EXPERTISECENTRUM O&O MONITORING

Screening VABB-SHW version 15 for publications in predatory and hijacker journals

Report to the Authoritative Panel
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1 Introduction

Predatory journals and publishers have been characterized as "entities that prioritize self-interest at the expense of scholarship and are characterized by false or misleading information, deviation from best editorial and publication practices, a lack of transparency, and/or the use of aggressive and indiscriminate solicitation practices" (Grudniewicz et al., 2019, p. 211). For the sake of simplicity, we will use the same 'predatory' moniker but note that it has been criticized (Eriksson & Helgesson, 2018).

In 2008, Jeffrey Beall was the first to compile a list of "potential, possible, or probable predatory scholarly open-access publishers". This list – together with his blog and a separate list of standalone predatory journals that was added later – was shut down in 2017, possibly due to pressure from the publisher Frontiers (Basken, 2017). In addition to an anonymously maintained copy at https://beallslist.net/, the most well-known spiritual successor are Cabells Predatory Reports (see 2.1). These negative lists (also referred to as 'blacklists') mention publishers and journals that ought to be avoided because of their questionable standards. This practice, however, has been criticized (e.g., Bloudoff-Indelicato, 2015) and some scholars have argued in favour of listing good journals – 'whitelisting' – instead. The Directory of Open Access Journals (henceforth DOAJ), for example, aims to cover "high quality, open access, peer-reviewed journals."

A key issue in this debate is the fact that it is not clear-cut which journals and publishers should be considered predatory and which ones should be considered legitimate. "Many OA journals and publishers exist in niches of unknown, uncertain and/or contested legitimacy. […] Just as there are many different types and degrees of 'predatory' publishing, there are numerous ways a journal or publisher could possess ambiguous or borderline legitimacy" (Siler, 2020, p. 1391).

More recently, journal hijacking has appeared as a special type of predatory publishing (Butler, 2013). It refers to journals that adopt the name and branding of a legitimate journal – typically one that is indexed in Web of Science and/or Scopus – in order to attract submissions and dupe researchers into paying publication or processing fees. The term "hijacked journal" can be confusing, since it can be used both to refer to the perpetrator and to the victim. We will therefore refer to the former as "hijacker journal" and reserve "hijacked journal" to refer to the legitimate journal.

In this report, we study to what extent papers published by social science and humanities (SSH) scholars within Flanders appear in questionable journals or conference proceedings. Since 2013 ECOOM-UAntwerp has organised comparisons of the annual lists of journals submitted to the Flemish Academic Bibliographic database of the Social Sciences and Humanities (VABB-SHW) with both positive and negative lists. For an overview of the design of the VABB-SHW, see Verleysen et al. (2014). The results of these screenings are communicated to the Authoritative Panel (Gezaghebbende Panel or GP), which decides which publications and publication channels adhere to all requirements for inclusion in the VABB-SHW.

Eykens et al. (2019) present a bibliographic analysis of the publications identified as predatory in these previous screenings. The results indicate that growing awareness of the risks of predatory publishing does not lead to a turn away from open access in general. Contrary to what one might expect, both junior and senior authors have published in predatory journals.

The previous screenings used the following lists:

- versions 4 and 5: Beall's list(s) as blacklist (Rahman et al., 2014; Rahman & Engels, 2015),
- versions 6 and 7: Beall's list(s) as blacklist, DOAJ as whitelist (Rahman et al., 2015; Sīle et al., 2017),

- versions 8 to 14: Cabells Predatory Reports (previously Cabells Journal Blacklist) as blacklist, DOAJ as whitelist (Eykens et al., 2018a, 2018b; Eykens & Guns, 2020; Guns, 2023;Guns, 2024; Guns et al., 2022; Guns & Vandewalle, 2021).

The current report is an update of the previous edition (Guns, 2024) and, as such, shares portions of the text with the previous report, especially in the description of sources, methods and limitations.

This report is based on the set of publications submitted for VABB-SHW version 15 (publication years 2014–2023). All journals and proceedings with ISSN were extracted and compared with, firstly, Cabells Predatory Reports (CPR) and, secondly, the list of journals indexed in DOAJ. Data from CPR dates from the 6th of September 2024. DOAJ was consulted on the 5th of December 2024.

2 Data sources

2.1 Cabells Predatory Reports

Cabells Predatory Reports (CPR) is a commercial service provided by Cabells Scholarly Analytics. The review board working on CPR makes use of a list of pre-specified criteria which are used to identify deceptive, fraudulent, and/or predatory journals. For each listed journal a 'violations report' is available. At the time of consulting, CPR listed 18,398 journals. We should remark here that this includes a large number of journals without ISSN as well as multiple duplicates.

Cabells distinguish between severe, moderate, and minor violations. The full list of criteria can be found in Appendix A. The 75 criteria range from severe to minor violations and are divided over 8 categories:

A. **Integrity (13 criteria):** Relates to the journal's ethics. Does the publisher abide by standard publishing or research ethics?
B. **Peer review (14 criteria):** Does the journal have adequate procedures for editorial control and peer review?
C. **Website (7 criteria):** Relates to the information displayed on the website. Is it deceptive, wrong or unclear?
D. **Publication practices (18 criteria):** Closely relates to research and publishing ethics, but focuses on the actual process of publishing, the techniques to attract authors, and statements about the management of the journal and its content.
E. **Indexing and metrics (2 criteria):** Is the journal using misleading or wrong metrics?
F. **Fees (6 criteria):** Does the publisher focus on payments and/or not communicate about them clearly prior to manuscript submission?
G. **Access and copyright (6 criteria):** Does the journal (or its publisher) communicate clearly on the access granted and the copyright policy that is being carried out?
H. **Business practices (9 criteria):** Relates to the marketing techniques used by the publisher or the journal's editorial team.

The criteria grouped under each category could be characterized as indicators ranging from fraudulent (severe) to vague or questionable practice (minor). When making use of the violation reports of CPR for evaluation purposes, it therefore seems advisable to consider the severity of violations.

2.2 Directory of Open Access Journals (DOAJ)

In 2003 DOAJ was set up "to increase the visibility and ease of use of open access scientific and scholarly journals, thereby promoting their increased usage and impact" (https://doaj.org/about). This directory aims to provide full coverage of peer-reviewed OA journals that can warrant the quality of the content. For a journal to be included in DOAJ it has to adhere to the principles of 'Transparency & best practice' (https://doaj.org/apply/transparency/). This set of 16 principles is the result of a collaboration between DOAJ, the Committee on Publication Ethics (COPE), the Open Access Scholarly Publishers Association (OASPA), and the World Association of Medical Editors (WAME). The principles refer to various aspects of publishing (peer review process, publishing schedule, etc.). At the time of consulting, DOAJ listed 21,174 journals.

3 Methods

At the start of the screening, we compiled a list of all journals with ISSN (n = 19,218) and proceedings with ISSN (n = 552) submitted for inclusion in VABB-SHW 15. These are the serial publications in which scholars affiliated to an SSH unit at a Flemish university have published during the time period 2014–2023. Within the journal list, 13,130 journals have been previously identified as peer-reviewed, of which 5,741 are selected by the GP, including 2,242 that are indexed in the Emerging Sources Citation Index (ESCI) of Web of Science (WoS). The remaining 7,389 are indexed in the Science Citation Index Expanded (SCIE), Social Sciences Citation Index (SSCI), and/or Arts & Humanities Citation Index (AHCI) of Web of Science (WoS). 2,391 journals have been classified by the GP as non-peer-reviewed. Finally, 410 journals appear in the list for the first time, and therefore their peer review status is yet to be decided.

We compared the journals in VABB-SHW 15 with those in CPR by cross-checking the set of ISSNs with the ISSNs and e-ISSNs in CPR. The second step consisted of looking up the ISSNs that appeared in both the VABB-SHW 15 data and CPR, in the DOAJ. Journals and proceedings whose ISSN matched with the ISSN of a journal on CPR were retained as potentially predatory or hijacked. As with previous screenings we have checked both journals indexed in WoS and journals not indexed in WoS.[1] Since the screening of VABB-SHW version 10 (Eykens & Guns, 2020), we also check conference proceedings with an ISSN.

For the cases in which a match was found, we consulted the violation report provided by Cabells and listed each journal's violations. A separate Excel file is provided to the Authoritative Panel that lists all details of the journals in question.

4 Findings

The results of our analysis are presented in three parts. In section 4.1, we analyse the number of journals/proceedings (and their publishers) that are found in the CPR. Section 4.2 zooms in on the severity of the violations. In section 4.3, we present a comparison of our findings to last year's results. Finally, section 4.4 zooms in on the phenomenon of journal hijacking.

[1] Publications in journals indexed in the SCIE, SSCI, and/or AHCI, as well as proceeding papers indexed in the CPCI-S and/or CPCI-SSH, are counted in the WoS publications parameter of the BOF-key.

4.1 Comparison of VABB-SHW with Cabells Predatory Reports

The comparison of publications submitted for VABB-SHW 15 with CPR yields a set of 173 journals – 169 from the VABB-SHW journal list and 4 from the VABB-SHW proceedings list (Table 1). Some of these are indexed in WoS: 18 in the core WoS indexes (AHCI, SSCI, SCIE, CPCI-S, CPCI-SSH), and 5 in the Emerging Sources Citation Index (ESCI). The majority of non-WoS journals are considered not to be peer-reviewed. The list of these 173 serials is delivered as a separate Excel overview. The list includes the following characteristics: VABB identifier, title, type or status in VABB-SHW, GP ranking, whether or not a severe violation is being reported for the journal, the number of publications in VABB-SHW, the name of its publisher, as well as metadata from CPR, including which violations are reported per journal.

There is one new journals listed in VABB15 that occurs in CPR as well as in the DOAJ. The *European Economic and Management Research Association* (ISSN 2444-8842) has 2 minor violations and 4 severe violations according to CPR. This journal is currently listed in VABB-SHW as peer-reviewed. We suggest the GP to investigate this journal in detail before making a decision.

Table 1. Number of VABB-SHW 15 journals identified in Cabells Predatory Reports by peer review status and WoS indexation

	Not in WoS	In core WoS index	In ESCI	Total
Peer-reviewed	27	21	5	53
Non peer-reviewed	116	0	0	116
Peer-review status undecided	4	0	0	4
Total	147	21	5	173

The 173 journals were published by 72 different publishers, with 3 accounting for multiple (more than 10) journals (Table 2). It should be noted that journals published by the same publisher very often exhibit the same violations. Thirteen journals could not be linked to a publisher ('-' in Table 2).

Table 2. Publishers with two or more predatory journals in VABB-SHW 15

Publisher	Number of journals
OMICS International	31
Scientific Research Publishing (SCIRP)	20
-	14
Canadian Center of Science and Education	10
Baishideng Publishing Group	6
Sciedu Press	5
Macrothink Institute	3
Juniper Publishers	3
JSciMed Central	3
Academic and Research Development Association (ARDA)	3
Science Publishing Group (Science PG)	2
MedCrave Group	2
Fortune Journals	2
Remedy Publications	2
David Publishing Company	2
Center for Promoting Ideas	2

Bioleagues	2
Addleton Academic Publishers	2
Asian Economic and Social Society (AESS)	2
American Research Institute for Policy Development	2
Austin Publishing Group	2
American Scientific Publishers	2
Athens Institute for Education and Research (ATINER)	2

4.2 Severity of violations

Table 3 lists the ten most common violations according to CPR. False claims of indexation or metrics are the most frequently occurring violations classified as severe.

The majority of channels (157 out of 173) have at least one severe violation listed. If we exclude journals and proceedings indexed in WoS, we find 14 journals for which no severe problems are listed. 9 of those journals currently are listed as non-peer reviewed. 4 are listed as peer-reviewed and one has a status to be determined. There are no journals with only minor violations: for all 14, a mixture of moderate and minor problems is listed. Of these journals, We advise the GP to examine these journals in more detail before making a final decision on their classification in VABB-SHW.

Table 3. Top-10 most frequent violations

Violations	Severity	Occurence
No policies for digital preservation.	Minor	103
The publisher displays prominent statements that promise rapid publication and/or unusually quick peer review (less than 4 weeks).	Moderate	96
Falsely claims indexing in well-known databases (especially SCOPUS, DOAJ, JCR, and Cabells).	Severe	54
The journal uses misleading metrics (i.e., metrics with the words "impact factor" that are not the Clarivate Analytics Impact Factor)."	Severe	53
The journal or publisher uses a virtual office or other proxy business as its physical address.	Minor	53
Authors are published several times in the same journal and/or issue.	Moderate	35
The publisher hides or obscures relationships with for-profit partner companies.	Severe	32
The journal's website does not have a clearly stated peer review policy.	Moderate	31
The website does not identify a physical address for the publisher or gives a fake address.	Minor	25

Poor grammar and/or spelling on the journal or publisher's website.	Minor	23

4.3 Number of publications in predatory journals per year

The 173 journals discussed in section 4.1 together account for 367 publications (Table 4) or 0.49% of all publications with ISSN submitted for VABB-SHW 15.

Table 4. Number of publications in VABB-SHW 15 per year that have appeared in a journal listed in CPR

Year	Non-peer-reviewed	Peer-reviewed	Undecided	Total
2014	18.0	18.0	0.0	36.0
2015	35.0	20.0	0.0	55.0
2016	27.0	16.0	0.0	43.0
2017	18.0	24.0	0.0	42.0
2018	15.0	18.0	0.0	33.0
2019	19.0	14.0	0.0	33.0
2020	16.0	19.0	2.0	37.0
2021	15.0	27.0	0.0	42.0
2022	9.0	12.0	0.0	21.0
2023	0.0	21.0	4.0	25.0
Total	172.0	189.0	6.0	367.0

The number of journals found in CPR is more or less stable since version 12, despite the growth of CPR. Table 5 presents an overview of the number of journals identified during each screening and the sources that were used over the years. The increase since edition 8 is mainly due to the expansion of CPR.

Table 5. Overview of screenings per VABB-SHW edition

VABB-SHW edition	Period	# journals	# articles	# journals in negative list	Negative list	Other sources
5	2004–2013	109	138	unknown **	Beall's list	WoS
6	2005–2014	128	315	unknown **	Beall's list	DOAJ, WoS
7	2006–2015	185	501	unknown **	Beall's list	DOAJ, WoS
8	2007–2016	65	91	7,601	Cabells Journal Blacklist*	DOAJ, WoS
9	2008–2017	89	145	9,713	Cabells Journal Blacklist*	DOAJ, WoS
10	2009–2018	97	164	14,154	Cabells Journal Blacklist*	DOAJ, WoS
11	2010–2019	114	175	14,183	Cabells Predatory Reports	DOAJ, WoS
12	2011–2020	156	288	15,539	Cabells Predatory Reports	DOAJ, WoS
13	2012–2021	169	354	17,042	Cabells Predatory Reports	DOAJ, WoS
14	2013–2022	161	348	17,168	Cabells Predatory Reports	DOAJ, WoS

15	2014-2023	173	367	18,397	Cabells Predatory Reports	DOAJ, WoS

* Cabells Journal Blacklist has been renamed to Cabells Predatory Reports in 2020.
** Beall's main list worked at the level of publishers, hence it is impossible to retroactively determine the total number of journals.

4.4 Journal hijacking

In this section, we focus on the issue of hijacker journals – predatory journals that co-opt the name, ISSN, and/or branding of a well-known, legitimate journal, thereby tricking authors into thinking they publish in an established journal (Abalkina, 2021). Figure 1 illustrates this by showing how the Dutch journal *Gedrag & Organisatie* is the victim of a hijack. This problem is particularly concerning for a system like VABB-SHW, which mainly relies on ISSN as a journal identifier. We note that the duration of such a 'hijack' is variable and can range from just a few hours to multiple years.

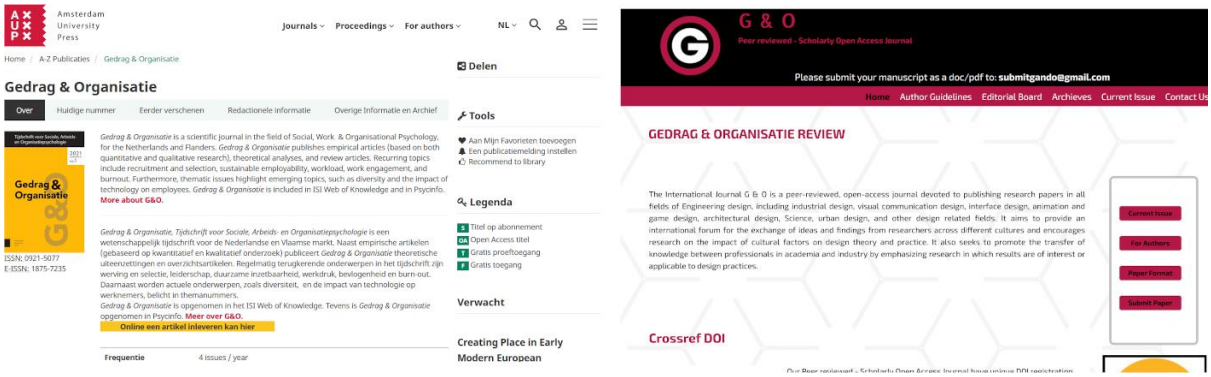

Figure 1. Example of a hijacked journal. Left: official website of Gedrag & Organisatie, right: website of hijacker journal pretending to be Gedrag & Organisatie.

It is important to stress that a publication with a hijacked ISSN is more likely to have appeared in the legitimate journal than in the hijacker. Hence, these ISSNs should not be treated as predatory. Instead, journal hijacking needs to be analysed at the level of individual publications, since it is typically impossible to distinguish between the legitimate journal and the hijacker based on metadata alone. This is, however, very time-consuming and can hardly be solved at the level of VABB-SHW alone.

The number of ISSNs in VABB-SHW that are listed as being hijacked is relatively low, but increasing quickly (Table 6). Since the hijacked journals are often indexed in WoS and/or Scopus, the corresponding number of publications grows even more quickly. After detailed analysis of all 69 publications with a hijacked ISSN, we find that two papers in VABB15 were published with a hijacker journal that was also flagged in the previous version of VABB, namely *Jökull* (real website https://jokulljournal.is/, hijacker http://www.jokulljournal.com/).

The publications in hijacker journals that occurred in VABB-SHW 14 (Guns, 2023) have been removed from VABB-SHW (in consultation with the universities) as well as local CRIS systems, and are hence no longer found in the current dataset. The same will happen for the case found in VABB-SHW 15.

Table 6. Number of hijacked ISSNs found per screening

VABB-SHW edition	Number of hijacked ISSNs in VABB-SHW	Number of publications with hijacked ISSNs	Number of publications in hijacker journals
10 and earlier	0	0	0
11	1	2	0
12	7	51	0
13	16	75	16
14	17	64	1
15	18	69	2

5 Limitations

With regard to the data and our analysis, three limitations should be highlighted. As stated in previous reports, journal lists are not static and often evolve rather quickly (Eykens et al., 2019). Journals may cease to exist, they can be withdrawn from (or added to) the DOAJ, the Web of Science, CPR, and so on. This requires the reader to pay close attention when interpreting the results. The comparison presented in this report only applies to the timeframe of VABB-SHW 15.

The second limitation relates to the data gathered from CPR. Cabells provides detailed violation reports, which can be helpful for decision making. The threshold applied by the in-house experts, however, is not clear. Some of the violations are less severe than others, or allow for the reader's own (subjective) interpretation.

A third limitation is related to the matching procedure used, which relies on the availability and correctness of ISSNs and other metadata in both VABB-SHW and CPR. However, studies have found different kinds of data errors in CPR (Dony et al., 2020), which may also affect the screening results.

6 Conclusion

Publications in journals that are listed as predatory form a small but not entirely negligible share of publications submitted for inclusion in VABB-SHW. The total number has more or less stabilized compared to the previous two editions. Over the course of the entire ten-year period of VABB-SHW 14, the number of publications remains roughly constant.

We see journal hijacking as a more worrisome trend, because it requires vigilance at the level of individual publications. For instance, both WoS (Butler, 2013) and Scopus (Abalkina, 2021) have inadvertently included publications that appeared in hijacker journals. On the positive side, only one publication in a hijacker journal was encountered in this edition.

7 References

Abalkina, A. (2021). Detecting a network of hijacked journals by its archive. *Scientometrics*, *126*(8), 7123–7148. https://doi.org/10.1007/s11192-021-04056-0

Basken, P. (2017). *Why Beall's blacklist of predatory journals died*. University World News. https://www.universityworldnews.com/post.php?story=20170920150122306

Bloudoff-Indelicato, M. (2015). Backlash after Frontiers journals added to list of questionable publishers. *Nature*, *526*(7575), 613–613. https://doi.org/10.1038/526613f

Butler, D. (2013). Sham journals scam authors. *Nature*, *495*(7442), Article 7442. https://doi.org/10.1038/495421a

Dony, C., Raskinet, M., Renaville, F., Simon, S., & Thirion, P. (2020). How reliable and useful is Cabell's Blacklist ? A data-driven analysis. *LIBER Quarterly: The Journal of European Research Libraries*. https://doi.org/10.18352/lq.10339

Eriksson, S., & Helgesson, G. (2018). Time to stop talking about 'predatory journals.' *Learned Publishing*, *31*(2), 181–183. https://doi.org/10.1002/leap.1135

Eykens, J., & Guns, R. (2020). *Screening VABB-SHW version X with Cabells Journal Blacklist and Directory of Open Access Journals*. ECOOM. https://hdl.handle.net/10067/1674140151162165141

Eykens, J., Guns, R., & Engels, T. C. E. (2018a). *Comparing VABB-SHW (version VIII) with Cabells Predatory Reports and Directory of Open Access Journals*. ECOOM. https://hdl.handle.net/10067/1481030151162165141

Eykens, J., Guns, R., & Engels, T. C. E. (2018b). *Comparison of VABB-SHW version IX with Cabells Predatory Reports and Directory of Open Access Journals*. ECOOM. https://hdl.handle.net/10067/1571090151162165141

Eykens, J., Guns, R., Rahman, A. I. M. J., & Engels, T. C. E. (2019). Identifying publications in questionable journals in the context of performance-based research funding. *PLOS ONE*, *14*(11), e0224541. https://doi.org/10.1371/journal.pone.0224541

Grudniewicz, A., Moher, D., Cobey, K. D., Bryson, G. L., Cukier, S., Allen, K., Ardern, C., Balcom, L., Barros, T., Berger, M., Ciro, J. B., Cugusi, L., Donaldson, M. R., Egger, M., Graham, I. D., Hodgkinson, M., Khan, K. M., Mabizela, M., Manca, A., … Lalu, M. M. (2019). Predatory journals: No definition, no defence. *Nature*, *576*(7786), 210–212. https://doi.org/10.1038/d41586-019-03759-y

Guns, R. (2024). *Screening VABB-SHW version 14 for publications in predatory and hijacker journals: Report to the Authoritative Panel*. ECOOM, University of Antwerp.

Guns, R. (2023). *Screening VABB-SHW version 13 for publications in predatory and hijacker journals: Report to the Authoritative Panel*. ECOOM, University of Antwerp. https://repository.uantwerpen.be/docstore/d:irua:17986

Guns, R., Arhiliuc, C., Eykens, J., & Vandewalle, E. (2022). *Screening VABB-SHW version 12 for publications in predatory journals*. ECOOM. https://hdl.handle.net/10067/1901800151162165141

Guns, R., & Vandewalle, E. (2021). *Screening VABB-SHW version XI for publications in predatory journals*. ECOOM. https://hdl.handle.net/10067/1748200151162165141

Rahman, A. I. M. J., Dexters, N., & Engels, T. C. E. (2014). *Predatory open access journals in a performance-based funding model: Common journals in Bealls list and in the VABB-SHW*. ECOOM. http://hdl.handle.net/10067/1139870151162165141

Rahman, A. I. M. J., & Engels, T. C. E. (2015). *Predatory open access journals in a performance-based funding model: Common journals in Bealls list and in version V of the VABB-SHW*. ECOOM. http://hdl.handle.net/10067/1233590151162165141

Rahman, A. I. M. J., Guns, R., & Engels, T. C. E. (2015). *Predatory open access journals in a performance-based funding model: A comparison of journals in version VI of the VABB-SHW with Bealls list and DOAJ*. ECOOM. http://hdl.handle.net/10067/1300570151162165141

Sīle, L., Guns, R., & Engels, T. C. E. (2017). *Comparing VABB-SHW (version VII) with Beall's lists and DOAJ*. ECOOM. http://hdl.handle.net/10067/1396540151162165141

Siler, K. (2020). Demarcating spectrums of predatory publishing: Economic and institutional sources of academic legitimacy. *Journal of the Association for Information Science and Technology*, *forthcoming*. https://doi.org/10.1002/asi.24339

Verleysen, F. T., Ghesquière, P., & Engels, T. C. E. (2014). The objectives, design and selection process of the Flemish Academic Bibliographic Database for the Social Sciences and Humanities (VABB-SHW). In W. Blockmans, L. Engwall, & D. Weaire (Eds.), *Bibliometrics. Use and Abuse in the Review of Research Performance* (pp. 117–127). Portland Press. http://www.portlandpress.com/pp/books/online/wg87/087/0117/0870117.pdf

Appendix A. Full list of blacklist criteria

This list of blacklist criteria is taken from https://cabells.com/predatory-criteria-v1.1. Some violations are considered more severe than others (moderate to minor).

A. Integrity

SEVERE

1. The same article appears in more than one journal.
2. Hijacked journal (defined as a fraudulent website created to look like a legitimate academic journal for the purpose of offering academics the opportunity to rapidly publish their research for a fee).
3. Information received from the journal does not match the journal's website.
4. The journal or publisher claims to be a non-profit when it is actually a for-profit company.
5. The owner/Editor of the journal or publisher falsely claims academic positions or qualifications.
6. The journal is associated with a conference that has been identified as predatory.
7. The journal gives a fake ISSN.

MODERATE

8. The journal/publisher hides or obscures relationships with for-profit partner companies that could result in corporate manipulation of science.
9. The name of the journal references a country or demographic that does not relate to the content or origin of the journal.
10. The journal uses language that suggests that it is industry leading, but is in fact a new journal.
11. The title of the journal is copied or so similar to that of a legitimate journal that it could cause confusion between the two.

MINOR

12. Insufficient resources are spent on preventing and eliminating author misconduct (that may result in repeated cases of plagiarism, self-plagiarism, image manipulation, etc.).
13. The journal/publisher hides or obscures information regarding associated publishing imprints or parent companies.

B. Peer Review	**SEVERE** 1. No editor or editorial board listed on the journal's website at all. 2. Editors do not actually exist or are deceased. 3. The journal includes scholars on an editorial board without their knowledge or permission. 4. Evident data that little to no peer review is being done and the journal claims to be "peer reviewed". **MODERATE** 5. The founder of the publishing company is the editor of all of the journals published by said company. 6. Evident data showing that the editor/review board members do not possess academic expertise to reasonably qualify them to be publication gatekeepers in the journal's field. 7. Have board members who are prominent researchers but exempt them from any contribution to the journal except the use of their names and/or photographs. 8. Gender bias in the editorial board. 9. Little geographical diversity of board members and claim to be international. 10. Inadequate peer review (i.e., a single reader reviews submissions; peer reviewers read papers outside their field of study; etc.). 11. The journal's website does not have a clearly stated peer review policy. 12. The journal has a large editorial board but very few articles are published per year. 13. No affiliations are given for editorial board members and/or editors. 14. Editorial board members (appointed over 2 years ago) have not heard from the journal at all since being appointed to the board.
C. Website	**MINOR** 1. The website does not identify a physical address for the publisher or gives a fake address. 2. The journal or publisher uses a virtual office or other proxy business as its physical address. 3. The website does not identify a physical editorial address for the journal. 4. Dead links. 5. Poor grammar and/or spelling. 6. No way to contact the journal/only has web-form.

	7. The journal's website attempts to download a virus or malware.
D. Publication practices	**SEVERE** 1. The journal publishes papers that are not academic at all, e.g. essays by laypeople or obvious pseudo-science. 2. No articles are published or the archives are missing issues and/or articles. 3. Falsely claims indexing in well-known databases (especially SCOPUS, DOAJ, JCR, and Cabell's). 4. Falsely claims universities or other organizations as partners or sponsors. 5. Machine-generated or other "sting" abstracts or papers are accepted. **MODERATE** 6. No copyediting. 7. The publisher displays prominent statements that promise rapid publication and/or unusually quick peer review (less than 4 weeks). 8. Little geographical diversity of authors and the journal claims to be International. 9. Similarly titled articles published by same author in more than one journal. 10. The Editor publishes research in his own journal. 11. Authors are published several times in the same journal and/or issue. 12. The journal purposefully publishes controversial articles in the interest of boosting citation count. 13. The journal publishes papers presented at conferences without additional peer review. 14. The name of the publisher suggests that it is a society, academy, etc. when it is only a publisher and offers no real benefits to members. 15. The name of the publisher suggests that it is a society, academy, etc. when it is only a solitary proprietary operation and does not meet the definition of the term used or implied non-profit mission. 16. The number of articles has increased by 75% or more in the last year. 17. The number of articles has increased by 50-74% in the last year. **MINOR**

	18. The number of articles has increased by 25-49% in the last year.
E. Indexing & Metrics	**SEVERE** 1. The journal uses misleading metrics (i.e., metrics with the words “impact factor” that are not the Thomson Reuters Impact Factor). **MINOR** 2. The publisher or its journals are not listed in standard periodical directories or are not widely catalogued in library databases.
F. Fees	**SEVERE** 1. The journal offers options for researchers to prepay APCs for future articles. 2. The journal states there is an APC or other fee but does not give information on the amount or gives conflicting information. 3. The journal or publisher offers membership to receive discounts on APCs but does not give information on how to become a member and/or on the membership fees. 4. The author must pay APC or publication fee before submitting the article (specifically calls the fee a publication fee, not a submission fee). 5. The journal does not indicate that there are any fees associated with publication, review, submission, etc. but the author is charged a fee after submitting a manuscript. **MODERATE** 6. The publisher or journal's website seems too focused on the payment of fees.
G. Access & Copyright	**MODERATE** 1. States the journal is completely open access but not all articles are openly available. 2. No way to access articles (no information on open access or how to subscribe). 3. The journal is open access but no information is given about how the journal is supported financially (i.e. author fees, advertising, sponsorship, etc.) 4. No policies for digital preservation.

	5. The journal has a poorly written copyright policy and/or transfer form that does not actually transfer copyright. 6. The journal publishes not in accordance with their copyright or does not operate under a copyright license.
H. Business Practices	**MODERATE** 1. Emailed solicitations for manuscripts from the journals are received by researchers who are clearly not in the field the journal covers. 2. Emailed invitations for editorial board members or reviewers from the journal are received by researchers who are clearly not in the field the journal covers. 3. Multiple emails received from a journal in a short amount of time. 4. Emails received from a journal do not include the option to unsubscribe to future emails. 5. The journal has been asked to quit sending emails and has not stopped. 6. The journal copy proofs and locks PDFs. 7. The journal or publisher gives a business address in a Western country but the majority of authors are based in developing countries. **MINOR** 8. No subscribers / nobody uses the journal. 9. The journal's website does not allow web crawlers.