### Keep the Momentum Going: Planning for Publishing While on Parental Leave

#### Yumeng Ou

Welcoming a new life into the world is arguably the most exciting and challenging moment one could ever experience. Although universities and institutions have been adopting generous parental leave policies these days, being an early-career researcher, while holding your newborn baby in your arms, you might still worry that putting your career on pause would make you lose the momentum and eventually your place in the field. I've been there, and I'm still working hard to dilute the impact the pause has made to my career. After all, there is no universal box that one can simply check to indicate such a career interruption. While you are on pause, other people are not. Luckily, I've got a circle of friends and mentors who have been in the same situation and have shared with me tons of insightful advice on how to stay productive and keep publishing during such a special period of time. The short answer is: yes, it is doable, and wise planning is the key. Here I would like to share some advice and experiences that I've found particularly helpful. Before going into detail, I would like to say that you should by no means feel guilty or anxious about not being able to publish as much as in your prime days. A new addition to the family is one of the most precious things in life that you should definitely celebrate and enjoy. Piece of Advice No.1: Don't be too hard on yourself!

My next piece of advice is to plan ahead well before the bomb goes off. One thing you will notice after the baby arrives is that your time is now chopped into tiny pieces (my husband and I call them "baby napping breaks") and any long work blocks become a true luxury. So, how do you make the best of these tiny slots? Compared to the core step of brainstorming for a proof that requires an extremely high level of concentration and continuity, I find it a lot easier to use those slots to actually write a paper: adding in details, carrying out routine calculations, writing the introduction, polishing the arguments. These activities can be done while you are running on low battery (think about those sleep deprived first couple of months) and are much easier to slide back into after you need to step away to warm a bottle of milk. If you plan ahead wisely and assign these tasks specifically for your parental leave, you may be able to actually turn the leave into a productive writing retreat. In addition, even though it may be harder to plan ahead,

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you might consider using this period of time to revise a paper or write a referee report. In short, despite the fact that keeping your research going may be a very challenging task when you are essentially a walking zombie, there are many other steps in the pipeline of publishing that are still relatively baby friendly.

That being said, it is not impossible to keep pushing your ongoing research projects while on leave. I personally am very grateful to have a group of wonderful collaborators who have helped me tremendously during this period of time. For any collaboration to run smoothly, it's always good to be frank about your level of commitment, especially when you are planning for or have been on parental leave. This way, you can collaboratively figure out a strategic plan so that you will have a chance to take a backseat during your leave and let others take the lead. There might be some suitable small tasks that you can take on such as solving a very concrete subproblem, or proofreading an argument. You will have the chance to "pay them back" by contributing more to the project after your childcare responsibilities are not as overwhelming. Having an ongoing collaboration (or multiple collaborations) while you are on leave will also help better structure your time and give you a sense of community.

Moreover, parental leave may actually be one of the best times to seriously plan for your future publishing. After all, people understand your struggles and wouldn't usually expect you to publish as much (or any, to be frank). It is hence a great time to slow down and plan for your future research directions. Contradictory as it may sound, I would say it's actually a golden time to write grant proposals (I've done two), even though you feel that your schedule is already crazily packed. This would give you a chance to step away from highly intense research activities to take a breath, while at the same time gathering good ideas and getting prepared for future projects. Again, compared to core research activities, idea gathering and grant writing are much more friendly to busy new parents. I've developed a habit of listening to online talks (one of the few good things the pandemic has contributed to mathematicians) while rocking my son to sleep or even changing his diaper, which helps me keep up with the evolving terrain of the field and find good potential research projects. Thanks to modern technology, my son seems not to have been bothered (wireless headphones are a godsend!). In the end, it doesn't even matter that much whether your grant proposal is successful or not (I know, it stinks). After your pause is over and the "play" button is hit, there will be a clear roadmap of future projects that you can follow to work towards new publications.

I know that all these are easier said than done, and being a new parent is such an overwhelming experience. It is okay to slow down, okay to be gentle on yourself. And you absolutely should. It is such a special and precious time for you, your baby, and your family, and you should by all means enjoy it to its fullest. I hope this advice can help ease a bit your anxiety for not being able to publish as you would've normally done, so that you can step into this exciting new page of life a bit more confidently.



Yumeng Ou

## **Credits**Photo of Yumeng Ou is courtesy of Yumeng Ou.

# Self-Publishing & Mathematics

#### Robert Ghrist

Academics tend to be leery of self-publication of scholarly works, given their desire for signaling quality and avoiding the appearance of being a *crank*. I have been experimenting with self-publishing since 2014. What follows is a survey of my reasons and processes, along with advice.

**Print texts.** In Fall 2014, I published a book, *Elementary Applied Topology* ("EAT" below), aimed at graduate students and researchers in the mathematical sciences. The book is dear to me and represents the synthesis of a significant portion of my professional career. It is an idiosyncratic text, but not unpublishable by a top venue. I chose to publish my book using Amazon's print-on-demand service (at the time called *CreateSpace*, now rebranded under *Kindle Direct Publishing*) for the following reasons.

- I retain the copyright and am completely unrestricted with regards to the publication of the text. I choose to keep pdf copies of EAT on my website, available for free. There are a few publishers who will do that (Cambridge is quite good about it), but not enough.
- 2. I set the price of the book. Subtracting Amazon's costs yields the royalty payment. One can set differential pricing by country.
- 3. Nonconformity is tolerated. I wanted to put figures on the front and back cover of my text. Most monograph

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- series have rigid style formats and will not allow that. I decided to hide some Joycean puzzles in the book (allusions, secret codes, mythologies) to keep me sane while dealing with writer's block. Explanations and permissions were not needed.
- 4. Amazon takes care of payments, returns, tax forms, currencies, analytics, etc. It works in many (though by no means all) countries.
- 5. The quality is very good. They do not print hardbound books, but their softcover books appear to me to be of the same quality as other softcover math texts by leading publishers. I chose to make the book blackand-white, but color printing is available for a (much) larger price. The cover is always full-color.
- Besides Amazon's already large distribution network, the book can be made available to physical bookstores and for purchase by academic libraries (albeit with smaller royalties).
- Publication turnaround time is quick. Upload the text and the cover, order a proof copy, then publish it with a click.

I have been and remain very happy with my decision and am convinced that academics—even pretenure academics—should use this (or a similar) platform for the self-publication of scholarly books.

The objections that I can think of are these:

- 1. "It's not refereed." It can be, but you have to ask friends to do it, and you need honest friends. Your readers also become your editors ex post facto. Because one can update the text at any time (simply upload a replacement pdf and run checks), it's reasonable to wait for readers to contribute error reports. (Full disclosure: EAT is full of errors, and I still have not issued a correction, alas.)
- 2. "Publishing with XXXX signifies quality." This is not quite true. Books on quantum knots and consciousness, the mystical golden ratio in nature, fractals and markets, and all manner of pseudomathematical claptrap are published by major presses (and those books will sell more than yours or mine). Publishers of higher mathematics are desperate for new books—the only way to make money on texts with low sales is to make a lot of books—and this situation is only getting worse. If you think to yourself, "But all the books by XXXX Press that I own are high quality," then you are forgetting how natural selection works. Go to a catalogue of "New & Upcoming" to get the picture of quality at the margin, before evolution thins the herd.
- 3. "But how will my book get noticed if I'm not already famous?" Yes, you will not get any free marketing, though Amazon may promote its own books more highly—I suspect, but do not know. If you aspire to fame, there is good news: many books in mathematics are poorly written and very poorly illustrated. Assuming that we are all smart and doing good mathematics (a very good