

processes to become mainstream, alongside the idea of treating the environment and development as one issue.

Some fields quickly grasped that interdisciplinary work is essential to understanding environmental change, and to mitigating – or adapting to – its effects. Confirming a human cause for climate change required the combined efforts of meteorologists, oceanographers and geographers, among others. Replacing the ozone-depleting chemicals used in spray cans and refrigerators needed chemists to talk to product designers. But, as a report this week in *Nature Sustainability* shows, other fields have not got so far in their interdisciplinary journey (L. Kotz *et al. Nature Sustain.* 2, 1067–1069; 2019).

In a project convened by the journal and the Convergent Behavioral Science Initiative at the University of Virginia in Charlottesville, an international group of architects, designers and engineers spent a year with behavioural scientists, investigating how their disciplines could better work together, and why they needed to do so.

Behavioural science has an existing and essential relationship to the built environment: we have to study how people live, work and move to create liveable buildings and towns. But the group established that, when it comes to sustainability, there's room for closer working, and the report amounts to an agenda for joint research. Potential questions include: how do architects and designers make decisions? To what extent can behavioural science in other contexts be applied to sustainable design and architecture? Do architects feel a duty to promote responsible energy use?

Cross-disciplinary working requires careful communication and confidence-building. As the example of defining sustainable development shows, disciplines have their own languages and can interpret terms differently.

Lessons in interdisciplinarity can also be learnt from the 'science wars' of the mid-1990s, a tense time in the relationship between natural scientists and the sociologists who study how research is done. Part of the ambition for sociologists of science is to place a mirror before researchers, to demonstrate potential flaws in their methods. But some eminent researchers saw these studies as an intrusion, and thought that natural scientists had little to learn from them.

One way to ease disciplinary tensions could be to underscore that sustainability calls for behavioural change at all levels – necessitating more research across all sectors. Governments, for example, often interact with independent researchers who study how to improve policy, including how government itself needs to adapt if it is to drive sustainability more effectively. Similarly, business schools produce case studies on how companies can adapt to facilitate that change. Behavioural research could help all of us – individuals and communities – to make changes to how we behave, whether it is taking more public transport or just turning the thermostat down a degree.

Along with governments, industry and individuals, the built environment consumes energy and produces waste, which makes it just as pivotal to sustainability. As the *Nature Sustainability* report says, collaborating effectively and learning from each other can be tough. But considering the planetary situation, not doing so has much higher costs.

 This week, we begin a more concerted push to promote diversity across our content."

No more 'manels'

***Nature's* new code of conduct strives for more diversity at research meetings and events.**

That women from under-represented minorities receive few speaking invitations to the world's largest Earth-science conference has again shone a spotlight on science's diversity deficit (H. L. Ford *et al. Nature* 576, 32–35; 2019).

Conferences are essential for research communication, and taking part is important for career progression. But turning the dial on diversity – and stopping it from slipping back – is proving difficult. Our investigation this year of 'manels' and 'manferences' – panels and conferences dominated by male speakers – showed that sometimes a heroic effort to diversify them one year is followed by business as usual the next (*Nature* 573, 184–186; 2019).

At *Nature*, we are aware of our own shortcomings – that our authors and referees, for example, include too few women – and of our responsibilities to turn things around (*Nature* 558, 344; 2018). This week, we begin a more concerted push to promote diversity across our editorial and publishing activities, including concrete commitments in the events that we organize (see go.nature.com/36jtfr).

In 2019, *Nature* and other journals in the Nature Research portfolio hosted, or co-hosted, more than 30 events in a range of disciplines. But despite informal efforts to make our conferences more inclusive, women and people from minority groups still make up only a small proportion of our speakers. We are therefore formalizing our efforts into a published code of conduct. This will apply not only to Nature Conferences but to all scholarly events organized or co-organized by Springer Nature.

The code commits us to having no male-only organizing committees for Nature Conferences planned from this point. We will invite equal numbers of women and men as speakers, whether we're selecting for keynote presentations or from abstract submissions. We also commit to having no manels at our events, and to monitor and report progress against these goals at the end of each calendar year. Planning for most of our events in 2020 is already advanced, so the full effect of our commitment will be seen from 2021.

Nature Conferences must be welcoming, safe, collaborative and productive for all attendees. Our code states that we expect participants to be considerate of diverse views and cultures, and respectful and collaborative in their discussion and critiques of ideas. Appropriate sanctions will be applied where the code is not followed.

We also commit to supporting diversity more broadly, including in geography, ethnicity, culture, career stage, disability and sexual orientation. With time, we aim to develop our code further to address this explicitly.

Scientific events must be more inclusive. We hope that this initiative – like similar ones in many other organizations – goes some way to reaching that goal.