

THE THEORY BLOGS COLUMN

BY

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INTRODUCING THE THEORY BLOGS COLUMN

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Blogs are a format for sharing content online. In a blog, one writes essay-like posts that are shared on the internet and are, typically, freely readable by everybody. The posts are seen in reverse chronological order, and readers can add their comments at the bottom of each post, respond to other comments, and so on. This format, introduced in the late 1990s, quickly became popular in the first decade of the 2000s for a variety of purposes.

Many people used blogs to share diary-like entries (this use peaked around 2010 and then migrated to social media apps like Facebook and Instagram). In addition, enthusiasts and hobbyists used blogging platforms to write in depth about their passions (a type of writing that we now see on Reddit) and professional writers, such as journalists and commentators, used it to share unedited and informal takes on timely issue (this type of writing migrated, in a very different form, to Twitter, and now it is seeing a resurgence in the original long form via newsletters).

Blogs also became popular in academia, including, so that we come to the point of this column, among theoretical computer scientists. Academic blogs, particularly in highly mathematical fields like ours, play a role that has not been subsumed by newer social media apps, and, as far as I can tell, they remain popular.

They allow us to share widely and freely the kind of discussions and ideas that are crucial to the development of our field and that are not fit to be published and disseminated as widely in other formats. They allow the sharing of newly formulated open questions, to discuss informally what is the fundamental new idea of a newly announced technical breakthrough, they allow us to present new and simplified proofs of old results, they allow the discussion and the analysis and quick refutation of a new paper claiming $P \neq NP$, and so on. They also allow the author to share (and collect comments on) course lecture notes, which has been done for several courses, and has even led to published textbooks, such as Ryan O'Donnell's book on analysis of Boolean functions.

This kind of content (insights into new techniques, simplified proofs, new open questions, drafts of lecture notes) has been shared, for a long time, in hallway con-

versations in departments and in conferences, and in private conversations among experts, or in certain graduate seminars. Having these discussion on blogs, however, makes them accessible and open in a completely different way, so that even students and young researchers that do not have access to those hallway conversations and those graduate seminars can share in the “lore” and the “oral tradition” of our field. Anecdotally, I have heard of a number of young theoretical computer scientists that have been learning about our field from blogs since the time they were undergraduates, or even high school students.

I have been thinking a lot about this issue of access to insights and ideas over the past year and a half. Because of Covid-related restrictions, we did not have conferences to go to and have hallway conversations at, and many of us did not even have departments to go to. Most exchanges of ideas happened in scheduled video calls, but one cannot bump into a colleague in a video call and start chatting, or overhear someone else’s video call and join the conversation. The Covid restrictions have increased the “privilege,” to use a currently fashionable word, of those plugged in to certain academic networks, and they have made it harder for new students to access knowledge, so that the openness of academic blogs is a valuable resource.

Blog posts are also a medium to tell personal stories that relate to research, something that has no place in technical papers and in textbooks, but is of great value. Omer Reingold, for example, has invited a number of people to write on his blog about “research life stories,” a project that is, to me, of great interest to see what happens behind the scenes of great research and how other people think about what they do. There is significant concern in our community about our gender imbalance and other issues of representation and inclusion, and significant pressure coming from university administrations to do better. University administrations address this problem with the tools that they have and that they know how to use: top-down mandates and emphasis on process. There are several things that our community can do to change in a bottom-up way, and one thing that I would like to see more of is personal narratives of what it’s like to devote one’s life to research and to embrace an academic community in which you do not see “people like you,” whatever this means for that particular person. This is something that can happen with a variety of media, including academic blogs, and I have personally seen the impact of sharing personal stories concerning LGBT issues.

But enough about theoretical computer science blogs, what does the Bulletin of the EATCS have to do with all this? This is a very good question, as people say during a Q&A when they do not have a good answer. I was asked whether I would like to edit a BEATCS column on theoretical computer science blogs: this sounded like an open ended task with no clearly defined goals, that gave me a good chance to make a fool of myself. So, as I have always done with similar proposals, I said yes.

My plan is to provide BEATCS readers with an access to TCS blog content that adds something that could not be provided by simply linking to posts, and to provide something that is complementary to blog content. For example, blogs thrive in immediacy, and I plan to use some columns to take a broader, retrospective view, and blogs tend to have a distinct, individual voice while this column will feature a variety of points of views and voices. Here is another difference: when a blogger runs out of things to say, the pace of publishing slows down and eventually there is an indefinite hiatus. The regular publication pace of BEATCS will be such that when we run out of interesting things to say to our readers, we will close down this column, perhaps to be revived again in the future.