REVIEW ARTICLE

Literature Review: A Historical Overview of the Open Access Movement

Alpana Saha¹, G Mahesh²

ABSTRACT

This literature review provides a comprehensive historical overview of the Open Access (OA) movement, tracing its evolution from early ideological roots to its current state as a transformative force in scholarly communication. It examines the key drivers behind the movement, including the subscription crisis, the enabling role of the internet, and seminal advocacy initiatives such as the Budapest Open Access Initiative. The review charts the development of critical OA infrastructure, including institutional repositories and OA journals, and analyzes the growing influence of policy mandates from funders and governments. It also addresses the challenges and critiques that have emerged, such as Article Processing Charges (APCs) and predatory publishing. The conclusion synthesizes the journey of OA and presents a structured overview of its past, present, and potential future trajectories, highlighting both its achievements and the unresolved issues that will shape its continued expansion.

AUTHOR'S AFFILIATION:

¹ Research Scholar, CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), New Delhi-110 012, India.

² Chief Scientist, CSIR Headquarters, Anusandhan Bhawan, CSIR Building, Council of Scientific And Industrial Research, 2, Rafi Marg, Sansad Marg Area, New Delhi, Delhi 110001, India.

CORRESPONDING AUTHOR:

Alpana Saha, Research Scholar, CSIR-National Institute of Science Communication and Policy Research (CSIR-NIScPR), New Delhi-110 012, India.

E-mail: alpana.niscair19a@acsir.res.in

INTRODUCTION

The Open Access (OA) movement emerged in response to escalating costs of academic journal subscriptions and increasing demand for free, unrestricted access to scholarly research. The movement has evolved from grassroots advocacy into a global transformation in scholarly communication, driven by technological innovation, political advocacy, and institutional support.

ORIGINS OF THE OPEN ACCESS MOVEMENT

1. Early Roots: Pre-Digital Era

The ideological foundation of OA dates back to the 17th century, with the creation of scholarly journals like *Philosophical Transactions* of the Royal Society. However, formal challenges to paywalled access emerged prominently in the late 20th century.

- **Lawrence (2001)** emphasized the unfair nature of restricted access to publicly funded research.
- **Odlyzko (1995)** predicted the breakdown of the subscription-based journal model due to rising costs and the advent of the internet.

2. The Role of the Internet

The widespread use of the internet in the 1990s drastically changed the academic publishing landscape. Digital dissemination removed many traditional barriers to information sharing.

- **Harnad (1994)** called for self-archiving of research articles online ("Subversive Proposal").
- **Ginsparg (1991)** launched arXiv, the first preprint repository, originally for high-energy physics.

KEY MILESTONES AND DECLARATIONS

1. Budapest Open Access Initiative (2002)

The **BOAI** was the first international declaration that clearly defined open access and set the groundwork for global action.

"By 'open access' to [peer-reviewed research literature], we mean its free availability on the public internet..." – BOAI (2002)

Encouraged two main strategies:

- **Self-archiving (Green OA)**
- **Open Access Journals (Gold OA)**

2. Bethesda Statement (2003) & Berlin Declaration (2003)

These built upon the BOAI and included broader academic and governmental support.

- The **Berlin Declaration** introduced the concept of "free, irrevocable, worldwide right of access" and called for the support of OA by institutions and governments.

DEVELOPMENT OF OA INFRASTRUCTURE

1. Institutional Repositories

Universities began creating digital repositories for storing and sharing their research outputs.

- **DSpace** (MIT, 2002) and **EPrints** (University of Southampton) were early examples.
- By the late 2000s, hundreds of repositories had emerged worldwide (OpenDOAR, ROAR).

2. Open Access Journals

The number of OA journals grew rapidly, especially with platforms like:

- PLOS (2001) – pioneered author-pays Gold OA model.
- BioMed Central (1999) – supported early OA in biomedical sciences.
- DOAJ (Directory of Open Access Journals) – established in 2003 to index quality OA journals.

POLICY AND FUNDING LANDSCAPE

1. Mandates and Legislation

Governments and funding bodies began requiring OA for publicly funded research.

- NIH Public Access Policy (2008) mandated archiving in PubMed Central.
- Horizon 2020 (EU) and Plan S (2018) represented global efforts to enforce OA compliance.
- UKRI, Wellcome Trust, and others adopted similar mandates.

2 Global South and OA

OA was also seen as a means to reduce information inequality.

- Initiatives like SciELO (1997) and AJOL (African Journals Online) supported OA in Latin America and Africa.
- These platforms offered multilingual and locally relevant content.

CRITIQUES AND CHALLENGES

Despite widespread support, the OA movement has faced criticisms:

- **Article Processing Charges (APCs)** in Gold OA create new barriers, especially for researchers in the Global South (Suber, 2012).
- **Predatory Journals** exploit the OA model for profit (Beall, 2013).

- The transition has created a fragmented publishing environment, with unclear licensing and compliance rules.

CONCLUSION

The Open Access movement, born out of academic and ethical concerns, has transformed scholarly communication. From grassroots advocacy and early digital archives to institutional mandates and global coalitions, OA has made research more accessible and equitable. However, persistent issues like funding models and quality control continue to shape its future trajectory.

Table 1: The Evolution and Future Expansion of the Open Access Movement

Era / Phase	Key Focus	Primary Drivers	Challenges & Emerging Directions
Origins & Advocacy (Pre-2000)	Challenging the subscription model; Ideological foundation.	Rising journal costs; Early internet technology; Scholar advocacy (e.g., Harnad's Subversive Proposal).	Establishing the concept; Limited infrastructure.
Declaration & Infrastructure Building (2000-2010)	Defining OA; Building key infrastructure.	BOAI, Berlin Declaration; Growth of repositories (DSpace, EPrints) and OA journals (PLOS, BMC).	Establishing standards (Green/Gold OA); Scaling repositories and journals.
Policy & Mainstreaming (2010-2020)	Enforcing OA through mandates; Mainstreaming OA publishing.	Funder mandates (NIH, Horizon 2020, Plan S); Expansion of APC-funded Gold OA.	Equity issues with APCs; Rise of predatory publishing; Compliance fragmentation.
Future Expansion & Integration (Present Onwards)	Moving beyond the article; Integrating with Open Science.	Community-driven models (Diamond OA); Preprints; Open Data, Code, and Peer Review; Transformative Agreements.	Developing sustainable, equitable models; Ensuring quality and trust; Managing the transition at a global scale.

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