



Storytelling as Science Communication

Sustain-Art-Sci (scicomm.dk)

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Agenda

The theory behind...

- What happens when a scientists make stories?
- What happens when the audience meet the stories?
- What happens when they co-create the stories?

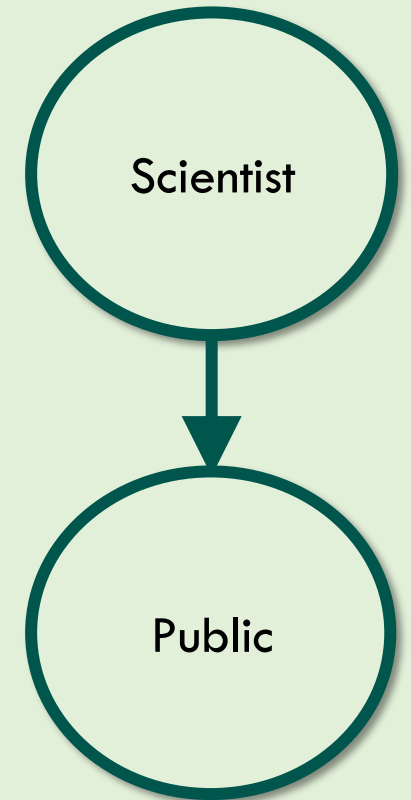
Let's talk theory

The transmission-absorption model of communication is still the most widely used:

It assumes that audiences

- *easily understands*
- *act accordingly.*

Too bad it has proven to be non-effective...



Let's talk theory

Storytelling can be an effective way to communicate **persuasive messages** in science communication

The three main arguments:

- science-based stories appeal to both **emotions and cognition**
- *while* also translating the science to **specific everyday scenarios**
- This can help audiences take up **new sustainable habits**

Let's talk theory

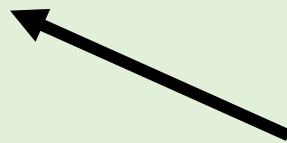
And we're built for it!

- Stories and storytelling are an inherent part of being human
- Humans has been dubbed “the story-telling animal”
- We have an ability to know what constitutes a coherent story
- Narratives give form to experiences we have lived through *and* allow us to envision alternative futures

Let's talk theory

The literature on storytelling in science communication also points to two factors, that might make storytelling a bad idea:

- 1) Audiences do not necessarily **recognize stories as science** and therefore might not be convinced by it
- 2) **Scientists do not seem to like storytelling** as science communication.



But that's not what we found....

Three Questions - One Case

Read the study at the QR code
or at this link:



<https://www.tandfonline.com/doi/full/10.1080/17524032.2025.2493331?af=R>

Three Questions - One Case



Lea Matthiessen

At a SysOrg's outreach event, we tested:

1. Storytelling as a Science Communication Product
2. Storytelling as Co-Creative Science Communication

Three Questions - One Case

Question 1: What happens when scientists make stories?

The linearity of a story can be scary (but healthy) for scientists...

Focus went from: *measurables and uncertainties*

To: *people and perspectives*

Fun fact: When presenting the stories, they personified the characters

Seven Findings from One Case

Question 2: What happens when the audience meet the stories?

Almost everyone at the event (including researchers) preferred a combination of story and scientific presentation.

In our interviews after, the researchers saw stories as for nonexperts...

Seven Findings from One Case

Question 3: What happens when they co-create the stories?

Co-creating stories leads to a high degree of visible engagement

BUT: Our interviewees viewed storytelling co-creation as a fun break from the *actual* science presentations...

Does co-creating stories consolidate data or simplifying science?

=They all chose to capture the same elements...

References

- Bloomfield, E. F. (2024). *Science v. story: Narrative strategies for science communicators*. University of California Press
- Broad, G. M. (2016). Animal production, ag-gag laws, and the social production of ignorance: Exploring the role of storytelling. *Environmental Communication*, 10(1), 43-61. <https://doi.org/10.1080/17524032.2014.968178>
- Dahlstrom, M. F. (2014). Using narratives and storytelling to communicate science with nonexpert audiences. *PNAS Proceedings of the National Academy of Sciences of the United States of America*, 111(Suppl 4), 13614-13620. <https://doi.org/10.1073/pnas.1320645111>
- Fisher, W. R. (1985). The narrative paradigm: In the beginning. *Journal of Communication*, 35 (4), 74-89. <https://doi.org/10.1111/j.1460-2466.1985.tb02974.x>
- Garforth, L. (2019). Environmental futures, now and then:: Crisis, systems modeling, and speculative fiction. *Osiris*, 34(1), 238-257.
- Hopkins, R. *From What Is to What If: Unleashing the Power of Imagination to Create the Future We Want*. Chelsea Green Publishing.
- MacIntyre, A. (1984). *After virtue: A study in moral theory* (2nd ed.). University of Notre Dame Press.
- Mattingly, C. (1991). Narrative reflections on practical actions: Two learning experiments in reflective storytelling. In D. A. Schön (Ed.), *The reflective turn: Case studies in and on educational practice* (pp. 235-257). Teachers College Press.
- Moser, S. (2019). Tasks of climate change communication in the context of societal transformation. In G. Feola, H. Geoghegan, & A. Arnall (Eds.), *Climate and culture. Multidisciplinary perspectives on a warming world* (pp. 141-167). Cambridge University Press.
- Richards, G. W., & Carruthers Den Hoed, R. (2018). Seven strategies of climate change science communication for policy change: Combining academic theory with practical evidence from science-policy partnerships in Canada. *Environmental Communication*, 12 (5), 627-643. <https://doi.org/10.1080/17524032.2018.1498902>
- Verlie, B. (2022). *Learning to live with climate change: From anxiety to transformation*. Routledge.
- Vitting-Seerup, S., & Matthiessen, L. E. (2026). *Storytelling Science for Sustainability - Using Storytelling to Communicate the Science of Sustainable Food Systems*. *Environmental Communication*