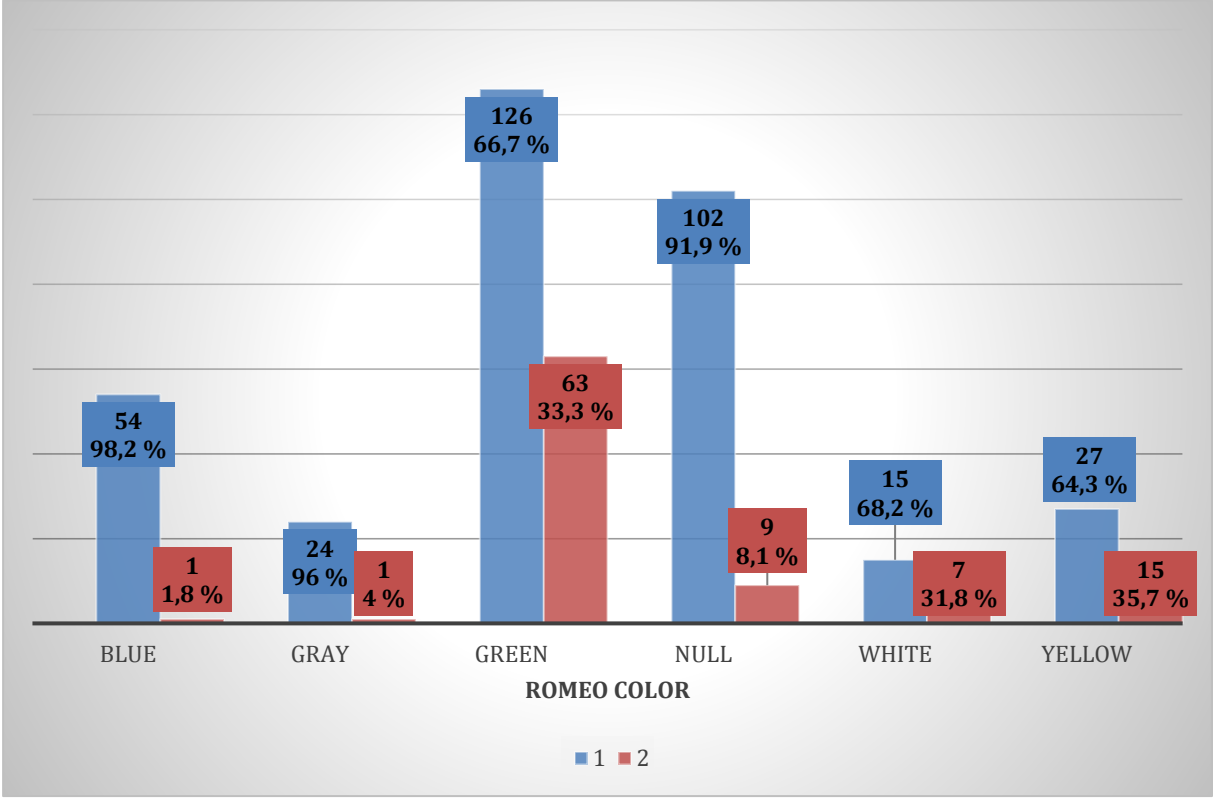


Figure 11: RoMEO color codes for level 1 and 2 journal publications at HSL during 2016 and 2017. N = 444.

Regarding RoMEO color codes (Figure 11), a curious statistic arose. Among green code publications, the portion of level 2 publications was high. As many as 63 out of 189, a percentage of 33,3, green-coded publications were level 2. Out of the 55 blue coded ones, only one was level 2. In short, the distinction between green and blue RoMEO color codes is that

green means the publishers' journal policy *allows* peer-reviewed green OA archiving whereas blue means the publishers *demand* green OA archiving to include the peer-reviewed version of a publication (see Table 1). The statistic indicates that non-DOAJ publishers were more inclined to simply *allow* rather than *demand* green OA archived publications to be peer-reviewed versions, since they were in the majority among level 2 publishers in the humanities. DOAJ publishers, however, seemed more inclined to *demand* peer-reviewed versions than non-DOAJ publishers. The statistic aligns with the assumed ideological distinction of intent between OA and TA publishers, as the blue RoMEO color code indicates a policy with the publisher that communicates a strong wish for valid publications to be as available to users as possible. The blue color code mandates that the green OA version of the publication is peer-reviewed in the same way as the gold OA version of the publication, which may be an important ideological foothold for OA publishers.

#### 4.1.6 International collaborations and DOAJ, RoMEO color codes

Cristin outlined 51 international collaborations among publications at HSL during 2016 and 2017, however, 241 entries in the data sheet were marked as NULL, indicating that Cristin lacked data on said 241 entries. The 51 entries marked as J did nevertheless give an indication as to practices regarding international collaborations at the faculty.

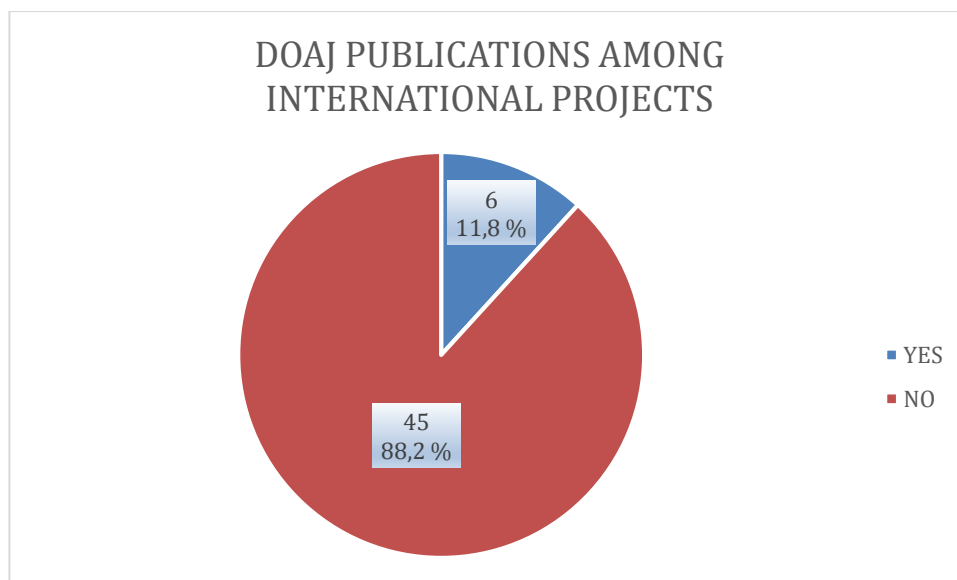


Figure 12: DOAJ publications among international projects at HSL during 2016 and 2017.

Out of the 51 publications with international authors, only 6 were registered in DOAJ, making for a percentage of 11,8. That stands in contrast to the total number of DOAJ publications at

HSL, which were at a percentage of 25,5. However, the sample size in this case was too small for us to draw any conclusions.

Below, we take a closer look at international collaborations by department.

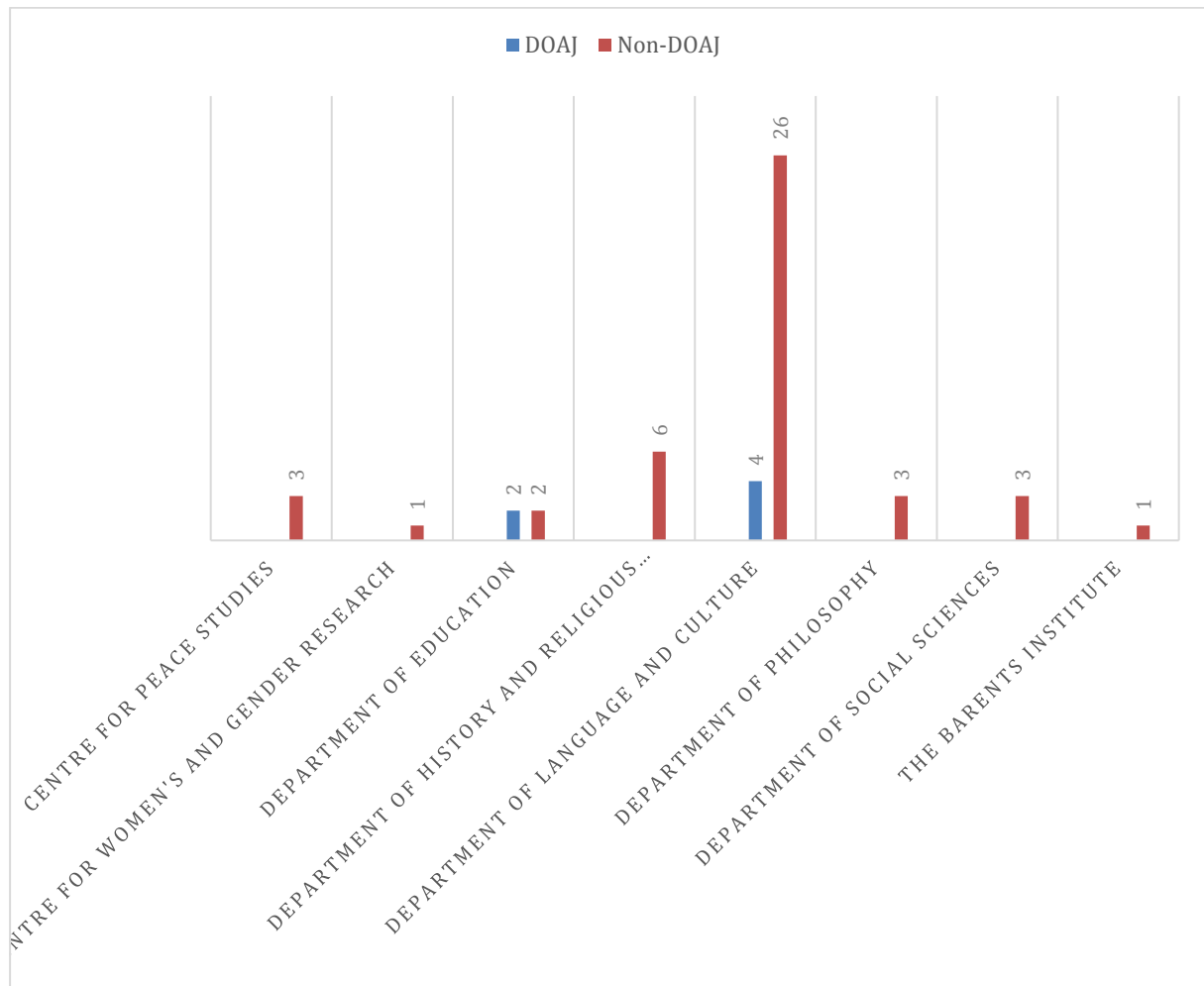


Figure 13: Number of publications formed by international collaborations by department.  $N = 51$ .

More than half of the international collaborations were performed at the Department of Language and Culture, of which 26 out of 30 publications were not published in a DOAJ journal. From earlier we could see that the percentage of OA publications at the department was 22,1. When international researchers were involved, the percentage dropped to 13,3. However, since the total number of DOAJ publications was so low for international projects, and the total tally so high for ISK, the department was still responsible for two thirds of the DOAJ publications with international authors at the faculty.



Pairing international collaborations at HSL with RoMEO color codes showed that DOAJ registrations did not signify a unified measure of OA proficiency for international projects. As many as 28 entries had green color codes, making them eligible for green OA.

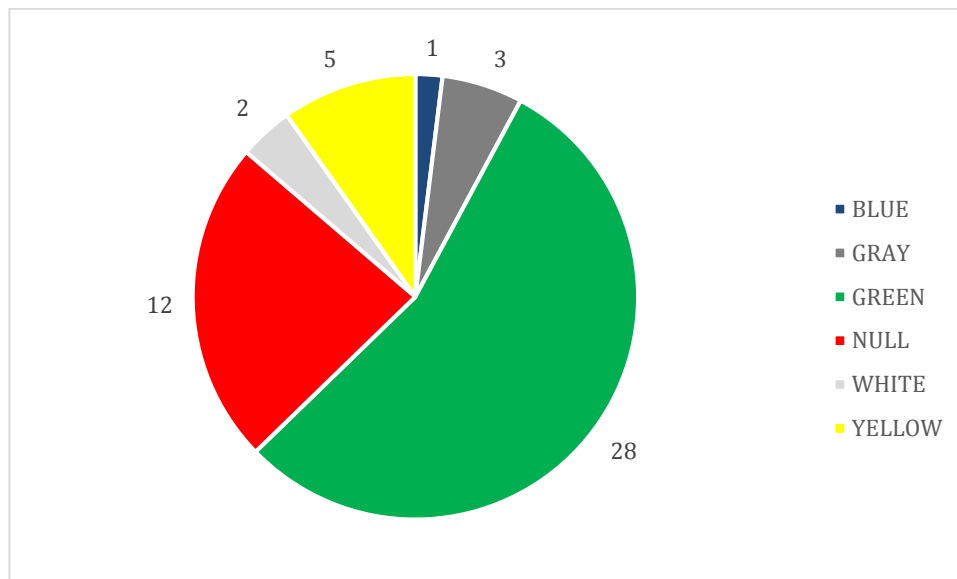


Figure 14: RoMEO color codes for publications with international authors at HSL during 2016 and 2017.  $N = 51$ .

#### 4.1.7 OA-publications by language

Publication language is also a factor to consider when looking at publication data. First off, we establish the number of publications by language, then we look closer at the relationships between publication language, DOAJ registration and RoMEO color code.

Within different fields of study there are different traditions for academic writing and publication practices. Some fields harbor a high degree of international publications and some fields are prominent with Norwegian language publications. Language practices within fields affect choices of publication channels made by researchers.

In all, eight different languages were used for publications at HSL during 2016 and 2017: English (EN), Spanish (ES), Norwegian (NB, NN, NO) and 5 other languages omitted from the dataset for the sake of anonymity, as there were too few publications in these languages to avoid identification.

Norwegian had three categories within the dataset. Two for the different written standards Bokmål (NB) and Nynorsk (NN). The third category was labelled simply “Norwegian” (NO), seemingly indicating that data was lacking on which written standard the publication had been

written in. I fused the three categories together to become one category, as low numbers of New Norwegian publications also yield potential personal indicators.

At first glance, we can see that all three Norwegian categories had a percentage of more than 50 for articles registered in DOAJ. Putting together the three categories, the total number of Norwegian publications registered in DOAJ was 62 out of 108, which is a percentage of 57,4. By comparison, 45 out of 311 English publications were registered in DOAJ, giving us a percentage of 14,5.

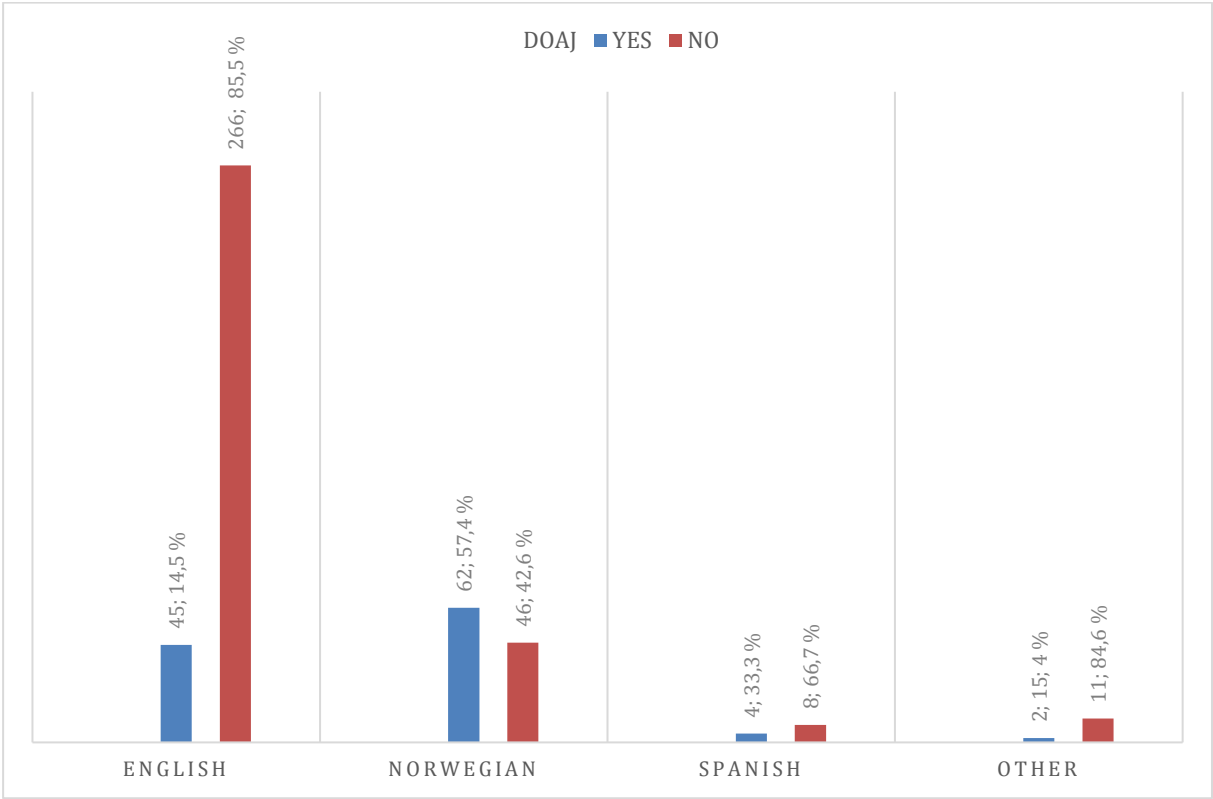


Figure 15: DOAJ publications by language at HSL during 2016 and 2017. N = 444.

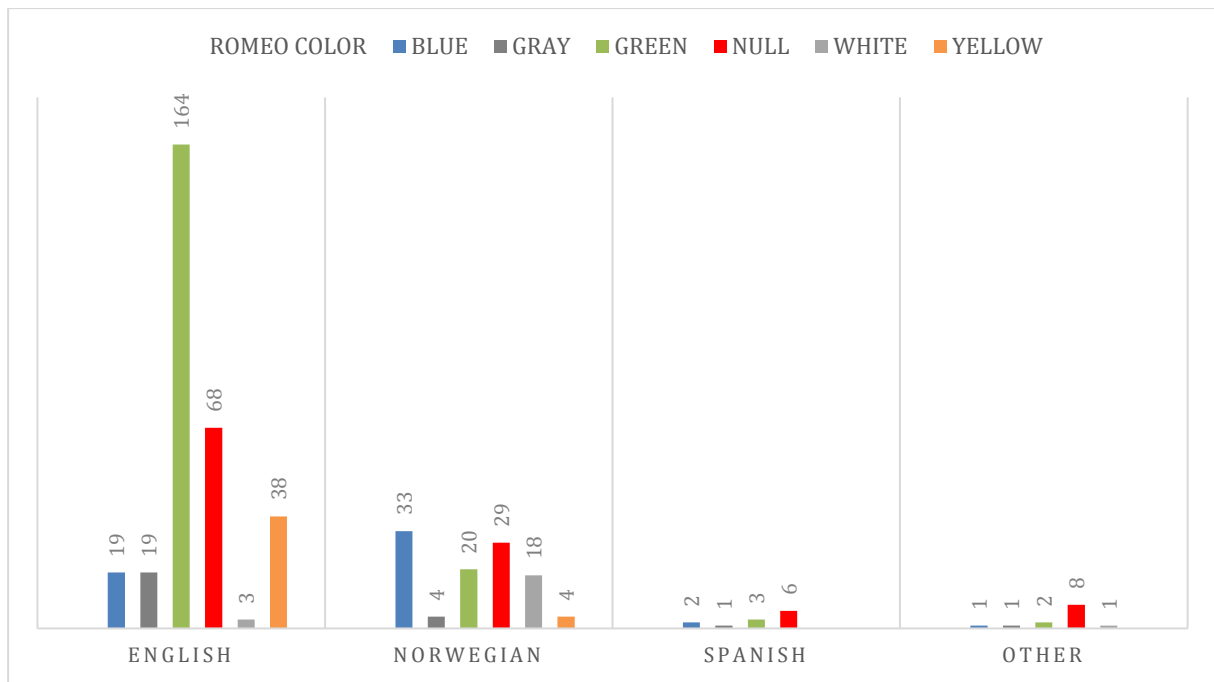


Figure 16: RoMEO color codes by language among publications at HSL during 2016 and 2017. N = 444.

As we have seen earlier, a high number of DOAJ publications signifies a higher percentage of blue RoMEO codes. Among English publications, where the share of DOAJ publications was lower than for Norwegian publications, the green RoMEO code was more common than the blue RoMEO code concerning green OA policies.

## 4.2 Online survey

The online survey was conducted using a web survey form provided by the University of Oslo. It was created with the acquisition of quantitative and anonymous data in mind, but it included an optional comment box at the end. The debate surrounding OA and Plan S seems to have inspired engagement in the academic community, giving me a moderately large body of qualitative information, to which I dedicated a part of the analysis.

As there are international as well as Norwegian employees at the faculty, both a Norwegian and an English version of the survey was sent out, making for two separate data sheets. For the Norwegian version, I received 145 answers, for the English, 19.

Between 2017 and the end 2018, there was a reorganization of departments at HSL, causing some of the respective departments to change names according to which fields of study they incorporated. The department names can be found in attachment 5.

#### 4.2.1 A basic chronology of questions and results

The questions are presented in chronological order and the statistics on the responses for each question, with the Norwegian and the English version combined. The Norwegian survey form with all the answers was translated into English in Microsoft Excel. In the figure descriptions, the total number of respondents to each question is given, indicated by the variable *N*.

For the survey, the first question was “What is your department?”. This question established early the department of each respondent and allows us to analyze the relationships between department and other questions in the survey.

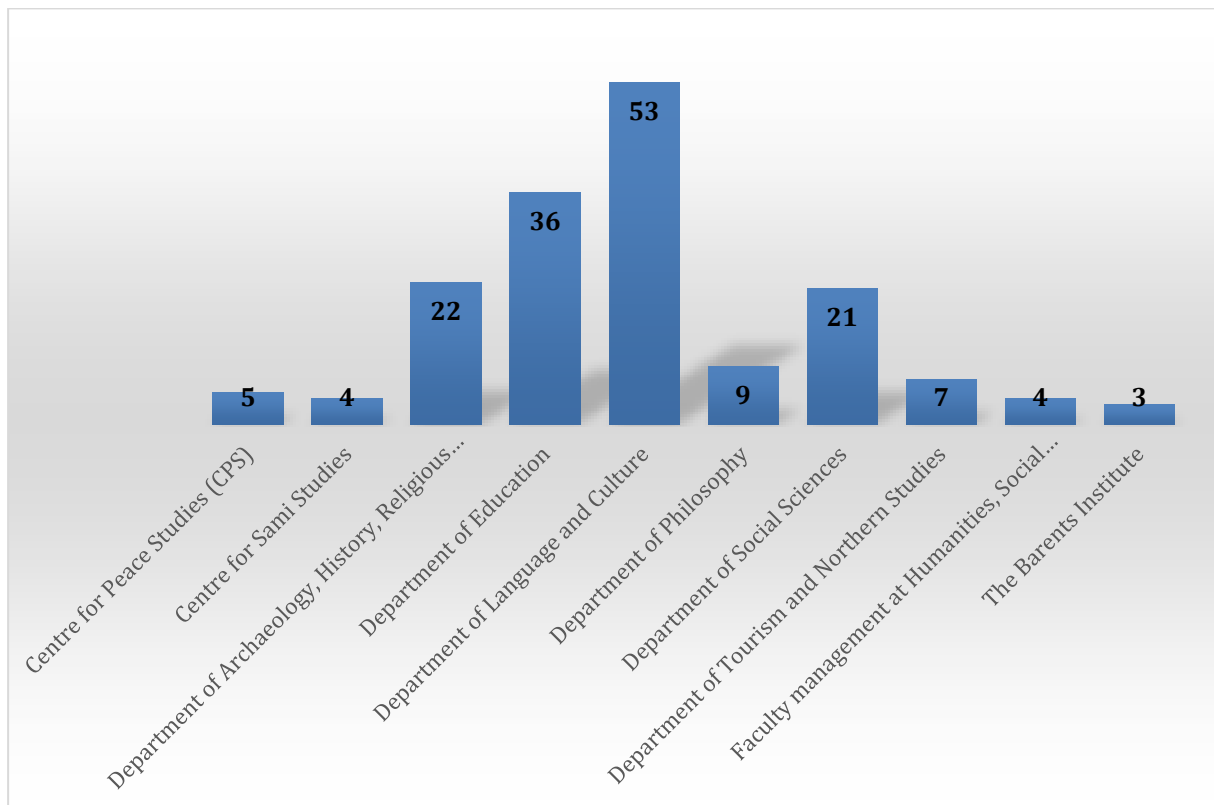


Figure 17: Survey question: What is your department? *N*=164.

Both for the Norwegian and the English version, the majority of respondents were from the Department of Language and Culture, with 53 respondents in all. For that department, it gave us a response percentage of about 40,8 %, as shown in Table 10. The Department of Education had as many as 36 respondents (18 %), while the Department of Archaeology, History, Religious Studies and Theology and the Department of Social Sciences had respectively 22 (33,2 %) and 21 (32 %) respondents in all. Otherwise, a few respondents are scattered on the remaining departments.

Regarding Figure 17: Survey question: What is your department? N=164., it is important that we know the relevant size of the respective departments and the return rate of survey responses from them. We established the number of FTEs for each department in 2016 and 2017 in Table 8 in chapter 4.1.4. Now we will establish the number of FTEs for 2018 in order to tie them to the survey responses. Note that the number of FTEs does not represent the number of employees at each department with full accuracy. Therefore, we will refer to the response percentage as approximate. The numbers are gathered from DBH<sup>23</sup>, as before.

*Table 10: Percentages of responses by department based on FTE numbers from 2018.*

<b>Department</b>	<b>Number of FTEs</b>	<b>Approximate response percentage</b>
Centre for Peace Studies	10,7	46,7 %
Centre for Sami Studies	14,25	28,1 %
Department of Archeology, History, Religious Studies and Theology	66,3	33,2 %
Department of Education	200,18	18 %
Department of Language and Culture	130,05	40,8 %
Department of Philosophy	43,9	20,5 %
Department of Social Sciences	65,7	32 %
Department of Tourism and Northern Studies	28,2	24,8 %
Faculty management	38,6	10,4 %
The Barents Institute	5	60 %

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<sup>23</sup> [Link to website containing FTE numbers](#) for departments at HSL during 2018.

The next question was that of the age of the respondents. This question allows us to tie OA preferences to age and make some potential connections.

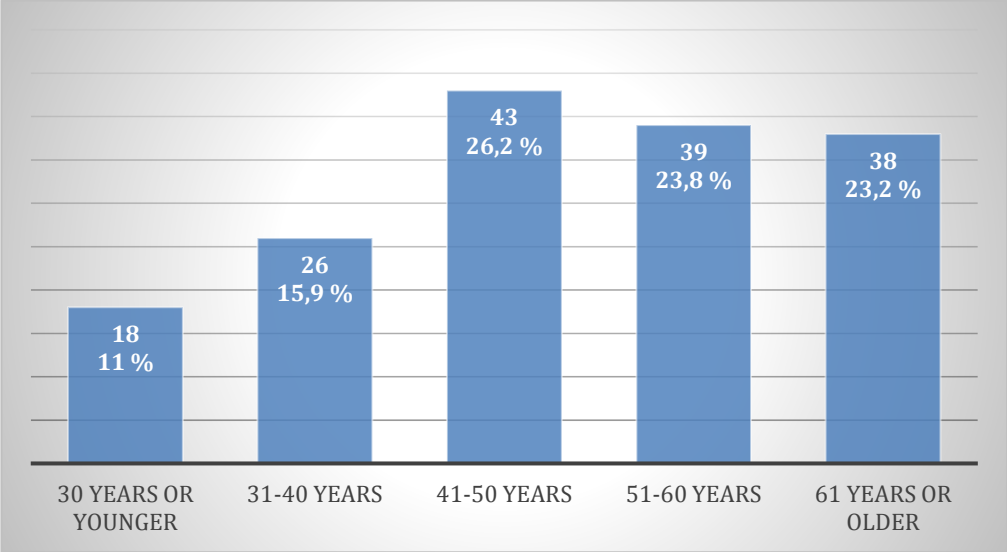


Figure 18: Survey question: What is your age? N=164.

Overall, age was evenly distributed for respondents older than 40 years, with 43 respondents in their 40s, 39 in their 50s and 38 older than 60 years old. There were fewer respondents younger than 40 than older among respondents with 44 against 120.

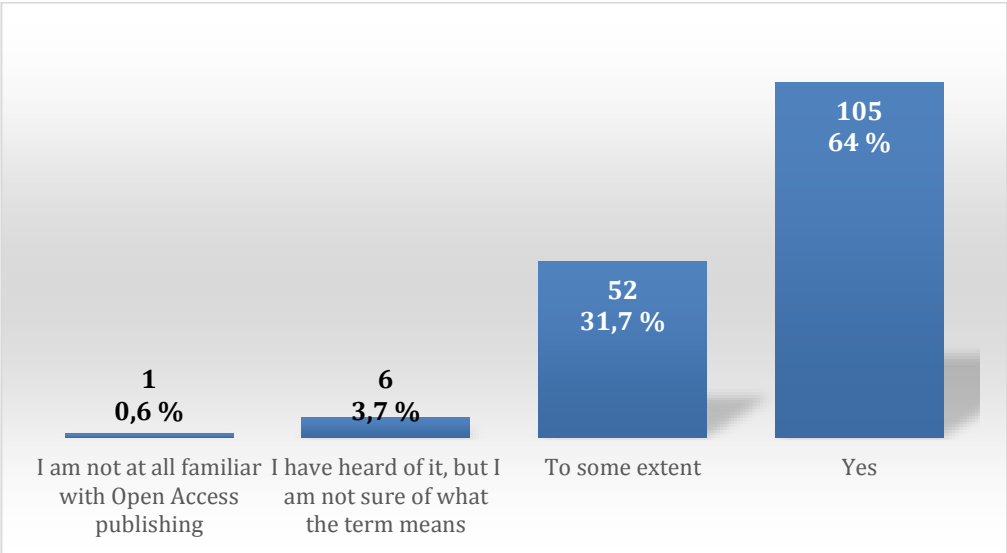


Figure 19: Survey question: Are you familiar with OA publishing? N=164.

On the question of whether the respondents were familiar with OA publishing, the majority answered that they were familiar with OA publishing, but more than one third answered “To some extent”.

The seven people who answered, “I am not at all familiar with Open Access publishing” or “I have heard of it, but I am not sure of what the term means”, were asked if they would like to learn more about OA. After that, their survey was over. To this question, six people answered that they would like to learn more about OA, whereas one answered “I do not find the topic interesting”.

For the 157 ones familiar with OA, the survey continued with the question of the impact of OA on academic publishing.

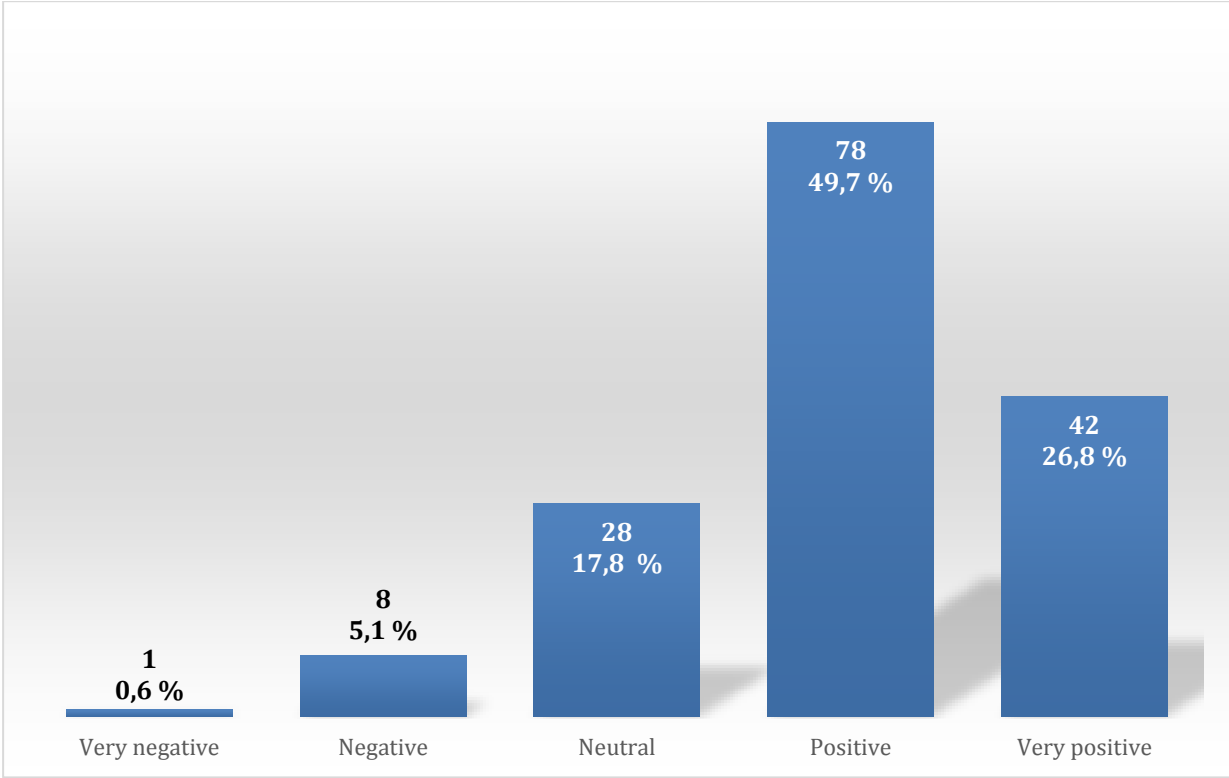


Figure 20: Survey question: Do you believe the overall impact of OA on academic publishing is going to be positive or negative? N=157.

The overall sentiment towards OA and its potential influence on academic publishing seems to have been positive among the respondents. There were 78 (49,7 %) responses for “positive” and 42 (26,8 %) responses for “very positive”. Some people were more reserved. As we can see, 28 (17,8 %) were neutral and 9 (5,7 %) were negative to the potential of OA.

The next question (Figure 21) sought to give an understanding on how employees believed OA would influence the quality of peer-reviews on academic articles.

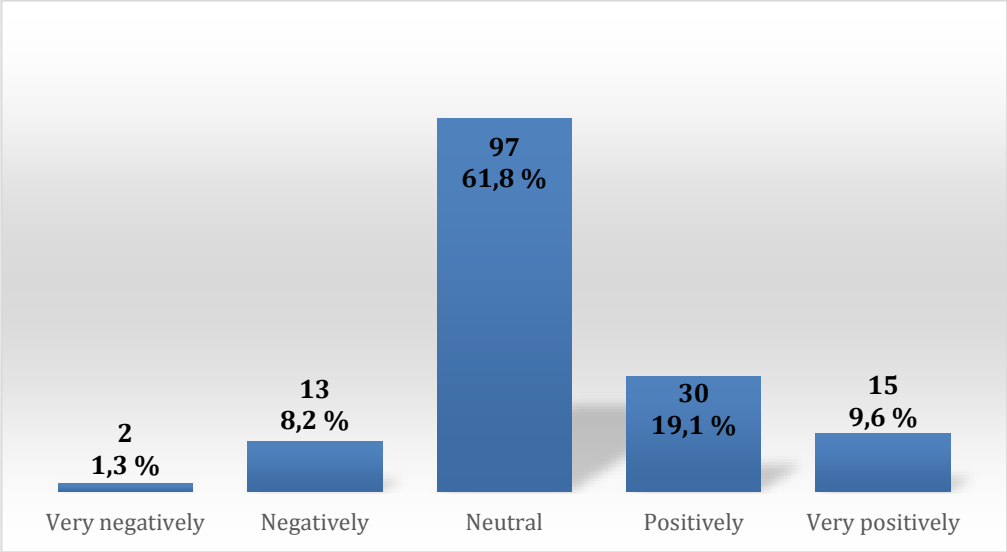


Figure 21: Survey question: How do you believe OA will influence the quality of peer reviews on academic articles? N=157.

To the question in Figure 21, 97 (61, 8 %) responded that they were neutral to how they foresaw the influence of OA on the quality of peer reviews, while 45 (28,7 %) were positive. 15 (9,5 %) were negative.

The next question asked if they were familiar with Plan S. 91 (58 %) were, and 66 (42 %) were not. The 91 who were familiar with Plan S, received a question on their opinion of its potential impact on academic publishing.

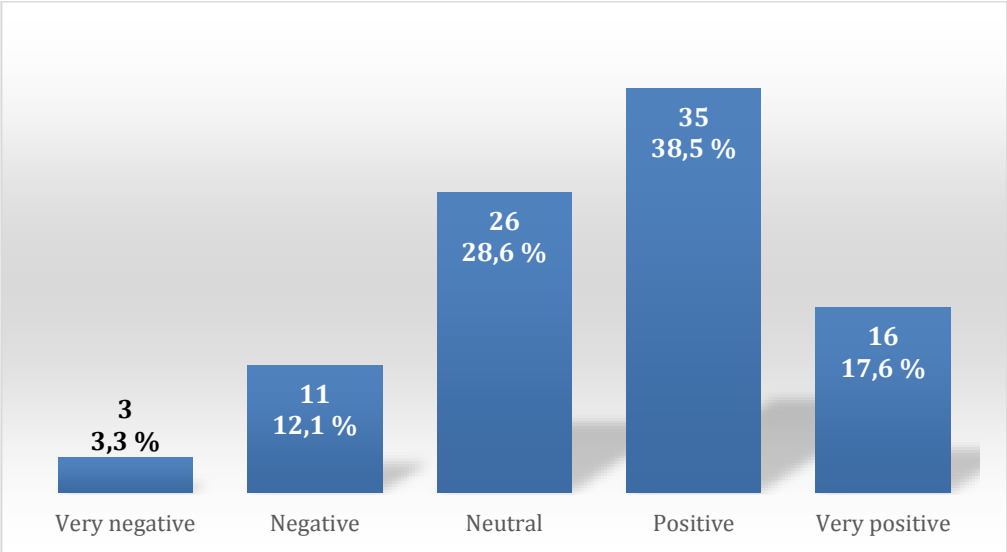


Figure 22: Survey question: Do you believe Plan S will have a positive or a negative influence on academic publishing? N=91.



A majority of 51 (56 %) were positive to Plan S. 26 (28,6 %) were neutral and 14 (15,4 %) were negative.

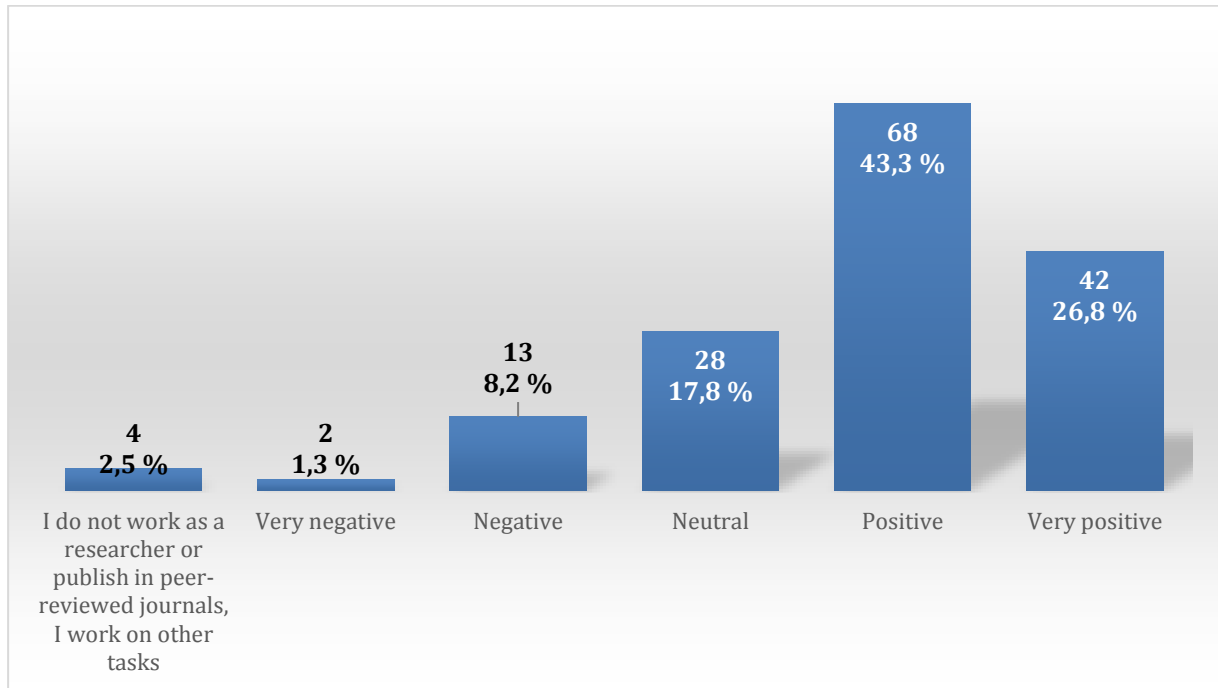


Figure 23: Survey question: Do you consider OA publishing to be positive or negative to your field of research? N=157.

People were asked if they believed OA would be positive to their field of study. For this question, the option to answer that they do not publish in peer-reviewed journals was included, as some respondents would be administrative employees not working as researchers. Four chose that option. 15 were negative, 28 were neutral and 110 were positive about the potential influence OA could have on their own field of research.

It was interesting to map how long the respondents had been publishing academic articles or other works. The previous question ended the survey for those four who said they did not publish or work as researchers. That made for a total of 151 remaining respondents for the next question even though it should have been 153 (a slip that escaped scrutiny in the development of the English survey version. See chapter 4.2.3 on why two respondents went missing).

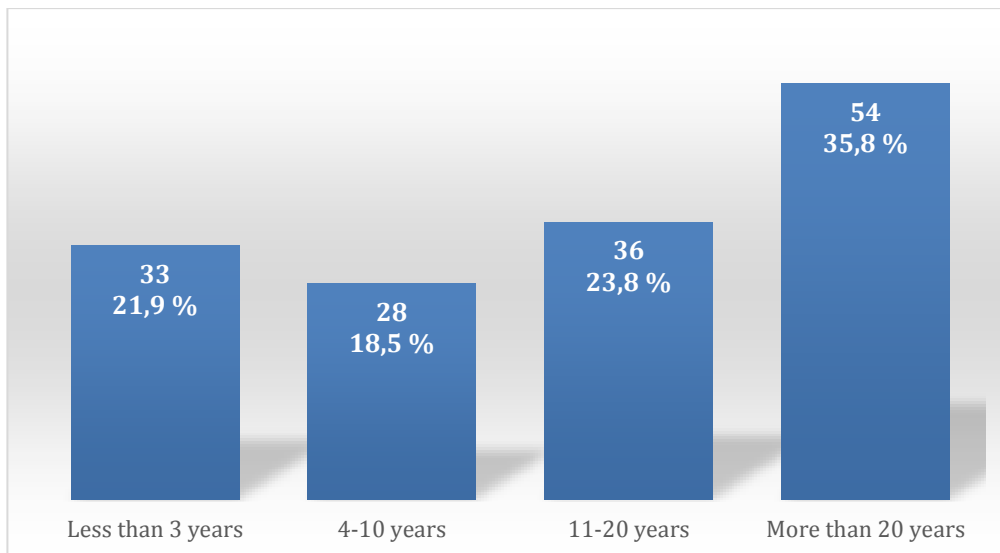


Figure 24: Survey question: How long have you been publishing articles or other works as a researcher or academic author?  
*N=151.*

Of the 151 remaining respondents, a majority of 54 researchers had published for more than 20 years, 36 had published for 11-20 years, 28 for 4-10 years and 33 for less than 3 years. This gave us a fairly even distribution between much and limited experience as academic writers, and we will later look more closely into which groups answered what on certain questions by cross-examining age and experience with opinions on OA.

With the next question, the intention was to get a closer look at the publishing practices of researchers at HSL. The question asked if they have published OA or submitted works to repositories like Munin while working as a researcher or an academic author.

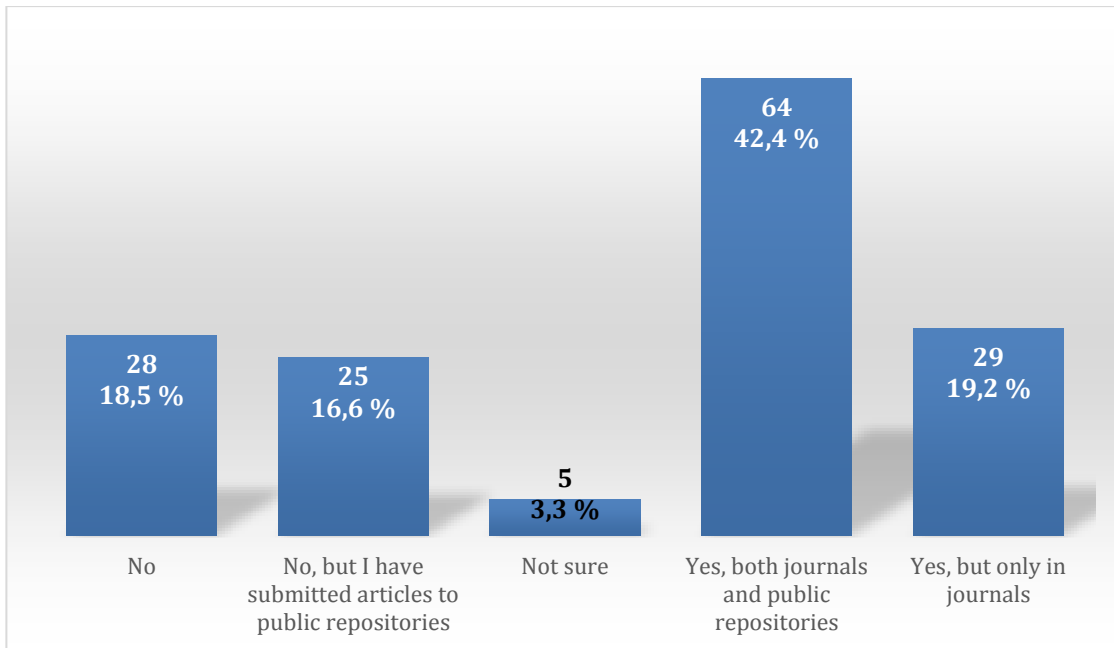
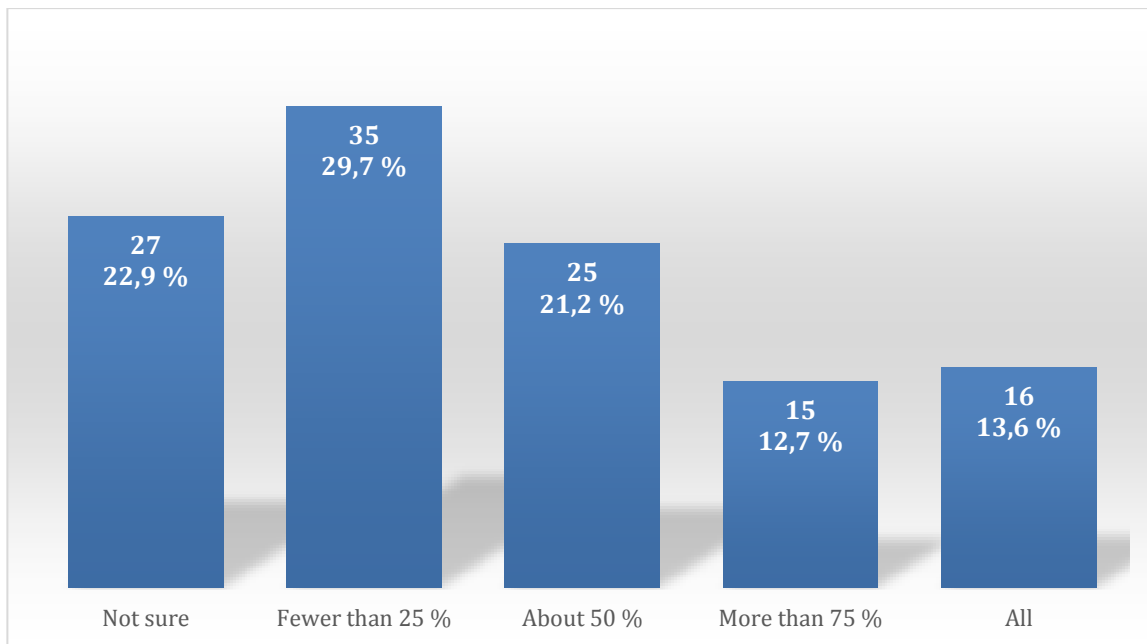


Figure 25: Survey question: *Have you published articles in OA journals or submitted them to repositories (such as Munin) while working as a researcher or academic author? N=151.*

28 (18,5 %) answered no, 25 (16,6 %) answered that they had only submitted articles to public repositories, five were not sure, 64 (42,4 %) had both published OA and submitted to public repositories, while 29 (19,2 %) had only published OA and not submitted their works to public repositories.

Furthermore, the aim was to determine how many OA publications and articles respondents had, with a question regarding the accessibility of their publications.



*Figure 26: Survey question: How large a percentage of your publications are currently available for free and without requiring permission barriers? N=118.*

27 people were not sure how many of their publications were freely available, 35 had fewer than 25 %, 25 had about half, 15 had more than 75 % and 16 had all of their publications freely available for anyone to read. This question had a total of 118 respondents and was the last question in the form for those who reached it. The 28 who answered “no” on the previous question were given a different question and the five who answered “not sure” reached the end of the survey form at the previous question.

For the 28 people who answered no on the question on whether they had published OA as researchers, a different question than the previous one was given. Here, the intention was to get an understanding of the reason they would have for not publishing their works OA. However, rather few respondents reached this phase of the survey, as most respondents had been publishing OA during their careers. This makes it difficult to draw conclusions based on the responses for this question.

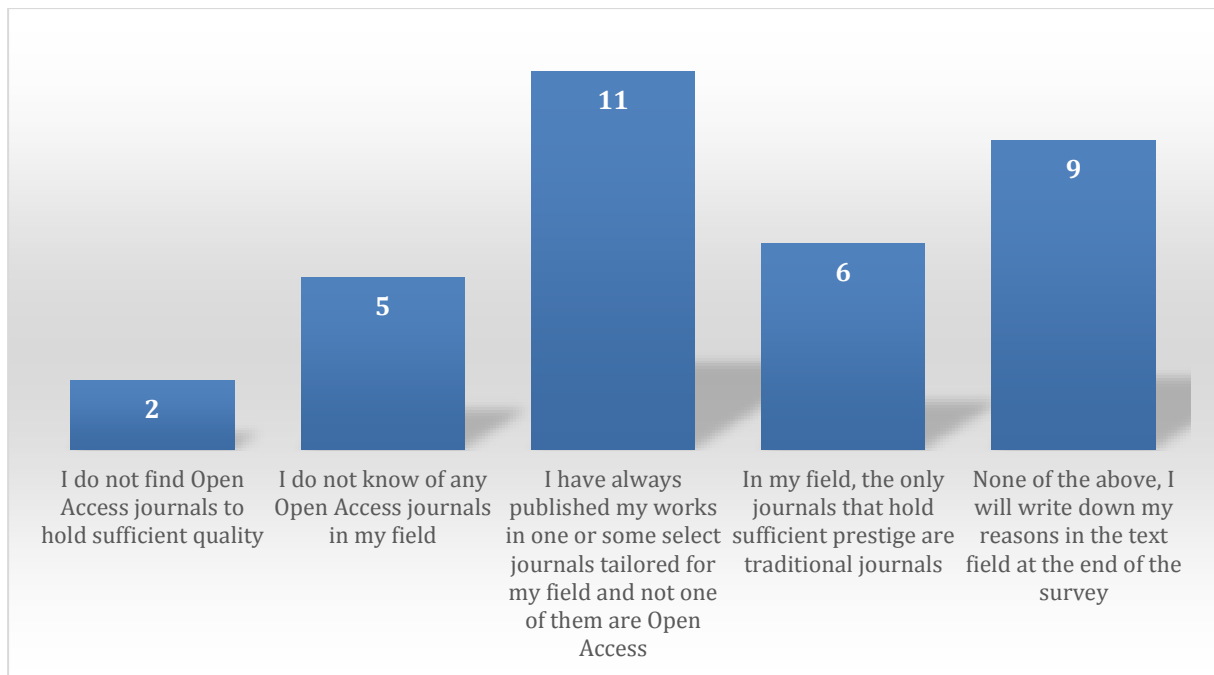


Figure 27: Survey question: What is your reason for not publishing your articles OA? N=28.

In this question, there were 28 respondents and 33 responses. This is because this was a multiple response set, allowing respondents to pick multiple responses to the same question. Eleven responded with “I have always published my works in one or some select journals tailored for my field and not one of them are Open Access”. This indicates that for most respondents who had never published OA, their publication practices had never involved OA journals. Six respondents responded that the only journals to hold sufficient prestige in their field are traditional journals. Five did not know of any OA journals in their field and two meant that OA journals do not hold enough quality. Nine people wrote their reasons in the text field at the end of the survey.

The last question of the survey asked the 28 researchers who had not published OA what could be done for them to choose OA for publishing.

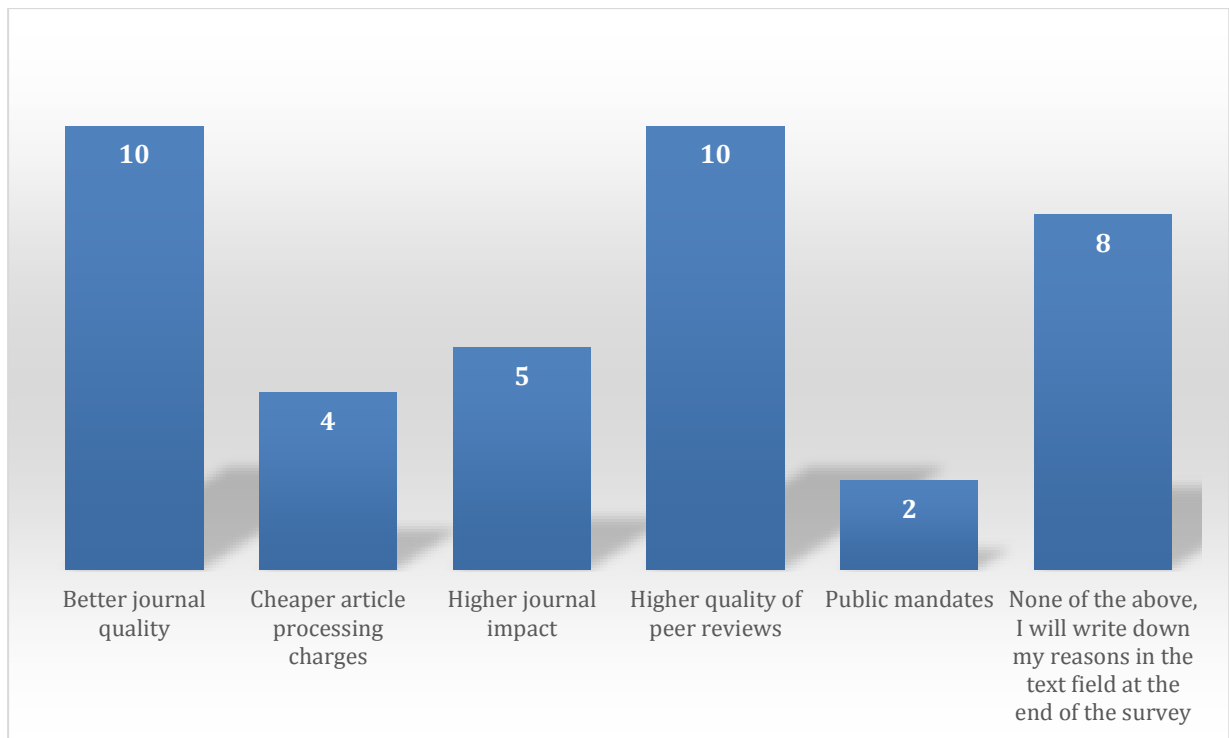


Figure 28: Survey question: What could be done to make you choose OA for publishing? N=28.

For this question, the 28 respondents produced 39 responses, as this also was a multiple response question. Ten answered that they wanted better journal quality and a higher quality of peer reviews for OA journals. Five wanted a higher journal impact, four wanted cheaper APCs and two wanted public mandates for OA. Eight answered that they would write their reasons in the comment box at the end of the survey.

#### 4.2.2 Responses by department

The dominating response by academics in the question of whether they believe OA will have a positive or negative influence on academic publishing was “positive” and “very positive”. For each department, “negative” and “very negative” had less than five respondents. Both at the Department of Education (ILP) and the Department of Archaeology, History, Religious Studies and Theology, the number of “neutral” respondents was a few more than those who answered “very positive”. The Department of Social Sciences had the highest number of people who responded “negative” to the question.

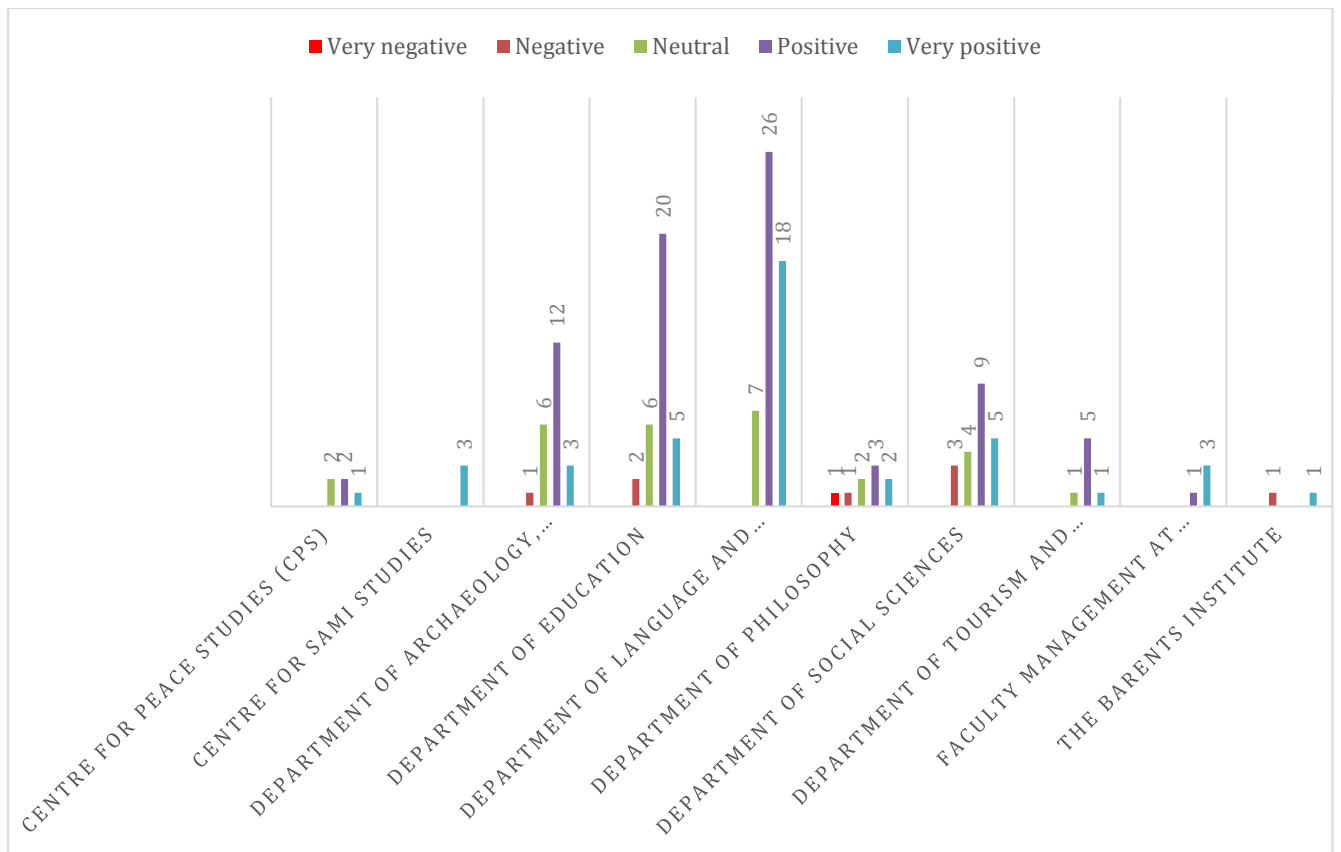


Figure 29: Distribution of responses by department to survey question: Do you believe the overall impact of OA on academic publishing is going to be positive or negative? N=157.

This cross-reference of questions demonstrates that there may be departmental differences at HSL in terms of how OA is perceived, most notably between the Department of Social Sciences (ISV) and the Department of Language and Culture (ISK). ISV have some negative respondents among a lower number of respondents than ISK, which has no negative responses from a higher number of respondents. This suggests a cultural difference, and looking at the publication data, we find that ISK has a slightly higher percentage of OA publications than ISV, with 22,1 % against 17,4 %. Although, at the departmental level, there is not quite enough data to conclude that the numbers signify overall trends. The correlations between publication data and survey responses likely have links between them among smaller parts of the largest departments. As we can see with ILP, which has the largest percentage of OA publications at 47,3 %, there are some who oppose the concept of OA. Large departments such as these harbor many different disciplines, between which there are cultural and preferential differences in relation to publication practices.

### 4.2.3 Responses by age

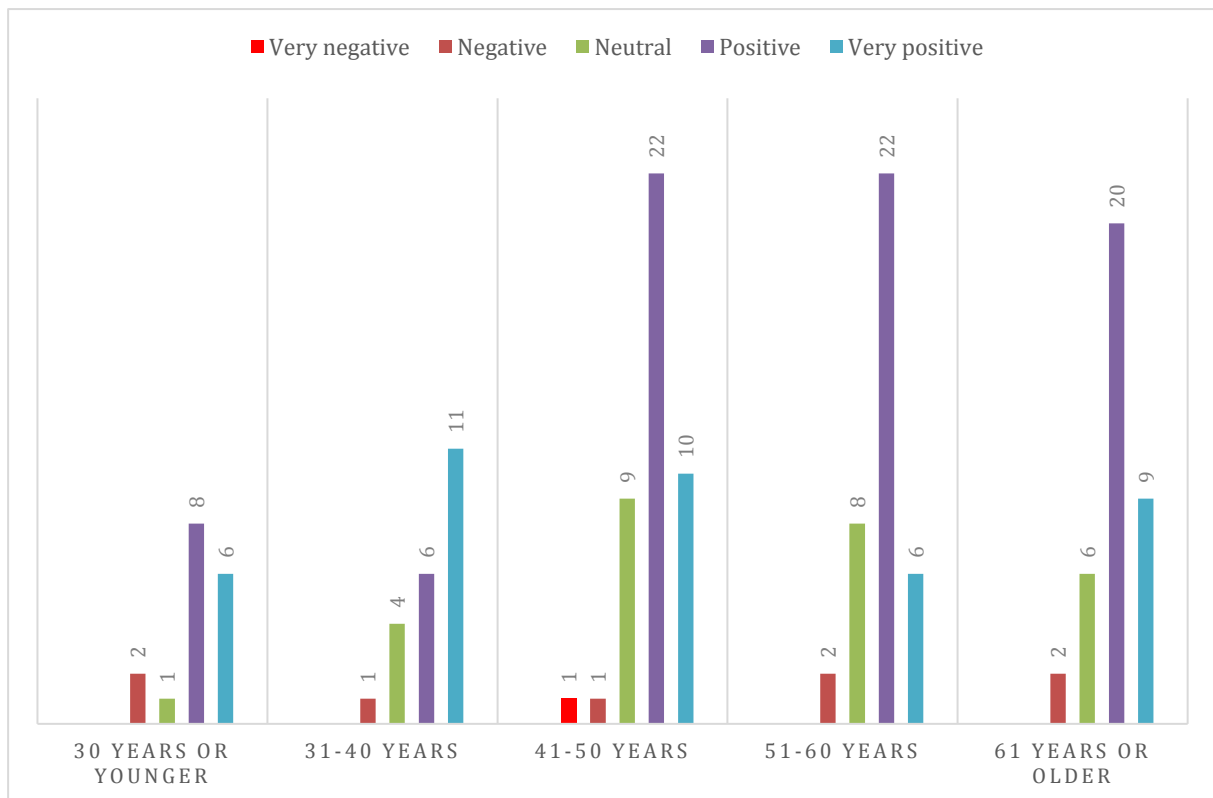


Figure 30: Responses by age to survey question: *Do you believe the overall impact of OA on academic publishing is going to be positive or negative?* N=157.

When comparing survey responses to the question “Do you believe the overall impact of OA on academic publishing is going to be positive or negative?”, we can see that the stats are nearly identical for the three age groups older than 41 years. For those in their thirties, “very positive” is the most popular answer, unlike the other age groups where “positive” is the most popular answer. The numbers for negative responses are evenly distributed among the age groups.

Another interesting crosstab to explore is the distribution of respondents who have published by age. What age groups are the most predominant when it comes to publishing, OA or otherwise?



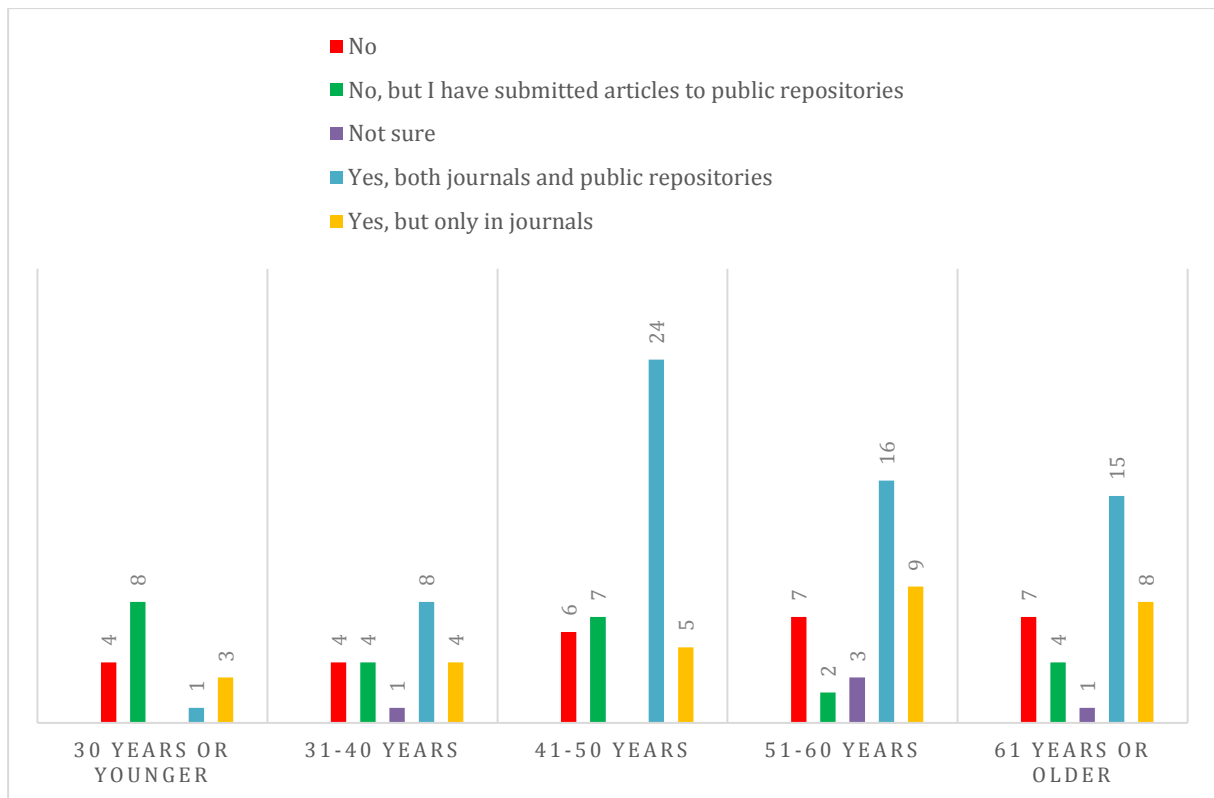


Figure 31: Distribution by age to survey question: Have you published articles in OA journals or submitted them to repositories (such as Munin) while working as a researcher or academic author? N = 151.

What we can derive from Figure 31: Distribution by age to survey question: Have you published articles in OA journals or submitted them to repositories (such as Munin) while working as a researcher or academic author? N = 151. is some of the same as from the previous question in Figure 30. Across the age groups, both attitudes and publication habits give similar graphs. Though when it comes to publishing habits, we can see that there is a spike among those in their 40s to submit both to OA journals and repositories, with 24 respondents out of 42 (57,1 %). Among respondents older than 50 years, 17 out of 72 (23,6 %) have published in OA journals without submitting to OA repositories. 31 (43,1 %) have both published OA and submitted to repositories. Those who have not published OA nor submitted to repositories are fairly evenly distributed among the age groups.

Elaborating further on those who had experience publishing as researchers, we can take a look at the crosstabs between attitudes to OA and the amount of publishing experience among the respondents.

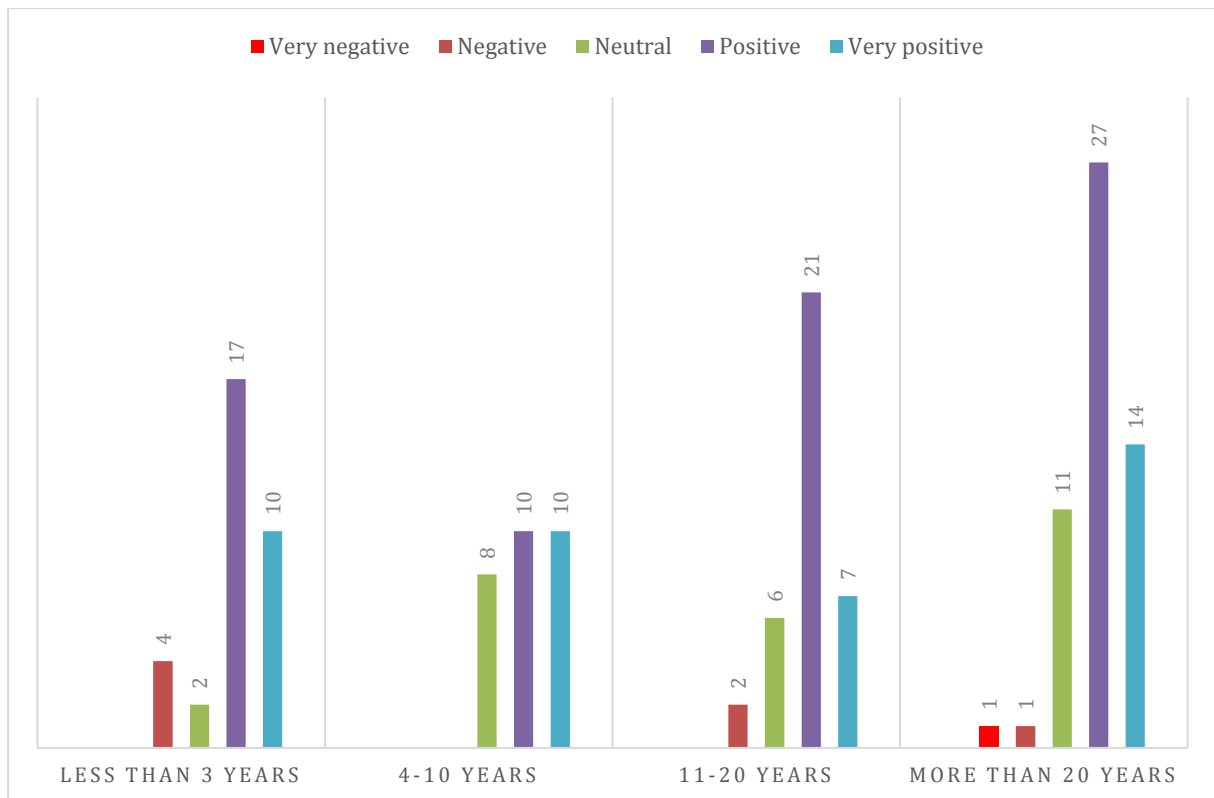


Figure 32: Responses by publication experience to survey question: Do you believe the overall impact of OA on academic publishing is going to be positive or negative? N = 151.

Looking at Figure 32, we see that respondents with more than 20 years of publication experience had 27 (50 %) positive answers and 14 (25,9 %) very positive answers. Eleven (20,4 %) were neutral and two (3,7 %) were negative, with the only very negative response being among them. The statistic for those with 11-20 years of experience looks comparably similar. For those with 4-10 years of publication experience, responses are close to evenly distributed among neutral (eight responses, 28,6 %), positive and very positive responses (both ten responses, 35,7 %). The respondents with less than four years of experience had the highest tally of negative responses at four (12,1 %) and the lowest tally of neutral responses at two (6,1 %). Aside from that, they had 17 (51,5 %) positive and ten (30,3 %) very positive responses.

#### 4.2.4 Reflections on faults and weaknesses of the survey

The question presented in Figure 23 asked people if they believed OA would be beneficial to their field of research. To this question, four recipients answered that they do not work as researchers, for whom the survey ended. With N=157 that should have made for a total of 153 remaining respondents for the next question. However, for the question presented in Figure 24, the number of respondents were 151, meaning that two respondents were suddenly unaccounted

for. Upon closer inspection, I see that I failed to allow the survey to continue for those who responded “very negative” and “negative” in the *English version* of the survey, which in this case makes for two respondents who prematurely submitted their responses before the survey was done. This was an unfortunate slip on my part. I was lucky, as only two people entered this phase of the English version, still allowing us a representative body of data for the remaining questions.

Another weakness of the survey is that it did not ask for the gender of the respondents. When developing the survey, I could choose between asking for age or gender. Asking for both would yield too many personal indicators for respondents from smaller departments. The publication data from 2016 and 2017 gave statistics on the gender of the researchers who published but lacks data on age. Had I asked recipients for their gender rather than their age, I could have linked it to the publication data. When I developed the survey, I did not reflect on this option and chose to ask respondents for their age as I believed it to be the more interesting detail. In hindsight, the analysis may have benefited from a survey asking for their gender.

#### 4.3 A qualitative analysis of the written responses to the survey

In total, the optional text boxes yielded 52 written answers for the Norwegian version and 6 answers for the English version of the survey. In attachment 7, every comment is presented, the Norwegian ones translated into English.

The responses contained a high diversity of opinions and touched upon very individual subjects regarding OA publishing, making for a complex body of qualitative data. The analysis gives a general, more quantitative, overview of the stances of the respondents.

Some people suggested that the survey looked official, as if it came from the faculty administration and not from a master student. This could explain the relatively large amount of comments in the text box sections.

##### 4.3.1 Charting the topics of qualitative responses

The comment topics were quantified to create a statistic of concerns and opinions voiced by respondents. Some categories overlap, as some comments contain multiple topics.

The topics were placed into three main categories:

- Attitudes
- Concerns and criticisms
- Neutral comments

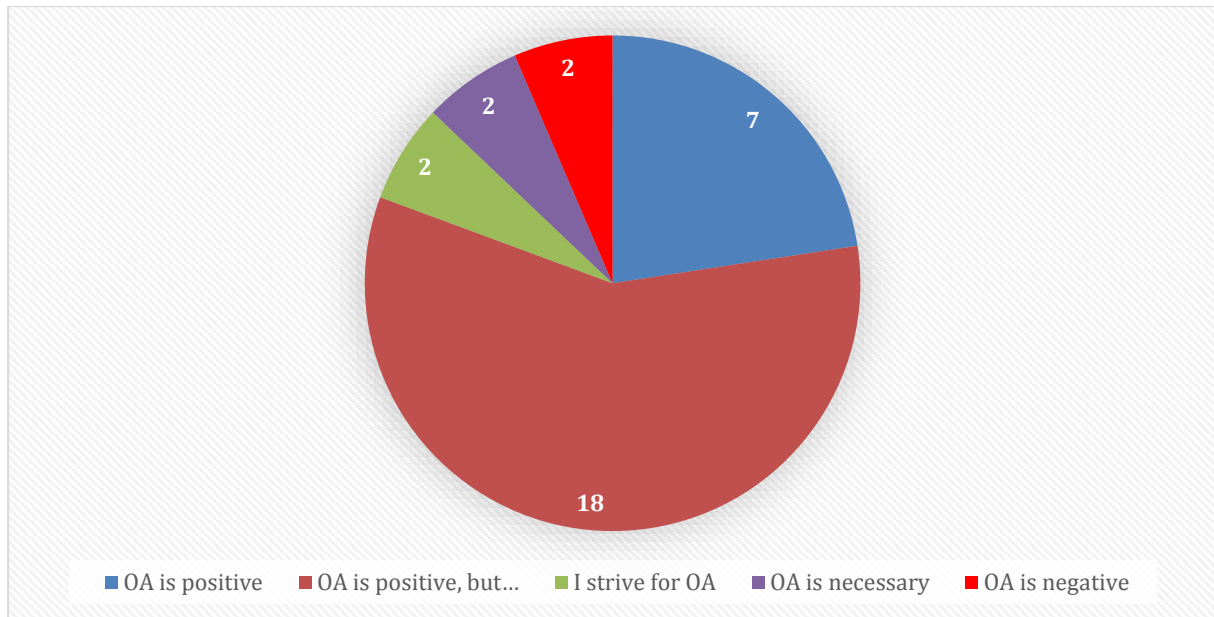


Figure 33: A pie-chart showing the distribution of attitudes to OA apparent in written comments from respondents. N=31.

Each main category had a number of sub-categories. First, the general attitudes of the commenters were mapped. Not all commenters expressed attitudes in their comments, so from 58 comments, 31 comments were from respondents who gave up a positive or negative outlook on OA. They are illustrated in Figure 33.

Most commenters were positive to OA, but had some concerns about its shortcomings, thereby the category “OA is positive, but...”. This category was the most common one, with 18 comments (58,1 %) fitting its description. Seven commenters (22,6 %) wrote that OA is positive without voicing reservations. Two people wrote that they strive for OA, two wrote that OA is necessary and two wrote that OA is negative (6,5 % for all three).

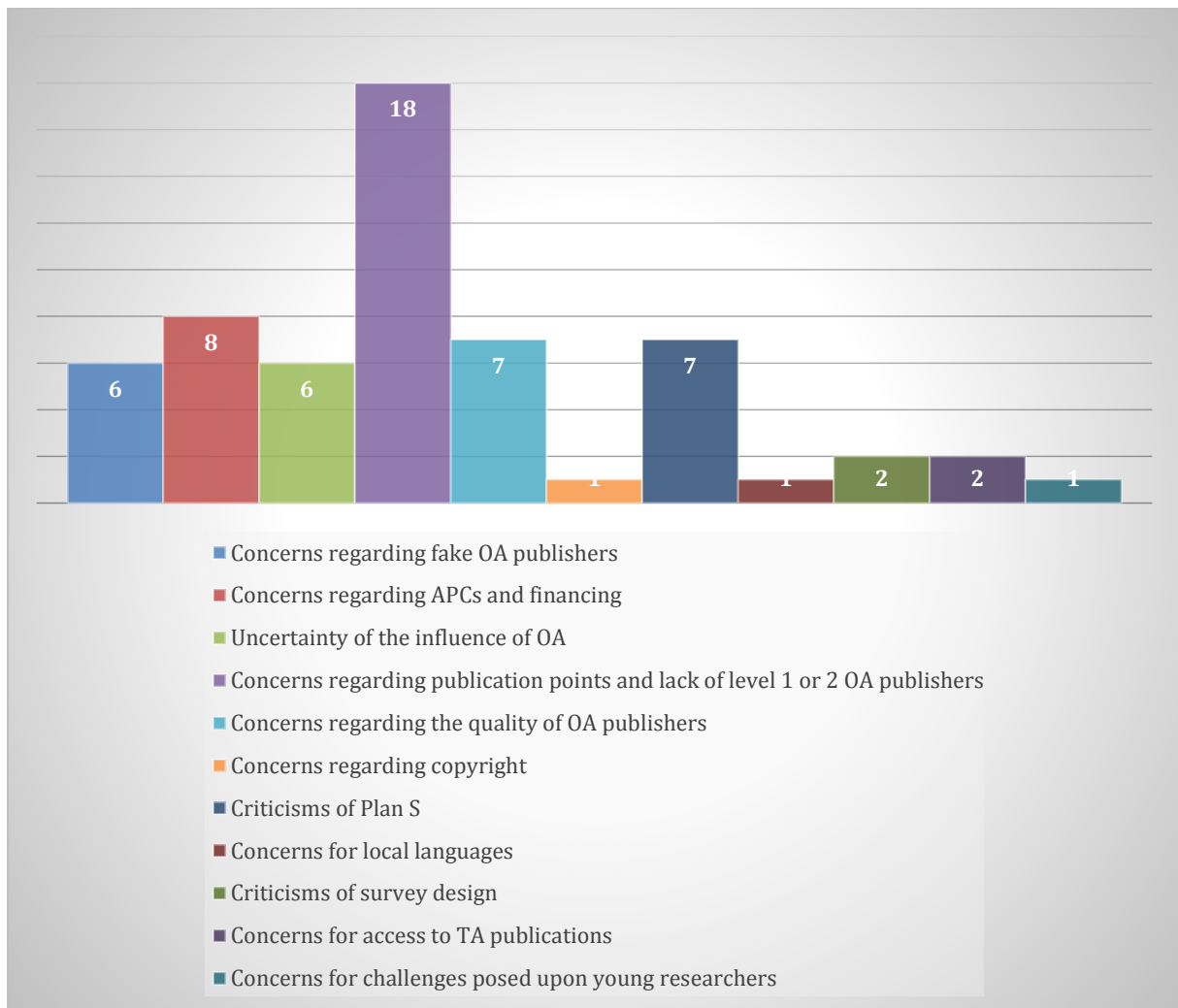


Figure 34: A graph displaying the distribution categories resembling various concerns and criticisms expressed by the respondents. N=43. Some comments fall under more than one subcategory.

Figure 34 displays the figures of all the main concerns and criticisms voiced by commenters. The most prominent one was “Concerns regarding publication points and lack of level 1 or 2 OA publishers”. For this subcategory, 18 matches were found among the written responses. Within this number nuances are hidden, so it is recommended to read the comments in attachment 7 to get a deeper understanding of the individual messages. The general implication, however, is a widespread worry that Plan S does not take into account the lack of OA publishers within many academic fields.

Eight commenters were concerned about APCs and financing related to OA publishing. Seven were concerned about the quality of OA publishers, a concern that upon impression seemed to be unrelated to the concern for lack of level 1 or 2 OA publishers, though at a structural level, the problems are intertwined as the Norwegian research administrations reward publishing in

prestigious channels. Seven people felt the need to criticize Plan S, sometimes along with other concerns, such as lack of publishers or OA quality levels. Six respondents were worried about fake OA publishers, a worry that may have been inspired by the media debate on fake OA publishers in the fall of 2018. Six people were uncertain about what influence OA may have on academic publishing and science in general.

Of the less predominant opinions, two felt the need to criticize the survey design, pointing out its superficiality and the complexity of OA publishing. Two voiced concern for lack of access to TA publishing. One was concerned about lack of OA publication channels for local languages such as New Norwegian and Sami. One respondent feared the mandate to publish OA will pose a challenge to young researchers facing the need to build a career in academia, as Plan S may complicate their situations if they are forced to navigate potential fake journals or find ways to finance OA publications. The commenter felt older researchers should take responsibility and publish more OA as they face lower risks given that they have more established careers.

Nine respondents fell into the last category; “Neutral comments”. These comments were not laded with opinion but were mostly researchers specifying their publication practices. Of the nine, four fell into the subcategory “Have not published yet”. These would be ph. d.-students still waiting to publish their first works. Two wrote that they were book authors. Two wrote that they practice OA publishing and one wrote “I believe the topic is important”.

## 5 Discussion

Upon discussing the contents of the datasets, the important part is to tie them to previous studies. A relevant study is Moksness' and Olsen's study done at UiT. The other is SOAP.

According to Moksness' study, respondents seemed to find it useful to publish OA, and felt it was expected of them to a very high degree (Lars Moksness & Olsen, 2017, p. 15). The publication data from HSL indicates that 25,5 % of publications were gold OA, if we were to assume that DOAJ status equals gold OA publications. There may be a few reasons for the number to be comparably low in context to what respondents to Moksness' study felt was expected of them.

There seems to be a lack of level 1 and 2 OA publication channels in many fields, as shown by Figure 34 in chapter 4.3.1. 18 respondents to the survey wrote concerns over lack of proper OA publication channels within the humanities. This may be reflected in the dataset. Prestige is important to researchers and sacrificing prestige for public accessibility may be hard to do.

There is also a potential fear of fake journals. The 2018 debate on fake journals may have come as a product of growing unease in the academic community over the effect of OA. In my study, this concern was voiced in six of the written responses to the survey.

With these aspects in mind, 25,5 % gold OA proficiency for 2016 and 2017 is a good number for HSL. In a publishing landscape where OA publishers lack for a number of fields, HSL researchers have already shown a will to publish OA. The numbers look even better for green OA, with 55 %. If all 244 green OA eligible publications are available in Munin with proper postprints, we can expect to be able to find more than half of HSLs journal publication output for 2016-2017 in UiTs own database. If we include preprints, the number jumps to 286, 64,4 %, though to many researchers, preprints are not an option for reading.

### 5.1.1 Publication practices and attitudes by department

In chapter 2.6.4, we theorized that cultural differences between different academic fields affect publication practices. At HSL, departments are often cross-sectional, so since our data does not distinguish between specific fields, we are left to look at tendencies within departments often harboring a multitude of fields with different publication practices and traditions.

The figures and tables relevant for the discussion of publication practices by department are Table 8, Table 9, Table 10 and Figure 29. We are shown that, of those who answered to the survey, the Department of Education (ILP) and the Department of Language and Culture (ISK)

have the highest rate of positive answers to the question of the influence of OA. The highest rates of dissent come from the Department of Philosophy (IFF) and the Department of Social Sciences (ISV), along with lower rates of positive answers. The publication data shows that ILP and ISK have higher outputs of OA publications than IFF and ISV, which suggests there may be a correlation between publication activities and attitudes among departments. However, from IFF and ISV, the body of survey data is relatively small, so it does not prove a correlation with the publication data.

ILP yielded some negative answers to the question in Figure 29, suggesting that there may be respondents working within fields that do not practice OA publishing in spite of ILP having the highest output of OA publications. This could be due to ILPs highly cross-sectional nature.

### 5.1.2 OA mandates, OAMJs and citation advantages

While the EU wants all researchers under its umbrella to publish OA from 2020 (European Commission, 2018a, p. 4), mandates for green OA publications have already been active since the beginning of the millennium. While old, the study done at the first four institutions to mandate green OA for their publications revealed that these publications were enjoying higher citation counts (Gargouri et al., 2010). The study is hardly proof that green OA leads to higher citation counts, though it showed that it does not hurt the researchers in any way for universities to mandate green OA for publications by their own employees. The publication data from HSL showed that a high number of publications had green or blue RoMEO color codes. With the UiT having a strong green OA policy, it may have helped its researchers getting higher citation counts than they would have gotten without such policies.

With the EU mandating all academic authors funded by it to publish OA, OAMJs may have a central role in the future of OA publishing in Europe. In terms of impact, journals containing large quantities of publications can cause some authors to struggle to be found amongst the ocean of publications available unless they publish large numbers themselves. In that sense, it could seem that OA may end up further encouraging mass production of scientific content. In this context, it is important to emphasize that a study indicated academic authors value journal quality and high-quality peer-reviews as their two most important factors when choosing a publisher, an indication that also holds true when choosing OAMJs (Wakeling et al., 2019, p. 760). Survey results such as these may serve to reduce worries that OA inspires mass production of content that result in lower quality standards for publications, as the study indicates researchers value proper quality controls when submitting publications.



### 5.1.3 OA ratios by journal rating

The differences between OA and TA journals in terms of quality levels at HSL may demonstrate justifications for being skeptical to Plan S (see Figure 8). The written comments from the survey showed that many researchers were facing difficulties with Plan S and its premise, to a great degree because of the journal ranking system and the lack of OA journals with sufficient prestige. Academic authors in Norway receive publication points based on the level of prestige of the journals they publish in, a matter which so far remains unaddressed by the EU in relation to Plan S.

The numbers revealed by Moksness and Olsen in 2019 showed that respondents from universities in Norway intended to publish in equal measures both OA and TA within the next two years (L. Moksness & Olsen, 2019, p. 6). This statistic indicates that the underlying priority for all researchers is to publish, whether it is OA or not. The answers to questions in Moksness' survey of the importance of quality and prestige in journals give us reason to believe high status and prestige is important for many researchers in Norway. If there is to be congruity between Plan S and the Norwegian publishing landscape, more prestigious OA publishers should be introduced to research fields where they are absent. If that cannot be achieved, NFR could consider granting dispensations to publish TA in fields lacking level 1 or 2 OA publishers.

In my survey, the question "Do you consider OA publishing to be positive or negative to your field of research?" (Figure 23) is the question which most closely resembles the main question from the SOAP survey (Dallmeier-Tiessen et al., 2011, p. 4). The relationship between positive answers is 89 % for SOAP and 70,1 % for HSL if the responses "positive" and "very positive" are put together. If we look at the SOAP survey, Figure 2 in Dallmeier's article shows that the top five fields of research for positive respondents are within the humanities, showing that the difference in positivity between researchers at HSL in 2019 and the global academic community in 2010 may have been around 18,9 %. SOAP is a much larger study than mine and the number from HSL could be slightly misleading due to differences in sample size. The numbers do, however, indicate a higher skepticism to OAs influence on academic fields at HSL, even though the focus on OA is much greater today than in 2010 when the SOAP data was gathered.

The difference these percentages show may in part be due to the influence of the Norwegian publication ranking system and Plan S. 70,1 % is still a high number for academics believing OA to benefit their field of research, but the difference in 18,9 % between SOAP 2010 and HSL 2019 may suggest the faith in OA has cracked a little with the advent of Plan S and the ongoing

debate surrounding it. However, it would require a similar survey question from HSL performed just before the launch of Plan S to give proper indications as to whether attitudes to OA have changed as a result of Plan S.

Uncertainty of the effects of OA on research in the future seems to be a common theme among researchers. The unpredictable effects of emerging publication practices may not reassure researchers that their best interests or society's best interest will be kept, as OA disrupts traditional and proven publication practices that have been prevalent for many years within certain disciplines.

#### 5.1.4 A closer look at the topics of written responses to the survey

Looking at the written responses to SOAP, we see that half of the respondents who had published OA had not experienced paying for APCs (Dallmeier-Tiessen et al., 2011, p. 9), which is in line with Suber's statement that most OA publishers do not charge author-side fees (Suber, 2012, p. 138). Of those who had not published OA, nearly half stated that the primary reason was problems with publication fees (Dallmeier-Tiessen et al., 2011, p. 7).

The economic aspect of academic publishing is one that logically would attract attention. With an emerging field such as OA, questions of financing still remain unanswered in many cases, a factor which is important enough for some recipients to mention. In the HSL survey, eight people wrote of their concern for APCs in the written response section, though it was not the issue that concerned respondents from HSL the most. The greatest concern seemed to be the lack of OA journals in academic fields. With SOAP, APCs seemed to be a greater issue. Though, in 2010, researchers were not mandated to publish OA, a fact that likely kept away the need to worry about lack of OA publication channels within certain academic fields. Such a concern might be the product of Plan S, as those who traditionally were allowed to publish in TA journals are forced to adapt to OA publishing without the necessary infrastructure in place for them to support the shift to OA.

One respondent believed review-processes will be negatively affected by OA, and the person seemed to feel that OA will change the publishing landscape, making it difficult for researchers to find the publishers and journals that will ensure their work be read. This is an issue that relates to the challenges a paradigm shift in academic publishing leads to for researchers, where some of the actors in the traditional publishing industry may be replaced with new actors, leading to uncertainties for researchers trying to pick the right publishers for their works. Within some fields, the traditional publishers may not even be replaced by OA publishers, potentially

leading researchers to try OA publishers specialized in other fields, whom may not have routines in place for hiring sufficiently competent reviewers for the relevant field.

A solution to the problem of lacking OA publication channels could be for the state to subsidize a change to OA as publication platform for established publishers within the humanities. It would be interesting to see the outcome of a survey like the one done on HSL if OA publishing channels were to be prevalent in all academic fields. OA publication channels though, need time to form and Plan S may be put into action too soon for many fields to adapt.

One written response to my survey wrote that some aspects of the academic system in Norway do not yet reward academic authors if they publish in OA journals rather than in established TA journals. This is a byproduct of OA being an emerging field and certain disciplines lacking OA journals accepted by NSD as level 2 journals, or in some cases, even as level 1 journals. Another writer calls on university and research administrations to implement policies to offer researchers options within fields lacking prestigious and quality assured OA journals. For Plan S to succeed in Norway, resources must be spent to ensure that all academic fields are given proper OA publication channels. However, implementing such policies is complicated, expensive and runs the risk of failure within fields where such policies will be attempted.

The NSD ranking system is difficult for emerging OA journals to succeed in. If NFR wants the implementation of Plan S to be successful in Norway, they depend on a cooperation with NSD to accommodate OA journals in fields where they lack prestige, or even where OA journals lack a foothold in the first place. Studies showed us that it is difficult to measure eventual OA citation advantages for publications, even though a majority of studies showed to have citation advantages for OA publications (Zhang & Watson, 2017). If the numbers were clearer, then citation advantages may have incentivized both authors and publishers to choose OA for publishing. Though, not all studies on the topic are sufficiently clear for researchers to choose OA based on citation advantages (Dorta-González & Santana-Jiménez, 2018).

Some commenters were concerned with the rise of fake journals. One respondent to the survey pointed to systemic problems weakening trust in OA, such as lack of public regulations and the rise of fake journals. The person does not blame OA for the rise of fake journals but argues rather that public policies and regulations need to catch up with the development of OA platforms in academia.

One commenter placed the responsibility upon older, more established researchers to publish OA and to take away the burden of responsibility from young researchers who face risks when

choosing to publish OA rather than TA, as the commenter felt OA publishing may negatively affect their career opportunities. If we tie this comment to the responses to the HSL survey, Figure 32 shows that the highest tally of negative attitudes to OA came from respondents with the least experience publishing. It is not a significantly high number, as overall very few people gave negative responses to the question of OAs impact, though it may suggest a slightly higher degree of uneasiness among the respondents who had just started publishing as they may have felt that the future looks more uncertain to them than to well-established researchers.

One respondent pointed to the undescribed and unknown nature of emerging OA publishers, which by interface and presentation are difficult to assess. It is important for researchers to know which publishers are proper and which are not and who to ask for help in this matter. Institutions could consider offering seminars to teach academics how to navigate the emerging OA publisher landscape. At UiT, this would be easy to do as the university library employs an extensive expertise on OA.

Among the comments it was also pointed out the judicial challenges facing the OA movement. With new definitions of accessibility, new definitions of copyright have emerged, such as Creative Commons. The European Commission Recommendation of 25.4.2018 stated that “licensing solutions should aim at facilitating the dissemination and re-use of scientific publications” (European Commission, 2018a, p. 2). This means that judicially, most publications will be easy to cite for anyone who wishes to do so, however, it remains unclear if companies can exploit OA copyright policies by not properly citing sources when promoting their products. With TA publishers, the tendency has been that they generally own publications that have been submitted to them by researchers (Park & Qin, 2007, p. 59). Such proprietary policies have traditionally kept the public from freely accessing most publications, though now, the EU has deemed that forcing non-proprietary copyright policies such as Creative Commons CC BY onto publishers is necessary to keep them from owning all rights to academic publications. The CC BY license is being criticized by some for being easy to exploit by companies as it is a little difficult to assess if they are judicially allowed to freely interpret the contents of academic publications and skew their meaning for their own commercial campaigns (Torvund, 2018).

One respondent referred to Plan S as an overly ambitious but necessary policy plan as the culture of academia has been affected by notions of prestige constructed by academic publishers, causing many researchers to focus their energy on getting their works published in the right journals, which, according to the writer, has a negative effect on academic research.

Commercially run publishers may want academics to publish in order to gain money. With the advent of OA, though, the incentive to publish large amounts may weaken or strengthen depending on the business models of OA publishers. It may be so that publicly run OA publishers may lower the general incentive to produce publications, though there are already very many commercial OA publishers. OA may incentivize the production of an even higher amount of publications than with TA publishing, as can be seen with some OA publishers yielding large publication outputs that resemble mega-journals (Spezi et al., 2017).

#### 5.1.5 OA in relation to local languages

In Norway, minority languages such as New Norwegian and Sami are struggling to have a foothold in academia. One respondent to the survey suggested that OA will be more difficult to implement for domestic publications bearing smaller local languages than international publications, as the person stated that the Norwegian University and College Sector does too little to stimulate the growth of these languages in academia.

If we look at the publication data in chapter 4.1.7, we can see that Norwegian publications are far fewer than English publications, but even so, there are more gold OA publications in Norwegian than in English, suggesting that local languages have little reason to struggle to publish OA. Unfortunately, New Norwegian and Sami had too few publications not to risk breaking their anonymity, but in Norway, there are possibilities for small publishers to publish OA, as institutions have plenty of funds to finance OA publishing or run their own OA publishing platforms for low costs. Small scale or public publishers can have cost-effective or non-profit business models. This would be beneficial for local languages that may not have a market capable of sustaining commercial academic publishers.

#### 5.1.6 Results relating to gender differences

The dataset reveals in chapter 4.1.3 that women in overall published less than men, though had a higher percentage of OA publications. These findings are in line with established theory on gender differences in academia which suggests a more horizontal perspective on academic careers among women and a gender bias towards men in academia (Angervall et al., 2018, pp. 1104-1107; Guarino & Borden, 2017, p. 672). That women would publish more OA than men may suggest an altruistic motive being more prevalent among women than among men, though the body of data from HSL is more of an indication that previous studies reveal a trend rather than proof of differences in values among men and women at the faculty, as the sample size is

not very extensive. Another factor to consider is the affiliation to departments for men and women, which is not included in the analysis.

The numbers relating to publication output shown in Figure 5 strongly suggest a gender bias toward men regarding career opportunities and researcher positions at the faculty. Men published in overall 78 more journal articles than women despite being fewer. Such a number is a sign that tendencies revealed in prior studies on gender differences in academia may hold relevance at HSL.

## 6 Conclusions

The goal of the study was to map OA publication practices at HSL in 2016 and 2017 as well as find indications to the predominant attitudes towards OA in 2018. In short, the major findings were that OA publications were among 25 % of all publications at the faculty, where women published slightly more OA than men percentage-wise. Numbers from NSD show that level 2 OA journals are overall extremely scarce. Despite this, HSL researchers managed to publish more than one out of ten OA publications in level 2 journals.

The survey showed that most respondents were positive towards OA. Within the written comments, a common concern was that some fields of study lacked OA publication channels at level 2, some even at level 1, a concern backed by data from NSD. The survey also suggested that there were some differences between departments regarding publication preferences. Regarding age, attitudes seemed to be evenly distributed amongst different age groups.

Building upon the study, it would have been interesting to know more about the differences between men and women in terms of attitudes. It would also be useful to do an in-depth study covering fields of research rather than departments, as many departments host a diversity of different fields bearing different academic cultures and practices.

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Ingvild Isaksen and Henning Hansen for teaching me what happens behind the scenes while registering works in Munin and making it a fun experience (!).

My good friends, Marius Svendsås, Bjørn Fjukstad, Audun Theodorsen, Mathias Arbo, Lars Ervik and Adrian Lium-Wickler for highly important positive feedback and beta-testing of the survey. Bjørn gave a paramount tip to convert all scaled questions to involve Likert-scales and to double-check that the analyzes I want to make are compatible with the questions asked, in addition to suggesting that age be included as a parameter. Mathias tipped me of the confusion that can arise between the answering options “Neutral” and “Not sure” and advised me to make recipients take a standpoint while answering graded questions. Audun shone a light on the risks of conflicting answers in similar questions.

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# **Attachment 1 - Application for access to publication data at UiT HSL (Norwegian)**

UiO v/ Sverre Bjarte Johnsen

Tromsø, 01.10.18

Søker: Sivert Grenersen

Veileder: Heidi Kristin Olsen

## **Søknad om behandling av publikasjonsdata ved UiT, HSL**

I forbindelse med min masteroppgave i medie- og dokumentasjonsvitenskap, MDV-3950, søker jeg om tillatelse til å behandle data om alle tellende publikasjoner fra år 2016 og 2017 ved UiT Norges arktiske universitet, institusjonsnummer 186, HSL, avdelingsnummer 33.

Masteroppgaven har arbeidstittelen “Open access as publication method at the Faculty of Humanities, Social Sciences and Education, UiT”, og vil inneholde en studie av publikasjonspraksiser ved HSL-fakultetet, med hovedvekt på Open access. Metoden vil være kvantitativ i karakter og vil også inneholde en anonym spørreundersøkelse for å få et innblikk i forskeres forhold til akademisk publikasjon og Open access ved fakultetet.

Datasettet bør være anonymt og bør ikke inneholde identifiserbare personopplysninger. Kolonner som bør ekskluderes vil være DOI, ETTERNAVN, FODSELSDATO, FORNAVN, PROSJEKTNR, ISSN (alle 4 kolonner), PERSONLOPENR, NAVN på tidsskriftserie, NAVN på tidsskrift, TITTEL på publikasjonen, VARBEIDLOPENR. Alle data som ikke inneholder personidentifikatorer kan inkluderes.

Med vennlig hilsen,

Sivert Martin Myrvang Grenersen

## Attachment 2 - E-mail correspondence with UNIT and acquisition of publication data at HSL (Norwegian)

**Fra:** Sverre Bjarte Johnsen <[sverre.bjarte.johnsen@unit.no](mailto:sverre.bjarte.johnsen@unit.no)>  
**Sendt:** 23. november 2018 16:37  
**Til:** Sivert Grenersen <[sgr027@post.uit.no](mailto:sgr027@post.uit.no)>  
**Emne:** SV: Søknad om behandling av publikasjonsdata ved HSL, UiT

Hei

Ok, her følger datasettet.

Gi meg beskjed om noe er uklart, eller om du trenger andre data.

vh

sverre

---

**Fra:** Sivert Grenersen <[sgr027@post.uit.no](mailto:sgr027@post.uit.no)>  
**Sendt:** fredag 23. november 2018 14.02  
**Til:** Sverre Bjarte Johnsen  
**Emne:** SV: Søknad om behandling av publikasjonsdata ved HSL, UiT

Hei Sverre,

Det var gode nyheter! Aggregert data er det jeg er ute etter. Eksempelarket illustrerte veldig godt hva du mente, så da tenker jeg det fungerer fint å la de markerte feltene utgå.

Med vennlig hilsen

Sivert Grenersen

**Fra:** Sverre Bjarte Johnsen <[sverre.bjarte.johnsen@unit.no](mailto:sverre.bjarte.johnsen@unit.no)>  
**Sendt:** 22. november 2018 19:47  
**Til:** Sivert Grenersen <[sgr027@post.uit.no](mailto:sgr027@post.uit.no)>  
**Emne:** SV: Søknad om behandling av publikasjonsdata ved HSL, UiT

Hei

Jeg kan sende deg data i morgen, fredag. Men fint om du bekrefter at du kun ønsker aggregert data og ikke data på direkte personidentifiserende nivå, jfr. vedlagte variabel beskrivelse.

(Dersom forskerne er aktivt informert om at deres svar på en evt. spørreundersøkelse også skal kobles mot data fra Cristin, er det greit fra vår side at data kan leveres på personnivå, så lenge opplysningene kun benyttes til forskning og resultatene ikke publiseres på en direkte identifiserende måte. Dette betinger en utlånsavtale fra oss, samt kopi av spørsmålene i spørreundersøkelsen.)

vh

sverre b johnsen

---

**Fra:** Sivert Martin Myrvang Grenersen <[sivegren@hotmail.com](mailto:sivegren@hotmail.com)>

**Sendt:** mandag 1. oktober 2018 11.43

**Til:** Sverre Bjarte Johnsen

**Emne:** Søknad om behandling av publikasjonsdata ved HSL, UiT

Hei Sverre,

Jeg er en masterstudent ved studiet i medie- og dokumentasjonsvitenskap ved Universitetet i Tromsø. Jeg skal skrive en oppgave om Open Access og skal i den forbindelse gjøre en studie av publikasjonspraksiser ved Fakultet for humaniora, samfunnsvitenskap og lærerutdanning. I den forbindelse søker jeg om å få behandle et datasett over alle tellende publikasjoner registrert i Cristin fra år 2016 og 2017 fra fakultetet. Jeg har lagt ved søknaden og et eksempellark der jeg har markert de feltene jeg ikke bør få med rødt. Jeg trenger ikke tilgang til personidentifikatorer i datasettet, da det forenkler søknadsprosessen å holde dataen anonym.

Er dette noe som kan gjennomføres?

Med vennlig hilsen,

Sivert Grenersen



## **Attachment 3 - E-mail to employees at HSL containing link to survey**

**Fra:** Sivert Grenersen

**Sendt:** 12. desember 2018 12:42

**Emne:** Spørreundersøkelse om åpen publisering ved HSL - Survey regarding Open Access publishing at HSL

Hei,

Har du et øyeblikk til overs til å svare på en spørreundersøkelse om åpen publisering (Open Access) ved HSL?

Formålet med undersøkelsen er å kartlegge ansattes forhold til temaet og deres standpunkt vedrørende åpen publisering.

Undersøkelsen er utviklet til å være anonym, rask og lett å svare på, og består av maksimalt 13 spørsmål.

Norsk skjema: <https://skjema.uio.no/108005>

Do you have a moment to answer a survey on Open Access at HSL?

The purpose of the survey is to map employees' relationship to the topic and their standpoint regarding Open Access publishing.

The survey is developed to be anonymous, quick and easy to answer, and consists of a maximum of 13 questions.

English form: <https://skjema.uio.no/103883>

Med vennlig hilsen/kind regards,

Sivert Grenersen

## Attachment 4 - Dataset categories

ARSTALL	Year of publication
VARBEIDHOVEDKATKODE	Main publication type
VARBEIDUNDERKATKODE	Publication type subcategory
PUBLIKASJONSFORM	Publication form [number]
PUBLIKASJONSFORMNAVN	Publication form name
PUBLISERINGSKANALTYPE	Publication channel type [number]
PUBLTYPENAVN	Publication channel type name
ARSTALL_ONLINE	Year online
ARSTALL_TRYKKET	Year printed
KVALITETSNIVAKODE	Quality level code [number]
SPRAKKODE	Language code
SPRAKNAVN	Language name
INSTITUSJONSNR	Institution number
AVDNR	Faculty number
UNDAVDNR	Department number
GRUPPENR	Group number
REKKEFOLGENR	Succession number
INSTITUSJONSNAVN	Institution name
AVDNAVN	Faculty name
UNDAVDNAVN	Department name
GRUPPENAVN	Group name
KJONN	Gender
VEKTINGSTALL	Weighting figures [number]
FAKTORTALL_SAMARBEID	Factor numbers for cooperation
FORFATTERE_INT	International authors [number]
NSDSTEDKODE	NSD locale code
INSTITUSJONSKODE	Institution code
EIERKODE	Owner code
STATUS_RBO	Status for result-based redistribution of state funds (RBO)
LANDKODE	Country code
LANDNAVN	Country name

SEKTORKODE	Sector code (state)
STATUS_INT_SAMARBEID	Status for international cooperation
LANDNAVN_ENGELSK	Country name in English
Antall_prosjekt	Number of projects
STATUS_SERIE	Status for serials
ROMEO_COLOUR	RoMEO color
STATUS_DOAJ	Status DOAJ
FINANSIERINGSKILDEKODE	Financing source code
STATUS_HOVED	Status main (unknown purpose)*
FINANSIERINGSKILDENAVN	Financing source name
opplastet	Uploaded (yes or no, unknown database)
DATE_ADDED	Date added (unknown purpose)
YEAR_OA	Publication year for publications made OA during 2016 or 2017

## **Attachment 5 – Departments at HSL as of 2018**

Department names at HSL as of 2018:

Fakultetsledelsen ved HSL-fak - Faculty management at Humanities, Social Sciences and Education

Institutt for filosofi og førstesemesterstudier - Department of Philosophy

Institutt for arkeologi, historie, religionsvitenskap og teologi - Department of Archaeology History, Religious Studies and Theology

Institutt for lærerutdanning og pedagogikk - Department of Education

Institutt for samfunnsvitenskap - Department of Social Sciences

Institutt for språk og kultur - Department of Language and Culture

Barentsinstituttet - The Barents Institute

Senter for kvinne- og kjønnsforskning - Centre for Women's and Gender Research

Institutt for barnevern og sosialt arbeid - Department of Child Welfare and Social Work

Institutt for reiseliv og nordlige studier - Department of Tourism & Northern Studies

Senter for fredsstudier (CPS) - Centre for Peace Studies (CPS)

Senter for samiske studier - Centre for Sami Studies

## Attachment 6 - Survey questions

Below is the survey form and a guidance to which questions the different answers lead. As both the Norwegian and the English version were identical, only the English version is included.

### Open Access as publication method at the Faculty of Humanities, Social Sciences and Education, UiT

---

This survey will be a survey on Open Access as a publication form for researchers and academics at Faculty of Humanities, Social Sciences and Education (HSL), UiT. The survey will ask some questions related to Open Access, and I, the asker, will seek to know your relationship to the subject and your standpoint regarding Open Access. The results from the survey will be presented in my master thesis in media- and documentation studies, which will be published fall 2019. The survey will be anonymous, no personal data will be shared.

The survey contains a maximum of 13 questions and is usually finished within a few minutes.

- What is your department? \*

*This element appears for all respondents to the previous question:*

- What is your age? \*

*This element appears for all respondents to the previous question:*

- Are you familiar with Open Access publishing? \*

Open Access is a term for free and public access to academic publications. Publications that carry the label "Open Access" are free of charge to anyone who wish to read or use them. On the contrary, publishers that hold Toll Access publications require payments for access.

- Yes
- To some extent
- I have heard of it, but I am not sure of what the term means
- I am not at all familiar with Open Access publishing

*This element appears if one of the following options are selected for question «Are you familiar with Open Access publishing?»: I have heard of it, but I am not sure of what the term means, I am not at all familiar with Open Access publishing:*

- Would you like to learn more about Open Access?
  - Yes, I would like to learn more about Open Access
  - I do not find the topic interesting

*This element appears if one of the following options are selected for question «Are you familiar with Open Access publishing?»: Yes, To some extent:*

- Do you believe the overall impact of Open Access on academic publishing is going to be positive or negative? \*
  - Very positive
  - Positive
  - Neutral
  - Negative
  - Very negative

*This element appears for all respondents to the previous question:*

- How do you believe Open Access will influence the quality of peer reviews on academic articles? \*
  - Very positively
  - Positively
  - Neutral
  - Negatively
  - Very negatively

*This element appears for all respondents to the previous question:*

- Are you familiar with Plan S? \*

Plan S is an initiative from the European Union (EU) to implement a policy which mandates that all research financed by the EU is to be made Open Access from 2020. Plan S has received a large share of publicity in media outlets such as Aftenposten and Khrono during the last months.

- Yes
- No

*This element appears if one of the following options are selected for question «Are you familiar with Plan S?»: Yes:*

- Do you believe Plan S will have a positive or a negative influence on academic publishing? \*
- Very Positive
- Positive
- Neither
- Negative
- Very negative

*This element appears if both of the options are selected for question «Are you familiar with Plan S?»: Yes:*

- Do you consider Open Access publishing to be positive or negative to your field of research? \*
- Very positive
- Positive
- Neither
- Negative
- Very negative

- I do not work as a researcher or publish in peer-reviewed journals, I work on other tasks

*This element appears if one of the following options are selected for question «Do you consider Open Access publishing to be positive or negative to your field of research?»: Positive, Neither, Very positive, Negative, Very negative:*

- How long have you been publishing articles or other works as a researcher or academic? \*
  - Less than 3 years
  - 4-10 years
  - 11-20 years
  - More than 20 years

*This element appears if one of the following options are selected for question «Do you consider Open Access publishing to be positive or negative to your field of research?»: I do not work as a researcher or publish in peer-reviewed journals, I work on other tasks:*

- Write some of your own thoughts on the topic of Open Access publishing (optional)  
The answer will be anonymous, but you can choose to sign the comment with your name if you wish to make a statement. It may be published.

*This element appears if one of the following options are selected for question «How long have you been publishing articles or other works as a researcher or academic?»: Less than 3 years, More than 20 years, 4-10 years, 11-20 years:*

- Have you published articles in Open Access journals or submitted them to repositories (such as Munin) while working as a researcher or academic author? \*
  - Yes, both journals and public repositories
  - Yes, but only in journals
  - No, but I have submitted articles to public repositories



- No
- Not sure

*This element appears if one of the following options are selected for question «Have you published articles in Open Access journals or submitted them to repositories (such as Munin) while working as a researcher or academic author?»: Not sure:*

- Write some of your own thoughts on the topic of Open Access publishing (optional)

The answer will be anonymous, but you can choose to sign the comment with your name if you wish to make a statement. It may be published.



*This element appears if one of the following options are selected for question «Have you published articles in Open Access journals or submitted them to repositories (such as Munin) while working as a researcher or academic author?»: No, but I have submitted articles to public repositories, Yes, but only in journals, Yes, both journals and public repositories:*

- How large a percentage of your publications are currently available for free and without requiring permission barriers? \*

A rough estimate is a sufficient answer.

- All
- More than 75 %
- About 50 %
- Fewer than 25 %
- Not sure

*This element appears if one of the following options are selected for question «How large a percentage of your publications are currently available for free and without requiring permission barriers?»: More than 75 %, About 50 %, All, Not sure, Fewer than 25 %:*

- Write some of your own thoughts on the topic of Open Access publishing (optional)

The answer will be anonymous, but you can choose to sign the comment with your name if you wish to make a statement. It may be published.



*This element appears if one of the following options are selected for question «Have you published articles in Open Access journals or submitted them to repositories (such as Munin) while working as a researcher or academic author?»: No:*

- What is your reason for not publishing your articles Open Access? \*
  - I do not know of any Open Access journals in my field
  - In my field, the only journals that hold sufficient prestige are traditional journals
  - I do not find Open Access journals to hold sufficient quality
  - I do not feel that publishing Open Access serves a purpose
  - I have always published my works in one or some select journals tailored for my field and not one of them are Open Access
  - None of the above, I will write down my reasons in the text field at the end of the survey

*This element appears for all respondents to the previous question:*

- What could be done to make you choose Open Access for publishing? \*
  - Higher quality of peer reviews
  - Better journal quality
  - Higher journal impact
  - Public mandates

- I do not have an interest in making my works Open Access
- Cheaper article processing charges
- None of the above, I will write down my reasons in the text field at the end of the survey

*This element appears for all respondents to the previous question:*

- Write some of your own thoughts on the topic of Open Access publishing (optional)

The answer will be anonymous, but you can choose to sign the comment with your name if you wish to make a statement. It may be published.



## Attachment 7 - Written responses to the survey

All Norwegian comments were translated into English by me. In some cases, I had to employ brackets for words lacking in the comments, as not all comments are fully cohesive.

The comments for each chapter are sorted chronologically by publication time, as presented by the survey report.

Quantifying comment topics for statistic presentations was a creative undertaking on my part, though I attempted to create an understandable overview over the concerns of the respondents:

*Table 11: Different categories for written responses to survey and their respective response counts.*

<b>Attitudes</b>	<b>N=31</b>
OA is positive	7
OA is positive, but...	18
I strive for OA	2
OA is necessary	2
OA is negative	2
<b>Concerns and criticisms</b>	<b>N=43</b>
Concerns regarding fake OA publishers	6
Concerns regarding APCs and financing	8
Uncertainty of the influence of OA	6
Concerns regarding publication points and lack of level 1 or 2 OA publishers	18
Concerns regarding the quality of OA publishers	7
Concerns regarding copyright	1
Criticisms of Plan S	7
Concerns for local languages	1
Criticisms of survey design	2

Concerns for access to TA publications	2
Concerns for challenges posed upon young researchers	1
<b>Neutral comments</b>	<b>N=9</b>
I practice OA publishing	2
I believe the topic is important	1
Have not published yet	4
Book author	2

### **Comment from an administrative respondent**

We can start with one of the four recipients of the Norwegian version who reached the question “Do you consider Open Access publishing to be positive or negative to your field of research?” This respondent answered “I do not work as a researcher or publish in peer-reviewed journals, I work on other tasks” to this question, and thus, reached the end of the survey. The person wrote:

*We convey research and educate people in order to increase the general level of knowledge for people at a global plane. Open Access will give everyone access to more research. This is undoubtedly positive.*

Category: OA is positive

### **Comments from respondents not sure if they have published OA**

The two next written answers are given by people who responded “Not sure” to the question “Have you published articles in Open Access journals or submitted them to repositories (such as Munin) while working as a researcher or academic author?” They wrote as follows:

*In my opinion, it is by principle wrong for authors (in practice their institutions) to pay for having their works published. In my opinion, users (in practice their institutions) have to pay for this.*

Category: Concerns regarding APCs and financing

*Open Access is probably socioeconomically useful and increases the accessibility to research results. What OP [OA] does to particular researches, I am more uncertain of.*

Categories:

- OA is positive, but...
- Uncertainty of the influence of OA

### **Comments from respondents who have published OA – Norwegian survey**

The next batch of written answers for the Norwegian version contains 35 responses. For the English version, 5 responses were written by respondents. They were written by those who reached the question “How large a percentage of your publications are currently available for free and without requiring permission barriers?” In order to reach this question, the respondents had to answer “Yes, both journals and public repositories”, “Yes, but only in journals” or “No, but I have submitted articles to public repositories” to the previous question, which read “Have you published articles in Open Access journals or submitted them to repositories (such as Munin) while working as a researcher or academic author?”

*I think it is very nice how Open Access will make research accessible to a lot of people who lack access to expensive journals, for example in countries in the third world (bad expression!). The only problematic aspect seen from my point of view is that Open Access makes it so that authors do not receive credits/publication points as academic authors, for example in the form of stipends from The Norwegian Non-Fiction Writers and Translators Association.*

Categories:

- OA is positive, but...
- Concerns regarding publication points and lack of level 1 or 2 OA publishers

*A fantastic idea, however, one must be aware of the fact that it will attract freeloaders.*

Categories:

- OA is positive, but...
- Concerns regarding fake OA publishers

*It was a little unclear to me what is meant by whether Open Access will have a positive or negative influence on academic publishing. If you mean whether it will lead to an increase (as I interpreted it), then I do not think that will be the case. Especially if one must pay in order to publish and therefore must apply to the institution for funds, OA*

*could have a hindering effect on the publication. However, if you mean that OA could lead to increased quality, the answer is yes, as it will be possible for more people to be well oriented in the research field and thereby have more studies in mind when they write their articles.*

Category: Uncertainty of the influence of OA

*It is, the way I see it, difficult to be sure about what the universities' eventual transfer to OA will lead to: will it have a positive or negative impact, and for which groups? It seems to be a battle arena right now, and both parties have strong alliances. If one ignores the fact that OA-proponents have a moral advantage ("everyone" are of the opinion that OA is "morally right"), then I fear that the open and free science will lose from this. The fact that research goes to publish through quality-assured channels is important (and is OA sufficiently prepared here[?]). At the same time, the profits of some of the established publishers is far too high. So, perhaps the battle must be picked up now!*

Category: Uncertainty of the influence of OA

*It is clearly possible to do Open Access in a bad way and getting good solutions in place will take time. However, in my opinion, the principle is right, and it cannot be up to enthusiasts whether research is published open or not – in other words, the system must facilitate and reward OA-publishing.*

Categories:

- OA is positive, but...
- Concerns regarding publication points and lack of level 1 or 2 OA publishers

*In my opinion, the ideal that all should have access to research results should be complied as much as possible, and I am therefore positive to OA and Plan S.*

Category: OA is positive

*The main problem is that we must gain points for our publications, but there are no OA journals at level 2 in my discipline and very few at level 1 also.*

Category: Concerns regarding publication points and lack of level 1 or 2 OA publishers

*A challenge for scientific employees is how we can spend annual resources to recoup books that are downloaded OA but where the publisher wishes donations from those who can afford it (“pay what feels good”). There should be a solution for this.*

Category: Concerns regarding APCs and financing

*The questions regarding negative or positive effects on research fields and academic publishing should perhaps have been better specified? It is unclear what is meant. The scientific quality of the contributions? International reputation? A better foundation for science in society? Better possibilities for dissemination? More just global research activity?*

Category: Criticisms of survey design

*I believe OA is a larger challenge for publishing nationally (in Norwegian) than in English, especially for publishers where scientific publishing does not comprise the main business, but still is important for political and/or societal reasons. I believe especially it potentially could negatively affect scientific publishing in New Norwegian and Sami, since the Norwegian University and College Sector does a minimal effort to secure these lesser used languages as scientific languages, but partly entrusts this task to publishers (whom then must make money of it).*

Category: Concerns for local languages

*I am retired and therefore I am not actively concerned with OA, but I think this case raises important principles.*

Category: I believe the topic is important

*This depends on the deals the library has with the publishers. There are some OA journals that are not covered by the university’s deal, because they are so-called hybrid journals, and thus one must pay oneself if one wants to publish OA since the publication fund at UiT will not cover this. This will lead to some research not being made OA after all because the university lacks the right deals.*

Category: Concerns regarding APCs and financing

*The «Open» umbrella (data, science, access, source etc.) may be a fashionable term within academia but could still be useful as a management concept. As a proponent of freedom software, it is difficult to have a negative attitude to open science in general.*



Category: OA is positive

*Quality assurance of publications is crucially important for the reputation of researchers, academic communities and research fields. I have a particular impression that the quality of referee-arrangements of OA channels vary to a stronger degree than in traditional channels.*

Category: Concerns regarding the quality of OA publishers

*OA is very important for democratizing the academic debate. Not all, neither in our country or globally, can afford to pay for expensive journals, and all publicly financed research should be publicly available.*

Category: OA is positive

*OA is an important upheaval which must happen, for we cannot continue to pay for our research many times, as we do now. However, the dilemma is that there are few current journals in my research field, which makes it difficult to publish OA. At the one side our administration tells us to publish OA, at the other side the same leaders tell us to gather publication points for the institution. It is frustrating.*

Categories:

- OA is positive, but...
- Concerns regarding publication points and lack of level 1 or 2 OA publishers

*I put up all my publications to my own website after 1-2 years, no matter where they were published. That way everybody can find them.*

Category: I practice OA publishing

*Today's model of financing for journal publications is not sustainable and it will be wholly necessary to transition to OA. However, this involves a great challenge: That is to get well-reputed journals with OA to my research field, and it is difficult to get the established journals to switch to OA. Thus, it is unclear how things will develop in the future – except for the fact that we surely have exciting times ahead of us.*

Categories:

- OA is necessary
- Concerns regarding publication points and lack of level 1 or 2 OA publishers

*The question of whether OA has a positive or negative influence on academic publishing is difficult to answer, since positive aspects such as science made available to everyone (which I absolutely support) is a part of the same picture as that of fake journals being on the rise, as well as the fact that it may become normal for researchers to have to pay to have their own research published. Publishing by payments will obviously weaken both access to publishing (it is often very expensive) og the quality of peer reviews (publications are often not peer-reviewed in, for example, fake journals); however, I would say that this is not an inherent weakness of OA, this is just about whether there are actors in the scientific community that value profit over knowledge, in other words, it is a question of regulations rather than a problem with OA.*

Categories:

- Concerns regarding fake OA publishers
- Concerns regarding APCs and financing
- Uncertainty of the influence of OA

*I think the goal of implementing a policy of solely OA by 2020 is overly ambitious, but I believe this is necessary to stop the publisher's plunder of the academic sector. We are in a situation where there is, in many academic communities, far more important where you publish rather than what you actually publish. This has a very negative effect on academic research. OA is undoubtedly better for the research than paying publishers (in the form of work and money) in order to make research available only for those who pay for it expensively.*

Categories:

- OA is necessary
- Criticisms of Plan S

*I think OA is a very important concept. However, I cannot ignore the fact that it practically halts in multiple fields/areas.*

Category: OA is positive, but...

*I am of the opinion that OA in general will have a very positive effect on the research in my field of study, as access to new research results independent of the interested readers' standing of course will contribute to allow everyone to keep themselves*

*updated in a more effective way and thus write good, updated research articles. That being said, one cannot say that Plan S as it stands today has an unconditionally positive effect. This it is premature to answer to at this point. It is also obvious that one in a transitional period will have a problem with the fact that OA journals have yet to be the most recognized and thus will be somewhat less attractive to publish in. This should however only be a transitional problem until OA journals build their reputation. Within my field, many are, by principle, very much for OA, but as long as the most read journals stay paywalled, it is difficult to avoid also publishing in such [journals].*

Categories:

- OA is positive, but...
- Concerns regarding publication points and lack of level 1 or 2 OA publishers
- Criticisms of Plan S

*OA is a good basic idea, regarding accessibility, but I am at the same time worried that the traditions and the academic prestige tied to established and good editorials in journals could be undermined or crumble. So, one worry tied to the scientific quality therefore – by the weakening of editorials, something that leans up on the economic incentives for publishing. On the other side, I am neither for letting large international publishing companies take out such a massive economic dividend which in reality is paid for by universities and research councils (the state).*

Categories:

- OA is positive, but...
- Concerns regarding the quality of OA publishers

*I try to strive for OA where it is possible. It is positive that our research is made publicly available.*

Categories:

- OA is positive
- I practice OA publishing

*The challenge for the further development of OA lies in the circumstances surrounding plagiarism, references and copyright.*

Category: Concerns regarding copyright

*I am by principle for OA – but against Plan S because it moves too fast. There are at the moment no relevant OA journals at level 2 in my field and we have to aim high. There is not enough control with the quality and reviews of OA journals and they are NOT as reputed. This feels as if it is administratively powered and NOT academically/scientifically.*

Categories:

- OA is positive, but...
- Concerns regarding publication points and lack of level 1 or 2 OA publishers
- Concerns regarding the quality of OA publishers
- Criticisms of Plan S

*Plan S is rigged to become a disaster for Norwegian researchers the way the process is planned. Which foreign researchers will cooperate with us if we are only allowed to publish OA? I believe a relatively long transition period is needed if this is to succeed, perhaps 5-10 years.*

Categories:

- Criticisms of Plan S
- Concerns regarding publication points and lack of level 1 or 2 OA publishers

*OA is a very complicated subject which really cannot be “discussed” or covered by a survey form...*

Category: Criticisms of survey design

*OA is good, but we must overcome the unserious actors (Fake Science). It should be so that OA is the standard.*

Categories:

- OA is positive, but...
- Concerns regarding fake OA publishers

*For some researchers, publication points will direct their paths. This concern must be attached to the ongoing process.*

Category: Concerns regarding publication points and lack of level 1 or 2 OA publishers

*It is not just the review-process which is believed to be negatively affected – it is also so these days that some journals strive for quality – it [is/will be] difficult to find the best articles/know where to try when one wants to reach out further in order to be read.*

Categories:

- OA is negative
- Concerns regarding the quality of OA publishers

*I think OA is very nice. At the same time, my field of study is dominated by non-OA journals. These journals are also the ones that give the most [publication] points. We are therefore punished for using OA. This is bad. It is also bad that we are not granted access to some non-OA journals at UiT, but are recommended to acquire the necessary articles from colleagues at other universities (in other words, we then still support non-OA, but make it difficult for us to acquire articles – we must beg on Facebook or whatnot to get them from other people). It is difficult to understand how this will be done properly without punishing researchers.*

Categories:

- OA is positive, but...
- Concerns regarding publication points and lack of level 1 or 2 OA publishers
- Concerns for access to TA publications

*I am basically positive to the idea of making research results available to everyone independent of economy. This will make scientific results available to everyone, which is a good thing. At the same time, I see a potential drawback in the form of OA publication sources that often receive payments in order to publish. This CAN lead to the fact that who gets to publish is not dependent on the quality of what they produce, but rather on economy, and that peers therefore have to/are pressured to be less strict in their reviews. This can then lead to a lower quality of the research studies being published. Within OA the costs seem to have been transferred to those who have made the study rather than those who have an interest in reading it. If this happens, the opportunity to publish [will] depend on economy, and this is obviously also very problematic.*

Categories:

- OA is positive, but...

- Concerns regarding APCs and financing
- Concerns regarding the quality of OA publishers

*The effect of Plan S is very difficult to predict, this is why I chose neutral. In principle, all research should be open access, but how we get there is another matter.*

Categories:

- OA is positive, but...
- Uncertainty of the influence of OA

*OA is basically very positive. The challenge within a field such as indigenous studies is that there are very few peer-reviewed OA journals. Thus, Plan S and an uncompromising demand which is outlined actually narrows down the opportunities for publishing in peer-reviewed journals.*

Categories:

- OA is positive, but...
- Concerns regarding publication points and lack of level 1 or 2 OA publishers
- Criticisms of Plan S

### **Comments from respondents who have published OA – English survey**

*In general, the move towards open access is very welcome, but the imposition of open access from research funding sources and/or home institutions also disadvantage individual researchers by disallowing publishing in many top-ranking journals (many of which are still (unfortunately) not open access).*

Categories:

- OA is positive, but...
- Concerns regarding publication points and lack of level 1 or 2 OA publishers
- Criticisms of Plan S

*I appreciate some reservations on OA from some of my colleagues, who are affiliated with various institutions around the world. The reservations are largely due to the current academic recognition systems. The recognition systems are built on the merits/ qualities that are 'housed in' and 'controlled by' a few private publishing houses, who gain a great deal of financial benefits. I believe that the OA must be implemented for academic research*

*to contribute to the society in real terms. However, in order to ensure the researchers not being unfairly punished due to changing recognition system, a transitional system within the academic administration needs to be in place and operationalized.*

Category: Concerns regarding publication points and lack of level 1 or 2 OA publishers

*Open access publishing is fundamentally important for researchers and academics who work within publicly funded institutions. The challenge is dealing with publishing houses such as Elsevier that suggest that they must make a profit for publishing research. The paradox is that many of these independent publishing houses control many of the highly ranked refereed journals within the NSD ranking system. This has to be resolved within the Norwegian academic journals ranking system.*

Categories:

- OA is positive, but...
- Concerns regarding publication points and lack of level 1 or 2 OA publishers

*The questions ask about the consequences of open access publishing. But it is unclear what the consequences will be. If open access succeeds in its aims of making research freely available, then of course that would be great. But if instead it creates incentives to publish in second-rate journals then this would be a disaster.*

Category: Uncertainty of the influence of OA

*Open Access publishing venues have not caught up with the EU's ambitions for scholars to use them. It is easier to achieve open access by publishing in inferior journals than in high-quality ones. Alternatively, scholars from well-funded institutions can pay for open access. Consequently, ease of access does not really align with the quality of scholarship.*

Categories:

- Concerns regarding publication points and lack of level 1 or 2 OA publishers
- Concerns regarding the quality of OA publishers
- Concerns regarding APCs and financing

### **Comments from respondents who have not published OA**

The last batch of comments come from respondents who answered “No” to the question “Have you published articles in Open Access journals or submitted them to repositories (such as Munin) while working as a researcher or academic author?”

These respondents yielded 14 comments for the Norwegian survey and one comment for the English survey.

*Today we are reviewed based on our publishing at level 1 or level 2. Level 2 gives more points. No level 2 channels are OA in my field of study. Therefore, I am, and my institute which is evaluated based on point counts, butchered by our own institution if we choose OA. The transition to OA is out of key with changes within this level 1 and 2 pressure we are under. Of course, the principle behind OA is the best, and so it should be. However, [do] not pressure us to commit suicide. We are placed in an impossible position. Thank you for that.*

Categories:

- OA is positive, but...

Concerns regarding publication points and lack of level 1 or 2 OA publishers.

*I have not published articles yet, neither open nor closed access. When I begin publishing articles I wish to publish OA. However, I am concerned that academics from institutions without the economic capacity to pay for them must be exempt from OA publication fees!*

Categories:

- I strive for OA
- Concerns regarding APCs and financing

*I am positive about OA, but there are no [publication channels] within my field. Many of the most applicable journals are under Elsevier and this creates problems for the project. It is very positive if more OA journals emerge and Plan S will hopefully lead to that, but some of us are trapped in a squeeze with expectation[s] of publishing in level 2 journals, but [with] no OA [channels] available.*

Categories:

- OA is positive, but...



- Concerns regarding publication points and lack of level 1 or 2 OA publishers

*OA fits the term freedom. It is not freedom for journals to own that which you have written, they are more of a communication [or distribution] channel to count as. Of course, with academic integration, and a place where your work can receive a professional assessment and be lifted [up], but that can be done without the system being as it is today.*

Category: OA is positive

*So long as Norway separate between level 1 and level 2, one will be required to publish in acknowledged journals.*

Category: Concerns regarding publication points and lack of level 1 or 2 OA publishers

*I have not published yet.*

Category: Have not published yet

*I have published in edited anthologies.*

Category: Book author

*I have not published OA as I am a ph. d. and am writing a monography.*

Category: Book author

*Well, I perceive this as a form of make-up on the corpse. An arrangement which has its downsides (fake journals, publishing of articles nobody reads anyways etc.), is to be made openly available – and by such, improve - ?*

Categories:

- OA is negative
- Concerns regarding fake OA publishers

*The reason that I have not used OA journals is that there is little information or opportunity to control whether they hold sufficient quality – both in terms of review routines and other parts of the publishing process. There is also a significant fear that one is to walk into the trap and send a manuscript to and get a publication in a journal that later turns out to be improperly serious. In other words, one is blamed for cheating and cutting corners to get research published.*

Categories:

- Concerns regarding fake OA publishers
- Concerns regarding the quality of OA publishers

*It is very unfortunate if OA means that we will not have access to the traditional journals. Within the field mathematics didactics there are very few good journals with OA, and without access to the traditional journals I cannot do my job as a researcher. It is simply not possible.*

Category: Concerns for access to TA publications

*I have not gotten far enough in my ph. d. program for publishing to be an option. I am very positive to choose OA for publishing when the time comes.*

Categories:

- OA is positive
- Have not published yet

*I have worked at UiT for just 1,5 years, so I have not yet published my first article.*

Category: Have not published yet

*I have not yet published. I wish to publish OA when the time comes.*

Categories:

- I strive for OA
- Have not published yet

*The fees associated with Open Access journals, combined with their limited prestige relative to traditional journals, make it hard to differentiate between a quality journal and a "predatory" one that will publish anything. It's a substantial risk that shouldn't be imposed upon young researchers who need to prove themselves and have limited means to pay the fees. Older, established researchers have no valid reason to publish in closed-access journals, and should take the initiative to change expectations.*

Categories:

- Concerns for challenges posed upon young researchers
- Concerns regarding fake OA publishers
- Concerns regarding APCs and financing

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