



The Splendors and Miseries of Open Access Scientific Publishing in Ukraine

Andriy Novikov ^{1,2}

Letter

- ¹ Department of Biosystematics and Evolution, State Museum of Natural History NAS of Ukraine, Teatralna str. 18, 79008 Lviv, Ukraine; novikoffav@gmail.com
- ² Department of Botany, Biology Faculty, Ivan Franko National University of Lviv, Hrushevskoho str. 4, 79004 Lviv, Ukraine

Received: 16 February 2020; Accepted: 17 March 2020; Published: 20 March 2020



Abstract: The letter represents the author's opinion on the reasons and background of the actively developing practice of unconscientious open access scientific publishing, as well as briefly discussing the current condition of academic publishing and indexation in Ukraine.

Keywords: open access; academic publishing; Ukraine

Open access (OA) to scientific publications has always been the traditional option in Ukraine, which was also stated in the "Belgorod Declaration on open access to scientific knowledge and cultural heritage" in 2008 [1]. Most academic journals in Ukraine are non-commercial and fully subsidized by hosting institutions. They have always been focused on the distribution of printed copies and usually grant free access to electronic versions of the published materials [2,3]. However, many Ukrainian academic journals did not, for a long time, have websites, nor did they update their contents in it when they had one. Only in 2018 did the Ukrainian government introduce a new law with a mandatory requirement for scientific publishers to regularly update websites and to provide DOIs (Digital Object Identifiers) for all published content [4]. This resulted in faster growth of Ukrainian scientific publications with free access.

In total, there are 3029 scientific journals registered in Ukraine [5,6]. However, only 10.00% of these journals have passed open licensing and are currently included in the Directory of Open Access Journals (DOAJ) database [7]. Only 3.47% of Ukrainian scientific journals are indexed by Clarivate Analytics [8], and only 1.75% by Scopus [9]. Moreover, most published content does not correspond to FAIR principles [10,11] due to issues with provided metadata. There are no special investigations on the implementation of FAIR principles by Ukrainian publishers yet. However, even a quick browsing through 20 randomly selected journals shows that only one of them fully adheres to the FAIR principles. Another 11 journals have various issues with provided metadata (i.e., incomplete or incorrect metadata, lack or absence of metadata on parental web-pages and/or in pdf versions of the articles, absence of separate web-pages for each article). Additionally, eight journals from this subset have no online presence whatsoever or have considerable issues with provided metadata and content. Despite free access to published materials, in many cases, Ukrainian scientific publications are poorly indexed by search engines (i.e., Google Search Console) because of missing or incorrectly provided metadata.

Another problem is that many Ukrainian investigations are conducted at a low quality level [12] due to both the low level of financial support and the lack of proper control. Researchers in Ukraine are not encouraged to publish in international high-rated editions because this usually does not give them either extra points nor bonuses. Only in the past few years, some of the Ukrainian universities have begun to pay bonuses for publishing in high-rated journals. However, these are local rather than global initiatives. Moreover, Ukraine has a national list of qualified scientific journals (NLQSJ),

which is more important for Ukrainian scientists. Publications in journals included in the NLQSJ are often of higher value. NLQSJ contains only Ukrainian academic journals and is subdivided into three categories [3–5]. The main category A includes 78 Ukrainian journals indexed by Web of Science or Scopus. The other two categories, B and C, cover journals indexed by any international scientometric database. This means that even if the journal is indexed by a predatory database (e.g., Open Academic Journal Index), it can be included in these categories. Hence, many Ukrainian academic journals strive for inclusion in such databases instead of improving the quality of their publications.

Publications in A-rated journals still do not give any real advantages in Ukraine and are not required either for dissertation defense or employment [13,14]. Therefore, many Ukrainian scientists continue to publish their outcomes in low-quality journals, and often the only ones who cite these articles are themselves. In some disciplines, self-citation of Ukrainian scientific publications reaches 72%, which makes Ukraine one of the leading countries in the world in this ranking [15].

Basing on my experience as a scientific editor for the last eight years, I can assume that the problem of quality publications in Ukraine has a complex character and cannot be clearly separated from scientific practice. I believe that every Ukrainian academic journal today struggles with a problem that has no simple solution. If editors of Ukrainian journals decide to reject low-quality manuscripts, they are faced with an absence of authors who can provide publications of an acceptable level. Vice versa, if editors accept such low-quality manuscripts, they doom their journal to never becoming better. In such situations, to close the journal would be the simplest and fairest solution. However, taking into account that most Ukrainian academic journals are maintained by research institutions [16], the closure of academic journals becomes an internal institutional and state political problem [17]. Some journals are trying to reform gradually, introducing slightly more and stricter requirements. However, in many cases, they face opposition or even sabotage from authors, when the authors intentionally do not follow the rules and recommendations of editors and reviewers in their manuscripts. As a result, journals often have a dilemma: to accept material as it is or to miss releases of entire volumes. Thus, many Ukrainian authors are hindering the reform of Ukrainian academic journals.

The government of Ukraine is also trying to find some ways to resolve this situation. In particular, in 2016, the Ukrainian government wanted to tighten the requirements for scientific publications, but this initiative was met with protests, especially from the side of Ukrainian humanities academics, who believe that national science should co-exist independently of the international scientific community. The Ukrainian humanities academics argue their position by stressing a few main issues: (a) the impossibility of developing common rules for the evaluation of scientific activities in different disciplines, (b) the inability to compete with colleagues from abroad, (c) the willingness to protect peculiarities of national, traditional scientific schools, (d) the impossibility of publishing their outcomes in high-rating editions [17–20].

Of course, the existence of 105 Ukrainian journals indexed by the Web of Science and 53 journals listed in the SJR database is hopeful. Nevertheless, many Ukrainian scientific publications, even if found, produce scientific noise rather than enhance the world's scientific heritage [21–24]. Unclear copyright politics and lack of anti-plagiarism verification of manuscripts supplement this situation [25]. High levels of self-citation, plagiarism (including self-plagiarism and translations from other languages, in particular, from Russian), and the unfair practice of data compilation/falsification, together with lack of qualified peer-review, make many of the Ukrainian scientific publications untrustworthy.

It is fair to say that in the last decade, many efforts have been made to improve the practice of open access scientific publishing in Europe and Ukraine. In particular, launching the OpenAIRE initiative in 2009, with the introduction of the Zenodo repository in 2013, made a breakthrough in access to many scientific publications, including research papers, datasets, and other supporting materials [26,27]. Today, Zenodo is actively used by many Ukrainian scientists for self-archiving. Open Journal System (OJS), which provides a free and reliable tool for the management of open access journals, is also often applied by Ukrainian academic publishers. The "Open Science in Ukraine" initiative provides free consulting support for Ukrainian academic journals in their development on the basis of OJS [28].

The Open Ukrainian Citation Index (OUCI) launched in late 2019 provides a convenient search tool for open scientific publications [29]. OUCI should become the first step in the development of a national scientometric index in Ukraine, which was preliminarily introduced several years ago [21]. However, Ukraine is still far from other European countries in its open access scientific activities. For example, Ukraine occupied the last position in the list of countries that have obtained grants covering article processing charges in the framework of European FP7 projects [27,30]. De-Castro and Franck [27] concluded that this "is the result of a very complex mix of cultural and socio-economic factors and the reasons behind it would be worth a deeper investigation". I totally agree with De-Castro and Franck, and I do hope that this will be a question for forthcoming deeper investigations.

Funding: This research received no external funding.

Conflicts of Interest: The author declares no conflict of interest.

References

- Belgorod Declaration On Open Access To Scientific Knowledge And Cultural Heritage. 30 January 2008. (In Russian). Available online: http://old.nlb.by/eifl/index.php?path=/catalogue/view-181&menu_id=56 (accessed on 16 February 2020).
- 2. Kuchma, I. Open access, equity, and strong economy in developing and transition countries: Policy perspective. *Ser. Rev.* 2008, 34, 13–20. [CrossRef]
- 3. Yaroshenko, T.O. Open access—The way to integration of ukraine into the world scientific community. *High. Sch.* **2011**, *3*, 47–51. (In Ukrainian). Available online: http://ekmair.ukma.edu.ua/handle/123456789/1040 (accessed on 16 February 2020).
- 4. Decree on Approval of the Procedure of Forming the List of Scientific Professional Editions of Ukraine. 15 January 2018; No. 32. (In Ukrainian). Available online: https://zakon.rada.gov.ua/laws/show/z0148-18? lang=en (accessed on 16 February 2020).
- List of Scientific Professional Editions of Ukraine in Which the Results of the Dissertation Works for Obtaining the Scientific Degrees of Doctor and Candidate of Sciences Can Be Published. 28 December 2019; (In Ukrainian). Available online: https://mon.gov.ua/storage/app/media/atestatsiya-kadriv-vyshchoikvalifikatisii/2020/01/perelik-naukovikh-fakhovikh-vidan-281219.doc (accessed on 16 February 2020).
- 6. List of Electronic Scientific Professional Editions of Ukraine in Which the Results of the Dissertation Works for Obtaining the Scientific Degrees of Doctor and Candidate of Sciences Can Be Published. 28 December 2019; (In Ukrainian). Available online: https://mon.gov.ua/storage/app/media/atestatsiya-kadriv-vyshchoikvalifikatisii/2020/01/elektronnikh-fakhovikh-vidan-281219.doc (accessed on 7 March 2020).
- 7. DOAJ. Directory of Open Access Journals. 2020. Available online: https://doaj.org/ (accessed on 7 March 2020).
- 8. Clarivate Analytics. The Master Journal List. 2020. Available online: https://mjl.clarivate.com/home (accessed on 7 March 2020).
- 9. SJR. Scimago Journal & Country Rank. 2020. Available online: https://www.scimagojr.com/ (accessed on 7 March 2020).
- 10. FAIR Principles. GO FAIR. 2020. Available online: https://www.go-fair.org/fair-principles/ (accessed on 16 February 2020).
- 11. Wilkinson, M.; Dumontier, M.; Aalbersberg, I.J.; Appleton, G.; Axton, M.; Baak, A.; Blomberg, N.; Boiten, J.-W.; da Silva Santos, L.B.; Bourne, P.E.; et al. The FAIR guiding principles for scientific data management and stewardship. *Sci. Data* **2016**, *3*, 160018. [CrossRef] [PubMed]
- Porev, S.M. What has the ukrainian legislation proposed to anagement for research quality? *Sci. Sci. Sci.* 2018, *1*, 30–42. Available online: http://nbuv.gov.ua/UJRN/NNZ_2018_1_5 (accessed on 16 February 2020).
- 13. Sologoub, I.; Coupé, T. Academic inbreeding in Ukraine. In *Academic Inbreeding and Mobility in Higher Education*; Yudkevich, M., Altbach, P.G., Rumbley, L.E., Eds.; Palgrave Studies in Global Higher Education; Palgrave Macmillan: London, UK, 2015; pp. 228–258. [CrossRef]
- 14. Osipyan, A. Corruption and reform in higher education in Ukraine. Can. Int. Educ. 2009, 38, 104–122.
- 15. Glänzel, W.; Thijs, B. The influence of author self-citations on bibliometric macro indicators. *Scientometrics* **2004**, *59*, 281–310. [CrossRef]

- Yatskiv, Y.S. Modern state and the problems of ukrainian academic scientific periodicals. *Sci. Ukr. World Inf. Space* 2013, *8*, 5–14. (In Ukrainian). Available online: http://www.nas.gov.ua/publications/books/series/ 9789660247048/Documents/2013_8/5_NU-8-Yatskiv.pdf (accessed on 16 February 2020).
- 17. Academic Council Vernadsky National Library of Ukraine. The Important Question of Reforming the System of National Periodicals, Professional Journals and Future Socio-Humanitarian Profile. 19 December 2019; (In Ukrainian). Available online: http://www.nbuv.gov.ua/node/5086 (accessed on 16 February 2020).
- Hundorova, T.I. The challenges of the modern world and the possibilities of the humanities in the transit age. *Visn. Nac. Acad. Nauk Ukr.* 2016, *5*, 76–79. (In Ukrainian). Available online: http://dspace.nbuv.gov.ua/ handle/123456789/104819 (accessed on 16 February 2020).
- Kozmenko, S.; Ostapenko, L. Will There Be Enough Scopus for All: Barriers to Scientists. *High. Edu. Ukr.* 2018. (In Ukrainian). Available online: https://osvita.ua/vnz/61399/ (accessed on 16 February 2020).
- 20. Mryglod, O.I.; Nazarovets, S.A. Scimetrics and management of scientific activities: Once again about world and Ukrainian. *Visn. Nac. Acad. Nauk Ukr.* **2019**, *9*, 81–94. (In Ukrainian) [CrossRef]
- 21. Ataie-Ashtiani, B. Chinese and iranian scientific publications: Fast growth and poor ethics. *Sci. Eng. Ethics* **2017**, *23*, 317–319. [CrossRef] [PubMed]
- 22. Ataie-Ashtiani, B. World map of scientific misconduct. *Sci. Eng. Ethics* **2018**, *24*, 1653–1656. [CrossRef] [PubMed]
- 23. Fiialka, S.B. The disclosure of ukrainian scientists' research results in academic journals: Problems and prospects. *Print. Publ.* **2018**, *2*, 128–141. (In Ukrainian) [CrossRef]
- 24. Kun, Á. Publish and who should perish: You or science? Publications 2018, 6, 18. [CrossRef]
- 25. Svyrydenko, D. Plagiarism challenges at ukrainian science and education. *Studia Warm.* **2016**, *53*, 67–75. [CrossRef]
- 26. Rettberg, N.; Schmidt, B. OpenAIRE: Supporting a european open access mandate. *Coll. Res. Libr. News* **2015**, *76*, 306–310. [CrossRef]
- 27. De-Castro, P.; Franck, G. Funding APCs from the research funder's seat: Findings from the EC FP7 post-grant open access pilot. *El Prof. Inf.* **2018**, *28*, e280413. [CrossRef]
- 28. Open Science in Ukraine (OSU). 2020. (In Ukrainian). Available online: https://openscience.in.ua/ (accessed on 7 March 2020).
- 29. Cheberkus, D.; Nazarovets, S. Ukrainian open index maps local citations. *Nature* **2019**, *575*, 596. [CrossRef] [PubMed]
- 30. De-Castro, P. Funded Bids for the Alternative Funding Mechanism for APC-free Open Access Journals And Platforms. 1 August 2016. Available online: https://www.openaire.eu/blogs/funded-bids-for-the-alternative-funding-mechanism-for-apc-free-open-access-journals-and-platforms-1 (accessed on 7 March 2020).



© 2020 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).