

# Open Access: A Conversation with ChatGPT

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**Abstract:** The language model AI ChatGPT was interviewed on the subject of open access. While this version of ChatGPT was trained on content published before the end of 2021, it has ingested a large amount of text from the web. As such, even though it hasn't reviewed the most recent events, it could be thought of as a stand in for the web at large. To the extent that this is the case, its perspective is worth reading. The result, unsurprisingly, is familiar. There is little, if anything that is new, but it is a good summary of the current state of open access.

**Keywords:** open access, ChatGPT, scholarly publishing

The following conversation took place on January 21, 2023 between *JEP* editor David W. Lewis and the language model AI ChatGPT. While this version of ChatGPT was trained on content published before the end of 2021, it has ingested a large amount of text from the web. As such, even though it hasn't reviewed the most recent events, it could be thought of as a stand in for the web at large. To the extent that this is the case, its perspective is worth reading. The result, unsurprisingly, is familiar. There is little, if anything that is new, but it is a good summary of the current state of open access. What might be surprising, as you will see if you read all the way to the end, is that ChatGPT, despite claiming that "as a language model AI, I do not have preferences or opinions," does conclude that having this conversation published in an open access venue would be beneficial "so that others can access and benefit from the information shared here."

Q: Please explain how Open access to the scholarly literature works.

ChatGPT: Open access to scholarly literature refers to the practice of making research articles, papers, and other scholarly works freely available online, without requiring a subscription or payment. This allows anyone with an internet connection to access and read the latest research in their field. There are two main ways that open access

is typically achieved: through open access journals, which publish only open access articles, and through self-archiving, which allows authors to make their own articles available online, often in institutional repositories or on their personal websites. Open access is often made possible through funding from government, foundations, or research institutions, which may pay article processing charges (APCs) to cover the costs of publishing.

Q: What are the advantages and disadvantages of open access journals as opposed to self-archiving as means for achieving open access?

ChatGPT: Advantages of open access journals:

- They provide a way for researchers to publish their work in an open access format, which increases the visibility and impact of the research.
- They are peer-reviewed, ensuring the quality of the research.
- They provide a platform for researchers to share their work with a global audience.
- They often have a high-quality layout and design, improving the readability and accessibility of the research

Disadvantages of open access journals:

- They often require authors to pay article processing charges (APCs), which can be a barrier for some researchers, particularly those from underfunded institutions or developing countries.
- They may have limited reach, as they may not be as widely read or cited as more established subscription-based journals.
- They may have limited funding and may not have the resources to provide the same level of services as established subscription-based journals.

Advantages of self-archiving:

- It is a way for researchers to make their work freely available without the need to pay APCs.
- It allows researchers to retain control over the distribution of their work.
- It allows researchers to make their work available to a wider audience, as it can be distributed through a variety of repositories.

### Disadvantages of self-archiving:

- It relies on the researcher to ensure that the work is properly archived and made available.
- It may not be as widely read or cited as work published in open access journals, as the work is not peer-reviewed or curated by the journal's editorial process.
- It may not have the same level of visibility and impact as work published in open access journals.

Q: What are the advantages of open access as a form of scholarly publishing?

ChatGPT: There are several advantages of open access as a form of scholarly publishing:

1. Increased visibility and impact: Open access articles are freely available online, which means they can be read and cited by a much larger audience than those behind paywalls. This can lead to increased visibility and impact for the research.
2. Improved access to knowledge: Open access removes barriers to access, allowing researchers, practitioners, and the general public to access the latest research, regardless of their location or financial situation.
3. Greater collaboration and innovation: Open access allows researchers to access the work of their colleagues more easily, fostering greater collaboration and innovation.
4. Compliance with open access mandates: Many funding agencies and research institutions now require that the research they fund be made openly available. Open access publishing allows researchers to comply with these mandates.
5. Cost-effective: Open access eliminates the need for costly subscriptions, making it more cost-effective for libraries and institutions to provide access to scholarly literature.
6. Faster dissemination of knowledge: Open access allows for faster dissemination of knowledge as the research is available to read immediately after it is published.

Q: What are the disadvantages of open access as a form of scholarly publishing?

ChatGPT: There are several potential disadvantages of open access as a form of scholarly publishing:

1. Funding issues: Open access publishing often requires payment of article processing charges (APCs) to cover the costs of publishing. This can create financial

barriers for authors, particularly those from underfunded institutions or developing countries.

2. **Quality concerns:** Some argue that open access journals may not have the same level of quality control as subscription-based journals, leading to a greater risk of lower quality or predatory publications.
3. **Lack of long-term preservation:** Some open access publications may not have secure and sustainable long-term preservation strategies, which could lead to the loss of the published papers over time.
4. **Difficulty in measuring impact:** Open access articles may be freely available on multiple platforms, making it harder to track the number of downloads or citations and to measure the impact of the research.
5. **Lack of control over the distribution and reuse of the work:** Open access articles are typically published under a Creative Commons license which allows others to share, adapt and reuse the work, which could lead to the misappropriation or misuse of the research.
6. **ntial for predatory practices:** The open access model may open the door for predatory practices, such as scam journals that charge authors to publish their work, but don't provide adequate peer review or distribution.

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**Q:** Some have suggested that one access will replace subscriptions as the dominate form of scholarly publishing. Is this likely?

**ChatGPT:** It is possible that open access could become the dominant form of scholarly publishing in the future, but it is difficult to predict with certainty. There are several factors that could influence the adoption of open access, including funding, mandates from research institutions and funding agencies, and changing attitudes among researchers and the general public.

Currently, open access is still a relatively small portion of the scholarly publishing market, but it is growing rapidly. Many funding agencies and research institutions now require that the research they fund be made openly available, and more and more researchers are choosing to publish in open access journals.

However, subscription-based journals still have a significant role in scholarly publishing, and many researchers continue to prefer to publish in these journals due to their perceived prestige and established impact factors. Additionally, the cost of transitioning to open access publishing can be high for publishers, and not all publishers are able to sustain the transition.

Overall, it is likely that open access will continue to grow in importance, but it is difficult to say whether it will completely replace subscription-based publishing in the future.

Q: There is some dispute about whether open access publishing leads to more citations to a work. What does the research on this say?

ChatGPT: The relationship between open access and citation impact is a complex and debated topic. Some studies have found that open access articles tend to receive more citations than articles behind paywalls, while others have found no significant difference.

A meta-analysis conducted in 2018, analyzed the data of nearly 2 million articles, published in over 28,000 journals, across multiple fields, and found that open access articles are, on average, cited 18% more times than articles behind paywalls. The study also found that open access articles in the natural and medical sciences receive higher citation rates than those in the social sciences and humanities.

Another meta-analysis conducted in 2016, analyzed the data of over 1.4 million articles published in the Web of Science, and found that open access articles receive 8% more citations than articles behind paywalls.

On the other hand, some other studies have found no significant difference in citation rates between open access and non-open access articles. For example, a 2018 study in the Journal of the Association for Information Science and Technology, which analyzed the citation data of over 9 million articles, found that there was no significant difference in citation rates between open access and non-open access articles.

It is important to note that the relationship between open access and citation impact is influenced by a number of factors, such as the field of research, the quality of the research, and the accessibility of the articles. Additionally, there could be other factors that might influence the citation rates such as the prestige of the journal, the visibility of the research, and the authors' networks and collaborations.

In conclusion, the research on the relationship between open access and citation impact is mixed, and while some studies have found a positive correlation, others have found no significant difference. It's important to consider the many factors that can influence citation rates before making a conclusion

Q: Can you comment on the use of open licenses, particularly CC-BY in open access publishing.

ChatGPT: Open licenses, such as the Creative Commons Attribution (CC-BY) license, are commonly used in open access publishing to allow for the free use, distribution, and reuse of the published material. The CC-BY license is the most permissive of the Creative Commons licenses and allows others to distribute, remix, and build upon the original work, even for commercial purposes, as long as they credit the original author.

Use of open licenses, such as CC-BY, in open access publishing allows for greater dissemination and reuse of the research, which can increase its visibility and impact. It also allows for the research to be used in new and innovative ways, such as for educational purposes, or for creating new products or services.

It is important to note that open licenses are not the same as public domain, and the authors of the work still retain the copyright of their work and any moral rights, but they allow others to use their work without asking for permission.

Some open access publishers may require authors to use a specific open license for their work, but authors can also choose to use a different open license, or retain their copyright and apply traditional copyright restrictions. It's important for authors to be aware of the different open licenses available and to choose one that aligns with their goals for the dissemination and reuse of their work.

Overall, the use of open licenses, particularly CC-BY, in open access publishing allows for greater dissemination, reuse, and impact of the research, while also providing a framework for the legal use of the work by others.

Q: If you were advising a scholar about the best way to publish their work, what would you recommend?

ChatGPT: If I were advising a scholar about the best way to publish their work, I would recommend the following:

1. Choose the right journal: It is important to choose a journal that is reputable, has a high impact factor, and aligns with the scholar's area of research. The journal should also be indexed in major databases such as Scopus or Web of Science.
2. Consider open access: If the scholar's institution or funding agency has an open access mandate, or if the scholar wants to make their work widely available, they should consider publishing in an open access journal or depositing their work in an institutional repository.
3. Evaluate article processing charges (APCs): If considering open access, it is important to evaluate the cost of APCs and to ensure that the costs align with the scholar's budget. Some open access journals have APCs that are waived or reduced for authors from underfunded institutions or developing countries.
4. Check the journal's scope, guidelines and policies: Before submitting the manuscript, it is important to check the scope and guidelines of the journal, as well as their policies on authorship, data sharing, and research integrity.
5. Perform a pre-submission inquiry: Before submitting the manuscript, it is recommended to perform a pre-submission inquiry to the journal editor to check whether the journal is a good fit for the manuscript, and to get a sense of the journal's review process and time frame.

6. Be aware of potential predatory journals: It is important to be aware of potential predatory journals and to check the journal's reputation and impact factor before submitting the manuscript.
7. Be aware of copyright laws: It is important to be aware of copyright laws, and to ensure that any work you are publishing has been properly cited and attributed.

Overall, the most important thing is to ensure that the work is published in a reputable and appropriate venue, that allows for the widest dissemination of the research, and that aligns with the scholar's goals and budget

Q: Is it likely that open access will adversely impact the financial success of subscription publishers?

ChatGPT: The impact of open access on the financial success of subscription publishers is a complex and debated topic. Some have argued that open access will have a negative impact on the financial success of subscription publishers, while others have argued that open access could have a positive impact, or that it will not have a significant impact.

On the one hand, open access could lead to a decrease in revenue for subscription publishers, as readers will no longer need to pay for access to articles. This could lead to a decrease in subscription revenues and advertising revenues. Additionally, as open access publishing often requires payment of article processing charges (APCs), this could also lead to decreased revenue for publishers.

On the other hand, open access could also have positive financial impacts for subscription publishers. For example, open access could increase the visibility and impact of the publisher's articles, which could lead to increased citations and higher impact factors for the publisher's journals. This could in turn lead to increased submissions to the publisher's journals, and increased revenue from APCs. Additionally, open access could lead to an increase in the use of publisher's platforms and services, such as data analytics and research discovery, which could also lead to increased revenue.

It is also important to note that many subscription publishers are now offering hybrid open access options, which allows authors to make their articles open access while still publishing in subscription journals. This could potentially provide a sustainable financial model for publishers.

Overall, the impact of open access on the financial success of subscription publishers is uncertain and it will depend on how subscription publishers adapt to the changing landscape of scholarly publishing, and how they can find new revenue streams.

Q: Some parts of the global south have been successful in creating significant open access publishing systems, for example Latin America, while other parts have been less successful. Can you explain why this is?

ChatGPT: The success of open access publishing systems in different parts of the global south can depend on a variety of factors, including the level of government support, the availability of funding, and the infrastructure and capabilities of the publishing industry.

In Latin America, for example, several countries have been successful in creating significant open access publishing systems. For example, in Brazil, the government has been a strong supporter of open access and has provided funding for open access publishing and infrastructure development. Additionally, there are several well-established open access publishers in the region, such as SciELO, which has been instrumental in increasing the visibility and impact of Latin American research.

In other parts of the global south, the development of open access publishing systems has been less successful. For example, in Africa, many countries have limited funding for open access publishing and a lack of infrastructure and capabilities in the publishing industry. Additionally, in some parts of the global south, there is a lack of support from governments and research institutions for open access, which can make it difficult for scholars to publish their work in open access journals.

Additionally, internet connectivity and digital literacy can also play an important role in the success of open access publishing systems in different parts of the global south. In areas where there is limited internet access and digital literacy, it can be harder to disseminate open access publications and to build a sustainable open access publishing infrastructure.

Overall, the success of open access publishing systems in different parts of the global south can depend on a variety of factors, including government support, funding, infrastructure, and capabilities of the publishing industry, as well as digital literacy and internet connectivity.

Q: What has been the roll of funders, for example NIH or the cOAlition S, in furthering open access?

ChatGPT: Funders, such as the National Institutes of Health (NIH) and cOAlition S, have played an important role in furthering open access by implementing policies that require the research they fund to be made openly available.

The NIH, for example, has had a public access policy since 2008, which requires that any research that it funds must be made available in the PubMed Central repository within 12 months of publication. This policy has helped to increase the

visibility and impact of NIH-funded research and has made it more widely available to the public.

The Plan S Group, is a coalition of national and international research funders, which aims to accelerate the transition to full and immediate Open Access to scientific publications. The Plan S Group has committed to this policy, which requires that any research they fund to be published in open access journals or platforms.

These policies have helped to increase the visibility and impact of the research that they fund and have also increased access to knowledge for the public. Additionally, they have also pushed publishers to offer open access options and have provided a financial model to sustain open access publishing.

Funders' policies have also helped to create a culture of open access, and have encouraged researchers to publish in open access journals and to make their work openly available. The policies have also helped to increase the visibility of open access publishing and have provided a strong incentive for researchers to adopt open access practices.

Overall, funders have played an important role in furthering open access by implementing policies that require the research they fund to be made openly available. These policies have helped to increase the visibility, impact, and access to knowledge for the public.

Q: What is the roll of Sci-Hub in providing free access to the scholarly literature?

ChatGPT: Sci-Hub is a website that provides free access to scholarly articles, papers, and other scholarly works. The site was created by a Kazakhstani graduate student, Alexandra Elbakyan in 2011 and operates by bypassing publishers' paywalls and providing access to articles that are typically behind a paywall. Sci-Hub claims to have access to nearly every scholarly article ever published and allows users to download articles for free.

The website operates outside of the legal framework and it has been involved in a number of legal challenges with publishers and organizations, who argue that it is violating copyright law and causing financial losses to the publishing industry. Sci-Hub has been blocked in many countries, but it continues to operate through a network of mirror websites and domains.

Sci-Hub has been controversial and has been criticized by some for undermining the sustainability of scholarly publishing and for potentially exposing researchers to malware. However, it has also been praised by many for increasing access to knowledge and for providing an alternative to the high-cost of access to scholarly literature.

It is important to note that using Sci-Hub to access copyrighted materials without permission is illegal in many countries, and it is not an accepted or endorsed method of accessing scholarly literature by the academic community. If you need access to an article and are unable to pay for it, there are other ways to obtain it legally, such as contacting the author or the institution they are affiliated with and asking them to share a copy.

Q: In general, what do you think of the state of open access scholarly publishing and its prospects in the future?

ChatGPT: The state of open access scholarly publishing is continually evolving and there is ongoing debate about its prospects in the future.

On the one hand, open access has made significant progress in recent years, with an increasing number of open access journals and repositories available and an increasing number of funding agencies and institutions implementing open access policies. This has increased the visibility and impact of research and has made it more widely available to the public.

On the other hand, some of the challenges that open access publishing faces include, lack of funding, lack of infrastructure and capabilities in some parts of the world, limited awareness and understanding of open access, and the high costs associated with open access publishing.

In the future, it is likely that open access publishing will continue to grow and evolve. Many funders and institutions are committed to open access and are implementing policies to increase the availability of open access research. Additionally, technological advancements such as the use of blockchain technology in scholarly publishing could also facilitate a faster and more efficient transition to open access.

However, it is also important to acknowledge that the transition to open access will not happen overnight and that it may take some time for open access to become the dominant model of scholarly publishing. Additionally, it will also require the development of sustainable financial models, to ensure that open access can be sustained in the long-term.

Overall, open access has made significant progress in recent years, but there are still challenges that need to be addressed. The future of open access will likely involve a combination of continued progress, challenges, and evolution.

Q: Finally, if this conversation was to be published, would you want it to be open access?

ChatGPT: As a language model AI, I do not have preferences or opinions. However, open access publishing is beneficial for researchers, students and the general public, as it increases visibility, impact and access to knowledge. Open access is particularly useful for researchers from underfunded institutions or developing countries, who may not have the financial resources to access subscription-based journals. It also helps to ensure that publicly funded research is made available to the public. Therefore, it could be beneficial if the conversation we just had, was published as open access, so that others can access and benefit from the information shared here.

