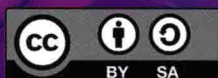
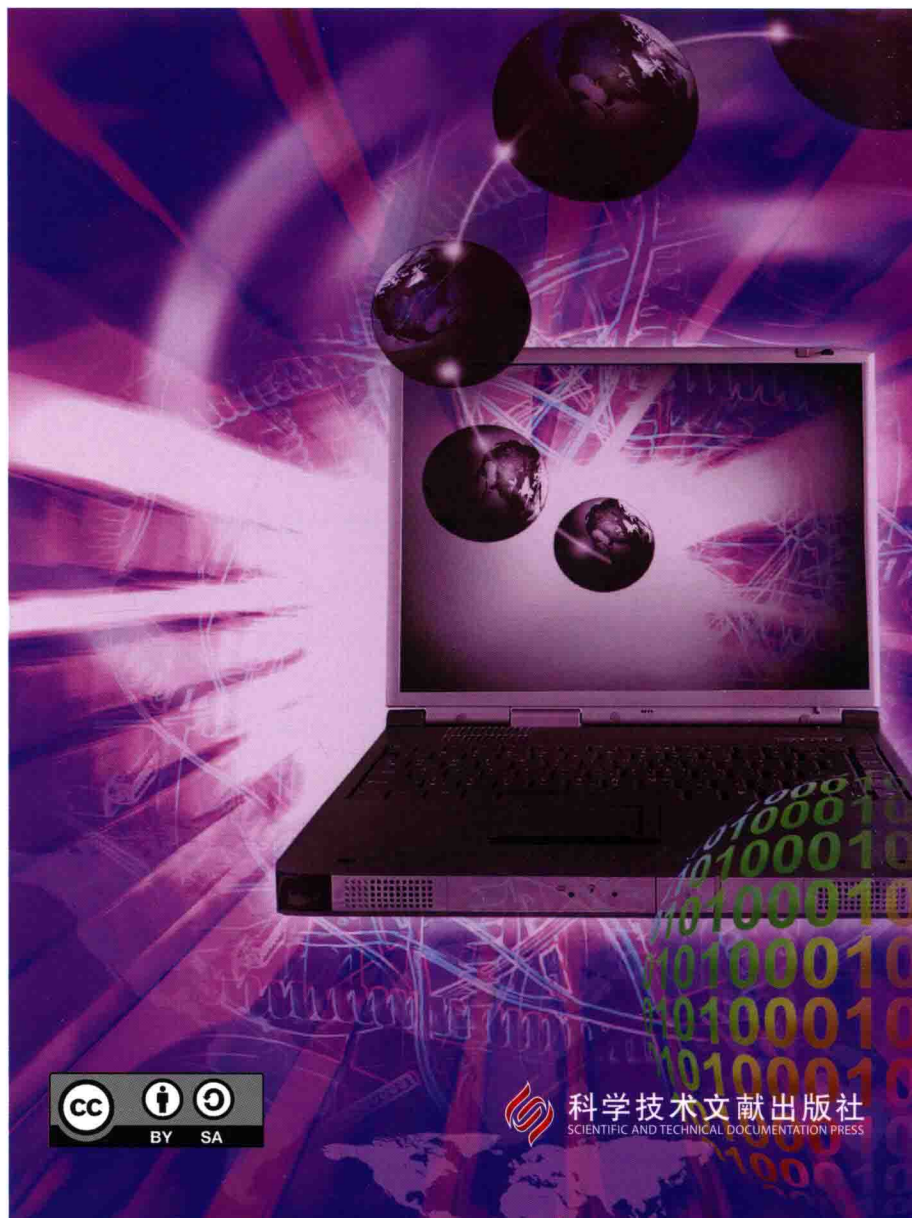


开放获取知识库联盟 (COAR) 简介

Margaret Kathleen Shearer 主审

顾立平 编



科学技术文献出版社
SCIENTIFIC AND TECHNICAL DOCUMENTATION PRESS

本课题受到以下项目资助

◎中国科学院国际合作局项目

“支持 GRC 开放获取行动计划的世界开放获取行动评价与监测平台”(Y140321001)

◎中国科学院科学传播局、发展规划局项目

“中国科学院文献情报和期刊出版领域引进优秀人才计划”择优支持项目(Y14341001)

◎国家自然科学基金委项目

“开放获取重大趋势与科学基金相关政策研究”(ZK16041001)

开放获取知识库联盟 (COAR) 简介

——>>> Margaret Kathleen Shearer 主审
顾立平 编



科学技术文献出版社
SCIENTIFIC AND TECHNICAL DOCUMENTATION PRESS

· 北京 ·

图书在版编目(CIP)数据

开放获取知识库联盟(COAR)简介 / 顾立平编. —北京: 科学技术文献出版社, 2016. 9

ISBN 978-7-5189-1879-9

I. ①开… II. ①顾… III. ①开放存取—知识库—介绍—世界
IV. ①G253.1

中国版本图书馆 CIP 数据核字 (2016) 第 215996 号

开放获取知识库联盟 (COAR) 简介

策划编辑: 崔灵菲 责任编辑: 王瑞瑞 责任校对: 张咧咧 责任出版: 张志平

出 版 者	科学技术文献出版社
地 址	北京市复兴路15号 邮编 100038
编 务 部	(010) 58882938, 58882087 (传真)
发 行 部	(010) 58882868, 58882874 (传真)
邮 购 部	(010) 58882873
官 方 网 址	www.stdp.com.cn
发 行 者	科学技术文献出版社发行 全国各地新华书店经销
印 刷 者	北京高迪印刷有限公司
版 次	2016年9月第1版 2016年9月第1次印刷
开 本	850×1168 1/32
字 数	70千
印 张	4.125
书 号	ISBN 978-7-5189-1879-9
定 价	48.00元



版权所有 违法必究

购买本社图书, 凡字迹不清、缺页、倒页、脱页者, 本社发行部负责调换

前言

开放获取知识库联盟 (Confederation of Open Access Repositories, COAR) 是一个迅速成长的国际联盟, 它成立于 2009 年 10 月并且联合了全球 100 多家机构, 旨在构建一个连接全球开放获取知识库的知识基础设施, 以扩大科学研究成果的可见度, 促进科学研究成果的广泛应用。本书汇集最近几年来 COAR 发布的几份重要文件, 在某种程度上, 说明了全球机构知识库的发展态势和目标。

本书从国际知识库的发展现状入手，介绍和分析了开放知识数据库的发展和重要作用，以及面临的挑战和机遇。重点介绍 COAR 的概念、加入 COAR 能够获取的权益及如何成为 COAR 会员。列举近年来 COAR 为强化构建全球开放获取知识空间的目标所做出的实践和努力，包括提出路线、草案、准则、会议、合作等，归纳 COAR 近些年所取得的成果，结合具体战略目标分析介绍 COAR 未来几年的发展方向和工作计划。本书中结合实际解答了关于 COAR 的常见问题，包括 COAR 的活动及成为会员的相关问题等。全书中英文结合，



整体上帮助读者较为全面地认识 COAR 组织、功能、已有成果、发展方向等。

本书摘取自 COAR 及 Margaret Kathleen Shearer 的手稿；顾立平统筹，负责遴选、组织编译和校对；最终稿件由 Margaret Kathleen Shearer 主审。参与各章节贡献的人员如下：第 1 章由张嘉欣和段美珍编译，段美珍和王振蒙完成校对；第 2 章，2.1 节由张嘉欣编译和王振蒙校对，2.2 节由王振蒙编译和张嘉欣校对，2.3 节由李丽梅编译和郭进京校对，2.4 节由郭进京编译和张梦霞校对，2.5 节由宋忠惠编译和段美珍校对，2.6 节由段美珍编译和赵越校对，2.7 节由彭乃珠编译和王振蒙校对；第 3 章，3.1 节由张嘉欣编译和郭进京校对，3.2 节由赵越编译和张晓丹校对，3.3 节由李丽梅校对和赵越编译；第 4 章由张晓丹编译和李丽梅校对；第 5 章由杨小微完成编译；本书全部内容 by 段美珍统稿，交付顾立平再次校对，并且委由杨良斌通读整理，史盈盈和丁利芳参与编辑。

本书知识内容的贡献者是 Margaret Kathleen Shearer 女士。对中文编译内容付出主要贡献的是杨小微老师、杨良斌老师等上述参与人员，本书若有任何缺失、不足之处，应属编者顾立平之责任。本书的形成得益于以上参与者的合作，本书实施开放获取。

>>>>>>>>>>>>>>

Page >>> 1



2.7 Reinforce the Aim to Develop a Global, Open Access Knowledge Commons	47
3 Cooperation and Achievement of COAR.....	49
3.1 Major Repository Networks Agree to Collaborate	49
3.2 The Sustainable Development Goals E-forum Discussion...	51
3.3 Major Repository Networks Agree to Adopt Common Guidelines	53
4 Development Strategy and Plan	58
4.1 COAR Strategy 2016-2018	58
4.2 COAR Work Plan 2016-2017.....	59

>>>>>>>>>>>>>>

Page >>> 3



3.3 国际主要知识库组织同意采用通用指南	105
4 发展战略及计划	109
4.1 COAR 2016—2018 年发展战略	109
4.2 COAR 2016—2017 年工作计划	110
5 关于 COAR	114
5.1 关于 COAR	114
5.2 加入 COAR 的权益	114
5.3 加入 COAR	115
5.4 常见问题及解答	118

~~~~~

Figure 1. The effect of the concentration of the solution on the adsorption of the dye.

This briefing paper presents an overview of the international repository landscape. The paper has been produced by COAR on behalf of the Aligning Repository Networks Committee, a group of senior representatives from repository networks around the world. While principally intended for the Global Research Council (GRC), the paper has also been written with a broader audience in mind.

Over the last 20 years, open access repositories have been implemented around the world and are now fairly widespread across all regions. Repositories provide open access (OA) to research publications and other materials and enable the local management and preservation of research outputs. They are a key infrastructure component supporting the growing number of open access policies and laws, the majority of which recommend or require deposit of articles into an OA repository.

OA repositories are increasingly connected through thematic,



national and regional networks. In turn, these regional and national networks are further aligning their practices globally through the COAR Aligning Repository Networks Initiative, making their collections more valuable as it enables new services to be built on top of their aggregated contents. These services include tracking of research outputs for funders and research administrators, monitoring usage of publications, facilitating text and data mining, as well as peer review overlay services.

Crucially, repositories represent a distributed and participatory model in which institutions manage content locally, but contribute to the global knowledgebase through adoption of common, open standards. Distributed systems, such as a global network of repositories, have an inherent sustainability. They increase the resilience of infrastructure and foster social and institutional flexibility and innovation. They also enable the research community to regain some influence over the scholarly communication system.

With a growing number of funding agencies adopting open access and open science policies that rely on repository infrastructure for adherence, it is critical that the repository and funder communities forge closer ties and find mechanisms to engage in regular dialogue. In addition, given that there are different approaches across regions in terms of both policies

and infrastructure, it is important that the diversity perspectives are considered as we collectively move forward. COAR, and its members and partners, welcome further discussion with the Global Research Council as we chart a course for a sustainable and dynamic future for scholarly communication.

## 1.2 Introduction

The trend towards greater openness is being driven by a growing recognition that our substantial global investments in research could have a much greater impact if they are widely shared and openly available to everyone. While this may not have been possible in the pre-internet world, the digital, networked environment has made this objective eminently achievable and within our grasp. Within this context, over the past 15 years open access repositories have become increasingly important components of the global research infrastructure.

Open access repositories play a variety of roles in the scholarly communication system, and these roles continue to expand and evolve. To date, their primary functions have been to provide visibility and open access to research outputs, with a focus on the journal literature, as well as to ensure archiving of this material



over the long term. Much of the journal literature is currently only available through subscription and/or pay per view fees, creating a significant barrier to the widespread dissemination and use of this research knowledge. To improve the visibility and impact of their research, many funders have adopted policies that require open access to journal articles. Repositories are a key infrastructure component to support these policies. Indeed, the vast majority of open access policies and laws requiring or requesting authors to deposit articles into an open access repository.

Beyond providing access to research articles and other research outputs, open access repositories are developing other functionalities, especially as services are built on top of the network of repositories. These include providing funders and institutions with the ability to track funded research output across repositories; delivering usage data; hosting collections of academic journals; supporting text mining of content for new discoveries; and linking related content across the network. As open access expands to the broader concept of open science, including a wider range of content types, open access repositories will become indispensable for managing, tracking, and providing access to the full range of outputs produced through research.

The purpose of this briefing paper is to provide a concise and

up-to-date overview of the state of open access repositories around the world. The paper was prepared for the Global Research Council by the Confederation of Open Access Repositories (COAR) on behalf of the COAR Aligning Repositories Network Committee, a group of senior representatives from repository networks around the world.

### 1.3 Repository Demographics

Repositories began to appear on the scholarly landscape in the late 1990's, but their real growth in numbers has occurred over that last ten years, mainly because of the availability of open source repository platforms and the establishment of the Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH), an interoperability protocol for exchanging information between repositories.

As of May 16, 2015, OpenDOAR, a service that monitors repositories, listed 2874 repositories worldwide. These repositories are distributed across the world, but are most predominant in Europe, Asia, and North America. This graph taken from OpenDOAR shows the current geographic distribution of repositories around the world.



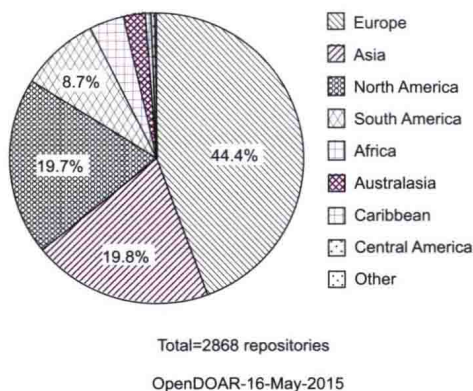


Fig. 1-1 OpenDOAR Graph of Repositories by Continent

The vast majority of repositories, just under 85%, are institutional repositories hosted and managed mainly by research institutions or universities, but there are also some very important and highly valued thematic repositories, including arXiv and PubMed Central, and journal repositories, including SciELO and Redalyc.

The repository landscape is quite diverse. Repositories vary greatly in their size service models, and the range of content types they collect. Most predominantly, repositories collect journal articles, e-theses and dissertations, and book chapters; but increasingly they are including research datasets, images and videos, and more.

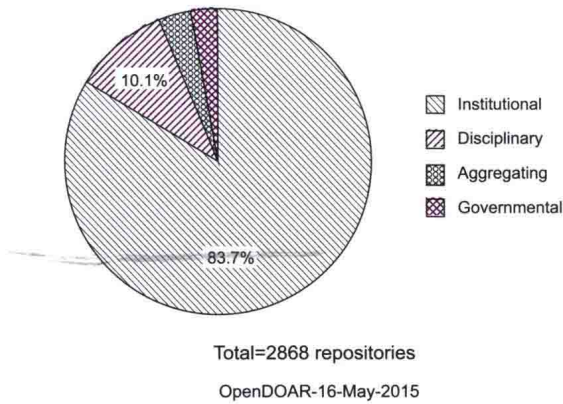


Fig. 1-2 OpenDOAR Graph of Open Access Repository Types

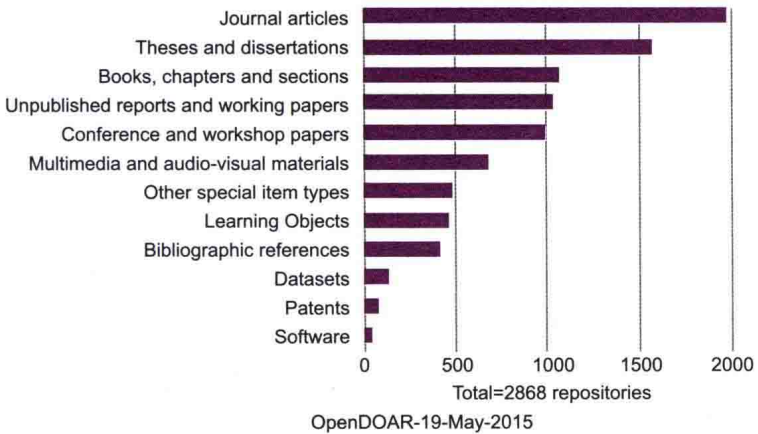


Fig. 1-3 OpenDOAR Graph of Most Frequent Content Types



It is difficult to assess the total volume of items in the repositories around the world, however, the BASE Search Engine, which aggregates records from (mainly) repositories around the world currently harvests over 72 million records from over 3000 sources, with approximately 17 million of them are records of journal articles.

Not all content in repositories is open access or full-text. A portion of the records in repositories either link out to published articles or have placed an embargo content on the full text item, usually because the publisher's policy requires this. The CORE (Connecting REpositories) search service, run by Knowledge Media institute at the Open University in the UK harvests only records which are attached to full-text articles has just over 24 million records in its central database, the majority of which are housed in repositories.

## 1.4 Regional Repository Networks

There is already significant repository infrastructure in many countries and regions of the world, which are connected through national and thematic networks. These networks have been created by governments in order to better track their research outputs,