

Using my religion

The Pope's climate change encyclical is more than a call for action. It is an example of how disparate communities, from religion, the physical and social sciences, can coalesce around a common goal.

The Pope's recent encyclical on climate change was a landmark moment in the conversation around this great societal problem (<http://go.nature.com/7IbiB5>). It is admirable that the Pope has so publicly walked the tightrope between science and religion. But the statement should be seen as a punctuating point in the dialogue between the Catholic Church and the climate change research community, not the final word.

The Pope officially speaks for over a billion Catholics around the world. At the very least, his words may serve to motivate some of the world's more conservative Catholic constituencies. Perhaps more importantly, the Pope's statement brought climate change back into the limelight at a critical juncture, shifting the debate in a way that hasn't been seen for many years.

The media was quick to praise the statement's audacity. The near 200-page document was hailed as a "major, authoritative statement of the moral teachings of the Catholic Church"¹ in the influential *Christian Science Monitor*. *The New York Times* said it "packed an unexpectedly authoritative and confident punch"². *The Guardian* called it "perhaps the most ambitious papal document of the past 100 years"³.

But the encyclical explicitly calls on the Church to enter a "dialogue with all people about our common home", rather than passively accept its message.

This Focus issue attempts to provide a scholarly foundation for that dialogue. It aims to acknowledge that the Pope has worthwhile things to say about climate change, while highlighting items that have been overlooked.

Ecology and public health scholars highlight the gaps in the Pope's thesis, questioning whether it satisfactorily addresses the complex linkages between sustainable development and a booming population (p907). Economics and governance researchers discuss the applied policy implications of the encyclical, highlighting the Pope's reframing of arguments around the global commons (p904). Sociologists call for more practitioners to join a collective effort to utilize the social sciences to address climate change (p900), reinterpret the

encyclical as a challenge to dominant political and consumer cultures (p905), and caution against relying on powerful elites undergoing a Damascene conversion regarding political solutions (p902). These pieces are exemplars of the social sciences contributing to the climate change debate.

A recent publication from the American Sociological Association offers a further example of a social science discipline setting out its stall⁴. The book clearly and powerfully explains how the sociology of climate change can be useful, while being suitably critical of what has gone before. In the same way that interested social scientists may be expected to know the headlines of the IPCC's reports, so engaged physical scientists should be familiar with the top-lines of this volume.

Such works are part of a larger project that serves to foster mutual understanding between the physical and social sciences, which still struggle to coexist.

It is increasingly accepted that the social sciences play an important role in climate research. On the one hand, they can describe in a scholarly fashion what society is, what it is doing, and what feasible alternatives are available. On the other, they can place scientific enquiry and findings in a social context, showing why they matter, and how they can be applied through good governance and policy.

But for that role to be executed, social scientists must be included — and include themselves — in existing institutions that are expressly targeted at addressing this problem. The social sciences need to be woven into the fabric of such processes, but that cannot happen until they formulate themselves into a vaguely coherent thread.

This will be a mutual effort. Perhaps the most prominent institution in this regard is the IPCC, which has so far failed to sufficiently engage with the social sciences on a disciplinary basis. For instance, only three of the 35 coordinating lead authors of Working Group III report were from social science subjects other than economics⁵. That is not enough.

The IPCC must proactively reach out to different disciplinary communities to encourage and facilitate their participation. The new IPCC chair, to be elected in October, must from the outset engage

with a full spectrum of social scientists, including them in scoping discussions for the next assessment report. David Victor has started a conversation regarding practical steps to facilitate greater social science involvement, and these ideas must be taken seriously⁶.

But the IPCC is not solely to blame. Social scientists of all stripes must engage. That requires a shift in mentality to encourage researchers to continuously challenge the disciplinary silos that remain the *modus operandi* of much climate change research.

Social scientists must recognise that participation does not entail conceding ontological or epistemological ground regarding the practices of science. Scholars must be allowed to hold their critical perspectives inside these forums. It is more useful for them to challenge institutions to move beyond the status quo from within. But that will require scientists from every discipline to approach institutions, interdisciplinarity, and the inherently social pursuit of scientifically-grounded solutions to climate change in a constructive manner. Researchers cannot build bridges while burning them at the same time.

In a way, the Pope's encyclical offers a model for how this can be done. It serves as an example of how academic research can feed into the social agenda, and hints at the role the social sciences can play in helping to shape, translate, and progress the conversation. It draws on established research to deliver a message that is at once both conciliatory and motivating, bridging a long-established divide between religion and science in the process.

In this sense, at least, the Pope's call for action on climate change contains a lesson for all. □

References

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5. Corbera, E., Calvet-Mir, L., Hughes, H. & Paterson, M. *Nature Climate Change* <http://dx.doi.org/10.1038/nclimate2782> (2015).
6. Victor, D. *Nature* **250**, 27–29 (2015).