### Austral Comunicación

ISSN-L 2313-9129 ISSN-E 2313-9137 Volumen 14, número 2, 2025 e01418

# Special Issue of *Austral Comunicación*: Science, Beliefs and Discourses across Social Spheres and Societies

#### **Reynaldo Rivera**

https://orcid.org/0000-0001-9169-0251 Facultad de Comunicación, Universidad Austral. Buenos Aires, Argentina. rrivera@austral.edu.ar

#### Alandeom W. Oliveira

https://orcid.org/0000-0003-2418-0299 *State University of New York at Albany. Albany, United States.* aoliveira@albany.edu

Publicado: 10 de abril de 2025.

DOI: https://doi.org/10.26422/aucom.2025.1402.riv

#### Introduction

In his influential 1999 article "Communication Theory as a Field", Craig conceptualized communication as a meta-theoretical field that plays a constitutive role in shaping social reality. Rather than merely serving as a means of transmitting messages or influencing behaviors, communication functions as a fundamental process through which knowledge would be constructed, relationships formed, and society itself is shaped. This Special issue shows how Communication theory would operate as a meta-theoretical field for the study of the relationships between science and belief in Latin America.

While there has been considerable research on 'religion' and 'science' as separate social and cultural phenomena across various disciplines, the specific social-scientific inquiry into their intersection is an emergent area (Jones et al., 2019).



There is a common misperception among academics and the general public that the relationship between science and belief (religion) is well understood and settled. Although most scientists do not perceive a conflict between them, the "conflict narrative" prevails in Western societies' discourses (Fitz Herbert et al., 2023). In many parts of the world, media makers and campaigns, adoption of the doctrine of "Separation of Church and State", constitutional mandates of secularization and recent Supreme Court rulings have created the impression of an ongoing "war" between science and religion (Aechtner, 2020; Fitz Herbert et al., 2023). In others, there is a perception that the conflict is over and that it was won by science, leading to the emergence of a public life that is by and large secularized (laic). Public spaces like classrooms, media, hospitals, courtrooms, and political rallies have all been "sanitized" (Segall & Burke, 2013) by sweeping out all religious understandings and influences, hence becoming free of indoctrination. Underlying such views is the assumption that science and beliefs are monolithic entities that can be easily and unproblematically separated.

However, recent scholarship suggests that such views are at best simplistic, and at worst misguided (Ecklund, 2010; Ecklund et al., 2019; Fitz Herbert et al., 2023; Harrison, 2010, 2015; Jones et al., 2019). For instance, although religion is not explicitly taught there continues to exist religious traces" or "undertones" in the secularized public educational systems of countries like the US (Segall & Burke, 2013) as well as in professions and other public spheres that are relevant in the construction of the modern world (Bauman, 2014; Casanova, 2011; Zsolnai & Flanagan, 2019). Faith, religion and beliefs continue to be present in performing arts and popular culture consumed by youth groups (Harris, 2016). Despite the absence of religious teaching and biblical reading, religious assumptions, metaphors, and terminology (e.g., mission, sabbatical, cardinal) remain integral part of educational thinking and practice, and sometimes resurface in public discourse. Moreover, theoretical/philosophical scholarship convincingly posits the possibility of science and religion being a relationship in a spectrum of different types of dialogue and collaboration (Catto et al., 2019; Elsdon-Baker et al., 2017), rather than conflict or independence (Barbour, 1966; Stenmark, 2004).

#### **RIVERA Y OLIVEIRA**

As the complexity of the interactions between science and religion has become more apparent and the field increasingly consolidated and internationalized, there is a growing need for scholarship that goes beyond abstract and philosophical theorizing and analytically examines science and belief as socially situated practices (De Cruz, 2022; Elsdon-Baker & Mason-Wilkes, 2019). More specifically, there is a need for research studies (especially in developing regions like Latin America and the Global South) that are evidence-based, grounded in systematic collection, analysis, and interpretation of data (expansively defined and not constrained to traditional positivist approaches). This is echoed by Jones, Kaden, and Catto's argument (2019) that "exploration of questions to do with science and belief is extremely limited... beyond the US, it would be hard to describe it as a 'field of study', so limited and disjointed has research been to date" (p. xix). Addressing such a need is the main goal of this special issue, which is framed by the following overarching question: How is the relationship between science and belief perceived, communicated, disseminated, negotiated, enacted, implemented, contested, challenged, experienced, and lived across varied parts of society and public spheres?

### Beyond borders: the positive role of complex relationships between science and religion

Communication has had a key role in the relationship between science and belief. The processes of scientific discovery and diffusion are fundamentally creative and relational, often marked by unforeseen developments and surprising outcomes that arise from the interaction of seemingly opposing ideas, elements, situations and agents. Creativity emerges through the dynamic interplay of individual and collective imagination, social interactions, and the inherent unpredictability of scientific exploration. Those interactions take place in the phase of dissemination, when scientific information is spread within society through communicational actions. In those processes, the convergence of different domains—such as science and beliefs—can create conditions that foster serendipity, enabling unexpected discoveries and innovations through the blending of diverse perspectives.

#### **RIVERA Y OLIVEIRA**

Serendipity plays a crucial role in interdisciplinary research, where breaking down barriers between horizons of knowledge like science and beliefs facilitates the exchange of ideas and the emergence of novel insights. This openness to unexpected connections can lead to groundbreaking discoveries that transcend the limitations of any single field (Darbellay et al., 2014). In contemporary society, where scientific advancements coexist with deeply rooted religious and spiritual traditions, it becomes crucial to examine how these domains communicate and influence each other. Better understanding this relationship is essential for fostering social harmony, enhancing educational practices, and promoting public policies that respect diverse perspectives. Inspired by and rooted in the scholarly activity supported by the International Research Network for the Study of Science and Belief in Society (INSBS), this Austral Comunicacion special issue seeks to challenge the prevailing conflict narrative by illuminating the complex interplay between science and belief in diverse settings, from classrooms and museums to digital platforms and public policy debates.

The articles in this issue collectively argue that the relationship between science and belief is not monolithic but exists on a spectrum, ranging from conflict and separation to dialogue and integration. By examining how science and belief are communicated, negotiated, and enacted in different social contexts, the contributors to this issue shed light on the ways in which these two domains coexist, influence one another, and shape public understanding of key issues such as education, social justice, public health, and sustainable development. Through empirical studies, theoretical explorations, and historical analyses, this collection of articles challenges readers to reconsider entrenched assumptions and to appreciate the dynamic and context-dependent nature of science-belief interactions.

#### **Conflict, Coexistence, and Integration in Educational Settings**

One major theme emerging from this issue is the dynamic interaction between science and religious belief within educational settings.

María Sol Barbera investigates the representation of science and religion in Argentine high school textbooks, revealing a spectrum of approaches ranging from conflict to independence and even complexity. She notes that "there is no majority or unified stance", acknowledging the potential for coexistence and dialogue.

Fernanda Barros and Yvonélio Nery Ferreira explore the historical influence of the French Lycée on Brazil's Collegio de Pedro II, arguing that "the relationship between state and church in Brazil provided a particular characterization to the group of staff and teaching subjects," reflecting the complex ways in which educational practices were shaped by cultural and political contexts.

Aya Isaac addresses the integration of Islamic values into science curricula, proposing a holistic educational model that aligns scientific understanding with spiritual and moral growth. By leveraging Islamic educational principles and aligning them with the Next Generation Science Standards (NGSS), Isaac challenges the notion that faith-based education necessarily undermines scientific rigor.

Alandeom W. Oliveira Javier Wever, Carmen Marroquín, and Antonio Miron examine how elementary school teachers in the United States navigate death-related instructional practices within secularized educational contexts. It is argued that "creating holistic educational spaces for student exposure to epistemically diverse ways of knowing death beyond science" could support youth flourishing and reduce death anxiety.

Heslley Machado Silva investigates how biology teachers in Argentina, Brazil, and Uruguay navigate the teaching of evolutionary theory and the potential inclusion of intelligent design. His findings suggest that "a more integrated approach to science and belief in education could help students navigate complex existential questions".

Collectively, these studies highlight the communicational impact of education and reveal how scientific and religious perspectives coexist and even complement one another within educational practices. By highlighting diverse cultural contexts and teaching approaches, these articles call for more nuanced educational frameworks that embrace the dialogue between science and belief rather than perpetuating rigid separations.

## Communication and Social Dynamics: the Role of Science and Religion in the Public Sphere

Another recurring theme is how belief systems and scientific authority intersect within social dynamics and public policy.

M. Mercedes Galan-Ladero examines the role of religious leaders in social marketing strategies aimed at achieving the Sustainable Development Goals (SDGs). This study highlights that religious values and scientific approaches can be "not only compatible but even complementary" when addressing social issues.

Patricia Schroeder Rius, Lucía Mancuello, Inés Besada Paullier, and Gimena Suárez analyze vaccination decision-making during the COVID-19 pandemic in Uruguay. Their findings challenge the prevailing assumption that religious opposition is the primary driver of vaccine resistance.

Carlos Nazario Mora Duro focuses on the perspectives of Mexico's non-religious population ("nones") toward science and religion. This study challenges the simplistic view of secularization as a linear progression, showing that pluralistic identities can accommodate both secular and religious elements within a single worldview.

These studies illuminate how communication and social dynamics can be shaped by both religious and scientific perspectives, offering a more holistic understanding of how belief systems interact with behavior in the public sphere.

#### **Cultural and Relational Perspectives: Understanding Belief Systems**

The cultural and relational dimensions of the interplay between science and belief are also explored in this issue.

Enrique Sánchez-Costa provides an analysis of how Jacques Maritain's networks fostered "a space for dialogue and hope amidst the crisis of modernity," showing how belief systems can adapt even in periods marked by secularization and social upheaval.

Lastly, Isaac Nahón Serfaty examines how digital communication platforms have reshaped the understanding of the sacred and the profane. This study underscores how digital media can facilitate both the coexistence and clash of differing worldviews in contemporary society. Collectively, these perspectives reveal that the relationship between science and belief is not only shaped by intellectual debates but is also deeply rooted in broader social and cultural transformations.

#### Conclusion

Together, the ten articles in this special issue of Austral Comunicación challenge readers to reflectively recognize that the interaction between science and religion is shaped by a range of communicative factors, including cultural norms, educational practices, intellectual networks, and social dynamics.

One of the key insights emerging from these contributions is the realization that science and belief are not static entities but are constantly evolving in response to changing socio-cultural systems and complex interactions. Whether through the integration of religious values into educational curricula, the strategic involvement of religious leaders in social marketing for sustainable development, or the nuanced portrayal of science and religion in school textbooks, these articles demonstrate that the interaction of science and belief is often more complex and fluid than conventional narratives suggest.

Moreover, the issue highlights that addressing contemporary challenges—such as public health crises, social justice movements, or educational reforms—requires a more nuanced understanding of how science and belief intersect and shape public attitudes and behaviors.

Ultimately, this special issue calls for a reimagining of the relationship between science and belief—one that embraces diversity, fosters dialogue, and recognizes the potential for collaboration rather than conflict. As society continues to grapple with complex issues that touch on both scientific and moral dimensions, it is crucial to adopt a more systemic and context-sensitive perspective. The articles in this issue offer valuable insights that can guide future research, inform public discourse, and inspire educators, policymakers, and community leaders to approach the science-belief relationship with openness, curiosity, and a commitment to understanding.

By presenting a spectrum of perspectives and case studies, this special issue not only contributes to the academic discourse but also invites readers to critically reflect on their

#### **RIVERAY OLIVEIRA**

own assumptions and to appreciate the intricate ways in which science and belief shape human experience. It is through such reflective and open-minded engagement that we can move beyond entrenched divides and toward a more inclusive and thoughtful consideration of the human quest for knowledge and meaning.

#### Acknowledgement

The editors of this monographic issue gratefully acknowledge the support of a grant from the Templeton Religion Trust, awarded via the International Research Network for the Study of Science and belief in Society (INSBS). The opinions expressed in the Special Issue articles are those of the authors and do not necessarily reflect the views of Templeton Religion Trust or the INSBS.

Creative Commons License Attribution-NonCommercial-ShareAlike 4.0 International.

#### References

- Aechtner, T. (2020). Media and Science-Religion Conflict: Mass Persuasion in the Evolution Wars (1st ed.). Routledge.
- Bauman, W. A. (2014). Religion and Ecology: Developing a Planetary Ethic. Columbia University Press.

Casanova, J. (2011). Public Religions in the Modern World. University of Chicago Press.

- Catto, R. A., Jones, S., Kaden, T., & Elsdon-Baker, F. (2019). Diversification and internationalization in the sociological study of science and religion. *Sociology Compass, 13*(8). https://doi.org/10.1111/soc4.12721
- Craig, R. T. (1999). Communication Theory as a Field. *Communication Theory*, *9*(2), 119–161. https://doi.org/10.1111/j.1468-2885.1999.tb00355.x
- Darbellay, F., Moody, Z., Sedooka, A., & Steffen, G. (2014). Interdisciplinary Research Boosted by Serendipity. *Creativity Research Journal*. https://www.tandfonline.com/doi/abs/10.1080/10400419.2014.873653

Ecklund, E. H. (2010). Science vs Religion: What Scientists Really Think. OUP USA.

- Ecklund, E. H., Johnson, D. R., Vaidyanathan, B., Matthews, K. R. W., Lewis, S. W., Thomson Jr., R. A., & Di, D. (2019). Secularity and Science: What Scientists Around the World Really Think About Religion. Oxford University Press, USA.
- Elsdon-Baker, F., Leicht, C., Mason-Wilkes, W., Preece, E., & 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. Newman University and YouGov. https://sciencereligionspectrum.org/wp-content/uploads/2017/09/SRESYouGovsurvey-preliminary-findings-5.9.17.pdf
- Fitz Herbert, A. L., Rivera, R., Ketelhohn, F., & Elsdon-Baker, F. (2023). Conflict narrative, stigmatisation and strategic behaviour of religious scientists in the Argentinean scientific field. *Acta Sociologica*, 00016993231173292. https://doi.org/10.1177/00016993231173292
- Harris, A. M. (2016). Creativity, Religion and Youth Cultures. Routledge.
- Harrison, P. (2010). *The Cambridge Companion to Science and Religion*. Cambridge University Press.
- Harrison, P. (2015). The Territories of Science and Religion. University of Chicago Press.
- Jones, S. H., Catto, R., & Kaden, T. (Eds.). (2019). Science, Belief and Society: International Perspectives on Religion, Non-Religion and the Public Understanding of Science. University of Bristol Press.
- Zsolnai, L., & Flanagan, B. (2019). *The Routledge International Handbook of Spirituality in Society and the Professions*. Routledge.