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SPECIAL ISSUE
Transitions in Science Communication: Continuity and Change

EDITORIAL

Transitions in science communication: agendas, approaches, and voices

Declan Fahy, Alice Fleerackers, Ana Claudia Nepote and Guoyan Wang

Abstract

This editorial introduces the *JCOM* special issue on "Transitions in Science Communication: Continuity and Change". The issue positions continuity and change within four historical processes that have shaped the development of the field: *institutionalisation*, *professionalisation*, *internationalisation*, and *diversification*. Within these broad field-shaping processes, the issue seeks to capture moments of transition in science communication by featuring selected contributions to the 2025 conference of the Global Network for the Public Communication of Science and Technology (PCST). The special issue combines three genres of contributions: research articles, practice insights, and an invited essay. Across these different contributions, the issue captures three types of transitions, focussed on agendas, approaches, and voices. It illustrates ongoing transitions within the institutions of science communication and transitions in professional roles and institutional responsibilities. It features contributions that show how the processes of internationalisation and diversification lead to new agendas, new approaches, and, crucially, new voices that can take science communication in new directions.

Keywords

History of public communication of science; Public understanding of science and technology; Science communication and social justice

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Our special issue, titled “Transitions in Science Communication: Continuity and Change”, prompts two immediate questions. How can we identify continuities? And how can we discern changes in an academic field, which tend to be slow, incremental, and cumulative? One set of continuities was identified by Bucchi and Trench in their recent book *Science Communication: The Basics* [2025, p. 62]. They argued that four clear processes could be observed in the development of the field: *institutionalisation*, *professionalisation*, *internationalisation*, and *diversification*. They added a fifth, *commercialisation*, in their book, but noted that it was not yet as pronounced as the others. Within the context of these larger structural processes, this special issue of *JCOM* seeks to capture transitions, particularly processes of change, in science communication.

Identifying processes and moments of transition as they are occurring is a difficult task, as transitions can be most reliably identified retrospectively. New ideas and approaches that at first appear novel can fade away or solidify over time into core concepts that underpin fresh research agendas. One way to discern transitions in a field at an early stage is to focus on selected contributions to a major international conference, identifying emergent ideas that have the potential to signal moments of transition, as we do in this special issue. *Transitions* in science communication was one of the three themes of the 2025 conference of the Global Network for the Public Communication of Science and Technology (PCST), a major international network of scholars and practitioners of science communication. The conference took place in Aberdeen, Scotland, bringing together over 650 participants from more than 55 countries on the topic of “Using Science Communication to Effect Positive Change: Exploring Transitions, Traditions and Tensions”. Our special issue is one of three journal special issues devoted to the conference, with two issues of *Cultures of Science*, to be published in 2026, focussing on the themes of *traditions* and *tensions*.

This special issue continues a tradition of collaboration between PCST, established in 1989, and *JCOM*, established in 2002 and one of the main journals in our field. A special issue based on the PCST 2018 conference examined “storytelling” [Joubert et al., 2019], while another, based on contributions to the PCST 2021 online conference, examined “participatory science communication” [Metcalfe et al., 2022]. The journal has also published scholarly commentaries that functioned as critical reviews of PCST conferences [Trench, 2012; Featherstone, 2014; Wang & Liu, 2016; Davies, 2023]. Our special issue contributes to this collaborative tradition of ongoing self-reflection within the field.

In our call for papers, we noted that the special issue would aim to “focus on continuities and change in science communication research and practice over time and across the world, examining in particular how our field of research and practice can be used to contribute to positive change amid pressing concerns over global issues including the climate emergency, rapid technological change, and public health problems”. Our call for papers received more than 50 initial abstract submissions. As editors, we faced the difficult task of selecting which abstracts to invite for full submission. We made our selection based on our interpretation of academic originality, as well as geographical distribution and diversity of authors, especially in terms of career stage.

Our special issue captures three types of transitions focussed on agendas, approaches, and voices, and combines three genres of contributions: research articles, practice insights, and an invited essay. In this introductory editorial, we summarise the contributions published in this collection and close with a brief overview of how they contribute to knowledge and practice in science communication, capturing key tensions and opportunities for a rapidly evolving field.

1 ▪ Agendas

The contributions in this special issue highlight new agendas in science communication research, reflecting the continued internationalisation and diversification of the field. This special issue opens with an invited essay from Professor Sarita Albagli [2026], based on her keynote lecture at the 2025 Aberdeen conference. She argues provocatively for a new research agenda that would mark a strong transition in the field's orientation to issues related to science and different forms of justice. The essay scrutinises the core science communication concept of citizen science, linking this foundational idea with "emerging rights agendas connecting environmental justice, cognitive justice and data sovereignty". Drawing on a range of scholarship from Latin America, Albagli examines the role of citizen science in addressing the global climate and biodiversity crises, arguing that citizen science can be a way to enhance "cognitive justice" by recognising the contributions that different communities — particularly communities at risk of the worst climate effects — can make to addressing environmental risks. Citizen science can enhance arguments for "data sovereignty", the idea that data "is subject to the laws and governance of the nation-state in which it is generated". The essay reflects on the idea that citizen science — tied to core concepts in science communication around public participation — can be viewed as a way to strengthen citizenship and increase public influence over policy.

Contributions to the special issue focus on the ongoing process of institutionalisation, but note particular transitions in the roles and practices of different organisations and professionals. Honkaranta and colleagues [2026] explore how temporary collaborative research consortia strategically shape their science communication practices, demonstrating how these organisations shift the focus away from the traditional emphasis on individual researchers' competencies. This work develops a conceptual framework that illuminates the intricate interplay among contextual conditions, collaborative dynamics, and communicative processes.

In their contribution, de Oliveira and colleagues [2026] examine how one longstanding type of institution, the science museum, can act as a place of social transformation. They find that science museums across Latin America and the Caribbean address gender equity by focussing elements of their work around themes related to female participation, identity negotiation, disruption of normative gender narratives, historical recovery, and activism. Initiatives around these themes, the authors conclude, have significant potential to address gender equity, but face ongoing challenges related to structural inequality and the historical struggle for rights.

Within institutions, there are transitions in the ways science communication professionals work, which is evident in the contribution from Janise Brück [2026]. In her study of "shared gatekeeping", Brück sheds light on the changing roles of journalists, public relations practitioners, and scientists in the selection of science news. Through 57 interviews, she examines the factors that shape how these three types of actors determine which science issues are relevant, newsworthy, and worth sharing with society. Her findings point to many overlaps that bode well for the state of science journalism, including a shared goal to "inform the public and promote social dialogue". However, Brück also illuminates how competing needs and differing levels of professional autonomy can raise tensions, with potential to compromise journalists' ability to produce critical, socially relevant science news that truly serves the public interest.

2 ▪ Approaches

A historical strength of science communication research has been its interdisciplinary grounding. As part of the field's continued internationalisation and diversification, new frameworks and approaches can be integrated into the field to influence transitions to new ways of viewing core issues in science communication. This can be seen in de Oliveira and colleagues' contribution, which applies critical feminist perspectives from two Latin American thinkers, Tania Pérez-Bustos and Lélia Gonzalez. In a similar act of theoretical originality, Miriam Welz [2026] introduces the concept of "academic saviourism" to argue that well-meaning attempts at enhancing inclusion in science communication can be symbolic rather than transformative and can have the unintended consequence of reproducing existing hierarchies of knowledge and structures of institutional power. Welz argues that addressing such saviourism involves moving from "an instrumental logic of outreach to a reflexive, relational, and justice-oriented practice". Both contributions point to the value of integrating theoretical and conceptual frameworks from diverse disciplines into science communication scholarship.

The diversification of science communication platforms and participants has generated new approaches. In this regard, responding to the ongoing shift towards digital, rapid-response science communication, Qingyang Chen [2026] examines the viral communication of popular science short videos during public health crises in China. The article articulates an integrated framework centred on spreadability, propagativity, and connectivity, demonstrating how audience needs, authoritative content, platform heterogeneity, and cross-media synergy collectively serve as critical catalysts for effective science communication.

The two practice insights present new approaches to science communication. Murray and colleagues [2026] present an original case of climate communication, a project that used improvisational theatre to engage audiences about climate change in remote and rural communities in Ireland. The authors conceptualise improvisational theatre — where the performance is not planned or scripted in advance — as a novel form of public engagement that involves dialogue between scientists, artists, and audiences. The practice insight sheds light on how participation in the shows influenced the performers to take pro-environmental actions and behaviours in their own lives, "demonstrating the value of co-created storytelling in climate engagement for both communities and practitioners".

Patil and colleagues [2026] provide a complementary perspective on how arts-based methods can engage publics with challenging science issues. They do so by reflecting on a series of participatory events in India that engaged publics in zine-making, artistic practice, and dialogue around the stigmatised topic of mental health. These events were co-created with people with lived experience with mental illness, and provide insights that can help other practitioners develop science communication initiatives that centre perspectives, needs, and knowledge of diverse publics. Most crucially, the practice insight demonstrates the value of Allport's [1954] "contact theory", which proposes that equitable, cooperative contact between groups can reduce prejudice. Patil and colleagues show how this framework can be applied in science communication practice, contributing to the field's ongoing transition from deficit to dialogue and participation.

3 ▪ Voices

When we issued our call for papers, we hoped that at least one of our contributions would be written by an early-career scholar or practitioner. We were especially pleased with our final set of papers in this regard, as all of the research papers and practice insights feature at least one author who identifies as early career. All academic fields require new perspectives to evolve and thrive. Nowhere is this clearer than in the infusion of bold new voices whose work is featured in this volume. We are glad that this special issue captures and celebrates this most important transition for the science communication field. We hope new voices will continue to emerge and showcase their work in future PCST conferences and in the pages of *JCOM*.

4 ▪ Conclusion

Our special issue captures moments of transition within the broad field-shaping processes of institutionalisation, professionalisation, internationalisation, and diversification. The contributions illustrate ongoing transitions within the institutions of science communication and transitions in professional roles and institutional responsibilities. The contributions illustrate that the internationalisation and diversification of the field lead to new agendas and new approaches, producing new interdisciplinary ideas that can take the field in new directions. But internationalisation and diversification also pose challenges. Progress in our field has been heterogeneous across countries. Transitions in the academic domain of public communication of science have occurred in contexts characterised by the asymmetrical circulation of knowledge, inequalities in certain countries, and linguistic diversity. All of these must be understood and acknowledged as our field continues its attempts to proactively adapt to the unprecedented, multifaceted challenges of the contemporary era. It is our aspiration that this issue, which marks a continued collaboration between the PCST Network and *JCOM*, will inspire sustained innovation in the field.

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References

Albagli, S. (2026). Citizen science, cognitive justice and data sovereignty: a view from the South. *JCOM*, *25*(05), Y01. https://doi.org/10.22323/3551202603090658 41

Allport, G. W. (1954). *The nature of prejudice*. Addison-Wesley.

Brück, J. (2026). Shared gatekeeping: comparing relevance criteria for selecting science information. *JCOM*, *25*(05), A02. https://doi.org/10.22323/349720251215133530

Bucchi, M., & Trench, B. (2025). *Science communication: the basics*. Routledge. https://doi.org/10.4324/9781032646749

Chen, Q. (2026). Effective communication of popular science short video in public health crisis: a grounded theory study on Chinese social media. *JCOM*, *25*(05), A04. https://doi.org/10.22323/348420260515152024

Davies, S. R. (2023). Fail better. *JCOM*, *22*(04), R01. https://doi.org/10.22323/2.22040601

Featherstone, H. (2014). PCST 2014. *JCOM*, *13*(03), R03. https://doi.org/10.22323/2.13030603

Honkaranta, M., Laapotti, T., & Sihvonen, T. (2026). Organising collaboration for strategic science communication in research projects. *JCOM*, *25*(05), V01. https://doi.org/10.22323/3501202602261008 53

Joubert, M., Davis, L., & Metcalfe, J. (2019). Storytelling: the soul of science communication. *JCOM*, *18*(05), E. https://doi.org/10.22323/2.18050501

Metcalfe, J., Gascoigne, T., Medvecky, F., & Nepote, A. C. (2022). Participatory science communication for transformation. *JCOM*, *21*(02), E. https://doi.org/10.22323/2.21020501

Murray, C. A., Bravo, P. S., Kindermann, G., & Fairfield, J. A. (2026). Agents of (comedic) change: co-creation through improv to develop environmental science agency. *JCOM*, *25*(05), N01. https://doi.org/10.22323/349920260111172907

Oliveira, B., Bizerra, A., & Soares, M. (2026). Transforming narratives: gender equity struggles in Latin American and Caribbean science museums. *JCOM*, *25*(05), A01. https://doi.org/10.22323/350220251031145242

Patil, K., Banerjee, A., Zafar, I., Jain, I., Prakash, M., Jayasankar, P., Kini, V., Teotia, V., Niranjana Murthy, A., Shankarappa, B., Nayok, S., Mahadevan, J., Ganesh, S., Viswanath, B., & Sud, R. (2026). Including lived experience voices in science communication to combat mental illness stigma: insights from India. *JCOM*, *25*(05), N02. https://doi.org/10.22323/352620260511100542

Trench, B. (2012). Review of PCST2012 conference: where is communication going? *JCOM*, *11*(03), E. https://doi.org/10.22323/2.11030501

Wang, K., & Liu, X. (2016). The new trend in Science Communication research ecology: 2016 PCST conference review. *JCOM*, *15*(06), R01. https://doi.org/10.22323/2.15060601

Welz, M. (2026). Academic saviourism: how well-meaning science communication can reproduce epistemic hierarchies. *JCOM*, *25*(05), A03. https://doi.org/10.22323/3490202604060657 59

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