

HIGH INTEGRATION OF RESEARCH MONOGRAPHS IN THE EUROPEAN OPEN SCIENCE INFRASTRUCTURE

Deliverable 5.3: Report on post-publication open peer review experiment

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A post-publication open peer review experiment with annotations

Claire Dandieu

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Introduction

This report presents the results of the post-publication open peer review experiment that took place from October 2018 to June 2019. It was conducted as part of the European HIRMEOS project¹, which included the implementation of an annotation service on the OpenEdition Books platform. To support the implementation of this tool on the platform, an experimental phase was set up. The purpose of this experiment was to explore, through annotation, new open peer review practices, post-publication, on monographs in the humanities and social sciences distributed in open access.

The results of the experiment are presented in this report following a support work carried out by an assistant editor in charge of the project. By following up with the various actors involved in the project, she was able to conduct a participatory observation. The following analysis is partly the result of this pragmatic experience, conducted on a panel of thirteen books.

To introduce this report, we will first carry out a brief bibliographic inventory to facilitate the understanding of the framework within which this project is carried out. We will then present the project itself and describe the main steps. Finally, we will present the results obtained and attempt to draw conclusions and recommendations.

Peer review

The scientific literature published in recent years has given us an insight into the current issues surrounding peer review activity and the reasons why initiatives titled "open peer review" are developing. Indeed, work has been done on the status of the peer review process, retracing its history and challenges (Ross-Hellauer, 2017; Tenant et al., 2017). We will therefore present here the different characteristics that seemed to constitute this practice.

In a post written on the open peer review experiment that was conducted in 2016 by OpenEdition for the VertigO journal, Julien Bordier, assistant editor, refers to the definition of peer review from the CNRS Institute for Scientific and Technical Information's website:²

"Peer review refers to the validation of an article by a peer review committee composed of scientists who are experts in the field of expertise of the content of the article. This process is intended to ensure scientific quality."³

¹ <https://www.hirmeos.eu/>

² <https://lab.hypotheses.org/1453>

³ <http://openaccess.inist.fr/?+-Evaluation-par-les-pairs-+>



This definition there refers to two elements: the function and the actors. Thus, the function of peer review is to "ensure scientific quality" of an article, i.e. to give it a sufficient "scientific" quality to be published. Peer review is therefore a necessary step in the scientific publication process. Secondly, the actors in this process, as mentioned in the definition above and referred to as "peers", are expert researchers in the same field of study and may or may not be grouped into "reading committees". Thus, being an expert in the field is a necessary condition for being considered as a "legitimate proofreader", which implies a logic of selection between the proofreaders. The reviewers selected for this process generally return their review reports to the publisher, who then informs the author of the resulting conclusions.

Peer review is therefore a process for deciding whether or not a scientific publication submission is "valid", whether or not it is publishable and under which modifications. But this stage also represents an opportunity for an exchange between several editorial actors with distinct roles and positions: the publisher, who takes charge of the management of the process and decides on the publication, the author who submits the work, and the reviewers who give their opinions and suggest ways of improvement. Although mediated by the publisher, this process leads to a conversation between researchers, some calling on each other's expertise to reread their texts, in the tradition of epistolary conversations between scholars. Thus, peer enrichment brings a fundamentally collaborative character to the publication process.

Peer review, although it seems to be firmly entrenched in the editorial process as it is an almost systematic stage of publication (peer review certification is a form of quality assurance for the publisher), is in fact a practice that has recently emerged. It was from the 19th century that this practice began to take shape, in response to the need to verify the scientific integrity of publications (Tennant et al., 2017). Nevertheless, it was only from the middle of the 20th century that it became more systematic and became an essential process. At that time, it was part of a movement to professionalize and strengthen the legitimacy of publishers (Tennant et al., 2017).

Open peer review

Gradually, there is a desire to open up peer review processes, to make it more transparent. While this intention existed as early as the 1960s, especially in anthropology (Pontille, Torny, 2015), it is particularly in the digital age that a number of dysfunctions in the peer review system was uncovered, one reason being that electronic tools make the problems of fraud related to the opacity of the system more visible. Added to this reason, this same opacity is accused of encouraging conflicts of interest.

In the face of these multiple criticisms, initiatives that fall within the scope of what is known as "open peer review" are emerging. They began to be discussed from the 1990s onwards,



particularly in the field of Science Technology Engineering and Mathematics (Bordier, 2015). Experiments and studies multiplied within journals and institutions from the 1990s to the 2000s.

This openness is therefore proposed as a response to an evaluation process that is considered deficient. As with the "classical" peer review, open peer review actually comprises a diversity of practices. In this sense, it is difficult to define it unambiguously. Tony Ross-Hellauer studied this concept and, by investigating the existing scientific literature, found no less than 120 different definitions of open peer review (Ross-Hellauer, 2017). Ross-Hellauer then identified seven core particularities, used to speak of open peer review: open identities, open reports, open participation, open interaction, open pre-review manuscripts, open final-version commenting, and open platforms. The many projects that have emerged in recent years present, to varying degrees, all or some of the above-mentioned elements.

In general, these criticisms come at a time when the publishing system is being challenged and questioned, because the web is developing new instances of publication, new ways of publishing, new ways of editing (Vitali-Rosati, 2016), and new actors are arriving. These new actors and configurations are causing upheavals in scientific validation systems.

In this context, we see the emergence of logics of decompartmentalization and decoupling of publication functions. Reordering is therefore possible, such as with the creation of overlay journals (like Episciences⁴), or the integration of peer review functionalities within open archives (as for example the Open Peer Review Module⁵ experiment (Perakakis et al., 2017)), or the creation of platforms dedicated to post-publication peer review (PeerCommunity In,⁶ PubPeer,⁷ Publons,⁸ Peeriodicals,⁹ PREreview,¹⁰ Prelights,¹¹ SciPost,¹² etc.) and scientific publishers are also testing open peer review, publishing reviewer reports (beginning with BioMed Central¹³ since 2001). Most recently (March 2019), the ReimagineReview initiative¹⁴ was created to present the different scientific initiatives around peer review. This directory provides an understanding of the diversity of possible

⁴ <https://www.episciences.org/>

⁵ <http://www.openscholar.org.uk/open-peer-review-module-for-repositories/>

⁶ <https://peercommunityin.org/>

⁷ <https://pubpeer.com/>

⁸ <https://publons.com/about/home/>

⁹ <https://peeriodicals.com/>

¹⁰ <https://www.prereview.org/>

¹¹ <https://prelights.biologists.com/>

¹² <https://scipost.org/>

¹³ <https://www.biomedcentral.com/>

¹⁴ <https://reimaginereview.asapbio.org/>



configurations around the exploration of new peer review processes. It is in this context that annotation tools such as Hypothes.is exist.

Annotation

Annotation is a scriptural practice whose origins may go back as far as reading and writing practices can be found.

Just as Christian Jacob pointed out in January 2019 to introduce a day-long workshop on open annotations,¹⁵ annotation can first of all be considered as a semiotic artifact, since it consists in the association of a meaning with a text, a word, or another object of knowledge. Thus, the inscription of the gaze carried by a human being, the inscription of their reaction in relation to the production of another human being (different according to the medium to which one refers) encompasses a set of different realities, gathered behind this meta dimension, in relation to a thought that precedes them.

There are therefore various expressions and definitions of what is meant by annotations and marginalias (Jahjah, 2014). Applied to the written medium, annotation can be considered as a practice of personal appropriation of the text by the reader, who then becomes a reader-writer. Annotation can serve personal purposes as an aid to reading, memorizing and understanding texts. Moreover, in his recent post "Annotation as conversation", Marc Jahjah traces part of the history and issues of annotation as a discussion and questions this possible use, going back to medieval and Renaissance times to explain the development of "personal" uses of annotation,¹⁶ conditions for the introduction of the dialogue between annotators.

It should also be noted that if it is primarily a spatial inscription of the reader's trace in the text, it is also a form of inscription over time and one of the interests may also lie in the study of variations in thinking through the perception of a text over time.

Depending on the devices, purposes and communities involved, it would be exciting to map the annotating process in order to understand its complexity. This ambitious project is beyond the scope of this experiment, but we recommend that readers of this report who would like to expand their knowledge on this subject should take an interest in the rich

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<https://www.hirmeos.eu/2018/11/05/hirmeos-workshops-on-annotation-and-metrics-for-oa-monographs-10-11jan-2019-paris/>

16

<http://www.marcjahjah.net/3338-lannotation-comme-conversation-1-2-des-humanistes-aux-acteurs-du-web>



scientific literature on the subject, starting with the works by Marc Jahjah¹⁷ and Christian Jacob¹⁸.

Lore recently, with the possibilities afforded by the Web, the social dimensions of annotation find opportunities to develop and many collaborative annotation projects are emerging, such as literary works such as the Frankenbook project¹⁹ (collaborative reading of the *Frankenstein* classic by Mary Shelley) or the Pynchon wiki project²⁰ (creation of a critical reading wiki on Pynchon's work).

The academic world is also taking up annotation, using modern devices in order to make an audience (researchers or broader) work together around scholarly writings. The annotation can then be used in projects of enrichment by indexing corpora (such as the current project Foucault Fiches de Lectures)²¹ but also projects of digital marginalias, invested to share and discuss their notes : Debate in the DH²², The Marginal Syllabus²³ and the Roger T. Pédaque project²⁴ to cite but a few.

Thus, annotation, through note sharing and conversation around personal thoughts, becomes a potential tool for peer review. To conclude this section and illustrate this dynamic, here are some examples of peer review projects using the Hypothes.is annotation tool.²⁵

- Bio-Med Central²⁶ : are launching a new peer review program, In Review, where authors' submissions can be used to gather community feedback, via annotations, before the peer review process is validated.
- Murmurations²⁷ : this journal uses annotations to organize open peer review, using different groups of annotations depending on the type (group for publishers, for reviewers, for authors).
- American Geophysical Union²⁸ : As in the previous example, the tool is used for peer review prior to publication. Annotations are sorted by user type (reviewer, publisher, author) and include tags to establish a typology of importance of the annotations (Minor, Major, etc). Depending on the type of user there are different types of rights:

¹⁷ By reading his thesis and his blog : <http://www.marcjahjah.net/>

¹⁸ By reading his works blog: <https://lieuxdesavoir.hypotheses.org/author/lieuxdesavoir>

¹⁹ <https://www.frankenbook.org/>

²⁰ <https://www.pynchonwiki.com/>

²¹ <https://ffl.hypotheses.org/presentation-du-projet>

²² <http://dhdebates.gc.cuny.edu/about>

²³ <http://marginalsyllab.us/>

²⁴ <http://base.d-p-h.info/fr/fiches/dph/fiche-dph-8220.html>

²⁵ Tool chosen for this experiment

²⁶ <https://www.biomedcentral.com/>

²⁷ <http://murmurations-journal.org/index.php/murmurations/>

²⁸ <https://sites.agu.org/>



reviewers only see their own annotations, publishers see them all, authors only see non-confidential annotations.

- Sens Public²⁹ : finally the web journal Sens Public uses Hypothes.is as a tool in its editorial chain, based on the Stylo editor. Part of the process takes place in private spaces, allowing publishers, proofreaders and authors to exchange directly. It is also possible on some publications to use post-publication public annotations to allow the public to exchange around the texts

HIRMEOS

HIRMEOS (High Integration of Research Monographs in the European Open Science infrastructure) is a European project that emanates from the OPERAS³⁰ infrastructure project. Its objective is to deploy, on five European platforms,³¹ new services based on monographs in the humanities and social sciences published in open access. We thus incorporated into the relevant platforms: identification standards (ORCID, DOI, Funder Registry),³² a peer review certification service (DOAB),³³ semi-automatic indexing functions (NERD),³⁴ an alternative metrics service and an annotation service. Each service then represented a work package of the project. To support the implementation of this tool on the OpenEdition platform, there was an experimental phase during which annotations were to be activated on a panel of books selected in agreement with the publishers. A publishing secretariat was then planned, with the objective of involving reviewers and potential authors in the establishment of a scientific conversation, supported by a publishing secretariat.

Presentation of the experiment

Within the HIRMEOS project, the WP dedicated to online annotation provides for the activation of Hypothes.is on the five platforms participating in the project. Ubiquity Press, EKT, Open, Göttingen University Press and OpenEdition have therefore simultaneously integrated this service into their platforms. The implementation of online annotations on the OpenEdition Books platform differs from that of its partners, as it has the additional objective of conducting an open peer review experiment post-publication. In this first part, we will see what was the scope and the objectives of the experiment that took place from October 2018

²⁹ <http://sens-public.org/>

³⁰ <https://operas.hypotheses.org/>

³¹ OpenEdition Books, Ubiquity Press, The OAPEN Library, EKT e-publishing, Göttingen University Press

³² <https://orcid.org/> , <https://www.doi.org/> , <https://www.crossref.org/services/funder-registry/>

³³ <https://www.doabooks.org/>

³⁴ <http://nerd.eurecom.fr/>



to June 2019. We will then present actors of the experimentation and we will finally look at the experimentation costs.

Experimenting post-publication open peer review

The scope of this experiment was to explore one of the possible use of the online annotations tool: post-publication open peer review. To define the scope of our experiment, we will first explain the expression by reviewing each of its concepts.

Scope definition

Post-publication

First of all, the monographs published on OpenEdition Books correspond to versions validated by the publishers. Therefore, in this case, the expression “post-publication” means two different things: the books are available online, but they have also already undergone a peer review process.

Peer review

As in the common sense, refers to the activity of editorial certification and validation that takes place during the publishing process. In our case, this activity is to be understood in its broadest sense, and adapted to the context and scope of the experimentation. Indeed, as we said above, the publications selected for this experimentation are monographs already published and peer-reviewed. The peer review that was carried out on these texts, prior to their publication, was therefore editorial in nature. The works concerned are certified insofar as they have reached a required level of scientific quality, since they have already passed the validation and scientific editing stage inherent in the publishing process. Re-examining these works with a similar aim is therefore outside the scope of the experimentation.

However, although the focus is different, the experience offered to the participants through the experimentation remains comparable. The objective is to ask potential readers of selected books to read them with a critical eye and to react to the ideas that compose the texts by publishing annotations. The purpose is no longer to make an overall judgment to recommend and justify the publication (or not) of a work, but to make a judgment on very specific elements of the text by sharing scholarly reading. In both cases, it is therefore a critical reading of a text that generates a feedback from researcher or expert who reads.

In the “review” concept, it is therefore the critical aspect that we have selected in order to offer a “lettrure” experience (Gallezot, 2016)³⁵, a read/write experience to our participants. It corresponds here to an activity of discussion between experts. The aim is for participants to

³⁵ https://archivesic.ccsd.cnrs.fr/sic_01438208/document



propose annotations corresponding to personal and constructive evaluations attached to specific passages of the text.

Peers

The audience for this experimentation corresponds to the audience of potential readers of the selected works. They are therefore primarily peers, i.e. members of the same research communities as the authors of the monographs. However, since the annotation tool was open to anyone wishing to use it, it was not necessary to have a special status to participate in this experimentation. Thus, by “peers” we will also refer to a wider audience of readers, including people interested in a scientific subject and who will take a critical look at it. In other words, it is more the way of reading that allows the reader to participate in the community of participants, the community of “peers”, than his or her status.

Open peer review

It is possible to state that this peer review is open at three levels. First of all, because as we have just explained, this is an experimentation open to any participant. Secondly, because the annotations are made public, which means that everyone can consult them. Finally, because these annotations are made on works that are themselves distributed in open access (partially or in all their versions), since the condition for everyone to create and see the annotations is that they can access the HTML version of the selected works.

To sum up, among the seven main components of the open peer review identified by Ross-Hellauer, here are the ones in which the experimentation was carried out:

- Open participation: while adopting on the one hand the traditional search for reviewers, we have also given the opportunity to anyone to participate in this experimentation;
- Open identities: although not mandatory, our guidelines encouraged participants to use their real identity;
- Open final-version commenting: the annotated object corresponded indeed to book final versions validated by the publishers, published on OpenEdition Books;
- Open interaction: between authors and annotators but also between annotators themselves;
- Open platforms: the review tool chosen for this experiment was an external service, developed by our partner Hypothesis.



Objectives

Several objectives define and delimit this experimentation. Before listing and briefly describing them, it is important to stress the experimental nature of this open annotation project. It is a time-bound experiment that was conducted from February to June 2019, i.e. over a period of five months. This makes it a short experimentation. During these few months, our aim was to orient the uses of potential annotators towards "open peer review post-publication". Our main objective was therefore to *guide* them, not to *force* them. As open annotation has not been widely used so far on OpenEdition platforms (only once, with the Vertigo experimentation³⁶), we also wanted to leave enough room for annotators to take advantage of the tool as they wished. Such "unexpected" practices were therefore in a sense desired. In effect, if orienting the uses allows us to examine the elements that allow the success or otherwise of this experiment, ideally, the scientific communities should take advantage of the tool themselves to develop their own practices. With these aspects in mind, we were particularly interested in several areas of experimentation.

- Enriching the published texts

First, annotating a text allows you to add elements (texts, media, hyperlinks, references). Annotation is a contribution, an added value to a publication produced by a reader. In this sense, one of the challenges was to motivate readers to produce annotations that would provide enrichments for other readers and authors. To do this, we expected readers to argue and reference their annotations, to cross-reference annotated publications with other scientific publications, in order to foster the development of new avenues of research and reflection. One of the interests of the experimentation was therefore to create a space for academic and collective work around a text already published.

- Stimulating the academic conversation

The readers participating in the experimentation annotated within the same annotation space (group). It was completely open (both to see the annotations and to create new ones). The tool allowed discussion through two mechanisms: either by sending annotations to the author or by responding to annotations from other readers. Indeed, the Hypothes.is feature allows users to reply to each other ("reply" functionality) and the tool can easily take the form of an online discussion forum. The idea, through this device, was to transpose into a digital space, in the margin of the text, the conversations that can be held during more traditional events such as research seminars and colloquia. Enabling readers to

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https://hal.archives-ouvertes.fr/hal-01283582/document?fbclid=IwAR3zoCChWI-C5Ys28VsbUP4-b5DMiTwhKjcVeGiqp_B9UW7IUR-_S354hjY



communicate directly and openly was a key challenge for us. In this way, we wanted to show and observe a dimension of research "in the process of being done".

- Exploring the OPR process

The third fundamental objective, given in the title of the experimentation, was to explore open peer review processes in post-publication. Peer review being an activity that is usually carried out without disclosure (the process is only visible to a small group), we seek here to examine the potential interests of making the results of critical readings public. Moreover, since peer review is not done in this case for publication purposes and the readings do not lead to overall review reports (as could be the case with reading reports), the assessment is very different from what researchers are used to. In our case, these are very targeted remarks and criticisms, which are not intended to make an overall assessment of the publication but rather to react to specific ideas. Although the objective is therefore different from the traditional peer review, it is the process of criticizing and making a personal judgment on the text of a peer that we wish to address, and to compare with the more traditional peer review practices.

Actors of the experimentation

Several actors took part in this experiment. Their role and involvement were decisive in its achievement. In this section, we present them briefly.

OpenEdition Books: a multi-publisher platform

OpenEdition Books³⁷ is a platform for publishing monographs in the Social Sciences and Humanities developed and maintained by OpenEdition. OpenEdition offers to its book publishers a personalized publishing space on its platform. Becoming a publisher on the OpenEdition Books platform requires the submission of an application. Currently, more than 7000 books are online, distributed by more than 90 publishers.

The books published on the platform correspond to the "publisher" versions, i.e. they have undergone a peer reviewing process, have been proofread, corrected and edited by their respective publishers. They are available on OpenEdition Books in the following formats: HTML, ePub, PDF.

Several distribution options coexist on the platform. The exclusive access option (none of the formats are available in open access), the freemium open access option (only the HTML format is available in open access) and the full open access option (all formats are available in open access). The majority of OpenEdition Books books have at least one open access format for their work, whether they are fully or partially open access with the freemium

³⁷ <http://books.openedition.org/>



model. For non-accessible formats, subscriptions are offered to libraries that provide access to content to their users and publications are sold by unit to individuals who so wish.

As an e-publishing infrastructure, OpenEdition therefore shares the editorial responsibility for the publications of its platform with the publishers who are members of its platform and who manage their publications independently and autonomously.

The relationship between OpenEdition and its publishers is one of service and trust. In fact, the decision to activate the Hypothes.is annotation tool rests with the publishers who have the liberty to decide whether or not to offer this service to their communities of authors and readers. Thus, the activation of the Hypothes.is tool as part of HIRMEOS is offered, not imposed, to our publishers as an option, a new service. In this context, the proposal to publishers to activate Hypothes.is on OpenEdition Books was accompanied by an experimental phase (the HIRMEOS experimentation) with multiple objectives.

Hypothesis

Hypothesis³⁸ is an American not-for-profit organization that develops the Hypothes.is annotation tool, chosen for this experimentation. It is usually not necessary to partner with this organization to integrate Hypothes.is into a platform, as the tool is open source. Its activation on OpenEdition Books consisted only of integrating a line of JavaScript code. Nevertheless, for this experimental phase, we have entered into a partnership in order to benefit from personalized functionalities: the publisher groups. For a few months, Hypothes.is worked to offer OpenEdition specific annotation groups for each publisher, allowing them to benefit from moderation rights and annotation spaces customized to their image (name and logo visible). In addition, developments have been made to ensure that Hypothes.is adapts to the technical specificities of the OpenEdition Books platform. As a partner, Hypothesis also played a communication role, participating in the dissemination of this experiment.

Publishers

It is primarily to publishers that the annotation experimentation was proposed. As a platform, OpenEdition Books wants to give publishers the freedom to choose whether or not to enable this feature for their content. In addition, participating in the experimentation required their involvement. We wanted to involve them in the process of delimiting the experimental project, by giving them the possibility to actively participate in the entire process:

- Possibility to customize/validate the charters of good conduct;
- Discussion on the type of works to be tested;

³⁸ <https://hypothes.is/about>



- Ability to moderate annotations;
- Communication with their communities on the experimentation;
- Suggestion of relevant contributors.

In addition to the fact that the activation of annotations did require their agreement, we also wanted to allow them to engage in this experimentation, by considering annotations as a value-added service that they could then use independently for their publications.

Here are the publishers who have agreed to participate:

- ENS Editions

ENS Editions³⁹ is an academic publishing house that publishes 13 book collections and 12 journals resulting from the scientific activity of the research centres of the Ecole Nationale Supérieure. It publishes 178 books on OpenEdition Books, divided into 14 collections.

- Casa de Velazquez

Casa de Velázquez⁴⁰ is part of the French Schools Abroad. It is located in Spain, Madrid and dedicated to creative and research activities in the Social Sciences and Humanities and focused on the Iberian Peninsula, the Maghreb and the Atlantic area. It publishes 79 books on OpenEdition Books divided into 2 collections.

- Presses de l'Enssib

The Presses de l'Enssib⁴¹ is the publishing house resulting from the research activity of ENSSIB, Ecole Nationale Supérieure des Sciences de l'Information et des Bibliothèques. It publishes 66 books on OpenEdition Books divided into 4 collections.

- OpenEdition Press

OpenEdition Press⁴² is the publisher of OpenEdition monographs, specializing in the following topics: Digital and societies, Social Sciences and Humanities in the age of globalization, Sciences and societies, Digital Humanities, Methods of the Humanities and Social Sciences It publishes 23 books in 5 collections.

³⁹ <https://books.openedition.org/enseditions/>

⁴⁰ <https://books.openedition.org/cvz/>

⁴¹ <https://books.openedition.org/pressesenssib/>

⁴² <https://books.openedition.org/oep/>



Authors

As with the publishers, we wanted to make sure that the authors agreed to open their work for experimentation. In addition, we consider online annotation as an opportunity for authors to communicate and receive feedback from their readers. In this sense, it seemed essential to us to offer them the opportunity to get involved by responding to the annotations of their peers, by providing details and updates of their research themselves. They were also asked to suggest reviewers and create an introductory annotation on their books. Finally, they could, if they so wished, participate in the communication of the project by relaying the information in their networks.

Annotators (contributors)

Whether they are directly invited to participate or do so spontaneously, they provide constructive criticism of the documents, can react to annotations already present, and enrich the documents with additional relevant information.

Community manager

As part of the HIRMEOS project, a full-time publishing secretary was in charge, from October 2018 to June 2019, of supervising the smooth running of the experiment. More specifically, its role was to find participants, accompany them and relay between the different actors, communicate on the experimentation and write this report presenting the results.

Experimentation costs

General set-up

In order to benefit from customized features, we have set up a partnership⁴³ with Hypothesis. In this context, groups of annotations specific to each publisher have been implemented. The publisher group functionality provided by Hypothes.is service was a paid service. Although the cost is not high, it differs according to the amount of documents involved and the partnership contract is renewable each year. To get a price estimate it is therefore necessary to contact Hypothesis.

Work time assessment

In order to conclude this first part and introduce the next one, which will present the different stages of the experimentation, here is a schematic schedule summarizing the succession in

⁴³ <https://leo.hypotheses.org/15095>



time of each stage. This representation will give also the possibility to provide a duration estimate of the work achieved by the community manager for a single book.

<i>October</i>	Stage 1. Project analysis and agenda, test of the annotation tool	
	Stage 2. Set-up of partnership with Hypothes.is	
<i>November</i>	Stage 3. Search for publishers, selection of books with the authors' agreement	
<i>December</i>	Stage 4. Documentation draft	Managing publisher groups implementation
<i>January</i>		
<i>February</i>	Stage 5. Launch of the experimentation : call for participation	
<i>March</i>	Stage 6. Search for annotators and follow-up of annotations	
<i>April</i>		
<i>May</i>	Stage 7. Feedback / Search for annotators and follow-up of annotations	
<i>June</i>	Stage 8. Report on the experimentation	

Tab.1 : Experimentation schedule

It should be pointed out that, despite the relatively segmented presentation in this table, several tasks could sometimes take place in parallel. Nevertheless, from this schedule, we will propose the following estimate: to begin with, we will not count the first months before the launch of the experiment since they were devoted to its preparation. Between February and June, we spent about three months doing outreach tasks, follow-up, email and telephone exchanges, project presentation, assistance in using the tool and follow-up on annotations. This represents about 45 days worked with a volume of about 8 hours of work per day, or 360 hours of work. Considering that we had 13 books to follow, this represents an average of just over 27 hours of work per book, or just over three days of work.

Experimental protocol: description and feedback on the steps of the experiment

Collaborating with publishers

Finding interested publishers

One of the first steps, conducted from November to December 2018, was to find publishers who would agree to enable Hypothes.is on some of their publications. For this purpose, the experimental project was presented to all OpenEdition Books publishers on two internal mailing lists. As these first contact emails did not elicit immediate feedback, follow-up personal messages were sent to some publishers. We had set the number of books to be selected at about ten, counting 3 books per participant. Once this number was reached, we stopped approaching new publishers. We were only able to exchange with fourteen of them. Here is some of the feedback we gathered from these exchanges:

- Two of them were interested in activating the basic annotation feature anyway. One of them soon offered some titles for the experiment and eventually participated.
- Two publishers, who seemed strongly interested, were met in person. We went to their offices and exchanged with several members of the team. This was an opportunity to discuss at length the potential interests of the approach and the possible fears of publishers. These two publishers also agreed to participate.
- The opportunity to interact directly with the publishers also had the effect of arousing interest in this experiment in a new partner of the platform, met during a workshop on the practice of annotation. Unfortunately, the publisher's publication schedule did not agree with the schedule of the experiment.
- In those exchanges, be they face to face or online, the issue of the workload was raised. It was the acknowledged cause of refusal for three publishers, and was a recurring point in discussing with others. The fact that someone was dedicated to monitoring the experiment may have reassured some of them in their decision to participate. On the other hand, for two publishers, thinking and discussing the possibility of enabling this feature on their content was already too time-consuming.
- As with workload, another issue that seemed important to publishers was moderation. Although Hypothes.is does not allow, in its basic version, to have moderation rights, we knew that there was still this possibility thanks to the functionality of publisher groups. The publishers then showed an interest in this



possibility. However, due to the workload involved, this task has been delegated to the editorial assistant accompanying the project.

Overall, the lack of feedback from publishers, as well as the issues discussed in the interviews, indicated a certain reluctance on the part of the platform's publishers. However, the three publishers (ENS Editions, Les Presses de l'Enssib and Casa de Velázquez) who finally agreed to participate did so with enthusiasm and interest and left a great deal of freedom to the project members in managing the experiment.

Selecting books

The publishers themselves chose monographs for this experiment, suggesting titles and proposing them to the editorial assistant. The only condition was that the authors agreed. The publishers provided the contacts of the authors of the proposed books for us to consult them. The strategies of selection were different for each publisher.

Two of them made the choice to select works from different collections (Presses de l'Enssib : collections *Papiers*, *Boîte à Outils* and *La Numérique* and ENS Editions : collections *Entretiens Ferdinand Buisson*, *Gouvernements en question(s)* and *Langages*). In addition, the author's supposed interest in the open annotation process and their responsiveness were most of the time taken into account in the editors' suggestions. Finally, the subject of the book and its potential for generating controversy and discussions was sometimes a determining factor in this choice.

There were really no pre-established criteria to be met in order to be considered as a potentially interesting work to annotate. The choice remained in the hands of the publishers, allowing them to freely browse their collections.

Once the first lists of works had been suggested by the publishers, the authors were presented the experiment. 18 potential authors were contacted. 13 of them accepted.

With those who refused, the question of investment in terms of time and availability was once again an issue raised. Other reasons given were: the experiment did not fit in with the editorial project, the book was too old and its author no longer mastered the subjects covered, and the innovative nature of this experiment carried a potential risk on the careers of young researchers/authors.

On the other hand, the vast majority of authors who accepted did so very quickly and with great enthusiasm (10/13). The remaining three people were cautious about the investment in time that this could represent. In addition to this argument, various reasons were given:

- the first person immediately accepted, but was very dubious of the potential relevance of annotation;



- the second was not sure about the public dimension of the experience;
- the third person hesitated because their book would have had to become open access, thus the concern about consequences in terms of revenue.

Indeed, three books of the experiment were initially not open access. It was then necessary to make them freemium, an action that is otherwise irreversible. While it took time to be pondered by one of the authors, the other two did not consider this opening as a barrier and quickly agreed to participate under these conditions.

A particular case seems of note, that of collective works. Here, there was two multi-author books. In this configuration, the decision to participate was up to the editors of the publications, but we nevertheless took the trouble to contact all the authors concerned to inform them that an experiment was going to be carried out on the book to which they had collaborated, and that we had the possibility of deactivating the annotations on their chapter in the event that they did not wish to participate. Only one person opposed the activation of the annotations on their chapter.

Selected books



Fig.1: Books of the experiment

Title	Author	Date	Disciplines	Publisher
<i>Ambassadeur de deux couronnes. Amelot et les Bourbons entre commerce et diplomatie</i> https://books.openedition.org/cvz/5159	Guillaume Hanotin	2018	Modern History	Casa de Velázquez
<i>Le mythe de la transition pacifique. Violence et politique en Espagne</i> https://books.openedition.org/cvz/734	Sophie Baby	2013	Contemporary History	Casa de Velázquez
<i>Nec plus ultra. L'Extrême Occident méditerranéen dans l'espace politique romain (218 av. J.-C. – 305 apr. J.-C.)</i> https://books.openedition.org/cvz/4355	Gwladys Bernard	2018	Roman History	Casa de Velázquez
<i>La documentation dans le numérique</i> https://books.openedition.org/pressesenssib/2373	Olivier Le Deuff	2014	Information and communication sciences	Presses de l'enssib
<i>Communiquer ! Les bibliothécaires, les décideurs et les journalistes</i> https://books.openedition.org/pressesenssib/357	Jean-Philippe Accart (dir.)	2010	Information and library sciences	Presses de l'enssib
<i>L'offre de livres numériques à destination des bibliothèques de lecture publique : un regard international</i> https://books.openedition.org/pressesenssib/1567	Hans Dillaerts and Benoît Epron (dir.)	2016	Information and library sciences	Presses de l'enssib
<i>À quoi sert la comparaison internationale en éducation ?</i> https://books.openedition.org/enseditions/7547	Hélène Buisson-Fenet and Olivier Rey (dir.)	2017	Learning sciences	ENS Editions
<i>Faire participer les habitants ? Citoyenneté et pouvoir d'agir dans les quartiers populaires</i> https://books.openedition.org/enseditions/5236	Marion Carrel	2013	Sociology	ENS Editions
<i>Dans la langue de l'autre, Se construire en couple mixte plurilingue</i> https://books.openedition.org/enseditions/8459	Anne-Christel Zeiter	2018	Sociolinguistics	ENS Editions
<i>Qu'est-ce qu'une archive de chercheur ?</i> https://books.openedition.org/oep/438	Jean-François Bert	2014	Information and communication sciences, History	OpenEdition Press
<i>Qu'est-ce que l'identité numérique ? Enjeux, outils, méthodologies</i> https://books.openedition.org/oep/332	Olivier Ertzscheid	2013	Information and communication sciences	OpenEdition Press
<i>Qu'est-ce que la Text Encoding Initiative ?</i> https://books.openedition.org/oep/1237	Lou Burnard	2015	Digital publishing	OpenEdition Press
<i>Qu'est-ce qu'un forum internet ? Une généalogie historique au prisme des cultures savantes numériques</i> https://books.openedition.org/oep/1843	Camille Paloque-Bergès	2018	Information and communication sciences	OpenEdition Press

Tab.2: Details on the selected books



This panel of books allowed us to benefit from a diversity of case studies. First of all, although the discipline of Information and Communication Sciences is over-represented, with two of our publishers specializing in it (OpenEdition Press and Les Presses de l'enssib), we were still able to explore other fields, including linguistics, history and sociology.

For the most part, the selected books were not new releases. Only four had been published the year before the experiment and seven of them were published between 2010 and 2015. The challenge for publishers was not to accompany the publication of a book, as the project schedule did not correspond very well to their publication schedules. Rather, the challenge was to draw attention again to titles that had probably already been presented, read and discussed and to explore the potential interests of the annotation..

Finally, we had three books written collectively. Of these, two were co-written by people outside the scientific field, i.e. professionals and experts (*A quoi sert la comparaison internationale en éducation ?* and *Communiquer !*).

All the books were written in French (only a few chapters of a collective work were in English.)

Collaborating with Hypothesis

Publisher groups

For this experiment, a partnership has been set up with Hypothesis to allow participating publishers to benefit from open annotation groups with moderation capabilities. In this way, publishers could benefit from a space referencing all the annotations made on their works, ensuring them an easy follow-up of the participations. Publisher groups were directly identifiable at the annotation tool level and had to be selected by users. Thus, in the list of proposed groups, the publishing groups were recognizable by their title "OPR +[name of the publisher]" as well as by the publisher's logo.



Fig.2: Screenshot of selection of groups in the dropdown menu of Hypothes.is

Associated with this group, a moderator account shared by the editorial assistant and the publisher allowed us to hide annotations if reported. The moderation system on Hypothes.is is a system of moderation a posteriori, i.e. annotations are immediately published but can be hidden afterwards if another user reports them to the moderators by clicking on the flag icon. In order to supervise this moderation system, a charter of good conduct was drafted.

The integration of this functionality into OpenEdition Books posed difficulties, as the structuring of URLs on OpenEdition Books was not compatible with the Hypothesis feature which allowed documents to be automatically linked to specific groups. For some time, it was not possible to assign a document to a publisher and when the annotation tool was activated, the user had to manually choose from the menu drop-down list the publisher group in which to annotate, which amounted to choosing between five different group options: Public (Hypothesis), OPR OpenEdition Press, OPR Casa de Velázquez, OPR ENS Editions, OPR Presses de l'enssib.

The launch of the experiment was therefore delayed a little while to strengthen the information system to guide the user to the "right" annotation layer. To this end, we strengthened our documentation and information system. We also made instruction annotations on all chapters of each book and each publisher group to alert potential annotators and guide them to the right groups.

Documenting

In order to guide the participants, several documents were prepared prior to the launch of the experiment.

Moderating

The guidelines were written to inform users on what they could or could not do with the annotation tool. This made it possible to explain under which conditions annotations were likely to be hidden. However, we wanted to write guidelines that were broad and general enough so that users could retain sufficient freedom to adopt the tool and give them the opportunity to develop their own uses. It is also for this reason that our guidelines were only indicative. We did not impose the signature of this charter but users were invited to respect it or risk that their annotations would be moderated a posteriori. We used this charter to encourage participants to use their real names. However, aware of the difficulty of finding participants if identity transparency was imposed (van Rooyen et al., 2010), we allowed them to use a pseudonym if they so wished.



Dos

- Write constructive, relevant and reasoned annotations using references.
- State your identity. In order to be able to value your participation, but also to encourage good open communication practices, publish under your real name. In the Hypothesis user account settings, you will also have the option to enter your ORCID ID if you wish.
- Take advantage of this experiment to engage in scientific conversations when the opportunity arises, or to impel new ones.

Don'ts

OpenEdition reserves the right to remove any annotation that falls into the following cases:

- Encumbering groups with out-of-context comments (test annotations, advertisements, etc.).
- Except in case of error, deleting and/or modifying previously published annotations.
- Personal attacks, trolling or harassment, publication of defamatory annotations.

Tab.3: Guidelines

Training

In order to assist the new annotators in getting to grips with the tool, we wrote a user guide in the form of a tutorial. Indeed, we assumed that tools such as Hypothes.is are still little used by readers and that some of them were not always comfortable with using such tools. In addition, the vast majority of existing tutorials, webinars and guides were in English. We therefore decided to write a guide in French,⁴⁴ assuming that the majority of the readers of the selected books were French-speaking. The user guide written was also adapted to the specific process of this experiment. Private uses (private annotations and private groups) were not yet developed and we drew the attention of readers on how to select publisher groups. This tutorial was not intended to replace the human support provided to the participants in this experiment, which was systematically offered to the people contacted but to a degree that would allow them to be autonomous if they so wished.

Guiding

As the experiment was open to all, we hoped that unexpected annotators would take part, that readers not invited to participate would seize the annotation tool during the experimental

⁴⁴ <http://www.maisondesrevues.org/1182>



period. We therefore felt it necessary to inform readers (Hypothes.is being a relatively discreet tool) and to inform them of the modalities of participation in the experiment. To do this, we created an "Annotate" button on the web pages of the annotable chapters. When users clicked on these buttons, the annotation tool unfolded and an informative window briefly presenting the annotation process was opened. A section dedicated to annotations was also created to present the annotation service on the OpenEdition website.

In addition, the "Annotate" button we created had a second function. As soon as Hypothes.is was activated on an OpenEdition Books document, users had the possibility to annotate within two distinct spaces: the general "Public" group activated by default when Hypothes.is launched on a web page, and the publisher groups created specifically for this experiment. The challenge was therefore to guide the user to the "right" annotation layer, that is, the publishing groups.

Communicating, searching for participants

Once the books had been selected, in agreement with the publishers and authors, the annotation groups created with Hypothes.is and the information system set up to guide users, we were ready to launch the experiment. This preparatory phase lasted four months and the experiment was officially launched at the beginning of February 2019.

The second phase of the experiment, lasting five months, was mainly devoted to communication, monitoring and support activities for the various participants. It was triggered by a wave of calls for communication. For this launch, two strategies were adopted. The first consisted in disseminating non-targeted messages, i.e. aimed at a global audience, the second in contacting individually scientists identified as belonging to the disciplinary field of the selected works by sending them personal invitations. In the following sections, we will develop these different strategies by reporting on the associated results that we have observed from the feedback we received from our interlocutors.

Global communication

Blog post

The launch of the experiment was prompted by the publication of a post⁴⁵ on OpenEdition's Hypotheses blog, Open Electronic Publishing (OEP). It presented the list of books chosen for the experiment and invited any reader interested in the process and the books to come and participate. This call to participation was relayed on the social networks Twitter and Facebook.

⁴⁵ <https://oep.hypotheses.org/2122>



Mailing lists

After relaying this first post on social networks, we invested the scientific mailing lists related to the themes addressed in the books of the experiment. Thus, the call for participation was relayed on 13 lists organised around the disciplines represented in our panel of books, either directly posted by the publishing secretary, or relayed by the moderators of these lists.

The objective was to mobilize existing communities, thus reaching more targeted audiences. We hoped to capture the attention of researchers around our experiment better than with a general call for participation. However, it does not seem to have yielded much results since we were only contacted by two people. Relaying information through different channels may still have had positive effects by allowing a wider dissemination of information, as shown by the answers below:

"Thank you for this invitation; I would be happy to participate in this experiment, which I had heard about through another channel. I'll come back to you if I have any questions."

"Thank you for your message. Indeed, I have heard about your project. I am currently on a business trip abroad, I will be back at the end of the month and I will gladly participate"

Communications by authors, publishers, institutions

On social networks, some publishers and authors have also called for participation on their books. Olivier Rey and Olivier Le Deuff, both authors of books participating in the experiment, thus disseminated the calls for participation which they published as posts on their blogs.⁴⁶

Publishers, meanwhile, also focused their communication partly on social networks, sharing the initial call for participation posted on our blog. Some also called on their readers to participate by sending emails to internal (for their researchers) or external (professional) mailing lists.

Furthermore, Casa de Velázquez presented the annotation project directly to researchers during a training day, which was obviously positively received by the community:

"Thank you very much for your message. I heard about Hypothes.is during a training course at Casa de Velázquez and this project seems very interesting to me. Moreover, I am certainly interested in the book you recommend. I'll try to find time to participate."

Finally, the University of Bordeaux Montaigne too took on the role of mediator in an experimental environment. Indeed, since the University's SCD kept a watch on open access

⁴⁶ <http://www.guidedesegares.info/2019/02/08/lannoter-lannoter/> (post by Olivier Le Deuff), <https://eduveille.hypotheses.org/13522> (post by Olivier Rey)



issues and two authors of the experiment were teachers at the University Bordeaux Montaigne, an article was devoted to the experiment on their website.⁴⁷ While few authors have taken up this communication role, the investment of some has nevertheless been significant enough to put us in touch with actors that we had not initially thought of, such as the University of Bordeaux Montaigne.

Workshop annotations

As part of the HIRMEOS project, a one-day workshop was held in Paris on 10 January on the theme of annotations. This event was an opportunity to discuss the experimentation project with an audience and gather initial opinions. On this occasion, we were able to lead some conversations about the concept of open post-publication peer review. In addition to making the experiment known, this workshop allowed us to observe the reflections that could be generated by this project. Indeed, the day ended with a series of questions on different topics: the evaluation of annotations; the public and the shareable nature of an annotation; attraction effects around publications; versioning of publications; anonymity.

Reimagine Review

During the experimental period, a new platform was launched with the objective of identifying projects that are exploring new peer review models. This is a platform developed by AsapBio. Organisations wishing to be represented in this directory of innovative projects had to submit a project profile to the organisation which, after study, validated or not the publication of a page dedicated to the organisation.

⁴⁷

<https://www.u-bordeaux-montaigne.fr/fr/actualites/bibliotheques/annotation-ouverte-de-livres-numeriques-unes-une-experience-inedite-d-openedition-books.html>



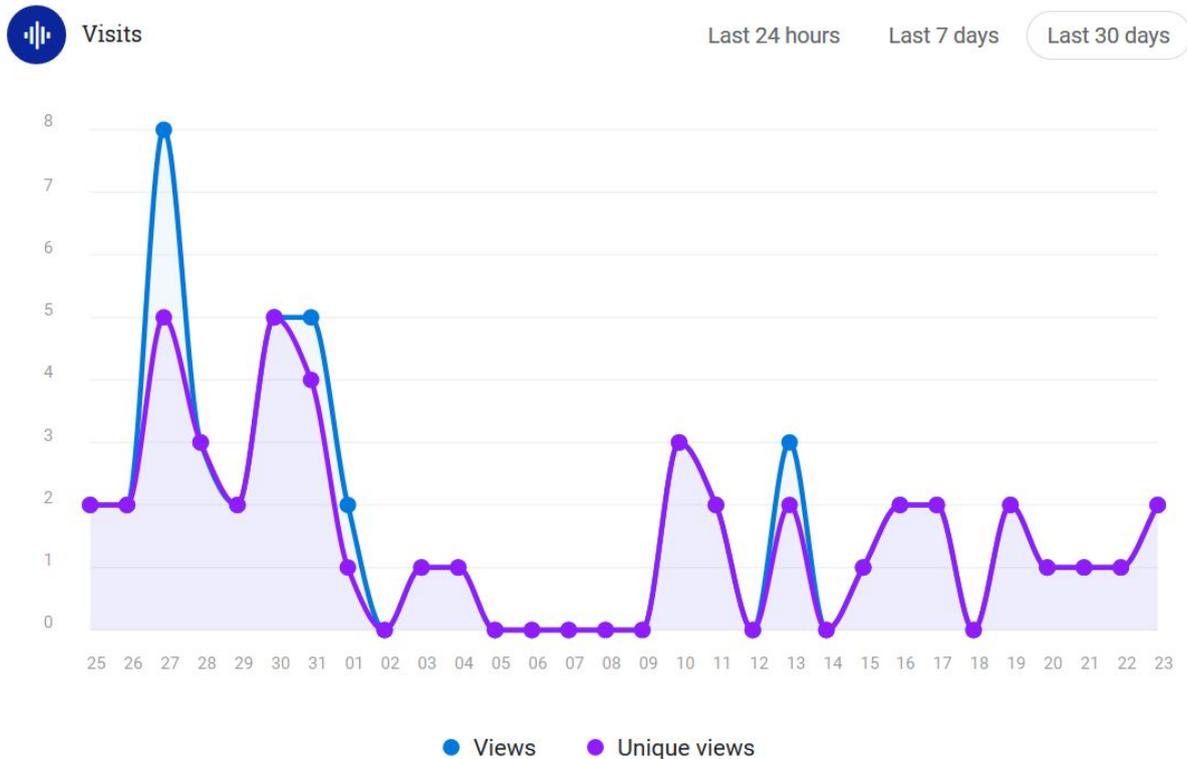


Fig.3 Usage statistics on "HIRMEOS - open peer review experiment" page, over 30 days (25 may - 23 june 2019)

Beyond a simple mapping of open peer review projects, ReimagineReview also aims to federate a community of scientific actors around the same issue: *"to grow a community of practice to enable innovators to learn from one another."*⁴⁸

Thus, we presented our project to Asapbio who agreed to list this experiment on their website. This is how the page "HIRMEOS - open peer review experiment"⁴⁹ was put online.

Tailored communication

One of the recommendations of the experimental report on the Vertigo magazine conducted by Julien Bordier a few years ago was that general communication was not enough to generate participation. Having taken these conclusions into consideration, we decided to devote the vast majority of our time to identifying potential readers of the selected books and contacting them individually.

At the start of the experiment, we contacted the participating authors and asked for their input. Some of them suggested mailing lists and networks. In addition, four of them provided

⁴⁸ <https://reimagineview.asapbio.org/about/>

⁴⁹ <https://reimagineview.asapbio.org/listing/hirmeos-open-peer-review-experiment/>



us with a list of potential annotators, representing 52 personalized invitations. One of the participating publishers also provided us with a list of 20 people.

In addition to suggestions from authors, publishers and sometimes invited guests themselves, the strategy adopted to find potential annotators was simply to conduct Internet searches to identify labs, research institutes, universities, concerned by the disciplines present in our annotable book panel. We also investigated academic social networks when the authors had pages. Finally, when people reacted to our communications on generalist social networks (Twitter) we also contacted them. As a result, 385 people were invited to annotate between February and June 2019.

In addition, since several books belonged to the disciplinary field of information, libraries and communication sciences, we identified scientists or experts potentially interested and proposed them the list of books. The approach was thus a little different from that of the other disciplines, which had only one book for each field. In this second case, we identify the themes addressed in the book that were later highlighted as the starting point for our participation proposal.

It should be noted that as non-experts in the disciplines represented in the panel of books (history, linguistics, educational sciences, etc.), it was sometimes more complicated for us to identify and understand each one's specialities. The involvement of publishers and authors was therefore important at this stage.

Finally, following this stage of contact by e-mail, we carried out an important follow-up action, both to obtain a response to our invitation and to encourage those who had committed themselves to participate to annotate.

Supervision of the experiment

Throughout the project, the assistant editor office carried out daily work to monitor the annotations and participants. Publisher groups were monitored daily and authors were notified when new annotations were made on their books, inviting them to interact with the annotators. Annotators could also be contacted following their annotations, to thank them or to guide them when we doubted that they had understood the objectives of the experiment. However, they were given considerable flexibility to be able to study how they would use the tool. An important outreach and follow-up work was also done on a regular basis to attract new participants. The moderation work was almost nil since we did not consider any of the annotations to be defamatory and the only report we received was due to a handling error. The participants were finally relatively autonomous and we were probably less solicited than Julien Bordier had been to guide them in using the right tone. The fact that the experiment is presented as an experiment of scientific conversation rather than as a peer review



experiment may have contributed to this. It was more the presentation of the objective of the experience and the annotation process that was important on our side.

Results of the experiment

Replies to the invitations

We are now going to present some observations that come from the responses of participants to our e-mail invitations. But before that, it's important to clarify one point about our contact approach. The emails sent were an invitation to participate. It means our main goal wasn't to ask people to give an opinion on open annotation. We sometimes asked them to justify their responses, but not systematically. So the analysis developed here are mainly based on free answers to the question: "Do you want to participate?". The following section presents their answers.

Among the 385 people contacted, and after various reminders, we obtained a response rate of 52%. In comparison, the people who had been suggested by the authors were 75% to respond. It seems that being recommended and invited by the author therefore increases the response rate.

Do you want to participate?

All respondents

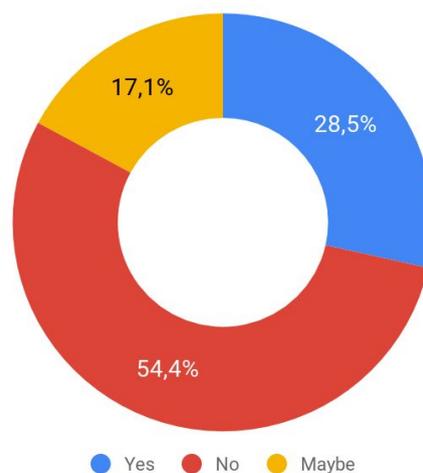


Fig.4: Responses to question: Do you want to participate? from all respondents

Do you want to participate?

Autors suggestions

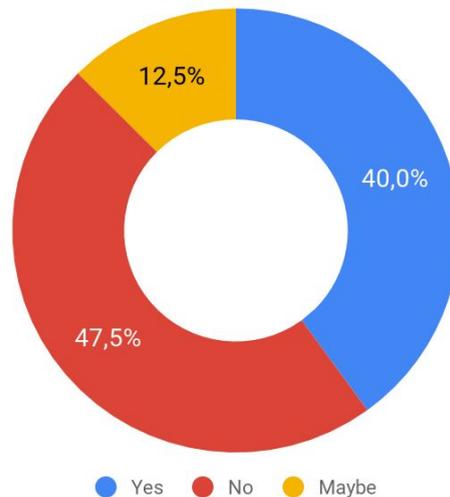


Fig.5: Responses to question: Do you want to participate? from people suggested by authors

Then, among the 193 respondents, we obtained three categories of answers: 55 (28.5%) answered positively, 105 (54.4%) negatively and 33 (17%) did not give an opinion. If we look at the results for the people suggested by the authors, the acceptance rate is higher, rising to 40%.

Among the 55 people who replied that they agreed to participate:

- 21 (38%) actually participated;
- 6 (9%) mentioned problems in handling the tool. Half of them did not participate in the end;
- 9 (16%) told us that they had already heard about the experiment;
- and the fact of having "already read" (2) or "having to read" (2) the proposed monographs was mentioned by some to explain their choice to participate.

Of the 105 people who refused to participate:

- 17 respondents (15%) refused to participate because they did not feel competent on the subject. In addition, many told us that they did not feel legitimate enough to criticize (more experienced) peers, that they were not comfortable with the public dimension of the experience and more particularly with the concept of evaluation.

- 4 people replied that they were not interested, without giving any additional information.
- Then, although these are rather isolated cases, a variety of barriers to participation have been cited to justify their lack of interest. Some of them also took the opportunity to make suggestions. Here are some of the elements discussed: the absence of annotations is not very motivating, learning a new tool (digital) is binding, it would be preferable to select more recent, or more controversial books.
- The most common reason that emerged, for the most part, was lack of time (73 people). The following graph shows the different reasons given:

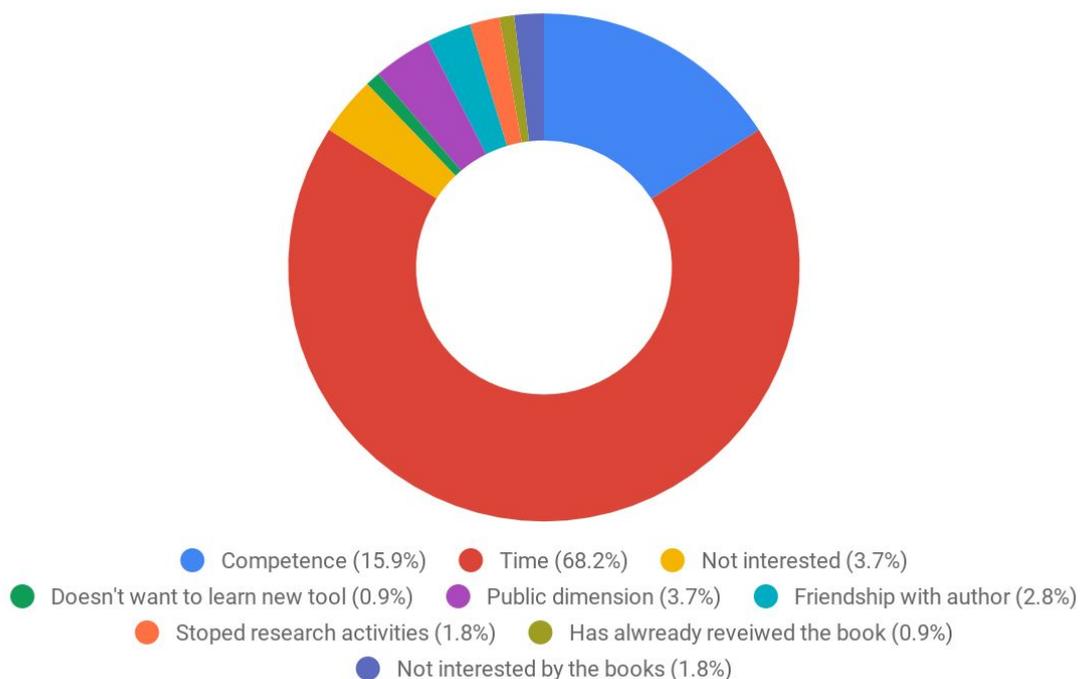


Fig.6: Reasons of non-participation used by respondents

- Despite this majority of refusals, some admit that they would still have found it interesting to annotate, but in a different context: on other books (3 people) or for another purpose, for educational or private use for instance (2 people).
- Nevertheless, several people expressed their interest in: having access to the experimentation report, communicating the initiative to their networks, reading the annotations made on the proposed works, and even to participate in the experimentation if other titles were added or if the experimentation was extended over a longer period.

Lack of time

62% of the respondents (120 people) justified their non-participation (all categories combined) by the fact that they did not have "time" to participate or that they were "very busy" with other activities. Thus, this was the argument most often used by those who answered "No" or "Maybe". Even those who answered "Yes" were numerous to mention time constraints (40% of them). Just as it was raised in Julien Bordier's report on the experiment carried out with the VertigO magazine (Bordier; 2016)⁵⁰, the typical response of the guests was as follows: "Thank you for inviting me - it's interesting - but I don't have the time".

An interesting project

Around 40% of the respondents (79 people) explicitly expressed their interest in this experiment. Only 29% of those who answered "Yes" explicitly expressed this interest, but their decision to participate speaks for itself. The other two groups of respondents ("No" and "Maybe") still have 45% and 43% of respondents interested in the experiment.

Interest in the selected works

About 10% of the total number of respondents expressed interest in the proposed books, saying they had already read the books, or that they planned to read them, or that they were simply interested in the subject. Through these answers, some of our interlocutors linked this proposal to their ordinary reading work, as part of their professional activity as researchers.

Mention of the author

In their responses, a proportion of respondents (5%) mentioned the authors of the books for which they were invited to annotate. First, some of the respondents (suggested by the authors) wanted us to thank the authors for the invitation (5 people) or to apologize for their refusal to participate.

In other cases, some told us that they had taken the initiative to exchange directly with the authors beforehand (2 people) and others asked us to confirm whether we had obtained the authors' agreement. This shows that the invited persons are concerned about the place of the author in this experiment and that establishing direct contact with them may seem important. The quality of interpersonal exchanges is important in research circles and the practice of annotation seems to be part of these dynamics.

50

https://hal.archives-ouvertes.fr/hal-01283582/document?fbclid=IwAR2b42aLpmuYmATjI3xol_Zq5mPL3PsJk9eH9ntSkXvj9j9wxXDxwLEXWM



Finally, 4 people informed us of the personal proximity they had with the author. Respondents then expressed their fear that they would not be enough "objective" to be able to criticize their peers.

Questions asked

Finally, many respondents (about twenty) sent us requests for clarification:

- On the commitment that this experiment implied: they asked if it was necessary to register and if there were feedback needs (question asked 8 times). This was often related to participants' time constraints.
- Still in this logic of time constraint, the question "What are the deadlines for participation?" was asked 11 times. One person also asked for confirmation that he could annotate only one chapter (not having time to annotate the entire book).
- Several people (4) also asked for a rewording of what was proposed to them and some questions were asked about: the interest of the approach, the context of the project and the destination of the annotations. These remarks were also discussed during telephone or videoconference exchanges with 13 of the people contacted (although they are not included in the statistics presented here, which are based solely on email responses).

Analytical methodology

In order to measure the results of this experiment, we were obviously interested in the annotations produced during these few months. In order to draw conclusions, these annotations were all consulted, during the follow-up of the experiment but also during an analysis phase. The methodology adopted is as follows.

First, the annotations made by the participants were extracted and added to a dataset (manually created). A spreadsheet was completed regularly, as part of the follow-up of the participations. To feed it, we did research by publisher groups on the Hypothesis website⁵¹. This first technique was not optimal because Hypothesis only lists first-level annotations on its site, but does not list responses to annotations⁵². We therefore had to check, chapter by chapter, whether there had been any responses to the annotations. We have used the

⁵¹ For example, to see the annotations made in the OpenEdition Press group, we went to: <https://hypothes.is/groups/a4XMWakd/opr-presses-de-lenssib>

⁵² Although there are alternative tools that allow this, such as the one developed by Jon Udell: <https://jonudell.info/h/facet/?max=50>. However, this one did not lend itself well to our use of publisher groups.



Crowdladders⁵³ site for this purpose. The following analyses provide an overview of the results as at 19 June 2019.

Date :	Publication date of the annotation
Doc_ID :	Chapter identifier: we retrieved the URL fragment containing the publisher and chapter identifier.
Book_Title :	Title of the chapter of the book annotated.
Annotator_Type :	If the author of the annotation was: an annotator, an author, a moderator.
Annotator_ID :	Hypothesis identifier of the author of the annotation.
Annotation :	Body of the annotation text.
Elements :	Mention of the elements used by annotators in their annotations: text, image, hyperlinks, tags, formatting, link to another annotation.
URL :	Annotation URL.
Anchor :	Type of annotation anchor : word, reference, footnote, sentence extract, paragraph, paragraph, Passage (several sentences), none (in the case of a footnote), annotation (in the case of a response to an annotation).
Level :	Annotation level : level 0 corresponds to an annotation whose anchor is the text, level 1 to a response to an annotation, level 2 to a response to a response to an annotation, etc.
Annotation_Type	Manual coding according to different categories and types of annotations. The types of annotations were non-exclusive.

Tab.4: Dataset of annotation analysis

This dataset has allowed us to obtain quantitative data to measure these results. As indicated in the table above, we have coded the annotations by classifying them into different categories and types of annotations (non-exclusive). Thanks to this, we were able

⁵³ <https://crowdlaaers.org/>



to bring a slightly more qualitative dimension to our analysis, by trying to observe the behaviours of our participants. This allowed us to identify some trends.

Before presenting these results, it is important to note the limitations of our approach. Not being specialists in the various disciplinary fields represented in the panel of books, we were sometimes limited in our understanding of the body of the annotations and had to remain cautious about interpretations. The analysis would have been more detailed if it had been carried out with the assistance of scientists from the disciplines represented (for example, we could have further refined the type of annotations "addition of element: idea").

Results of the analysis

Some overall results

Over the trial period, from February 7, 2019 to June 19, we recorded a total of 259 annotations, mainly spread over half of the shares.

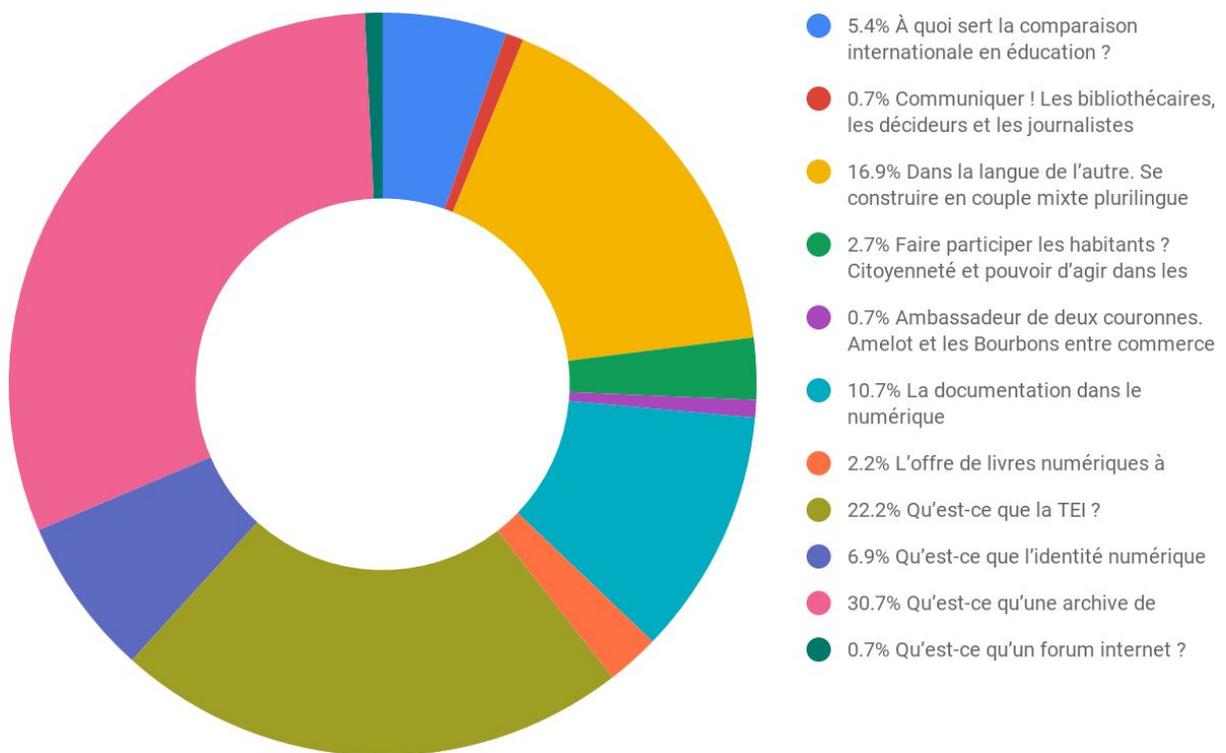


Fig.7: Annotations by book

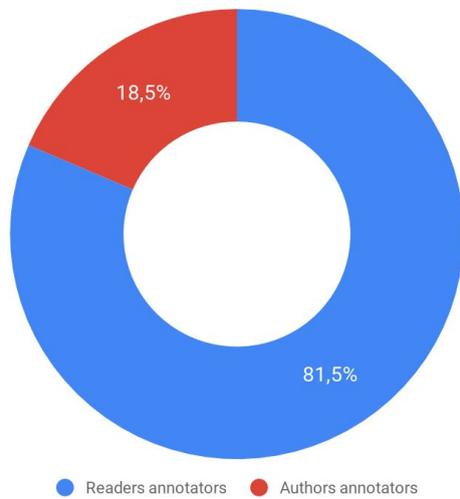


Fig.8 : Who is annotating?

We have identified three types of annotators. The authors of the works, the readers of the works, and the moderator of the experiment (ourselves, but this only concerns one annotation). The vast majority (81.5%) of these annotations were made by reader annotators.

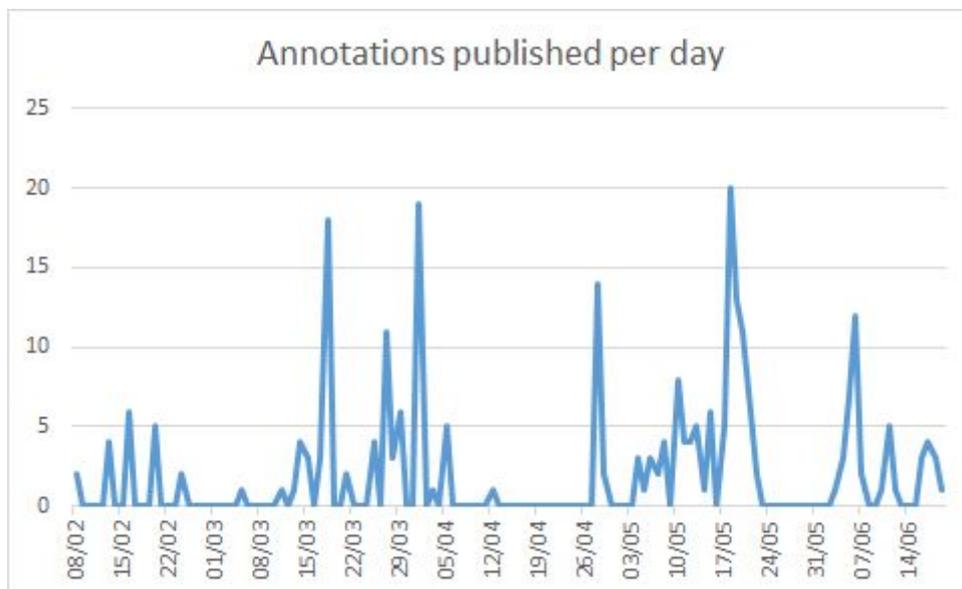


Fig.9: Number of annotations published per day during the experiment

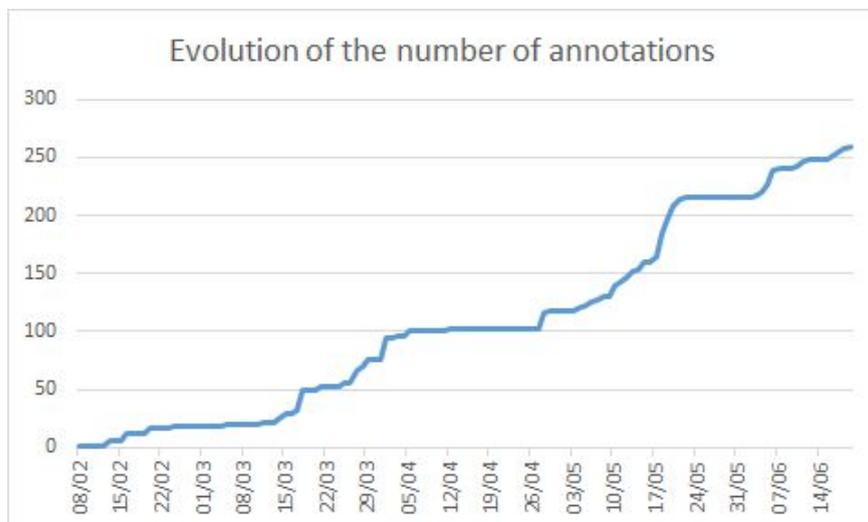


Fig.10: Evolution of the total number of annotations over time

The participation in this experiment was done in stages. The first large level of participation were observed about a month after the launch. Indeed, most of the participants did not come to participate immediately when we contacted them and several reminders and exchanges by email (and sometimes by phone) were made with the majority of them before they started annotating. This trend partly reflects the need to mobilize and support participants. In contrast, most annotations were generally made by participants over a limited period of time, usually over only a few days.

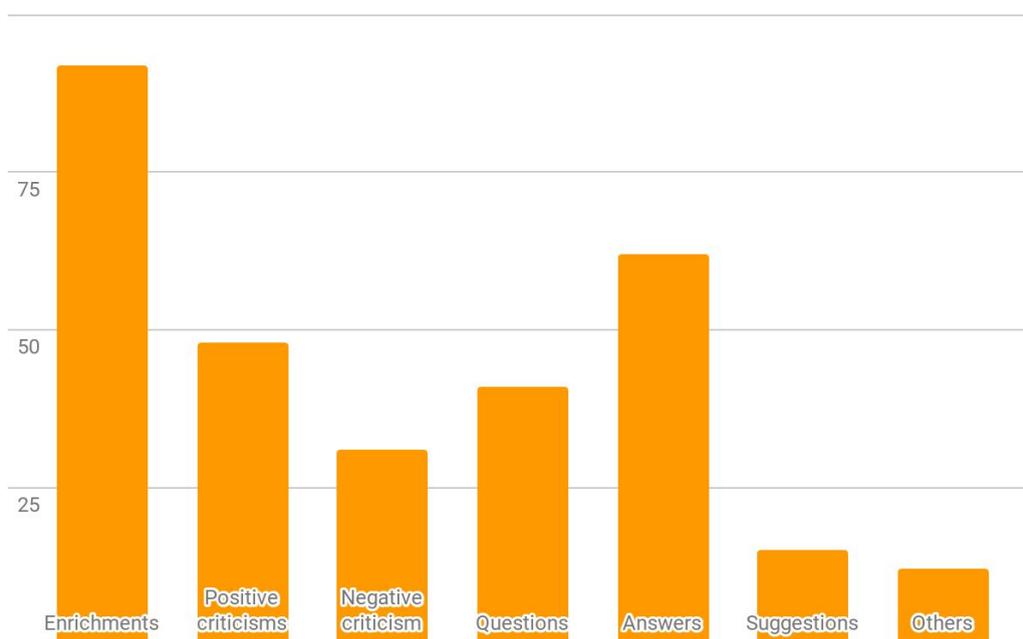


Fig.11: Number of annotations by category

After the general presentation of some quantitative data, we will develop the observations resulting from the coding of annotations. The overview by annotation category, provided in the graph above, already allows us to notice some trends. First, it appears that annotations have been used to enrich the publications. Indeed, contributors have used Hypothes.is to add new elements to published texts. Then, if we look at the annotations that express critical content, we notice that annotators have shared their agreement more than their disagreement about the ideas stated. Concerning the "suggestions", without expressing direct criticism, they nevertheless reflect the expression of an opinion, a form of judgment on the text made by the reader. Finally, two categories of annotations, the "questions" and "answers" categories, are interesting to observe because they inform us about the amount of interaction invested by the participants. Although these categories are non-exclusive and would merit further analysis, we can try to group them as follows:

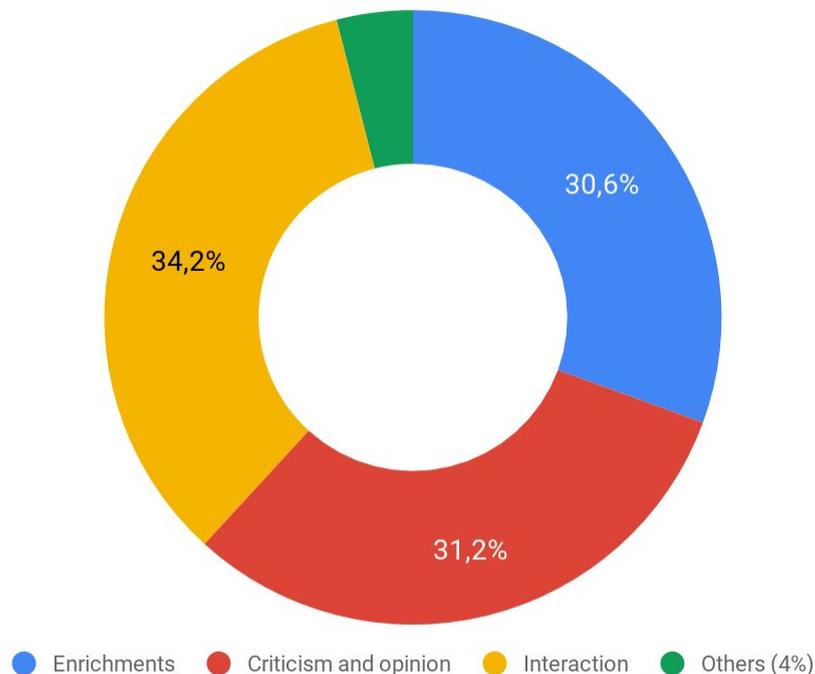


Fig.12: Distribution of annotations by categories

Analysis by category

Enrichments (92)

For this category, we collected the annotations in which annotators made additions concerning the ideas of the text. Here, we have studied the type of contribution present in the annotation. Most of the time, it was the addition of a new idea or reflection related to ideas in the text in order to extend it (57), but it could also be the addition of examples (23)



that illustrated the author's comments, references (38), or other clarifications whose purpose was to help people understand the text (3). We have also created an "update" type (7) to group annotations that actualize the statements in the publication.

Finally, in an editorial purpose, the "correction" type (5) includes alerts with proposed amendments which are not related to the ideas of the text but rather to its form. Thus, the annotators took the liberty of correcting any errors in the text.

Since our categories are non-exclusive, these annotations could also be criticisms (positive or negative). However, most of the time, the "enrichment" annotations were "neutral" and sufficient in themselves. In this sense, the author's aim was not necessarily to justify taking a position on the text (to express his agreement or disagreement), but simply to enrich it. This category of annotations therefore shows us the potential for text enrichment and new discussions that the practice of annotation offers.

Positive criticisms (48)

The overwhelmingly positive criticisms were intended to express agreement with the ideas or research approaches developed in the texts. Through these annotations, participants came to "validate" the content of the books. They were also invested to express the interest in the annotated book and sometimes even to compliment the author on some pleasant passages to read. These positive criticisms were sometimes argued and developed, and annotators took the opportunity to ask questions, add references or other ideas, thus extending those present in the publications.

Negative criticism (31)

Negative criticism, on the other hand, concerns the annotator's expression of disagreement with the text. Most of the time, these are disagreements about the formulations and terms used by the author (11). These criticisms are then used to discuss how to present the ideas but also their meaning.

Sometimes the criticism of ideas was accompanied by examples or by the development of an idea that contradicted or nuanced the text. In this case, these were negative criticisms, which we referred to as "counter-arguments" (11), contradicting what was stated in the publication.

Then, some annotations partly questioned the author's research approach and methodology (5). These annotations all came from the same participant who adopted this posture as an annotation strategy. Several other annotations pointed to a "lack in the publication" (3): these were more general annotations that denounced the fact that an important reference or reflective elements were missing from the works. Finally, only one unsubstantiated negative criticism was observed.



Questions (41)

We then observed another category of annotations, questions. These were explicitly stated. For the most part, they were primarily addressed to authors, who were best placed to answer for the choices of use of terms or idea layouts in their publications. However, other more general questions were quite appropriate for interaction between annotators. To summarize, here are the different types of questions collected:

- Simple question (29): this is the majority of the questions asked. In this case, the annotator questions the ideas that are developed in the text by opening up other avenues of reflection or expressing new ideas.
- Question, request for clarification (10): the annotator asks to clarify the meaning of what has been stated in the text or requests additional information (examples, references, etc.).
- Question, terms (3): the annotator asks the author to justify the use of certain terms or formulations.

Answers (62)

The "answers" category allows us to measure the proportion of annotations dedicated to the discussion. This category represents almost a quarter of the total number of annotations (62 or 24%).

Of these 62 responses, only one was made by us, with the user account OE_Admin, to answer a general annotation made about the experiment. Otherwise, the majority of the responses were made by the authors of the books (38). The rest are responses written by annotators (23).

The annotations are divided into 3 levels of response:

- Level 1, response to an annotation (46):
 - Authors' responses: The vast majority of authors responded to the participants' annotations. However, there are still 11 annotations that come from the annotators themselves.
 - Annotator responses: these annotations were made to respond to an introductory annotation by showing interest in the experimental approach or by bouncing back on elements of reflection presented by the author (2), to complete his own annotation (3), or to respond to other annotators (6).
- Level 2, response to an annotation response (13): in 12 cases out of 13, these are annotators who respond to the answers given to them by the authors.



- Level 3, response to a response from an annotation response (3): only three cases reached this level of depth of discussion and this was the particular case of authors who responded almost systematically to all annotations.

We can therefore already observe that the interaction between annotators is limited because it concerns only 8 annotations in total, i.e. only 12% of the responses.

Suggestions (15)

Annotations in the "suggestions" category are mainly addressed to authors. The approach here was to formulate a kind of criticism that was a little less direct and presented as a proposal of the annotator, with the objective of improving the publication. These annotations have been sorted into two types: a first type focused on the ideas of the text, a second type on their presentation and arrangement.

- Suggested clarifications (11): The majority of these suggestions are of this type. Through these remarks, the annotators point out needs in terms of developments, explanations, definitions, illustrations or development of avenues for reflection.
- Editorial suggestion (4): the annotator proposes to add or move elements in the publication (page footnotes, glossary, paragraph).

Others (12)

- Invitation to annotate (5): introduction of the experiment by the author.
- General remark on the experiment and the device (3).
- Presentation of his annotation process (1): Introductory annotation written by an annotator to explain his process.
- General chapter criticism (1).
- Auto-response (1): additional annotation using the response feature.
- Correction of a previous annotation (1): the annotator corrects its previous annotation by publishing a new annotation.

Feedback from participants: authors and annotators

We wanted to interview the people who participated in the experiment in order to find out their feedback. For example, we conducted interviews with five annotators and three authors. In addition to these interviews, we also received feedback in writing or through telephone calls from six annotator participants. These feedback experiences are a valuable source of information and results for this experiment, as they allow us to see the difficulties and obstacles to participation, but also the possible interests of developing the practice of



annotation within communities. From these results, we will try to identify conclusions and useful ideas for future experiments.

Who are the participants?

First of all, we were able to observe participations from twenty-five people, excluding authors. Almost all of them used their real names or were easily identifiable. Only one remained anonymous (we could not identify through the username). For the others, we were able to obtain the following information:

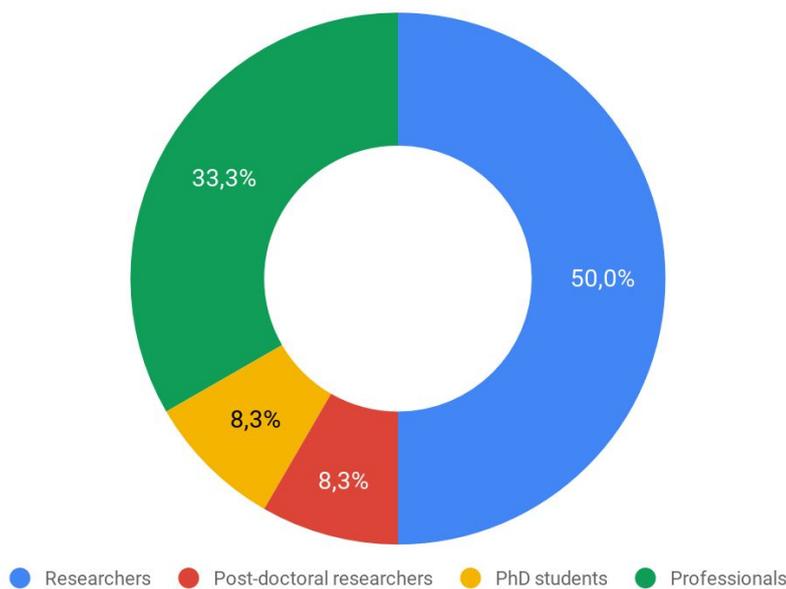


Fig. 13: Who are the annotators participant?

Half of them are researchers, 33.3% are professionals and 16.6% are young researchers. The majority of them belong to the field of information and communication sciences. This is partly due to the fact that these disciplines were over-represented in our selected books. But we also think that this is due to the fact that members of these disciplines are more likely to be interested because their research objects are consistent with the purpose of this experiment. The annotators were all French-speaking, most of them working in France, but also in Switzerland and Canada. Finally, we can observe that, contrary to the results of the VertigO experiment, this experiment succeeded in attracting the interest of professionals, people outside the academic field.

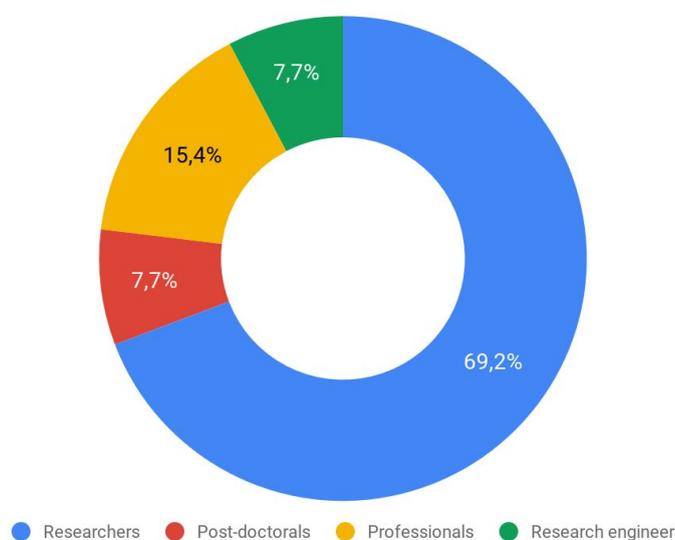


Fig.14: Who are the authors participant?

For their part, the majority of the authors were researchers or teacher-researchers, with the exception of one post-doctoral fellow, two other experts and one research engineer. There were also many experts among the authors of chapters for collective works.

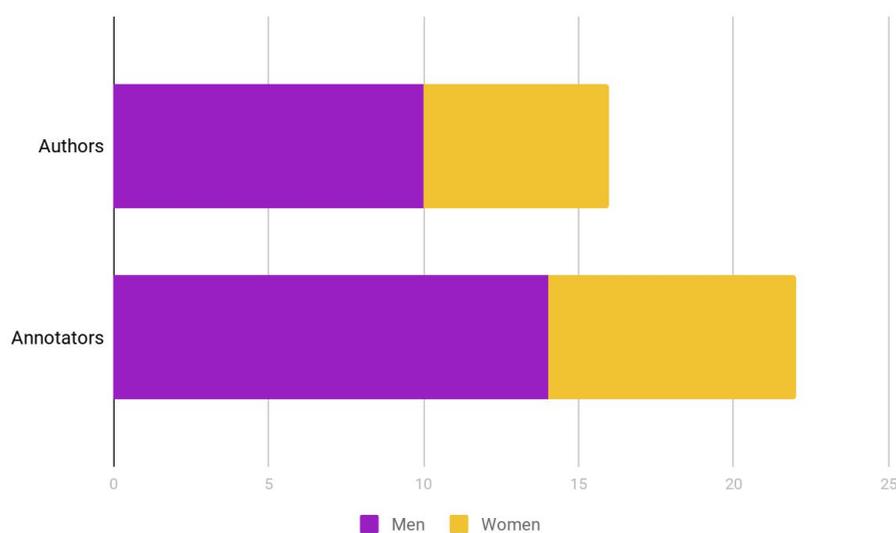


Fig.15: Gender distribution of annotators dans authors

The majority of participants, annotators or authors, were male.

These data are obviously to be compared with our experimental protocol. Thus, as we mentioned in Part 2, not having a prior database of researchers to contact, we mainly did

Internet research to find potential annotators, and solicited suggestions from authors and scientists contacted by email. To ensure that these results were not biased, an inclusive approach should have been adopted from the preparatory phase.

Motivations to participate

Among the annotators and authors interviewed, all were attracted by the proposed approach. To justify this interest, several reasons were given:

- Some annotators and authors were already familiar with the Hypothes.is tool and were interested in it. However, they viewed the tool differently, for other purposes. The prospect of a post-publication evaluation around an online book was therefore an opportunity for them to explore new uses.
- Participants were already aware of the issue of post-publication open peer review. Some annotators had also participated in projects with similar approaches, such as liquid book projects. For their part, the three authors interviewed each perceived potential benefits of a post-publication conversation, including: feedback from their readers, enriching their publications with new examples and providing updates.
- Others were more generally interested in participation issues and were curious to test the annotation device in this regard.
- Finally, some of them had projects with similar logic and aimed to draw constructive conclusions from this experiment for their own projects, such as the use of the annotation system in an educational context.

Even before starting the experiment, several participants were therefore already partly convinced of the value of an online and collaborative annotation.

In addition to this interest in the process of public annotation of books, the reading of the works proposed to potential annotators was integrated for several of them in their ordinary research work. For example, the proposed book was included in the bibliography of one of them (who had to work on the subject) and another had been asked to write a review of the book.

Moreover, knowing the author personally was sometimes a motivation to participate. For example, a person was going to become a colleague with the author of the book he was asked to annotate. The experiment was an opportunity for him to discover more about his future colleague's research work. Another participant accepted because the author of the proposed book, who had suggested inviting her as an annotator, was a friend. Thus, we can notice that experimentation sometimes fitted into established or under construction networks of sociability.



Then for two of the authors with whom we spoke, the proposed experimental approach was related to their research work. Thus, through their research themes, they were already partly willing to participate.

Finally, the fact that this experimentation takes place in a familiar environment (OpenEdition) in which they had confidence, gave credit to this experimentation and also convinced them for some to participate.

Their digital reading and writing habits

Most of them are people who are not very active in online social networks and do not necessarily have a contributors profil. Some of them even mentioned that they did not feel part of a "digital culture". In addition, many have a critical eye and a certain mistrust for social networks.

On the other hand, we still had a few people, especially among the authors, who were particularly active on social networks, especially on Twitter and blogs.

Nevertheless, for all of them, digital technology has become an essential part of their working environment for reading publications. While some still express their "love for paper", and even regret it (denouncing the fact that with digital technology we "gain in speed but we lose humanity"), it remains undeniable that print is now used by our participants for a minority of their readings and especially for particularly long texts.

Finally, talking about their digital reading and writing practices led us to notice that some of them were already using digital annotation features regularly. Several tools were mentioned: note features in Zotero, Dropbox and SwitchDrive, the GoogleDrive suite, comments in Word or PDF annotation.

Assessment of the technical system

Overall, the tool was easily taken over by users who found it "ergonomic" and "intuitive". However, three main difficulties have been identified and deserve to be noted because they constitute potential obstacles to the use of the tool and therefore to the general participation in this experiment.

First of all, authentication has not always been easy to understand. Because the places of registration and authentication in the tool are different for users: to register, they had to go to the Hypothes.is site and to authenticate they had to go to the chapter of a book, open Hypothes.is and. This transition from one platform to another was sometimes difficult for users to understand.

Then, users had to make sure that they annotated in the right place, in the right publisher group. As the opening of the right publishing group was not automated, some people



annotated in the “Public” group of Hypothesis, instead of the publisher groups, generating frustration on the part of users who had to move their annotations, one by one, from one group to another.

Finally, several annotators deplored the lack of an overall view of the annotations made to an entire book (all chapters combined). They would have liked to have access to a summary that would allow them to have a quick overview of all the annotations produced and the participating annotators.

Annotation strategies

Three annotation strategies were mentioned by the annotators interviewed:

- First of all, there were those who annotated as they read. Some of them have also taken advantage of the "tag" feature, which is a feature used to manage annotations.
- Then there were those who had already read the books and taken notes beforehand. They reviewed their notes in order to select those that seemed interesting, with a view to sharing them publicly. It should be noted that for these annotators, it was interesting to compare (sometimes after several years) the way they had looked at these same publications.
- Some annotators have done a first job of taking personal notes, in private (whether on paper or digital) and then selected the annotations to be published. They sometimes used this experiment to do other research work (e.g., book reviews). The reading and note-taking work was therefore carried out with a twofold objective in mind and the annotators preferred to divide this work into two phases. Finally, other annotators were not always comfortable with the immediacy of the online annotation and preferred to take the time to prepare these annotations because of their publicity.

In addition, the three authors interviewed also published annotations. First, two of them had published introductory annotations, inviting their readers to participate in the experiment. Then, all three of them participated greatly in this experience by responding to some of the comments they had received (one of them responded almost systematically). The annotation activity was time-consuming for one of the interviewees. He explained that answering took him time because he took the trouble to find out who he was talking to, in order to understand his approach and be able to answer him as well as possible. Another explained that the annotations were an opportunity to provide readers with additional references.

Moreover, it seems that annotating implies a more cursive, attentive and linear reading practice than what participants are used to. Indeed, the common reading practices of many of them are more "fast" and "selective" readings. Here, the annotators did not want to take the risk of asking a question about an element that was developed a few paragraphs later. In



this sense, the time spent writing the annotations was, for the majority of them, only a small part compared to the time spent reading the annotated chapters.

On the process of a public evaluation

The personal (private) and public annotation procedures are very different. The one made publicly raises the question of receiving the message. This is all the more so since this experiment was presented as a scientific communication experiment. The communication exercise therefore involved two parties: the sender and the receiver. In the context of this experiment, the receipt of annotations was therefore done at two levels: the author and the readers.

A question of legitimacy

Since the exercise proposed to the annotators was to criticize their peers' publications, the question of the legitimacy to be criticized arose for some. This question of legitimacy was raised differently, depending on the status of the annotator:

- For PhD students or early career researchers, it could be difficult to evaluate more experienced peers. This critical act requires an assurance that is not necessarily available at the beginning of a career. Especially when professional instability induces a form of precariousness among researchers whose future is still uncertain. This precariousness can then put them in a tricky position, and limit the freedom of tone that more established annotators in the scientific field can afford.
- Moreover, as professionals, some were potentially less affected by this fear of judgment and authority within a field to which they do not belong. However, one of them did mention the habit of using an over-consumption of reference systems in order to prove itself to researchers. In a way, this is a search for recognition on the part of these annotators who feel they must do more to be recognized as legitimate interlocutors.

Annotator/author relationship

The act of annotating a publication in an open peer review perspective implied for the annotators a form of communication contract: by criticizing and giving their opinion on the publication, they finally addressed the author, aware that he would read the criticisms and could respond to them, especially since they were made at the very level of their publication. The strategy adopted by several annotators was therefore to try to use a neutral and non-teaching tone, to avoid overhanging postures.

For some participants, the process was particularly interesting because the specific nature of an annotation (attached to a very precise passage of the text), coupled with the fact that it is a practice more informal (because for the moment it is less codified and institutionalized than



a book review, for example), allowed them to formulate more "personal" criticisms. Some mentioned the possibility of entering into dialogue with the author as an opportunity to access a privileged relationship, a form of intimacy that is usually inaccessible. Getting in direct contact with the author was considered for them as a "reader's dream".

For their part, the three authors interviewed, by agreeing to participate in this experiment, had somehow "committed" themselves to taking the time to respond to annotations. But above all, for them, this duty of reply and interaction is inherent to their position as authors. Indeed, the author remains in his position as author, and interacting with readers helps to maintain this role (if this was the case for our three authors interviewed, it should be noted that other authors did not get involved in the responses).

Moreover, as mentioned above with the authors' annotation strategies, just as annotating a publication implies a scholarly, qualitative reading process, responding to an annotation implies taking an interest in the other's process (if this person is not part of the same knowledge network), in order to be able to respond correctly, constructively and thoughtfully. To quote one of our interviewees, "if someone writes an intelligent annotation, you will have to answer it! In other words, when annotation process involves scholarly reading, annotation response involve scholarly communication.

Relationship with the public

The challenge was also to share annotations that could be of interest to a wider audience and not just to provide a critical feedback to the author. Several participants therefore wrote their annotations with the objective of sharing with future readers information that they felt was enriching in terms of the ideas addressed in the texts. The consideration of the reader's audience has sometimes pushed our participants to write their annotations for popularising science.

The question of the reception of annotations by a large audience has been problematic with some annotators. The constraining aspect of the public review was that it was not possible to clearly identify the people who would read the annotations. Some participants considered that the communication contract is not sufficiently defined. Linked to this reflection, some annotators had difficulty understanding the posture they had to adopt, related to two approaches that might seem contradictory: a personal and intimate approach towards the author, and a publication approach with some fears about the risks of misinterpretation and bad reuse of annotations.

Finally, there was more specifically the issue with the receipt of annotations by other annotators. One interviewee told us that his first reaction to our invitation was to check if there were any annotations already published and who had made them. Two types of postures have also emerged with regard to the possibility of interaction between annotators:



- Those who welcomed their colleagues' replies and took the step of responding to some of the annotations that interested them. In the majority of cases, annotators were rather positive about this possibility of interaction between readers.
- At the same time, many also stated that they were primarily interested in the author's return, to which they addressed themselves as a priority. Their investment in this experiment was primarily oriented towards writing annotations critical of the text, not towards writing annotations critical of their colleagues' annotations.

Places of scholarly communication

In order to better understand conditions for a successful appropriation of the annotation practice as a scientific communication tool, we asked participants about their communication habits. Indeed, we asked ourselves: how does scholarly communication really work? Interviewees mentioned several "places" of communication, presenting us with their specificities and disadvantages.

Social networks

For some, social networks are the place where debates and conversations can be held, around scientific news. However, some annotators pointed out that these exchanges focus on posts produced within these same networks, more than on researchers' publications. Two interviewees also explained that conversations and posts are more oriented towards self-representation than a real debate of scholarly ideas. Others denied this, by defending that there is real communities of debate on Twitter and that many conversations in their disciplines are taking place there. Finally, social networks are problematic for some people because of archiving and durability of information, because exchanges produced in Twitter quickly end up being lost in the network flow. It would therefore be more a question of exchanges of the moment, of immediacy.

Mailing lists

These mailing lists sometimes bring together large communities of researchers around some disciplines. Thanks to their ability to bring people together around topics of common interest, they provide interesting channels for information. However, the people who mentioned this communication tool had a mixed opinion. According to them, these are good channels for disseminating informative messages, but they are ultimately not very effective when it comes to exchanging and debating.

Colloques and seminars

These are "traditional" and institutional places for meeting and exchanging researchers which, unlike the previous examples, have the advantage of being held in person. One of the disadvantages mentioned by our participants is that too little time is dedicated to exchanges



during these meetings. These events appear more as an opportunity to present one's work with the objective of meeting, socializing and exchanging afterwards. The consequence is that participants end up debating very little. They react to presentations immediately, on work they are not always familiar with before the speaker introduces them. Finally, the symposiums appear more as places of communication in the sense of image, presentation of oneself and one's work.

Reading reports, articles and monographs

Scientific publications themselves are presented by some participants as spaces for the exchange of ideas, or the system of references and citations is invested to conduct dialogues between researchers, through intermediary publications. Debates and answers can thus take place between researchers, in a public way, from one publication to another.

Finally, it seems to us that there is no such thing as a unique way of scholarly communication, but rather several ways of communicating, defined within specific communication spaces, with their own specificities, rules, codes and communities. While there are many opportunities for researchers to communicate, our authors interviewed, as well as several annotators, deplore more space is not devoted to scholarly discussion activity and that the injunctions to be published in particular take too much precedence over "other" activities.

Results of this experiment: positive, negative?

According to the feedback from the annotators, the annotation communication system has various advantages:

- The act of annotation goes hand in hand with the act of reading carefully. In this sense, being involved in an annotation practice leads to the development of a more qualitative reading, a learned reading.
- It allows a real exchange (a direct exchange) with the author because it is not a unilateral criticism but a communication system where the author can respond, at the same level as the one who comments.
- The annotation system allows people who are not traditional contributors (who do not identify themselves in the scientific communication places currently available) to express themselves, despite significant authority reports to be taken into account.
- It allows people to enter into dialogue with other readers, directly at the text level. Some people had the impression, with this experiment, that they had participated in a "network of readers". For some, the annotation would therefore have a significant socializing effect.



- Through these annotations, publications are enriched and future readers can discover new avenues, benefit from the updates in the annotations and think collectively.

Most participants were thus interested in participating in similar experiments in the future as authors (and vice versa for authors). Several of them nevertheless indicated that they would do so under the condition that the annotations be framed (particularly with moderation). They also expressed interest in repeating the experience as annotators, now that they had explored the tool and discovered the possibilities it offered. Several other conditions were then mentioned by the participants: that annotations are integrated into their ordinary publication work (that it is not an additional workload) and that they have the guarantee that there will be feedback from the authors.

The authors also informed us of their appreciation of annotations they had received on their books. The feeling was very positive overall: the annotations were considered relevant and enriching compared to the initial text. The updates were interesting for the readers and the annotations made were "intelligent".

Finally, taking the time to read and understand the annotators' remarks allows authors to question their own concepts. This attests once again to the socializing potential of the experience because it involves taking an interest in the thought and work of annotators. The authors of the books that received mainly annotations from people they already knew pointed out to us that they would have liked to see people from outside their knowledge circles.

Feedback from publishers

At the end of the experiment, we also devoted a period of time to discussions with the publishers to talk about their participation, the results obtained and the prospects.

Publishers' investment in experimentation

First, about their participation. As a platform, we proposed from the beginning to carry this experimentation. Although encouraged to get involved in this experience, it was agreed that this would not necessarily involve a large workload on the part of the publishers. Thus, the participating publishers finally gave us a significant autonomy in this experiment, testifying to the trusting relationship that links OpenEdition to its publishers. In addition, as mentioned when looking for participating publishers, the issue of workload was a decisive factor in their decision to participate (or even simply to take the time to think about it). As with the annotators invited to participate, this question of time to invest and workload is then to be questioned. For this reason, we asked them if they thought that carrying this project was part



of their mission as publishers. From this question, we can draw some interesting elements, mentioned by some of the publishers interviewed.

To begin, one of their priorities is first to include open access issues in their editorial policy. This practice of open annotation is an "above" stage, which partly explains why it is not considered a priority element.

Secondly, this experimentation was sometimes considered as an activity that went beyond the "strict scope" of their missions. We then identified three explanatory elements related to this remark:

First, and this is a key point in this analysis, it should be recalled that our objectives were mainly exploratory. In this sense, the experimentation was (rightly) assimilated by the publishers to an observation and investigation activity. It therefore had an innovative and forward-looking dimension and despite the potential interests that strongly interested them (and convinced them to participate), it seemed difficult for them to get more involved, since this exploratory process and this annotation practice were indeed outside their ordinary editorial activities.

Secondly, this experimentation was sometimes associated with an activity of "handling scientific communication", which was considered to be beyond their scope of activity. However, we have seen that for the participants (annotators and authors), publications were themselves perceived as objects of scholarly communication.

Finally, some publishers presented their missions as "the promotion and dissemination of research" as produced by the publisher. On the one hand, it emerged from our interviews with participants (annotators and authors) that one of the challenges was indeed to contribute to the dissemination of publications "as produced", in particular by participating in scholarly, qualitative reading, which must remain one of the main objectives of scientific publication. In addition, we then looked at the statistics of consultations of the annotated books, using the Matomo tool, to see if this experiment had a positive impact in terms of "diffusion" and "promotion" of the publications. In the following section we will show the results obtained by selecting a view representing the evolution of consultations (total views + unique visitors) over a year and over all chapters, by book.

Result of annotations by publisher groups

OPR Presses de l'enssib⁵⁴

36 annotations (including answers) were published in the Ensib Press Group. These annotations were mainly concentrated in one of the books that received about 77% of the interests. This is the book with the most active author. Indeed, he had communicated on the

⁵⁴ <https://hypothes.is/groups/a4XMWakd/opr-presses-de-lenssib>



experiment at its launch and responded almost systematically, and very quickly, to each new annotation.

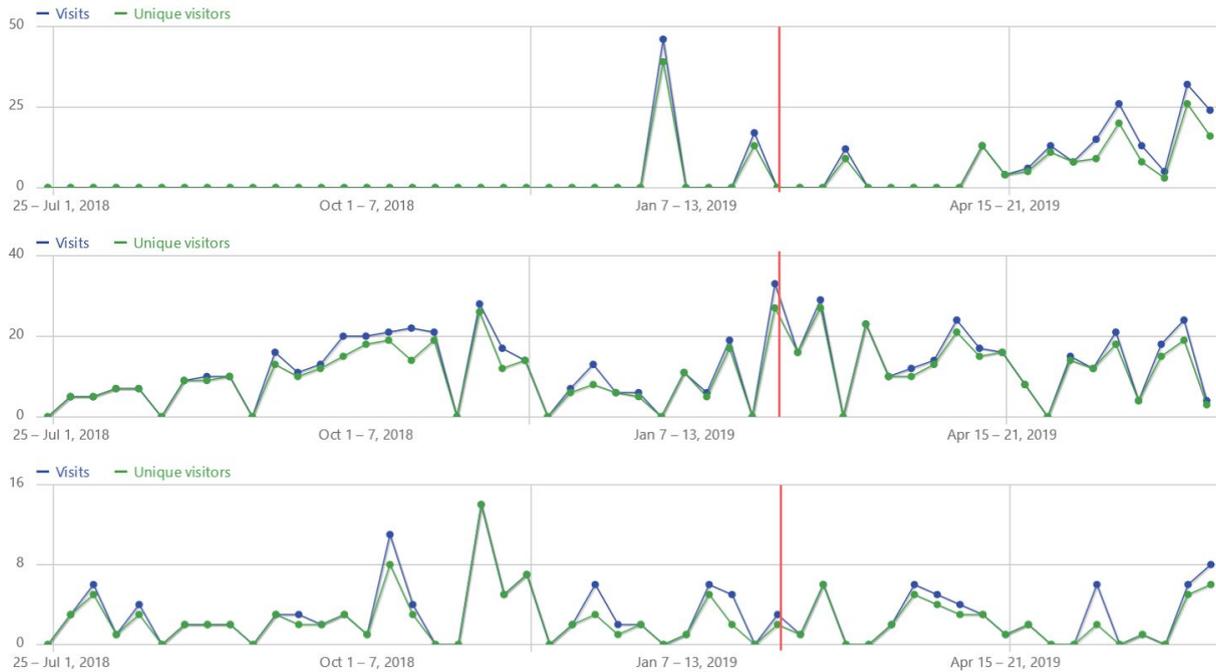


Fig.16: Evolution of visits of chapters of experimented books of Presses de l'enssib during last year

OPR ENS Editions⁵⁵

63 annotations were published, distributed as follows 11%, 19% and 69% per pound. In this group, the annotations were therefore a little more distributed but concentrated once again on one of the titles. As with the previous publisher group, the most successful title was also the one with the most active author, who suggested a large list of potential annotators he wanted to invite to participate.

⁵⁵ <https://hypothes.is/groups/Zx18zyny/opr-ens-editions>



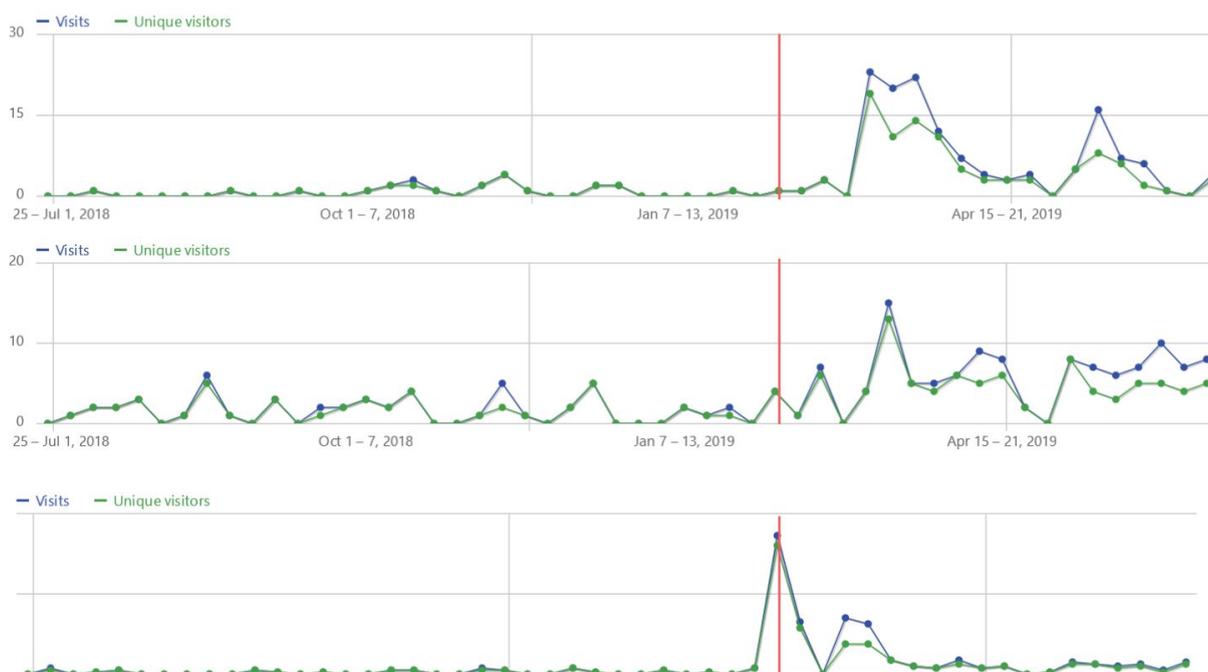
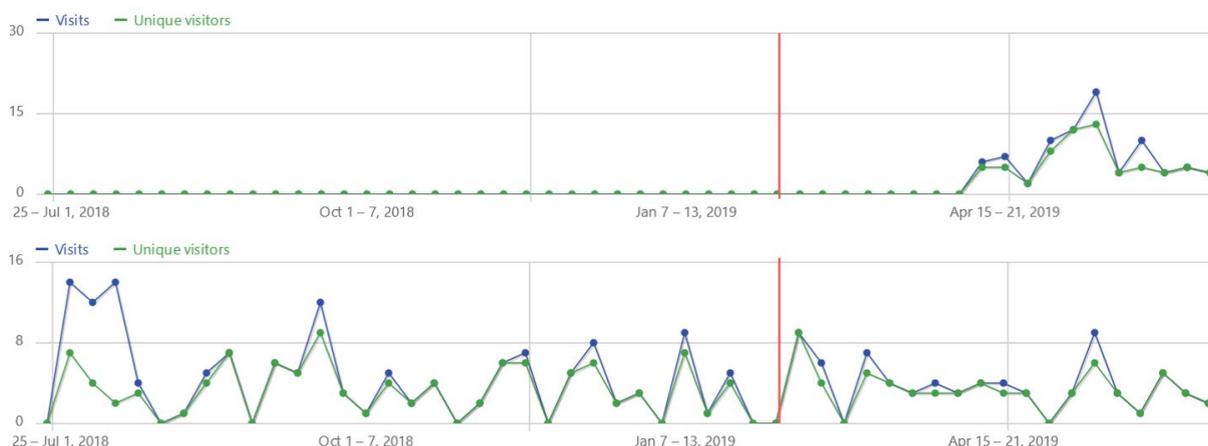


Fig. 17: Evolution of visits of chapters of experimented books of ENS Editions during last year

OPR Casa de Velázquez⁵⁶

Only two annotations were made in this group and they were made by one of the authors. Participation was more difficult to generate for these titles, many of the people invited to participate showed interest in the books as well as in the experimental process. However, we can see that the investment of one of the authors and in particular his involvement to communicate about the experiment has nevertheless had a positive effect on the statistics of his book



⁵⁶ <https://hypothes.is/groups/xR5ywodi/opr-casa-de-velazquez>



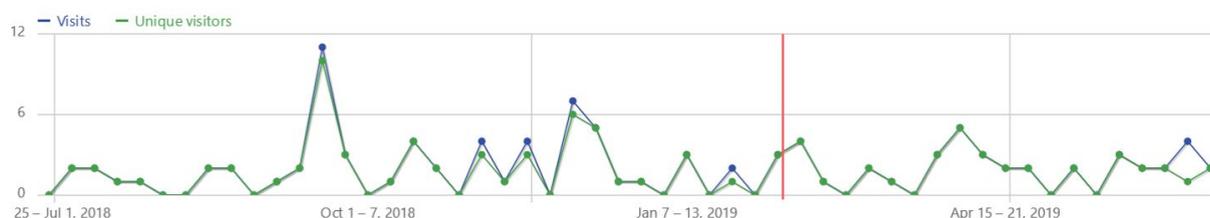


Fig.18: Evolution of visits of chapters of experimented books of Casa de Velázquez during last year

OPR OpenEdition Press⁵⁷

It is the publisher group that generated the most important engagement, with a total of 158 annotations published. It should be recalled that this group contained one more book than the other publisher groups. The annotations of this publisher groups were mainly concentrated around two titles that contain 76 of the annotations.

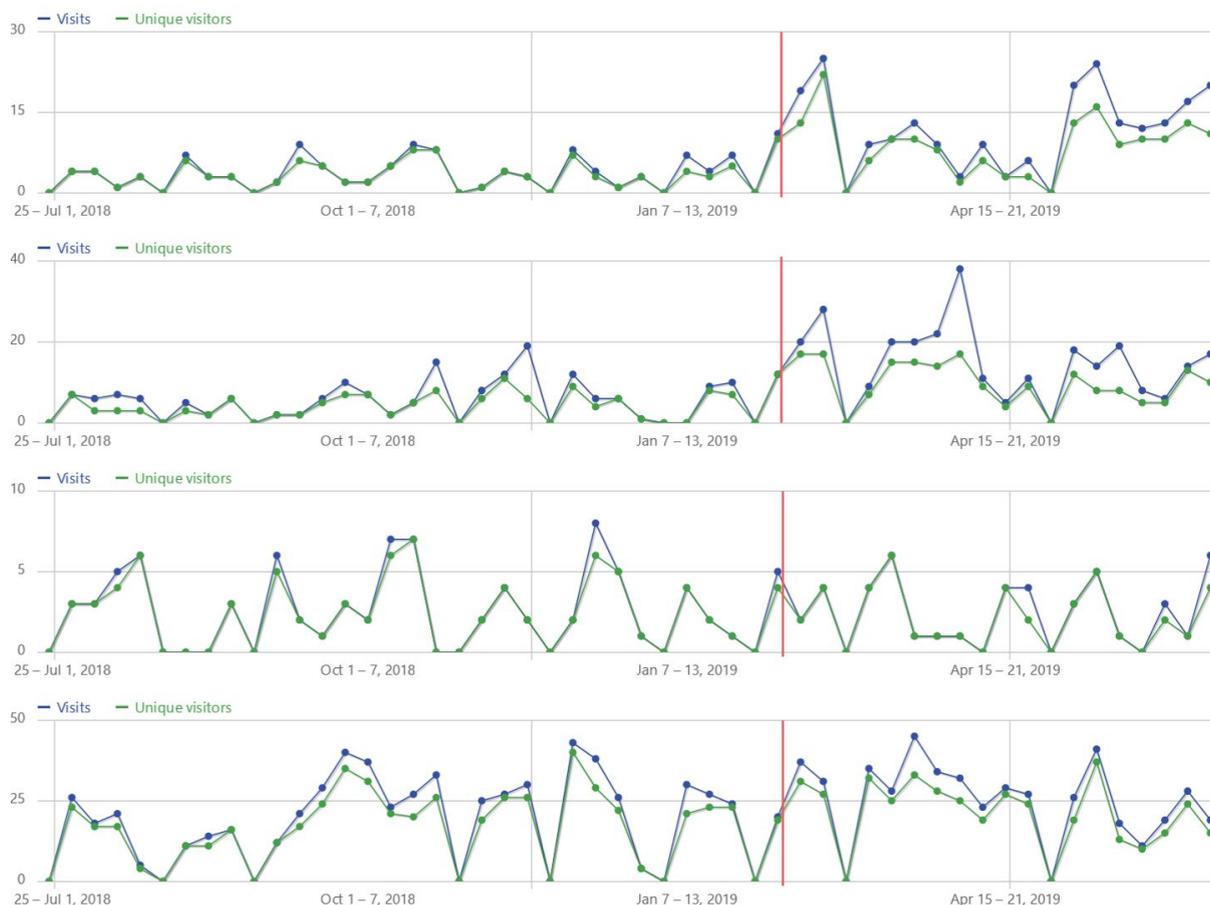


Fig.19: Evolution of visits of chapters of experimented books of OpenEdition Press during last year

⁵⁷ <https://hypothes.is/groups/JWPbJgVp/opr-openedition-press>



Thus, if we look at the evolution curves of visits of the books (the red line represents the launch of the experiment in February) we can see that the annotation leads to an increase in visits to books that were the most annotated in this experiment (those presented first in the list of three or four curves per publisher). This trend was also confirmed for books with low ratings, although this is somewhat less visible. For monographs that regularly receive a lot of visits, the comparison of the before-after curves is more difficult to observe. However, we can see that the annotation has had the effect of "awakening" books that were not very popular in previous months.

Main difficulties

Taking into account the delays, the constraints in the experimentation and the feedback from our participants, we can observe that the results differ widely from one book to another: if the outcome is positive for some books, other books have received little or no annotations. One of the interests of this experimentation was therefore to identify different potential barriers to participation and to try to determine whether these barriers were inherent in our approach. It appears that these obstacles were mainly related to the academic field itself.

The time constraint

The main obstacle, mentioned by the vast majority of researchers invited to participate, is time. In his report, Julien Bordier stresses the importance of not underestimating the entry cost of learning a new tool, this cost depending on the numerical ease of each person. According to the recommendations from the Vertigo experiment, the integration of the annotation tool into the platform should have reduced this entry cost. However, it seems that it has generate some confusion as to the nature of the tool. The integration of Hypothes.is into OpenEdition Books may have given the illusion that it was a new tool developed by OpenEdition, whereas it was a tool managed by a separate organization. This situation was often confusing for the users, who were required to go back and forth between the two platforms (registration on Hypothes.is, authentication on OpenEdition Books, etc.). Similarly, the choice to create specific annotation groups for each publisher (Publisher Groups) proved to be more complex than expected. Although this feature offers considerable advantages for the publishers and the authors (including moderation possibilities), it was an additional technical constraint for the annotators.

In addition to the time constraints imposed by the mastering of the tool, researchers have little time to devote to scholarly reading practices for books that did not immediately fit into their regular research activities. A scholarly reading practice presupposes an attentive and cursive reading, and therefore highly time-consuming.



The public dimension

We identified another barrier: the public dimension of the experience and, consequently, the risk of exposure induced by the publication of annotations. Several participants considered that the source of this problem is structural, pointing to a "hyperspecialization" of the scientific world. It would then be difficult, for both the author and the annotator, to risk the devaluation of several years of work. The importance given to the devaluation risk is the result of the predominance of the publication activity in the academic field and, more precisely, in the evaluation system. The authorities responsible for the evaluation of researchers will mainly study and judge the publications, and the importance given to the productivist injunction for the publications is huge.

The remuneration system for the researchers' publication activity is therefore less a financial economy than a symbolic one upon which their career depend. Because of this issue, a conceptual shift seemed to occur when we were discussing the experimentation: evaluating a researcher's publication was sometimes perceived by the researchers as taking the risk of evaluating the researcher himself - with potential negative consequences on his career.

Some participants told us that this reluctance could be exacerbated by the increasing scarcity of positions and the increasing number of researchers in precarious situations, which increased the cost associated with the risk of exposure.

In addition, this experience also showed that relationships between researchers are governed by authority relationships. Exchanges between researchers are potentially influenced by their position within the scientific field. This position is defined by their status (the risk of exposure seems to decrease with increasing status since the risk of precariousness of experienced researchers is lower than for early career researchers), but also and above all by their place within communities and social networks.

From that, we can easily understand why the concept of "ego games" often came up when we discussed the difficulty of publicizing the annotations.

In response to these time constraints and the risks of exposure, we could promote activities that contribute to the development of scientific conversation through annotations. If the annotation activity was taken into consideration by the institutions responsible for the evaluation of the research, it could gain further recognition and allow a more direct symbolic reward. It would fit well with the current policies, which aim at promoting a more qualitative evaluation. However, scientific communication seems to be subject (like any social organization) to power dynamics and biases that must be taken into consideration - otherwise there would be a risk of crystallizing the issues previously mentioned. In order to create an evaluating system designed by and for the researchers, the scientific communities should be involved in the process. Researchers will then be in the best position to discuss



with the institutions the conditions under which the integration of practices such as annotation could be beneficial.

Recommendations

Based on the results and the feedback from our participants, we suggest a serie of recommendations for the next post-publication open peer review experiment.

General recommendations

As mentioned earlier, our main difficulty during the experimentation was to find volunteers and participants. Three approaches can be explored:

- Build communities: identify from the outset our target communities, their needs, their codes and their communication patterns. Involve them in the very early stages of the annotation project as active players. For this experimentation, we have involved the authors but it would be wise to involve larger communities. It is also important to adopt an inclusive approach from the outset, to prevent the risk of social grouping.
- Find incentive factors: the annotation projects should have specific aims. The annotators need concrete goals: working around a new publication, a special event (a meeting), etc. In addition, positive levers should be sought for enhancing the value of the work done by the participants. We could turn the annotation into a publication (the participants would then be mentioned as co-authors), or share the most relevant annotations on social networks (and mention their authors).
- Provide support and lead: create a regulatory system and guidelines that clearly outline the terms of the communication contract and the experimentation aims, while leaving the possibility to the communities to be the actors of these codes. Activating the annotation tool is not enough to bring annotations, so we should adopt a pro-active attitude. Although there have been no conflicts during the experimentation, we should also provide tools to manage potential conflicts (the moderation functionality being not the only one to be considered).

Above all, the annotations should no longer be considered by the researchers as an additional work. Thus, the practice of annotation should be a support used in well-established communication places:

- For courses: pedagogical annotations
- For the preparation, the support or the extension of academic events, suitable for in-person meetings such as seminars, symposia, workshops, etc.



- For the publications: during the publications reading process, or some preparatory work such as writing book review.

For platforms

Our only recommendation concerning the platforms is to implement the annotation tool directly into the platforms internal system. We realized during the interviews that some participants already used annotation tools in their daily work. Hypothes.is (like other tools) allows also annotations for private practices. If the tool is already used for private practices, then the participation rates for public practices could increase, partly solving the problem of the technical entry cost.

For Hypothesis

Some technical difficulties were identified during the experimentation and the interviews. Hypothes.is' tool was initially designed to annotate web pages. The feedback may help us to optimize some aspects of the tool and processes:

- Simplify the identification and authentication process by centralizing this steps on the webpage currently annotated.
- Optimize the Publisher Group system: Hypothes.is has already achieved this, since the tool has been partially adapted to our specificities (scoping of our URLs) as part of our partnership. Nevertheless, several annotations were located in the wrong group and it may be appropriate to improve the automated opening of a defined group, with a default setting.
- Develop a feature that allows to visualize all the annotations included in one book (composed of different chapters with different URLs), so that the participants can read the annotations on one page.
- List not only the first-level annotations on the website, but also the answers and the footnotes: from a conversational perspective, annotation answers are just as important as the first-level annotations.

For publishers

Considering the added value generated by the annotations for the publications and, in particular, the potential books enrichments observed during the presentation of the annotation results, considering the social aspects and the possibility of creating readers communities via the annotation system and the possibility for the authors to gain feedback from their readers, we think it would be beneficial to the publishers to offer this functionality to the authors, and to use it as a tool to enhance and enrich their publications.



- Involve the authors: because they know their communities, but also because they are the main stakeholders interested in getting feedback on their monographs and developing their networks. And because one of the main interests for the annotators is precisely to communicate with the authors, who are best placed to answer any comments and questions.
- Integrate this practice into open access policies.
- Integrate the annotations into existing workflows: given the potential workload resulting from the annotation practice, the aim is not to add additional work to the editors but rather to build on the work already done. For example, concerning the search for new annotators: this requires the development of a network, and this activity is already managed by the publishers for the proofreaders. The proofreaders will make potential annotators and vice versa. In addition, it seems entirely appropriate to propose annotation as a parallel tool to the reading reports.
- We recommend to adopt a strategy based on a two-level implementation:
 - A simple activation for all contents as a commentary tool, which will allow readers to identify the tool and get used to it.
 - The gathering and animation of communities around specific books: whether during scientific events to stimulate interest around an author (by activating annotations on other titles) or to accompany the publication itself, the annotation tool will make it possible to promote some works and "bring to life" the publisher's catalogue. The annotation projects are an opportunity to gather "readers" groups around an active and collective reading process, a scholarly reading process. The publications are thus enriched and alive, they evolve with their communities and the contributions of everyone ("readers", authors, publishers).

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