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KrimOJ - Towards the Digitalisation of Criminology

This article takes stock of the early years of *Kriminologie – Das Online-Journal | Criminology – The Online Journal*, one of the first open access-only journals for criminology. It details the creation of the journal, offers an overview of achievements thus far as well as considerations on how to ensure the journal's long-term future. We also look at the findings of an online survey and examine the unique challenges of publishing an open access journal.

Keywords: criminology, digitalisation, open access

KrimOJ – Ein Beitrag zur Digitalisierung der Kriminologie

Der vorliegende Beitrag bilanziert die Anfangsjahre von Kriminologie – Das Online-Journal | Criminology – The Online Journal als eine der ersten reinen Open-Access-Zeitschriften für den Bereich der Kriminologie. Er schildert die Entstehung des Journals und gibt einen Überblick über die bisher erzielten Ergebnisse, schildert Überlegungen zur Verstetigung und liefert Erkenntnisse aus einer Online-Umfrage. Der Beitrag thematisiert zudem die besonderen Herausforderungen, die mit dem Betrieb eines Open-Access-Journals verbunden sind.

Schlagwörter: Digitalisierung, Kriminologie, Open-Access

1. Introduction

Digitalisation has become so ubiquitous in recent years that it has permeated almost all aspects of our lives, including the field of criminology, as demonstrated by a recent symposium organised by the Kriminologische Gesellschaft (KrimG), the association of German, Austrian and Swiss criminologists. Held between 8 and 10 September 2022 in Hannover and titled "Crime and Digitalisation – Digitalisation and Crime", the conference was host to a series of presentations and in-depth discussions aiming to identify the ways in which the digital transformation is impacting criminal activity, and which best practices are evolving in response. This trend has also been underlined by the launch of *Kriminologie – Das Online-Journal | Criminology – The Online Journal* in September 2019, the first open access-only journal for criminology.

^{*} NB: with the exception of book reviews and conference reports, this is the only non-peer-reviewed article to be published in KrimOJ to date.

Abbreviated to *KrimOJ* and initiated in Germany, it is free of charge for both readers and authors in line with the diamond open access model. Previously, the Internet Journal of Criminology (IJC) was the only publication following a similar model, although its editors and authors are overwhelmingly from Commonwealth nations. Though it is important to state that while in recent years established print journals have increasingly made online access ahead of publication possible, in the field of criminology it is journals such as the IJC and KrimOJ that have ventured furthest into the digital realm. As three years have now passed since the first issue of KrimOJ was published, this seems an appropriate moment to reflect as well as document the opportunities and limitations of publishing an open access journal for criminology. To this end, we shall first examine how *KrimOJ* was created (2.) and present facts and figures summing up the journal's first three years (3.), before focusing on the unique challenges faced by open access journals (4.).

2. The creation of KrimOJ

2.1 Background and initial stages

There are two key events that gave rise to the journal. The first relates to the overall state of the discipline and stems from the longstanding discussion on the crisis facing criminology in the German-speaking world. It is against this backdrop that we particularly recall a memorandum published in 2012 – drafted during a conference at the Max-Plank Institute for Foreign and International Criminal Law involving over 60 researchers – that extensively examined the state of criminology in Germany (Albrecht et al., 2012). The paper's key observation is that German criminology – measured in terms of its contribution to international discussion in relevant journals and at criminology congresses – was falling ever further behind, and in some areas, significantly so. At that time, the memorandum also resonated with KrimOJ's two editors-inchief, although it did not immediately spur them into action.

This only changed some years later. The main impetus was provided by the first meeting of the Criminology in North Rhine-Westphalia network,² which was formed in Bochum in July 2017 and lists KrimOJ's editors-in-chief among its founding members. The network comprises academics active in criminological research, teaching, education and advanced training in the German state of North Rhine-Westphalia. At the time, the objective was to widen professional and public access to criminological knowledge through conferences, the continuous sharing of information and knowledge, the creation of research and teaching clusters, as well as developing opportunities for junior researchers and for further education. In the run-up to the inaugural meeting, Dr Bachmann came up with the – then still rather vague – idea of taking inspiration from the online law journals that existed at the time and creating a similar format for the field of criminology. The reasoning was that this would partly help address German criminology's lack of international visibility as highlighted by the "Freiburg Memorandum". After all, one of the advantages of open access journals is that they give readers across the globe easy access to their content.

As criminology is essentially an interdisciplinary field, it quickly became clear that without support from other specialist fields it would be almost impossible to put this plan into action. It was only when employees from the University of Cologne's Institute of Criminology travelled

² See https://www.kriminologie-nrw.de.

together by train to one of the early meetings of the Criminology in North Rhine-Westphalia network in Bochum that the idea of creating an online journal for criminology finally started to take shape, and it was at that moment that Dr Bögelein became a founding member and editor of KrimOJ. Together, the Institute's employees were able to successfully convince almost all members of the emerging Criminology in North Rhine-Westphalia network to join the KrimOJ editorial board. This proved to be an effective partnership from the start, as the network also shared the journal's goal of raising the profile of German criminology. The editorial board was subsequently expanded to include notable scholars from other German states and abroad, as well as from other specialist fields relevant to criminology, with the aim of cementing KrimOJ's international and interdisciplinary objectives. Other milestones during the journal's initial phase were the purchase of the "www.kriminologie.de" domain as well as the launch of a partnership with the University and City Library of Cologne (USB) to ensure the technical aspects of our project could be realised. At the time, the USB had already decided to increase its focus on e-publishing and was looking to expand its range of services, which again meant that both sides were able to benefit.

Following these and several other activities marking the groundwork, which cannot be listed individually here, a request for funding was submitted to the Scientific Library Services and Information Systems (LIS) programme offered by the German Research Foundation (DFG). By the end of this laborious process in January 2019, the journal had finally managed to secure over 340,000 euros worth of funding to cover staff and non-administrative costs.

2.2 From funding approval to initial publication

Confirmation of the DFG's financial support also marked the beginning of a new phase in the story of KrimOJ's creation: now all those carefully laid plans needed to be put into action. In the following, we present some examples that illustrate what this meant in practice.

First, the all-important homepage – vital for any open access journal – needed to be created. This required the necessary technical infrastructure, built around the Open Journal Systems (OJS) software used by KrimOJ. Moreover, the website content was written and – as KrimOJ is a bilingual journal – translated into English. The team also worked with a graphic designer to create the layout. Another key area was establishing standardised processes, e.g. for inhouse procedures, article submission and the double-blind peer review process. And, lastly, it was necessary to recruit the required staff for the collaboration between the journal's editing office and the USB. Alongside all of these and other basic preparations, our team also had to edit the first ever KrimOJ: a special issue on migration and crime that was published as planned at the end of September 2019.

In this context, we do not want to hide the fact that the widening of publication opportunities in the field of criminology afforded by KrimOJ was not greeted with enthusiasm in all quarters. The editorial staff were very well aware that the new journal temporarily caused some disquiet among a small number of established criminological journals, although this should hopefully now be resolved. It was never KrimOJ's intention to be unwelcome competition; rather, the aim was to enhance the field of criminology by offering a new type of journal that stood along-side existing publications and provided open access to articles.

3. Three years of KrimOJ: facts and figures

3.1 Articles

Between September 2019 and September 2022, a total of 13 issues (excluding the current issue) of KrimOJ were published. Overall, 90 articles – essays, reviews and conference reports – were presented. This includes five special issues covering topics such as migration and crime, social network analysis in criminology and imprisonment in Europe. The number of submitted manuscripts has grown continually, almost tripling over the course of the past three years. Roughly one third were rejected by the journal as the articles in question were either not recommended for publication by the reviewers or – more rarely – the editors-in-chief turned down the article before sending it for review. KrimOJ is a bilingual journal, publishing articles in both German and English, with the proportion of published articles written in the latter language reaching almost 40%. While there were only a few hundred monthly online visitors during the journal's initial phase, this figure is now over 30 times higher.

3.2 The double-blind peer review process

One part of the editorial process that takes up a significant amount of time is the organisation of the double-blind peer review process, i.e. the anonymous review of anonymised manuscripts by independent experts. On average, the editorial team has to send out eight requests to potential reviewers before receiving a positive response. Occasionally, it may be necessary to request a third review, for instance when reviewers hold strongly diverging views on a paper. To date, this has been required for 5% of all submissions.

Once the reviews have been received, they are forwarded to the relevant author by the editorial team. If an article has been accepted with revisions, all amendments made to the manuscript by the author(s) will be carefully checked by the KrimOJ team and, in certain circumstances, by the reviewers as well. The final manuscript is then formatted for publication before subsequently being published. All of this requires a tremendous amount of communication: for each published article, an average of 25 emails are sent, 16 between KrimOJ and the author, and nine between the journal and the reviewers.

3.3 Authors

The authors whose articles have been published in KrimOJ are predominantly European and the vast majority are researchers based in Germany, Switzerland and the Netherlands. In terms of contributions from other continents, articles from North America and Australia have occasionally featured. The manuscripts published by KrimOJ are almost entirely written by researchers at teaching and research institutions. There is a slightly higher percentage of predoctoral fellows (39.8%) compared to postdoctoral researchers (28.6%) and professors (26.3%). A small percentage of authors were students (5.3%).

3.4 Reviewers

In terms of their background and qualification levels, KrimOJ's reviewers are very similar to its authors: they are predominantly European and occasionally from North America and Australia. The journal's reviewers are also quite predominantly scholars from research and teaching institutions. The majority are professors (45.4%), followed by postdoctoral (38.4%) and predoctoral fellows (16.2%).

3.5 Readers

While we were able to draw on data from OJS as well as our own calculations to compile information about our articles, authors and reviewers, it was not possible to do this for our readership. We thus conducted an online survey between the end of March and the end of April 2022 in which we asked not only reviewers and authors, but, most importantly, readers for their opinion on KrimOJ. The aim of this survey was to evaluate the journal and to establish where there might be room for improvement or growth.

The survey was created with the help of LimeSurvey and respondents were actively recruited via several German-language newsletters, members of KrimOJ's editorial board and the KrimOJ twitter account. A link to the survey was also set up on the journal's homepage. Respondents could complete the survey in German or English. To prevent respondents from completing the survey multiple times, cookies were used (see Theobald, 2017, p. 330), as well as a captcha security check to block bots and other such applications. The survey was designed not to store IP addresses to avoid excluding respondents accessing the questionnaire via a VPN or similar network. This can happen when several people access a survey using the same VPN as it is falsely assumed that the person has already completed the survey (ibid., p. 331). All surveys were completed anonymously. At the end of March, another reminder inviting recipients to complete the survey was sent with the KrimOJ newsletter as well as on Twitter.

The survey comprised a total of 44 questions; however, filter questions were used to ensure that not every respondent was asked all of the questions unless they fell under all three respondent categories (i.e. reader, author and reviewer). Lastly, the survey asked questions concerning the respondents themselves. Various question types were selected, which meant that respondents could provide multiple answers to some questions. Other questions allowed respondents to give an open-ended answer, offer justification or input numbers. Sliders were also used. Respondents could decline to answer each question.

A total of 71 completed surveys were received: ten in English and 61 in German. There were 33 incomplete questionnaires. During the data cleaning stage, twelve of these surveys were excluded from analysis as respondents either quit the survey after the first question or simply clicked through, i.e. submitted the default answer option "do not know"/"prefer not to say" for each question, which needed to be changed by the respondents. A time stamp applied to each survey also made it possible to ascertain how long, on average, it had taken all participants to complete the survey and thus to identify the respondents who had simply clicked through (see Thielsch & Weltzin, 2012, p. 118; Theobald, 2017, p. 75). The remaining incomplete questionnaires were stopped at different points. Possible explanations for this could be the length of the questionnaire, respondents being unaware that they could return to complete the survey

or simply a loss of interest. There were thus 38 complete and 21 partially answered surveys available for analysis.

Of course, the data that we were ultimately able to analyse are not representative due to the low number of responses and thus few meaningful conclusions can be drawn. Nonetheless, we were able to gain some interesting insights from our analysis. For instance, the responses showed that almost all of the journal's readers are working in teaching and research institutions (84%) and only a small number (16%) are practitioners (i.e. active in social work, legal professions or the police). On average, they are aged between 30 and 39. Asked about their motivation for reading KrimOJ, respondents' most frequent response was "To find information concerning criminology" (28.5%; see Table 1). For approx. 21% of readers, the high-quality articles were the main motivating factor, while a considerable number (18.7%) read KrimOJ out of personal interest.

Moreover, 49.2% of readers stated that they thought the articles offered useful information for their work or research and that they have cited papers appearing in the journal (27.7%; see Table 2). However, just under one eighth of readers did not find the articles published in KrimOJ helpful for their work. This could be due to the previous finding that a considerable proportion of those reading KrimOJ do so purely for personal interest and thus do not usually find the journal directly useful for their work.

Table 1: Why do you read KrimOJ?

	N	Percent
To find information concerning criminology	35	28.5%
High quality articles	26	21.1%
Personal interest	23	18.7%
Good selection of topics	14	11.4%
Training and CPD	14	11.4%
Interdisciplinarity	8	6.5%
No response	3	2.4%
Total responses	123	100%
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Source: Bachmann, Bögelein & Weigand; multiple responses were possible, valid responses n = 52.

Table 2: Did you find articles published in KrimOJ helpful for your work?

	N	Percent
Yes, I have cited articles in my work	18	27.7%
Yes, I was able to find information for my work/research	32	49.2%
No	8	12.3%
No response	4	6.2%
Yes, I contacted the author of an article published in KrimOJ to discuss their research findings (professional exchange)	3	4.6%
Total responses	65	100%

Source: Bachmann, Bögelein & Weigand; multiple responses were possible, valid responses n = 48.

In total, 97% of respondents would recommend KrimOJ. Looking to the future, respondents expressed a desire to see an even greater number of international articles and papers from the field of police science. KrimOJ will endeavour to accommodate these wishes in future issues.

4. Challenges

During the first three years of KrimOJ, the editing team faced a number of challenges that should also be mentioned here in the hope that this may prove useful for those looking to launch similar projects. Sharing our experiences might also help to explain why certain processes are sometimes difficult to understand. This could particularly be the case for authors, reviewers and guest editors who work with KrimOJ and may, for instance, find themselves wondering why some processes take longer or are organised differently from others.

4.1 Safeguarding the journal's future

One of the challenges facing the team is ensuring the journal's continuation. The production of open access journals can be assumed to require almost exactly the same effort as print journals. Of course, a digital open access journal does not generate any printing costs, but all the remaining processes should be similar. One major difference, however, is that print journals have access to a regular source of income from reader subscriptions. Open access journals, on the other hand, are much harder to fund and securing long-term funding poses a serious challenge.

During the first three years, DFG funding made it possible for KrimOJ to instantly start operating as a diamond open access journal. This grant enabled the recruitment of one research assistant (26 hours per week) for 36 months as well as a student assistant (10 hours per week). As this support ends, this funding will disappear and with it these assistants. In this respect, KrimOJ is now facing a challenge that all open access journals must contend with: finding the means to secure its future.

Table 3 provides an overview of the ideas that have so far been considered and the avenues that KrimOJ has already concretely explored. Some of the options listed in Table 3 have – at least, for now – been ruled out. These are finding donors, opening the journal up to advertising and trying to raise the necessary funds through crowdfunding. Existing resources do not allow us to pursue these options in a manner that would ensure the necessary longevity for the journal. The same is true for the idea of setting up and running a non-profit association. Applying article processing charges (APCs) or restricting access to selected content (freemium model) have also been excluded as they do not align with the principle of diamond open access nor with our agreement with the DFG. Moreover, they would require considerable administrative efforts within the university to implement. We were also unable to identify a way to secure gender grants as such issues are not explicitly focused on by the journal.

One option that is currently being explored is a consortium of funders comprising university libraries and research institutions. KrimOJ would be open-minded about acquiring such funding within the context of institutional and state structures (universities, libraries, government funding, research and criminology organisations), but until now it has not been possible to obtain funding through any of these channels.

Just like fee-based journals, KrimOJ is fortunate enough to be able to draw on considerable volunteer support. In particular, this includes those involved in the review process and in the publication of our journal, work which is not remunerated. In the future, the journal may have to outsource more of its tasks to volunteers. This is also common practice among fee-based

Table 3: Review of options to secure long-term funding

	Advantages	Disadvantages	Conclusion
Donations	- a small community is willing to donate money	creating & managing donation accountuncertain amount and regularity of donations	 supplements existing funding model
Advertising on homepage	 adverts might be of interest to readers easy to implement depending on model straightforward source of income 	 non-targeted advertising time-consuming implementation depending on model uncertain amount and regularity of income 	- supplements existing funding model
Crowdfunding Financing generated via an online platform	 receiving financial contributions from the general public can generate higher levels of funding and also boost recognition 	 usually for start-ups, not existing projects uncertain that the necessary funding target would be reached 	- not sustainable
Sponsoring	 guaranteed income can search for sponsors within existing network long-term funding model 	 conditions may apply (special issues, organisation) limited funding period time-consuming to search for sponsors 	- criminology associations as potential sponsors?
Publication fees (APCs) Authors pay to publish their article	 guaranteed income long-term funding model if publication funds cover certain APCs, then no subsequent costs for authors 	 significant administrative burden need to check incoming payments excludes authors without access to funding limited acceptance of APCs among social sciences journals 	- does not (or does not fully) align with principle of open access
Freemium Certain content free, additional premium content available for a fee	 guaranteed source of income only certain content available for a fee (e.g. HTML articles available for free, charge for PDFs) 	 significant administrative burden (account management, payment monitoring, scale of prices) sufficient number of paying readers needed 	- does not align with the diamond open access model
Consortium funding Joint funding from univer- sity libraries & research in- stitutions	guaranteed source of incomelong-term funding model	 difficult to be accepted often just journal flipping (transitioning from a paywalled journal to an OA model) 	- frequent journal flipping
Funding: institutional and government fund- ing (university libraries, li- braries, specialist organisa- tions)	 guaranteed source of income long-term funding model if funding is provided for an indefinite period of time 	 funding only provided for a certain period significant administrative burden (submit proposals, proof of project funding, etc.) considerable competition 	- potential for EU funding
Volunteering	 no funding required long-term funding model administrative burden can be shared USB can provide technical support 	willingness to volunteervolunteers need to be taught how to use software (OJS)	rotating editors-in-chief?tasks shared between volunteersguest editors
Association	potential for government fundingmembership fees	- creating and managing association entails sig- nificant administrative burden, initial cost	- long-term model
Grants for the imple- mentation of gender equality obligations set out in law	- potential to secure funding for staff	- funding to ensure the equal representation of genders in areas where the majority of roles are held by men	- difficult to argue how KrimOJ encourages equal gender repre- sentation

journals, although there is one key difference: the publishers behind those journals benefit financially from the taxpayer-funded time and work of reviewers, authors as well as editors. Open access journals, on the other hand, generate not monetary but research value by granting the criminological community and interested members of the public free access to research findings.

4.2 Administrative burden of managing submissions

The difficult task of securing ongoing funding for the journal is further exacerbated by the (frequently significant) administrative burden involved in managing article submissions. No other area requires as many resources. This can be illustrated by taking a closer look at the relevant procedures in place at KrimOJ. As previously mentioned, on average our team sends 25 emails per published article; this comprises communication with the author (16 emails) and with reviewers (nine emails) who have agreed to take part in the journal's review process. Finding the necessary reviewers is also a cumbersome process. Even if a potential reviewer does not wish to review an article for the journal, up to three emails may be sent before we receive their negative reply (after initially contacting the potential candidate, we may have to send out one or two reminder emails). If the response is positive, this may then be followed by numerous messages as reviewers often contact us, for example with queries or extension requests. Once the team finally has both reviews, it is possible that they will differ considerably in their opinion, which, as already mentioned, may result in the need for a third review to ensure that the decision to publish or reject the manuscript is made on a sound basis. In such cases, the lengthy search process must begin anew.

Here it should once again be made absolutely clear that KrimOJ is reliant upon the invaluable contribution of researchers who offer their expertise for free. Without them, it would not be possible to ensure that articles published meet the peer review standard. Based on this experience, we have a favour to ask of any potential reviewer who is currently unable to submit a review for KrimOJ: before contacting you, a member of the team will have taken the time to identify you as a suitable expert. If you receive such a request and are unable to review the manuscript, it would be extremely helpful if you could also recommend two or three alternative reviewers. As any potential reviewer is invariably a renowned expert in a specific field, they can usually identify other suitable colleagues in little time. For our editorial team, this is a considerable help, saving them countless hours.

Once the authors have implemented any revisions suggested by the reviewers and our editorial team has accepted the updated manuscript for publication, the articles need to be formatted. Here the amount of time required depends on the length of the paper and the number of tables, etc. As our editorial office applies the two-person rule for quality assurance, one manuscript requires on average approx. ten hours of formatting, the majority of which is carried out by student assistants. Given that formatting is vital to the preparation of each new issue of KrimOJ, this leaves us feeling uneasy: the conditions should be better for such an important stage in the editing process. However, the financial situation will slightly improve for our student assistants from October 2022 when the University of Cologne will begin paying Germany's new increased minimum wage of €12 per hour. Here too we would like to make a request, this time to our authors: it would be much appreciated by our editorial team if you could

pay close attention to the guidelines for manuscripts³ and if requests for changes – especially after the final round of formatting has taken place – are kept to an absolute minimum.

4.3 Other potential areas of improvement

In addition to the challenges already mentioned, there are other areas where KrimOJ is looking to make improvements both now and in the future. In the short-term, this includes tasks such as evaluating and indexing the journal to boost its visibility as well as publicly demonstrating the journal's adherence to quality standards. KrimOJ is currently listed in the following databases: Deutsche Nationalbibliothek (German National Library, DNB), Directory of Open Access Journals (DOAJ), Elektronische Zeitschriftenbibliothek (Electronic Journals Library, EZB), Google Scholar, KrimDok (university library of the University of Tübingen's Institute of Criminology), Psyndex (via KrimLit, the criminological literature database of the German Centre for Criminology), Global Serials Directory, Ulrichsweb, ERIH PLUS and Scopus. We are currently working to add KrimOJ to further abstracting and indexing databases. Another positive development is that KrimOJ has been awarded the DOAJ Seal, which is only awarded to 10% of journals indexed in the DOAJ. To receive the seal, journals must demonstrate best practice in open access publishing.

On the basis of our experience with KrimOJ, we would generally state that the processing of articles from non-Anglophone or German-speaking countries involves a greater administrative burden. This is partly due to the fact that most of these manuscripts tackle little-researched issues, which makes it particularly challenging to find suitable reviewers. However, one of the key objectives of KrimOJ is to counter Euro- or Anglocentric biases in academia and thus continue to work especially hard to obtain and publish as many articles as possible from all corners of the globe. This is necessary not least so that KrimOJ can adequately live up to its objective of being a bilingual journal. In the first three years, an impressive proportion (approx. 40%) of published articles were in English. Our aim is to increase this further.

One of the other challenges that we have faced in the past three years is collaborations with guest editors for the creation of special issues. Here we have been able to improve the way in which we work with guest editors by setting out more transparently who is responsible for which tasks. Lastly, we plan to focus even more on the issue of social media in the years to come. This is an obvious step for an online journal. However, KrimOJ's limited personnel, who are already stretched to capacity by existing editorial and communication responsibilities, make this an, at present, almost insurmountable task.

4.4 Conclusion

In spite of all the challenges and the initial disquiet among other criminological journals, overall, the KrimOJ team would rate the journal's journey so far as positive. What began as a vague idea with a previously unused domain "www.kriminologie.de" has grown into a respected outlet for criminological articles from around the globe. Some of the papers published with the

³ See https://www.kriminologie.de/index.php/krimoj/libraryFiles/downloadPublic/2

journal have also been part of cumulative PhD theses, marking a milestone in academic achievement for their authors.

As a new publication forum, KrimOJ obviously remains unknown in some areas and is yet to become widely established. Changing this will be a task for the years ahead. At the same time, the significant administrative burden and workload will become increasingly challenging to address given the uncertainty hanging over the journal's long-term financial future. But one thing is certain: KrimOJ is here to stay. The journal also aims to continue to play its part in developing the digitalisation of criminology by making researchers' findings available to everyone so that they can be accessed free of charge anytime, anywhere. If you are interested in becoming involved in our project – be it as an author or a reviewer, or if you have any ideas or wish to contribute in some other way – we would be delighted to have your support.

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