DOI:10.1145/3488554

Moshe Y. Vardi

The Paradox of Choice in Computing-Research Conferences

IN THE EARLY 1970s, after a major struggle with Soviet authorities who denied Soviet Jews permission to emigrate, primarily to Israel, such permission was granted on a limited basis. Small waves of Soviet emigrants landed in Israel, making a transition from the Soviet economy to Israel's Western economy. I remember stories about their encounter with Israeli supermarkets. In the Soviet Union, a friend told me, if you wanted to buy canned peas, there was one available type of canned peas. In an Israeli supermarket, there were a dozen different types of canned peas. The choice was so difficult that in many cases ex-Soviet shoppers just gave up and left the store without making a purchase.

This phenomenon was studied by American psychologist Barry Schwartz in his 2004 book, *The Paradox of Choice—Why More Is Less*. “Autonomy and freedom of choice are critical to our well-being, and choice is critical to freedom and autonomy” wrote Schwartz. “Nonetheless, though modern Americans have more choice than any group of people ever has before, and thus, presumably, more freedom and autonomy, we don't seem to be benefiting from it psychologically.”

I believe the problem of over-choice also describes what is happening today with computing-research conferences. When COVID-19 erupted in early 2020, many conferences had to pivot from an in-person mode to a fully remote mode. By April 2020, ACM had released guidelines for “Best Practices for Virtual Conferences.”^a Computing-research conferences also quickly discovered the

standard conference registration fee of say, around US\$500–\$700, is not realistic for virtual conferences. Registration fees have been reduced drastically. Many conferences are free to non-authors or have a nominal fee. I now can sit in my home office and “attend” dozens of conferences per year, at almost no cost.

While the characters in David Lodge's 1984 novel, *Small World: An Academic Romance*, spend their time traveling from conference to conference, I can hop from conference to conference at any time, all from the convenience of my home. Yet I do not, as I have too many choices. In addition to conferences, events of various types are taking place all over the world, and most are open. The conference/event world is truly flat now. Dozens of email notices land in my inbox every week. But processing this stream of notices is by itself a time-consuming task, so most of these notices languish unopened. I must confess that the extent of my conference participation has shrunk over the past year and a half, rather than expanded. Too much choice.

It may seem this problem has been created by the pandemic, and it will go away when the pandemic ends, hopefully sooner rather than later, but I do not think so. Undoubtedly, we are all eager to resume social contact, and there will be a rush to attend in-person conferences as soon as it is safe to do so. But there is a growing realization that COVID-19 may have been just a dress rehearsal for a much larger crisis—the climate crisis. The slew of extreme-weather events over the past few years has demonstrated compellingly that the issue is not about a rise in planetary temperatures in the year 2100, but with a climate that is getting more extreme *right now*!

In my January 2020 *Communications*

column, “Publish *and* Perish,”^b I asked: “Can we reduce the carbon footprint of computing-research publishing?” In a March 2020 *Communications* Viewpoint, “Conferences in an Era of Expensive Carbon,”^c Pierce et al. make several specific recommendations for ACM to reduce the carbon footprint of its conferences. But I believe the proposals in both columns do not go far enough. The very idea that each paper publication must involve conference travel is not morally acceptable anymore. Virtual and hybrid conferences are here to stay, I am convinced, which means the paradox of choice is here to stay.

The fundamental problem, I believe, is the current computing-research publication system conflates research publishing with community building. Other disciplines view the two as two distinct activities of their research community. In the past I have pointed out the weaknesses of the conference system as a vehicle for scholarly publishing, but conferences were effective community-building vehicles. Virtual conferences have yet to become effective community-building vehicles. We may need in-person conferences for community building, but not so many!

In my opinion, the status quo is simply not acceptable anymore. Change is imperative. We *must* change!

^b <https://cacm.acm.org/magazines/2020/1/241717-publish-and-perish/fulltext/>

^c <https://cacm.acm.org/magazines/2020/3/243024-conferences-in-an-era-of-expensive-carbon/fulltext>

Moshe Y. Vardi (vardi@cs.rice.edu) is University Professor and the Karen Ostrum George Distinguished Service Professor in Computational Engineering at Rice University, Houston, TX, USA. He is the former Editor-in-Chief of *Communications*.

Copyright held by author.

^a <https://www.acm.org/media-center/2020/april/virtual-conferences-best-practices/>