Conferences Work Better When Everyone Stays Home

I expected the coronavirus to ruin a scientific gathering earlier this month. Then I virtually showed up.

By Ariel Procaccia

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Try it. You'll like it. *Photographer: Maki Nakamura/Digital Vision*

I've always found it distasteful that cooking shows present viewers with mouth-watering food that can't be savored. Strangely enough, that thought was on my mind when I finally accepted that, due to the pandemic, an international scientific conference I was helping to organize would have to take place virtually. I believed that our event was doomed to become the academic analog of a cooking show – a pale shadow of the real experience.

A few months later, I'm delighted to have been proven wrong. If a traditional conference is like dining at a restaurant, then a well-organized virtual conference is like takeout – from a better

and cheaper restaurant. Rather than falling prey to the coronavirus, conferences that have transitioned online are more vibrant than ever.

In retrospect, the success of virtual conferences is only somewhat surprising. The program of an academic conference is generally devoted to talks, whereby a speaker imparts insights to participants. This transfer of knowledge, however, is often foiled by the fact that many of the potential recipients are sound asleep. To be sure, once in a while one attends a great talk that can only be fully appreciated as a live performance, much like a fine play. By and large, though, virtual talks are roughly as effective as their in-person counterparts.

The main difficulty for the virtual format, then, is to emulate an informal yet crucial feature of conferences: impromptu interactions, which are indispensable for forming scientific collaborations and professional connections. This secret sauce is concocted from natural ingredients such as serendipity and personal chemistry. It may seem inevitable that the artificial substitutes found in an online environment would rob the recipe of its zing.

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Fortunately, cleverly designed platforms can, in fact, facilitate spontaneous interactions that rival those that happen in person. For example, our conference and several others have employed a service called Gather, which allows participants to wander around a digital space in the form of an avatar. Conference-goers can initiate or join group video chats by walking up to other participants, and leave those chats by walking away. Despite the simplicity of this setup, bumping into an old friend is just as exciting as in real life, and sneaking out of a dull conversation is just as awkward. For a truly authentic experience, the virtual meeting space can even be configured to look like a dingy conference center.

Where virtual conferences really shine is their accessibility. Attending an international conference typically requires arduous travel and a week or more spent away from home, so

parents and people with disabilities commonly choose to stay put. Moreover, the costs of participation usually run into thousands of dollars, which may be prohibitively expensive for scientists from less affluent universities and developing countries. By contrast, virtual conferences can be attended from the comfort of one's couch and are almost free. Our conference cost (at most) $10 to attend this year, whereas I paid $2,806 to attend last year's edition. It's no wonder that attendance at virtual conferences has soared as high as four times the usual number.

At the same time, virtual conferences do have a weakness: It appears that some participants only engage with the conference to a limited extent. Ironically, this may be the result of how cheap and easy it is to attend. In traditional conferences, the investment of money and travel time serves as a commitment device. Like the classical legend of Ulysses ordering his crew to tie him to the ship's mast to resist the sirens' song, an exorbitant price tag wards off bewitching temptations such as email answering and op-ed writing. Surely there are more cost-effective ways to foster engagement (gamification comes to mind).

On the whole, the evidence in favor of the virtual format is already compelling enough to conclude that conferences will never be the same. At a minimum, many will adopt a post-pandemic hybrid model that allows either physical or online participation. It also seems likely that some well-established annual events that have scrambled to transition online in recent months will choose to permanently transcend their physical origins. Conferences will be more inclusive, more efficient and more innovative once they embrace the virtue of being virtual.

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