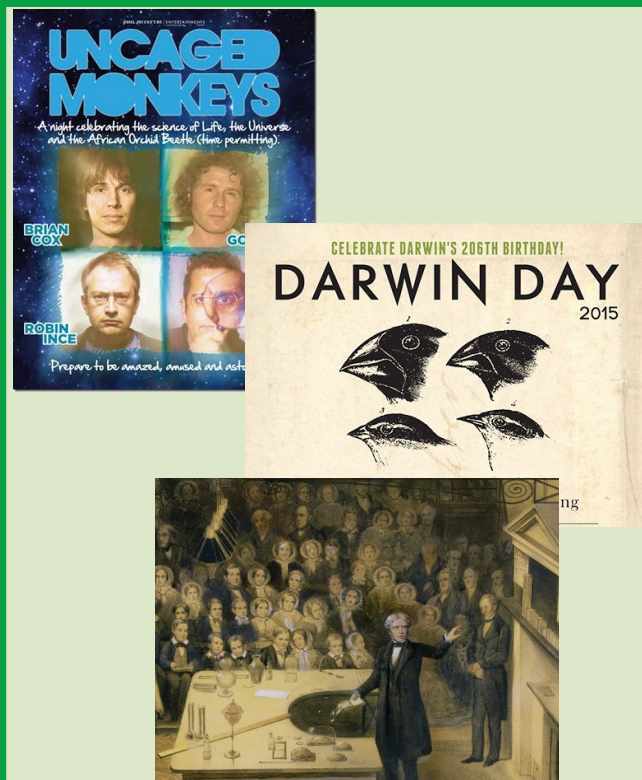


## **Science Turns Out To Be A Fiction : Damaging consequences**



## Story-telling in Sociable Science



Work in groups to prepare a **synthesis** of three short texts about “Popularizing science.”

You **cannot show your text** to the other members of your group.

Read your text and **rephrase** what it is about **orally** in your own words to the members of your group.

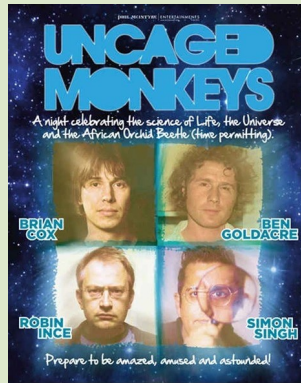
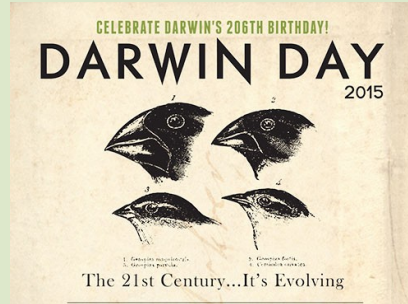
**Together write** in a couple of lines **a synthesis** of your three excerpts. (max 100 words)



Try and use the structure and linking words you noticed in the previous article to organize your thoughts.



## Story-telling in Sociable Science



*Scientific research should not be confined to the ivory tower of academia, something 19<sup>th</sup> century scientists who turned science into a show fully understood. Yet, the notion that entertainment could be a vehicle for science faded away during the 20<sup>th</sup> century. Fortunately, 21<sup>st</sup> century comedians and scientists have revived this idea of popularizing science on TV and in theatres. The media, the Internet revolution and high-profile events have also helped give center stage to a field of intellectual inquiry that has been making our lives so much easier.*

**88 words**



## Story-telling in Sociable Science



**Hannah Little**  
Lecturer in Communication and  
Media, University of Liverpool

The new romantic comedy *Fly Me to the Moon* tells the story of how, in the run up to the Apollo 11 mission, Nasa hired a high-flying marketing specialist to bolster public support. The history books tell us this isn't quite what happened, but I believe modern science communicators could still learn from this irreverent revision of Nasa's history.

In the opening scenes of *Fly Me To The Moon*, Kelly Jones (Scarlett Johansson), is recruited by shady government officials to sell one of the biggest things one can sell, the Moon. The premise may seem far-fetched. After all, who doesn't already love the Moon? Why would we even need to sell the exciting prospect of a man landing on it? In 2024, we look back on the 1969 Moon mission with rose-tinted glasses.

In reality though, throughout the 1960s, the majority of US citizens felt that the huge cost of the Apollo missions was not worth their money. "Americans are over their long and very expensive honeymoon in space," Jones chirpily tells a sceptical Nasa employee. "I'm here to remind them why they fell in love in the first place." As she gets started in her mission to collect the human stories behind Apollo 11, we see Jones hit with opposition from Nasa's workforce, concerned her attempts will undermine the science. The launch director tells her: "My guys are too weird for interviews and they're actually really busy doing life and death work." In the face of reluctance and hostility, she starts to make up her own stories, of engineers with rocket fuel in their blood and a childhood love of the stars, and a director with an airman father who died in the line of duty.

Next year, Nasa is planning to launch its Artemis 3 lunar mission, sending humans to the Moon's surface for the first time in nearly 50 years. But things aren't what they were in the 60s. **The further away** we've got from seeing Neil Armstrong make one small step, **the stronger public support** for returning to the Moon has got.

This doesn't mean there is support for all areas of science. Down on Earth, pandemics and the existential threat of the climate crisis have highlighted the importance in how people feel and communicate about science. At times, in pockets of the USA, misinformation and science denial are winning out. So could scientists can learn something from PR and marketing professionals?

Research from cognitive science shows that people remember certain stories, and pass them on more faithfully, better than others. In particular, we remember human stories with social relationships and motivations, counter-intuitive stories that surprise us and negative stories where nothing good happens.

## Story-telling in Sociable Science



### FLY ME TO THE MOON

#### Questions

1. Do you think scientists should get inspiration from PR and marketing professionals? Why or why not?
2. If you had to communicate more (or even shoot a movie) about one current or past scientific issue, which would it be and why?
3. Which of these tricks from cognitive science would you use to have a scientific issue popularized: **social relations and motivations?** **counter-intuitive stories that surprise us?** or **negative stories where nothing good happens?**

Justify: what would the pros or cons be?



To answer, use **double comparatives** as underlined in the article.



## Story-telling in Sociable Science

### Professional reluctance?

#### How do science communicators feel about using such tricks?



Hannah Little

Lecturer in Communication and  
Media, University of Liverpool

- science communicators worry, at times, that introducing counter-intuitive narratives or human characters to their communication might detract from the science.
- science communicators may worry that making their stories too negative could leave people disheartened, too anxious to act on things like the climate, or turn them off science altogether. However, negative emotions can actually be an important step in the emotional journey towards activism.
- science is often a collective endeavour involving huge teams. Arguably, it is the scientific method, rather than individual researchers, that makes science successful. Science communicators often refrain from overemphasising individual responsibility or opinion.
- having too many characters or counter-intuitive elements could make science communication too complex, contradicting the objective to make something highly complex easily understood.

## Story-telling in Sociable Science







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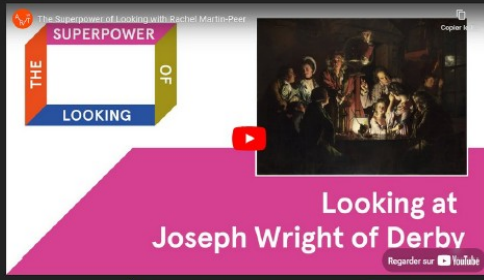


## Story-telling in Sociable Science



## Story-telling in Sociable Science

The Superpower of Looking with Rachel Martin Peer



01:30 – 04:40

**Look at the video and learn more about Joseph Wright's painting.**

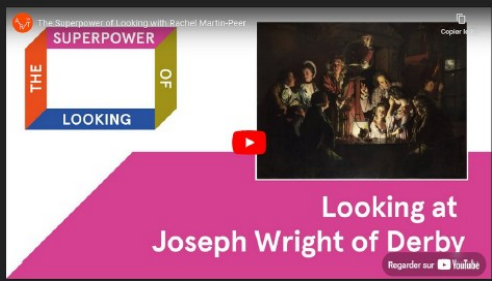
**Pay attention to phonetics.  
How would you stress those words?**

**favourite  
a picture  
to demonstrate  
an experiment  
the Enlightenment  
inspired  
interested  
worries  
similar  
to stimulate  
conversation  
to understand  
to represent  
scientific  
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# Story-telling in Sociable Science

### **An Experiment on a Bird in the Air Pump (1768)**

**Joseph Wright of Derby (1734–1797)**

The 'Derby' in **Joseph Wright of Derby** was probably a sign of the artist's pride in his hometown. Derby was famous for scientific advancement in the service of industry – a bit like Silicon Valley is now for technology.

The eighteenth century was an age of discovery in Britain – entrepreneurs emerged and like-minded people formed societies. One of these was The Lunar Society of Birmingham, a group of inspirational men (and it was just men) who debated science, philosophy, the arts and commerce before travelling back home by moonlit carriages. This artwork is Wright's way of sharing scientific ideas with everyone, not just a select few, and showing the reactions of ordinary people.

Wright of Derby specialised in candlelit pictures, and this is the largest that he painted. The bird is placed in a glass container and the air is then pumped out. Drama is created both through dramatic use of light and shade and through the facial expressions and poses of the figures.



# Story-telling in Sociable Science

► **TEXT B** – In the early 19<sup>th</sup> century, Michael Faraday gave lectures at London's Royal Institution. As it turned out, his talks were so popular that the carriages people rode to see him used to cause traffic jams on Albemarle Street. A master communicator and a consummate showman with a knack for enthralling audiences with the latest discoveries in electricity and chemistry, Faraday was a draw. As much a brilliant entertainer as a scientific genius, he really had it all.

Over the course of the 20<sup>th</sup> century, however, the notion that entertainment could be used for sharing science with the general public was lost along the way – something of a paradox, given that never before in history had the fruits of scientific research become so relevant to people's lives.

# Story-telling in Sociable Science

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## Story-telling in Sociable Science

**Thème grammatical:** *habitude dans le passé, forme fréquentative et traduction de l'imparfait*

1. Il passe son temps à faire des remarques malveillantes, alors je ne le vois plus aussi souvent qu'avant.  
.....

2. Le patron avait l'habitude de nous faire faire beaucoup d'heures supplémentaires et je me suis peu à peu habitué à suivre un programme de travail.  
.....

3. Jadis on disait que la peste avait disparu.  
.....

4. Les citoyens romains regardaient le commerce et les arts comme des occupations d'esclaves : ils ne les exerçaient point. (Montesquieu)  
.....

5. Il neigeait... Pour la première fois, l'aigle baissait la tête. (Victor Hugo)  
.....

6. L'avenue était silencieuse. On entendait le bruissement des arbres. (Patrick Modiano)  
.....

7. Il ne cessait de pleuvoir depuis deux jours.  
.....

## Story-telling in Sociable Science

**Thème grammatical:** *habitude dans le passé, forme fréquentative et traduction de l'imparfait*

1. Il passe son temps à faire des remarques malveillantes, alors je ne le vois plus aussi souvent qu'avant.

He **will** make spiteful remarks, so I don't see as much of him as **I used to**.

2. Le patron avait l'habitude de nous faire faire beaucoup d'heures supplémentaires et je me suis peu à peu habitué à suivre un programme de travail.

The manager **was used to making** his employees work overtime and I gradually **got used to working** to a schedule.

3. Jadis on disait que la peste avait disparu.

It **used to be said that the plague had been eradicated**.

4. Les citoyens romains regardaient le commerce et les arts comme des occupations d'esclaves : ils ne les exerçaient point. (Montesquieu)

Roman citizens regarded trade and arts as occupations for slaves: they **would** not practise them.

5. Il neigeait... Pour la première fois, l'aigle baissait la tête. (Victor Hugo)

It **was snowing**... **It was the first time** the eagle **had bent** its head.

It **was snowing**... **For the first time**, the eagle **was bending** its head.

6. L'avenue était silencieuse. On entendait le bruissement des arbres. (Patrick Modiano)

The avenue was silent. We **could hear** the rustling of the trees.

7. Il ne cessait de pleuvoir depuis deux jours.

It **had been raining non-stop for** two days.