Observations on the TEX Users Group's 41st Annual Conference—TUG 2020 in the COVID-19 era

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The 41st annual conference of the TEX Users Group (TUG, tug.org) was scheduled to be at the Cary Graphic Arts Collection of the Rochester Institute of Technology this past summer.

Like so many other organizations in 2020, TUG's board of directors had to cancel its in-person conference on account of the 2020 COVID-19 epidemic. After a short period of indecision, the board decided to try to have a Zoom-based conference, and they asked TUG member Paulo Ney de Souza to organize the online conference. Paulo had substantial prior experience organizing online conferences in response to cancellation of in-person conferences.

I am partially writing this report for people outside the TUG community and TUGboat readers who may be interested in how organizations handled moving from an in-person to an online conference. Of course, it is also written for TUGboat readers who attended or may have missed the conference.





Figure 1: Left: Poster for original conference, designed by Maggie Blaisdell, an RIT graphic design student. Right: for the online conference, designed by Jennifer Claudio, a science teacher in San Jose.

The event

The virtual conference was held July 24–26, the same days for which the in-person conference had been scheduled; people already had those days blocked out in their calendars. In partnership with the University of Adelaide, where TUG board member Will Robertson is on the faculty and made the arrangements, the conference was broadcast on Zoom. The conference was also streamed on YouTube because it was easier for some people to watch via YouTube than Zoom; it also provided a back-up access path.

Conference registration was required, free (unlike TUG in-person conferences), but with encouragement to contribute to TUG. About a seventh of registered attendees did contribute, as did several institutions.

The online conference worked as follows:

- 1. Conference presenters were encouraged to record their presentations on video in advance and to pass them to the conference organizers for broadcast during the presenter's slot in the conference schedule. Participants were given excellent information about putting a presentation on video, available at tug.org/tug2020/pres.html. After the presentation was shown, the presenter was available live to answer questions.
- 2. On July 23 (the day before the main conference talks started), an online introductory LATEX workshop was held; Overleaf generously provided support for online TeX usage at the workshop. The workshop leaders, Sue DeMeritt and Cheryl Ponchin, had held similar workshops in person at many previous TUG conferences. About 30 people joined for more than half of the workshop; many others were present for shorter amounts of time.
- 3. The daily conference schedule was organized so presenters could give their talks at a reasonable time within their own time zone (tug.org/tug2020/program.html). The conference was run more or less around the clock; times here are US EDT: day 1, Friday noon to 8:30pm; day 2, Saturday, 3am to 4pm and 9:45pm to 3am Sunday; day 3, Sunday, 9am to 7pm.
- 4. For every session, there were declared hosts or co-hosts with Paulo being the primary host when he was not taking a break to sleep. The hosts moderated the sessions.
- 5. During the sessions about a dozen and a half people usually other speakers, but occasionally attendees were designated to be "panelists" within Zoom. Panelists could unmute and speak (as the hosts could); the rest of the people watching a session could not unmute. Everyone participating in a session could send questions and chats (in a text box) which everyone on Zoom could see.
- 6. Presenters' videos or slides resided with multiple hosts so, when they didn't work from one host's location, they could be shared from another host's location. A few presenters showed their slides and gave their presentations live.
- 7. There were also virtual breakout rooms where people could meet for technical discussion or

socially, using Zulip (zulipchat.com, around 80 people over the course of the conference) and Gather Town (gather.town, up to 15–20 people). These were organized by Rohit Goswami of the University of Iceland. Both remain active indefinitely and anyone is welcome to join.

The content

There were presentations on quite a variety of topics. See again tug.org/tug2020/program.html. As is typical of TUG conferences, there are a number of presentations not closely related to TFX.

I saw the presentations as falling into a number of areas: creating accessible PDF output; TEX community infrastructure and resources and their use, including new and commercial ones; teaching TEX and the user experience; typography; applications of TEX et al.; connections between TEX and other systems and formats; extending use into other domains and to other devices; variations and improvements on traditional TEX capabilities; and the future of (IA)TEX, etc., both plans and opinions of where else to go. There were two keynote presentations and two live interviews.

There were lots of very fine presentations, and there are links to the videos of the presentations at tug.org/tug2020. Readers who did not attend the conference should take a look. Two that I particularly enjoyed were by Amelia Hugill-Fontanel and Paulo Cereda. Peter Flynn's presentation on creating virtual bookshelves for use as background while Zooming was a lot of fun (they can be seen in the background of Jennifer's poster on the previous page). The conference proceedings, the present issue of TUGboat in which this report is included, will be entirely open access towards the end of this year. The proceedings includes papers or abstracts from all the presentations.

I was struck by the evolution of who is involved with what in the TEX world since I first attended a TUG meeting in 2003. Projects go on and evolve, while who is maintaining or developing them slowly changes. It is clear that TEX et al. remain in widespread use, there is a vibrant community, and that the end of TEX is not imminent.

Reflections

There were over 250 participants; in-person TUG conferences rarely reach 100 participants, more commonly 50–60. Being free and not requiring travel for participation are two evident reasons for the greater attendance. Twice there were 130 people in a presentation, split roughly two-thirds/one-third between Zoom and YouTube. There were seldom less than

40 people in a session regardless of the time of day. (Many more people registered than attended; presumably some will watch at a later time.)

The conference ran impressively even through occasional little glitches. Over the course of the three days, the hosts knew better what glitches to anticipate and to try to avoid. Non-host panelists could also unmute briefly to provide helpful ideas of getting around glitches. There was one unpleasant Zoom bomb—hard to avoid with free registration.

Recording presentations in advance was probably a first experience for most participants. They seemed up to the task. In addition to decreasing the chances for Internet problems, prerecording tended to result in graphically nicer presentations which may have been better organized than without prerecording. Also, very usefully, they didn't overrun their time slots as live presentations can do.

Having the conference be virtual had other advantages. It was nice to be able to leave the "meeting room" without anyone knowing. It was nice to do other things while in the meeting without appearing rude to the speaker, for instance, to eat, do other computer work, or tune into a baseball game on a separate screen.

There was lots of side chat during presentations, mostly extending from something a speaker had said. This did not seem disrespectful to the speaker as it would have in a live meeting room. The chat was often useful, such as someone giving the url of a great example of something the speaker had mentioned.

Holding this online conference on short notice required massive volunteer dedication and effort, which I am sure was greatly appreciated by the TUG board and conference participants.

Futures

There is hope that the 2021 TUG conference can be held at the Cary Graphic Arts Collection at RIT; of course it will depend on the global health situation. If not, TUG has learned a lot about how to have a successful online conference and the next one can be even better. If it can be live at the Cary, some observations from this year, such as the benefit of recording presentations in advance, could still be applied; there would likely be provision for some remote presentations.

The world is moving increasingly to digital communications. Recovering from having to cancel this year's in-person conference gave TUG a start to where the world is moving.