## The true contribution of academic publishers to academic publications

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Publishing an edited volume in a renowned series is quite a remarkable experience nowadays. Responsibility for all tasks except for marketing has been shifted to the volume editor and to low-skilled workers in low-wage countries. A volume editor recounts his experience.

The editor working for the publishing house was most helpful. He had given the contents of the textbook considerable thought and spent hours on the phone with me explaining his experiences regarding style and layout. Over the course of a year, I learned a lot about professionally producing technical books. Later, I proudly saw the volume on bookstore shelves, incidentally at a price students could afford.

That was in the early 1990s. At the time, publishers had already outsourced typesetting to the authors and their PCs, but they still employed in-house editors who put the time and thought required into book projects to secure high-quality results. Back then, I had such positive experiences with Springer, but also with other well-known publishers with whom I published both monographs and edited volumes.

So more than 20 years later, I unsuspectingly decided to publish another book with Springer, an edited volume with the best contributions delivered at an international conference. We didn't want to publish proceedings in the usual sense, but a carefully edited volume with chapters referring to each other. Since bibliometric indicators are used to assess authors nowadays, it was a stroke of luck that Springer was advertising an appropriate series as follows: "Now indexed by ISI Proceedings, EI Compendex, DBLP, SCOPUS, Google Scholar and Springerlink." My team organized a peer review process for the book chapters to secure the quality of the contents according to the standards prevailing today. Nothing seemed to stand in the way of a successful book. But it turned out completely differently—a drama in five acts.

Act one. Springer expresses interest in our request to publish the book titled "ICT Innovations for Sustainability" in the series in question and estimates the sale price for the print version at "99.99 euros." That might not sound particularly cheap, but it is within reason today for a book of this size. We sign the contract, the authors begin their work, and we give them the "Author Guidelines" and a promising package of "Author Tools" described on Springer's website as applicable for this series. Some of the specifications are very unusual, for example the format for 3rd- and 4th-level headings. Aware that authors tend to ignore such rules and then produce countless variations whose standardization

later on requires enormous time and effort, we point out such peculiarities to our 47 authors for good measure. And we make sure they know that all the figures for the print version must be comprehensible in grayscale.

Act two. Numerous questions from the authors show us that there are unclear instructions in the guidelines as well as inconsistencies with the Author Tools. In addition, some authors have downloaded other guidelines from Springer's website and are now convinced that they apply to our series. We send lists of detailed questions to the publisher. Although we do receive answers, they often raise new questions. Fairly late, one Springer editor sends us a new version of guidelines that we have never seen before, accompanied by the surprising information that we do not need to "deal with formatting" since the book will be "typeset professionally." Please remember this sentence well so that you can use it as a yardstick for what is yet to come.

Act three. Actually, it's good news that professionals will take care of the layout and we, as editors of the book, will have nothing to do with it. But aside from the fact that this piece of information reaches us quite late and contradicts the instructions on the Web, it is hard for me to believe in this miracle. I continue trying to deliver a manuscript that is as uniform and well worked through as possible. We ensure that the bibliographies in all of the chapters are formatted uniformly. And of course we continue to insist that all figures must be comprehensible in grayscale because the price of the print version cannot support images in color. All this makes for a lot of time and effort. We, the editors of the volume, consider it to be an investment that will save everyone involved work during the next step—final proofing—and will enable us to stick to the ambitious schedule for publication. Then we deliver the roughly 470 pages to Springer.

Act four. A friendly gentleman from a company in Chennai, India, contacts us by e-mail. Springer has commissioned the company to produce our book "in accordance with the Springer style guidelines." We are curious to find out which guidelines it will be. When we receive the PDF of the entire book for proofing, the answer is clear: none of them. The proofs look like they had been edited by a random generator. For headings from the 3rd level on, there are now no less than *nine* different variations, sometimes even several in a single chapter. In addition, the headings were not recognized as such in some chapters. Incidentally, none of the nine variations conforms to Springer's guidelines for this series ...

But that is by no means the only problem: Placeholders that we used to cross-reference other chapters of the same volume were not replaced, even though that had been agreed by e-mail with several people at Springer; in all the chapters' bibliographies, the titles of all the sources were automatically lowercased, including abbreviations, so that we have to correct them back to the original in hundreds of cases, for example "it" to "IT," "un" to "UN," "oecd" to "OECD"; in some chapters, dozens of references were removed from the text, and then "Author Queries" like the following were generated: "References [56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69] are given in list but not cited in text." The only way to repair damage of this kind is by hand, and by going back to the

original manuscript. This requires understanding of the subject matter (yes, the subject matter matters, too!).

The list of mutilations could go on and on. I send a complaint listing pages of problems in detail to Springer's subcontractor, and also to Springer for their information. It includes the sentence: "It is inevitable that someone who tries to *understand* will now look at both the current text and the author manuscripts and decide what has to be done." You may already suspect that there will be no "someone" unless we do the work ourselves. We're trapped: after all, we want to present the book at an upcoming conference. Who knows how much longer it would take if we switch to another publisher; perhaps that would even involve a legal dispute. If we give up the project, then all the work invested so far—especially by the 47 authors—would be for nothing.

It is problematic that at this point in the process, we cannot change the text itself, but must explicitly annotate every single correction. When the "professionals" implement our changes, new mistakes usually emerge, which we then have to find and correct in the next round. This reminds me of the olden days—of software development in batch mode. It feels like teaching someone pottery over the phone. When we complain, they respond with long-winded e-mails, begging for leniency: "Please bear with us!" So we bear with them, i.e., we do their work on nights and weekends—to solve trivial problems that would have been completely avoidable. Being nice by working nights.

Springer doesn't consider it necessary to get involved in our communication with its subcontractor. An irresistible business model: Have unqualified workers produce something in collaboration with good-tempered academics, whereby the latter take on quality assurance for free, even when the project turns into a bottomless pit. And have them relinquish all the rights to the final product—as your reward for organizing the whole process with as little effort as possible.

Act five. The book is on the market [1], and not a trace of the birthing pains it caused is to be seen. Springer now markets the soft-cover print version for a whopping 203 euros, 253 Swiss francs, or 259 US dollars. The fact that it is now 474 pages long instead of 300 can explain only part of the difference to the price originally quoted. We are also told that the price mentioned at the outset resulted from an error on Springer's part. Incidentally, the online version of each of the 27 chapters costs roughly 25 euros.

Yet the price is not to be the only surprise. 26 of the 119 figures have been printed in color—but not the ones where color would have contributed most to comprehension. Nobody informed us about this decision; nobody gave any thought to the significance of the colors in the figures. Authors contact us and complain, "If I had known that I could have used color ..."

It is obvious that there was nobody at the publishing house who had given the substance of this book any thought. I also assume that nobody had an overview of the entire process. We dealt with a total of seven people at Springer and its subcontractor. Most of the time, they did not know what the others had agreed with us, even if they did try their best to support us, each from their own limited perspective.

The year of publication was another surprise: Even though the book was published on August 22, 2014 (the print version too), the copyright page states the year 2015. This needn't necessarily concern us, since it makes the book seem new for a longer period of time, but the integrity of this practice is at least worth discussing.

Seven months after its publication, our book has still not been "indexed by ISI Proceedings, EI-Compendex, DBLP, SCOPUS, Google Scholar and Springerlink," as Springer's website had proclaimed, and the ones that matter most are ISI and SCOPUS. The authors start complaining to me because the publication isn't counted for bibliometric indicators as long as Springer does not live up to its promise. My repeated inquiries have no effect at all—except that Springer subtly changes the information on its website, which now reads: "Indexing: The books of this series are submitted to ISI Proceedings, EI-Compendex, DBLP, SCOPUS, Google Scholar and Springerlink." The wording "submitted to" is closer to the truth than the previous "now indexed by," since Springer claims it has no direct influence on most of these services as they are operated by competitors and Springer can only suggest that a work be included. So the promise previously made to the authors was at least negligent. It seems that droves of authors take the bait. In the series in question, more than 180 volumes have been published since 2013, in other words, more than one volume per week on average. An assembly line with no quality assurance at all by the publisher. Springer publishes a total of approx. 4,500 book series, i.e., it operates 4,500 of such virtual assembly lines in parallel, which is easy if you do practically none of the work—except advertising, of course. This also shows that is is an illusion to think that it is a sign o fquality to be accepted for publication by one of the big and highly reputed brands in academic publishing. It is this illusion that is still being sold, nothing else. The emergence of open access business models that make the authors pay for publishing just makes this visible.

Up until 20, 30 years ago, publishing houses still identified topics and authors, advised them, and guided them through the process. Publishers gained their reputations by ensuring the substantial and technical quality of the works. They also assumed significant financial risks (and had to be selective for this reason) because print runs had to have a certain minimum size. In contrast, in today's age of printing on demand and online publication, the financial risk is very close to zero. Production is outsourced to low-wage countries, as we have seen, and quality assurance is shifted entirely to a volume's editors and authors. Why is publishing academic books more lucrative than printing money? Correct: you'd have to print the banknotes yourself.

In publishing this critical report, I am not aiming to criticize the subcontractor's employees for their lack of training or experience. What I am criticizing is the uncompromising externalization of costs by Springer-Verlag, which can use cheap labor because it simultaneously shifts quality assurance to volume editors, many of whom are paid out of taxpayers' money. This reduces costs—and at the same time, the publisher increases the retail prices, partly because university libraries willingly buy back the products the tax payer has financed and partly because sales of conference proceedings are guaranteed by the organizer of the event. The tasks performed by the publishing house are reduced to advertising,

using a brand that owes its reputation to the work of a previous generation of professionals—real professionals.

In light of these realities, I do wonder whether anybody is concerned with the reputation of a successful brand—apparently not. One plausible explanation is that the renowned academic publishers have been living on the glory of bygone days very deliberately and for quite some time. The major brands are still surrounded by an aura of quality and credibility. The future will show how long they can cash in, in other words: how long it will take to ride that horse to death. This modus operandi certainly isn't sustainable.

I provided this text to the people involved for their information before publishing it. Subsequently, Springer intensified its efforts to have the volume indexed by SCOPUS. This happened eight months after publication of the book.

Numerous colleagues responded to the German version of this contribution [2], writing to tell me about similar and even worse experiences with other publishers. The problem I have described here is obviously not specific to Springer-Verlag, but rather the result of the business model prevailing in the industry today. It speaks for Springer's separation of editorial and commercial affairs that the original version of this article was accepted for publication in the Springer-Journal *Informatik-Spektrum*. Because of the strong interest it triggered, the responsibles at Springer then suggested to publish it also in English translation. However, after more than a year, I was told that they didn't find a Springer journal that accepts this format of article.

## About the author:

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## References:

[1] Hilty, L.M.; Aebischer, B. (eds.): ICT Innovations for Sustainability. Springer Series Advances in Intelligent Systems and Computing 310. Springer International Publishing 2015, ISBN: 978-3-319-09227-0 (Print) 978-3-319-09228-7 (Online) DOI: 10.1007/978-3-319-09228-7

[2] Hilty, L.M.: Was leisten Wissenschaftsverlage heute eigentlich noch? Informatik-Spektrum 38:4, 2015, 302-305