

Impact case study (REF3)

Institution: Newman University		
Unit of Assessment: UoA 4 Psychology, Psychiatry and Neuroscience		
Title of case study: Science and Religion: Exploring the Spectrum		
Period when the underpinning research was undertaken: Start Date: 01 October 2014 End Date: 28 December 2017		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s): Professor Fern Elsdon-Baker (PI) Dr Stephen Jones (Co-I) Dr Alex Hall (Co-I) Dr Carissa Sharp (Co-I)	Role(s) (e.g. job title): Director of Newman University's Centre for Science, Knowledge and Belief in Society (CSKBS), and Associate Directors in CSKBS	Period(s) employed by submitting HEI: February 2015 to August 2018
Period when the claimed impact occurred: 2015-2018		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact (indicative maximum 100 words)		
<p>Between early 2015 and December 2017, research undertaken by the Centre for Science, Knowledge and Belief in Society at Newman University engaged audiences beyond academia in open-minded debate about the relationship between science and religion in society today. This has led to a social change in the perception that there is a necessary conflict between science and religion. It has also had a significant impact on the emerging scholarly field in relation to the social study of science and religion. The longer-term impacts are likely to include helping to break down barriers to engagement with science as well as promoting greater tolerance towards religion by challenging negative stereotypes.</p>		
2. Underpinning research (indicative maximum 500 words)		
<p>The research was led at Newman University by the Director of CSKBS, Dr F. Elsdon-Baker as Principal Investigator. The Centre for Science, Knowledge and Belief in Society (CSKBS) was a multidisciplinary team of academic research staff at Newman working on a sustained programme of research across philosophy, psychology and religion in relation to science and belief from 2015 to 2018. Later in 2018 the team relocated to the University of Birmingham. While at Newman, the main large-scale project in this programme of research was <i>Science and Religion: Exploring the Spectrum</i> (SRES1), a multi-million pound funded research project which ran from early 2015 to late 2017. For example, see Authority, Authenticity, and Belief: British and Canadian life scientists and publics' narratives of evolution and religion : International Research Network for the Study of Science & Belief in Society (scienceandbeliefinsociety.org)</p> <p>The research took an intergroup relations and social identity approach to publics' perceptions and engagement with science and in particular evolutionary science. The research included: qualitative analysis of interviews and focus group data; a historical strand looking at historical and contemporary media discourses on science and religion; a social and experimental psychology strand with a focus on social identity formation; and a quantitative strand including a number of large-scale surveys (with YouGov) focusing on public perceptions of science and religion.</p> <p>A key finding emerging from SRES1 was that public space discourse suggesting a conflict</p>		

between evolutionary science and religion is not necessarily driven by religious individuals who reject evolution, as may have previously been assumed. Rather, it was found that, in the UK and Canada, the majority of *both* religious and non-religious publics who themselves accept evolutionary science, nevertheless assume that most religious people are highly likely to see a necessary clash between science and religion and reject evolution. This is despite the fact that levels of rejection of evolution are low in the countries studied, and furthermore such rejection does not inevitably mean that individuals wholly reject science, or even subfields of evolutionary science. What was observed across all disciplinary strands of research is a form of projected conflict, which is not necessarily played out in individuals' lived experience. This also impacts on whether publics think it is plausible for scientists to hold religious beliefs.

Another key finding is that we see similar trends across religious, spiritual *and* non-religious groups when it comes to questions concerning aspects of human evolution. It is clear that publics, both historically and contemporarily, find an array of ways to reconcile their own religious, spiritual or non-religious beliefs with an acceptance of evolutionary science. There is, though, a perception across publics that conflict between 'science and religion' has been and continues to be the default relationship and the pervasiveness of this perception further contributes to maintaining the conflict model as the dominant public narrative. These findings have important implications for efforts to build open-minded dialogue between science, philosophy and theology, in both scholarly and public domains.

3. References to the research (indicative maximum of six references)

'Science and Religion: Exploring the Spectrum', Grant TRT0082, Templeton Religion Trust
[Science and Religion: Exploring the Spectrum | Fern Elsdon-Baker | Templeton Religion Trust](#)

Fern Elsdon-Baker and Bernard Lightman, Eds (2020). *Identity in a Secular Age: Science, Religion, and Public Perceptions*, University of Pittsburgh Press.

Stephen H. Jones, Fern Elsdon-Baker, Rebecca Catto, Tom Kaden (2020). 'What science means to me: Understanding personal identification with (evolutionary) science using the sociology of (non)religion', *Public Understanding of Science*, 29:6, pp.579-596.
<https://doi.org/10.1177/0963662520923110>

Stephen H. Jones, Rebecca Catto, Tom Kaden, Fern Elsdon-Baker (2019). "'That's how Muslims are required to view the world": Race, culture and belief in non-Muslims' descriptions of Islam and science', *The Sociological Review*, 67:1, 161–177
<https://doi.org/10.1177/0038026118778174>

Stephen H. Jones, Fern Elsdon-Baker, Rebecca Catto, Tom Kaden (2019), Diversification and internationalization in the sociological study of science and religion, *Sociology Compass*, 13:8, <https://doi.org/10.1111/soc4.12721>

Tom Kaden, Stephen Jones, Rebecca Catto, Fern Elsdon-Baker. (2017). 'Knowledge as Explanandum: Disentangling Lay and Professional Perspectives on Science and Religion'. *Studies in Religion/Sciences Religieuses*. 47. <https://doi.org/10.1177/0008429817741448>

4. Details of the impact (indicative maximum 750 words)

The Impact is chiefly in the Area: 'Impacts on understanding, learning and participation', and specifically in these types: 'Enhanced cultural understanding of issues and phenomena; shaping or informing public attitudes and values'; 'Public or political debate has been shaped

or informed by research; this may include activity that has challenged established norms, modes of thought or practices'; 'Research has challenged conventional wisdom, stimulating debate among stakeholders.'

The *Science and Religion: Exploring the Spectrum* project (SRES) is a large-scale, multi-disciplinary and international research project lead by Professor Fern Elsdon-Baker (Centre for Science, Knowledge and Belief in Society at Newman University, Birmingham UK), in collaboration with Professor Bernard Lightman (York University Canada), Dr Carola Leicht (University of Kent, UK) and Dr Rebecca Catto (Kent State University, USA). The research project aims to explore the full spectrum of attitudes towards science, evolutionary science and religion from the perspective of all faiths, and none, in the United Kingdom and Canada. The multi-disciplinary research team have backgrounds and expertise in: history and philosophy of science, science communication, psychology, sociology and media studies. This innovative and unique research project employs four intersecting approaches: social science field research; oral history, historical and media analysis; experimental social psychology; and a large-scale survey of public perceptions, attitudes and identity formation in the UK and Canada. Results were communicated at numerous conferences: e.g. Sharp, C. & Elsdon-Baker, F., George, K., Leicht, C., (2017). 'Exploring the perceived relationship between science and religion among agnostics, atheists, and theists.' Paper presentation at New Perspectives on Science and Religion Conference, 2017, Manchester, UK, organised by the team. [See Source \(8\)](#).

Impacts on understanding, learning and participation was chiefly through *science communication channels, and engagement with the wider public*. Science communication and media professionals play an influential role in shaping public discourse about the relationship between science and religion and can often perpetuate narratives about conflict between the two. E.g. [See Source \(4\)](#) The project team worked in collaboration with the British Science Association, which is the leading provider of science communication training in the UK, to run workshops aimed at media professionals, and **ran 7 public engagement events in partnership** between September 2016 – November 2016 (e.g. [See Source \(6\)](#)). An estimated total of 333 audience members attended the events. In addition to SRES1 team members, the events included 25 speakers from a range of institutions and organizations, including local universities and faith groups. Out of these attendees 36.6% stated their perspective had changed (slightly, somewhat or substantially) in relation to the relationship between science and religion. A graphic comic was also produced by a media fellow to reach new audiences ([See Source \(2\)](#)). In addition, there is evidence of the reach of the project's public engagement activities through social media activity. The team posted **49 blog articles** on the site, authored by a combination of project team members and guest authors drawn from a range of leading experts and rising early career researcher in the field. To the end of 2018, the **website had received 51,708 views**, the project had **1,116 followers on Twitter**, and its **Facebook page** had received **929 'likes' and 933 followers**. [See Source \(7\)](#) The website received regular traffic from all over the world, having had visits from readers with IP addresses in **over 150 countries** or autonomous territories. Of these 150+, there were **over 100 page visits from viewers in 36 countries**. Project Tweets were regularly shared by a diverse range of accounts, with project generated content having been shared by popular figures as diverse as the Bishop of Manchester David Walker (7,209 Followers), Miqdaad Versi of the Muslim Council of Britain (7,000 followers), Professor of Theoretical Physics Jim Al-Khalili (107,000 Followers), as well as journalists such as Medhi Hasan (Al-Jazeera and the New Statesman, 350,000 followers) and Assad Baig (freelance and Channel 4 reporter, 8000 followers).

Results from the Newman University/YouGov national UK and Canada survey (4000+ participants) were launched at the British Science Festival in 2017 [See Sources \(1 and 10\)](#)

The research has also attracted significant media coverage, including:

- **5 newspaper/periodical articles** based on the research published in *The Observer*, *The*

Times, and *The Daily Mail*. (Combined print readership (daily): 4,107,000) For example, See Source (9)

- **12 blog posts, news sites or similar online publications** based on the research including among others *The Conversation*, *Forbes*, *Christian Today*, and *Biologos*. (Combined online readership (monthly): 9,492,000)
- **2 op-ed pieces** written by Prof. Fern Elsdon-Baker about the research published in *The Guardian* and *New Scientist*. (Combined online readership (monthly): 8,161,000) See Sources (3 and 5)

5. Sources to corroborate the impact (indicative maximum of 10 references)

(1) Website at www.sciencereligionsspectrum.org launched in May 2016, which has been supported and promoted via social media accounts on [Twitter](#) and [Facebook](#). See Press Release of survey results : <https://sciencereligionsspectrum.org/in-the-news/press-release-results-of-major-new-survey-on-evolution/>

(2) Jordan Collver's [graphic novel-style comic](https://sciencereligionsspectrum.org/in-the-news/my-evolution-living-along-the-spectrum-of-science-and-religion/) <https://sciencereligionsspectrum.org/in-the-news/my-evolution-living-along-the-spectrum-of-science-and-religion/>
Available at <https://www.coroflot.com/jordancollver/My-Evolution-comic>

(3) Elsdon-Baker, F (2017a). 'Comment: A third of UK adults question evolution. Does that matter?' *New Scientist* 6th September 2017
<https://www.newscientist.com/article/2146455-a-third-of-uk-adults-question-evolution-does-that-matter/>

(4) Elsdon-Baker, F (2017b). 'Questioning evolution is neither science denial nor the preserve of creationists?' *Guardian* 5th September 2017
<https://www.theguardian.com/science/political-science/2017/sep/05/questioning-evolution-is-neither-science-denial-nor-the-preserve-of-creationists>

(5) Elsdon-Baker, F (2017c). 'Would you Adam and Eve it? Why creation story is at heart of a new spiritual divide' *Guardian* 17th September 2017
<https://www.theguardian.com/world/2017/sep/16/would-you-adam-and-eve-it-why-creation-story-is-at-heart-of-a-new-spiritual-divide>

(6) British Science Association
<https://twitter.com/britsciassoc/status/917365803489681408?lang=en>

(7) Project Twitter feed: <https://twitter.com/SciRelSpec> and Facebook page: <https://www.facebook.com/sciencereligionsspectrum>

(8) <https://sciencereligionsspectrum.org/wp-content/uploads/2017/01/SRES-Conference-Programme-04-05-2017.pdf>

(9) *Daily Mail* 6th September 2017 'One in Ten Britons do not Believe in Evolution'
<https://www.dailymail.co.uk/news/article-4856348/On-ten-Britons-not-believe-evolution.html>

(10) Elsdon-Baker F, Leicht C, Mason-Wilkes W, Preece, E, and Piggot, L (2017) [Science and Religion: Exploring the Spectrum: Summary Report of Preliminary Findings for a Survey of Public Perspectives on Evolution and the Relationship between Evolutionary Science and Religion](#). Birmingham, UK: Newman University and YouGov.