

## Theatre about science. Theory and practice

---

**Reviewed Book**

MONTENEGRO, M., OLIVEIRA, F. M., CRUZ, M. T. G., AMARAL, S. V. AND MOREIRA, F. (EDS.) (2023).  
THEATRE ABOUT SCIENCE. THEORY AND PRACTICE.  
COIMBRA UNIVERSITY PRESS

**Reviewed by**

**Andrew Glester**

**Abstract**

*Theatre About Science. Theory and Practice* is a result of the Theatre About Science Conference, held in November 2021 in Coimbra, Portugal. Most of the articles build upon presentations given at the conference, but some were written specifically for the publication.

**Keywords**

Science and technology, art and literature

**DOI**

<https://doi.org/10.22323/2.23030703>

*Submitted:* 4th April 2024

*Accepted:* 16th April 2024

*Published:* 21st May 2024

---

The dialogue between science and theatre goes back to Ancient Greece and has seen something of a resurgence since Michael Frayn's play *Copenhagen* about the fateful meeting between physicists Niels Bohr and Werner Heisenberg in 1941 [Frayn, 1998] began its 326 performance run at the National Theatre in London in 1998. Just as theatre makers have dipped and sometimes plunged into the world of science for inspiration, scientists have also turned to theatre to engage new audiences in science. "*Theatre About Science: Theory and Practice*", published by Coimbra University Press, delves into the intriguing intersection of these two seemingly disparate fields.

The book is mainly composed of writing built upon presentations at the 2021 'Theatre about Science' conference in Coimbra, Portugal, and is organized into two thematic sections: Reflections and Practice. The section on 'Reflections' considers overarching topics like representing 'physics on stage' or the intersection of science and the arts from an academic perspective, taking examples from across practice and related research. For the 'Practice' section, the editors have added contributions from an array of academics and practitioners in what becomes a varied and rich foray into the practices of science theatre.

One of the book's notable strengths is its seeking of a global perspective. Historically, notable academic contributions to science theatre research have been

biased towards the anglophone parts of the world. 'Science on Stage: From Doctor Faustus to Copenhagen' [Shepherd-Barr, 2012] and 'Science: Dramatic Science Plays in American and Great Britain 1990–2007' [Zehelein, 2009] are notable and important texts. This collection includes the more diverse voices of 'Science & Theatre: Communicating Science and Technology with Performing Arts' [Weitkamp & Almeida, 2022]. In the chapter on 'Theatre and Science Fiction', we learn from the case study of the Italian play '2069 — Oltre la Luna', notably on how science fiction can act as a mediator between the scientist and theatre maker in the often heated debate between scientific accuracy and the need for compelling narratives. The Brazilian children's theatre show 'Curumim Quer Musica!' case study explores what appears to have been a genuinely collaborative piece, with the public being part of the process from the outset to staging. The result is a helpful study that practitioners worldwide will benefit from.

As the world around us warms, more species of life on Earth will become extinct. Anyone seeking to explore the effects of climate change in theatre will find fertile ground in the 'Stuffed Bears' and Canned Tuna' chapter, which opens the book. How can theatre truly convey species loss to the audience? Often, this comes down to portraying the death of a single individual, perhaps a puppet or a stuffed polar bear. Can a single death really convey the devastation of the extinction of a species? We are even given to consider whether plays should seek to bring about change in society or whether it is an exercise in futility. A closing line from Marek Horn's 'Yellowfin' play (2021), quoted in the book, is somewhat downbeat: "We're still us! Knowing why the fish went won't change that."

If some theatre makers are suffering from climate-related depression, others are finding inspiration in another of the big topics in science for society. A chapter in the 'Practice' section turns to AI in science theatre; 'From Theatre to Computational Linguistics: Artist-In-The-Loop Artificial Intelligence'. The advent of language models like Chat-GPT has provided improvisers with a new source of inspiration for their work. Like jazz musicians, on-stage improvisers require human collaboration and creativity [Johnson-Laird, 2002]. One actor builds on what the other has said for comedic and dramatic effect. An AI language model in that mix proves to be an intriguing addition. For the improvisers, it pushes the boundaries of the art form and raises questions about using AI in the creation of stories. For science communicators, humour provides a safe and informal space for audiences to discuss a hot topic.

Theatre makers, science communicators and researchers will find much to inform their work among the pages of this book, as well as inspiring ideas for fascinating discussions in classrooms and rehearsal spaces alike. By exploring innovative approaches and successful collaborations between artists and scientists, the book enables readers to consider effective interdisciplinary collaboration in both academic and artistic contexts. There is a richness to the case studies, enabling the reader to return to the book in years to come and dip into a case study as a standalone piece.

With climate change and the increasing proliferation of language models in AI entering many parts of our lives, we are far from the audiences of the science theatre of Ancient Greece. It is welcome that we can still sit down with a book exploring how creative theatre might effectively tackle the big topics of today's

science. By illuminating the creative possibilities inherent in this intersection, 'Theatre About Science: Theory and Practice' explores the boundaries of both disciplines with a view to developing new avenues for collaborative inquiry and expression.

## References

- Frayn, M. (1998). *Copenhagen* [Play]. Directed by Michael Blakemore. National Theatre, London.
- Johnson-Laird, P. N. (2002). How jazz musicians improvise. *Music Perception* 19 (3), 415–442. doi:[10.1525/mp.2002.19.3.415](https://doi.org/10.1525/mp.2002.19.3.415)
- Montenegro, M., Oliveira, F. M., Cruz, M. T. G., Amaral, S. V. & Moreira, F. (Eds.) (2023). *Theatre about science. Theory and practice*. doi:[10.14195/978-989-26-2507-2](https://doi.org/10.14195/978-989-26-2507-2)
- Shepherd-Barr, K. (2012). *Science on stage: from Doctor Faustus to Copenhagen*. Princeton, NJ, U.S.A.: Princeton University Press.
- Weitkamp, E. & Almeida, C. (2022). *Science & theatre: communicating science and technology with performing arts*. doi:[10.1108/9781800436404](https://doi.org/10.1108/9781800436404)
- Zehelein, E.-S. (2009). *Science: Dramatic. Science plays in America and Great Britain, 1990–2007*. Heidelberg, Germany: Winter.

## Author

Andrew Glester.

Lecturer in Science Communication at UWE Bristol (@[scicommsuwe](https://twitter.com/scicommsuwe)). Andrew is an award winning podcast host, radio presenter and producer/director of films and live events, Andrew has worked with BBC Worldwide, The Natural History Museum, Physics World, Diamond Light Source and produced shows for arenas, concert halls, theatres and festivals internationally. He is a science writer and the host of the Physics World Stories podcast and the Cosmic Shed podcast which was recently named as one of the Guardian's Favourite Podcasts. Andrew produced the tours of the BBC Blue Planet Live! in 2006 and 2008 before directing and producing Polar in 2011.

 [andrew.glester@uwe.ac.uk](mailto:andrew.glester@uwe.ac.uk)

## How to cite

Glester, A. (2024). 'Theatre about science. Theory and practice'. *JCOM* 23 (03), R03. <https://doi.org/10.22323/2.23030703>.



© The Author(s). This article is licensed under the terms of the Creative Commons Attribution — NonCommercial — NoDerivatives 4.0 License. ISSN 1824-2049. Published by SISSA Medialab. [jcom.sissa.it](http://jcom.sissa.it)