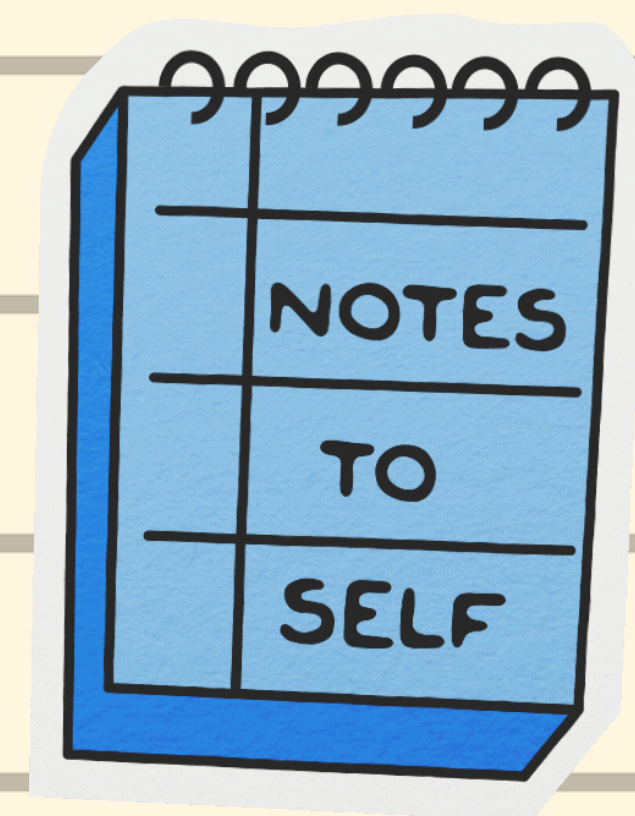


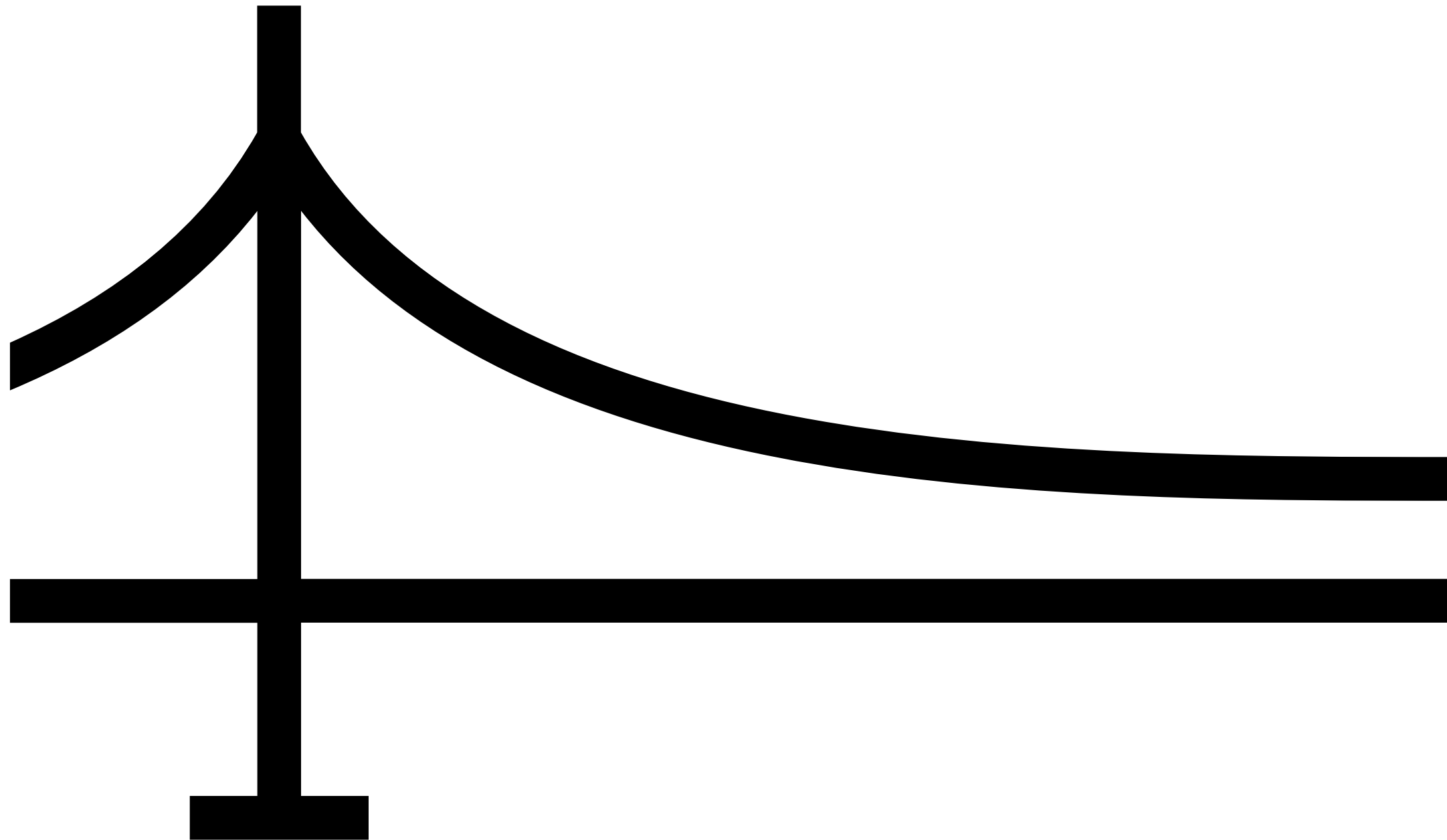
SCIENCE AND SOCIETY

WHY COMMUNICATE SCIENTIFIC RESEARCH

Rossella Spiga







science communication

two milestones

04



COMMUNICATION OF SCIENCE

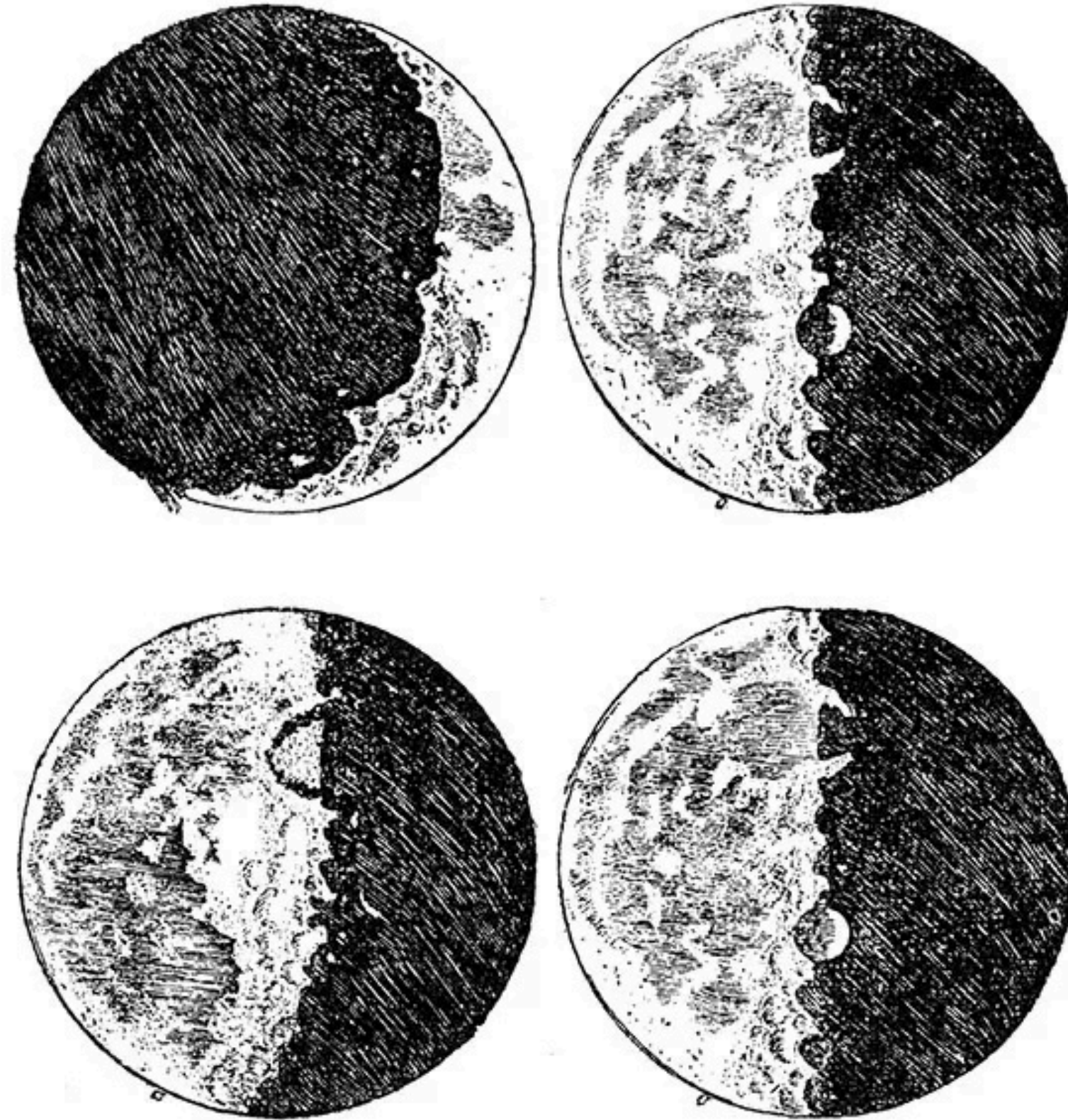
is an indispensable step of the
scientific process.



The ability to effectively
communicate research
findings is crucial for success
in sciences.

the fundamental social
institution
of science is its
system of communication

JOHN ZIMAN (1925 – 2005)



Galileo sketched the Moon as he saw it in his telescope. Sidereus Nuncius, 1610.

MODERN SCIENCE
was born in 17th century
by breaking down the
PARADIGM OF SECRECY

Paolo Rossi (1923 – 2012)

the Ivory Tower

academic science



REPORT

Science the Endless Frontier

Vannevar Bush, 1945

post-academic science

KNOWLEDGE SOCIETY

Towards knowledge societies:
UNESCO world report
2015



What is SCIENCE?

society



DEMOCRACY

Is SCIENCE *democratic?*



communism
universalism
disinterestedness
originality
organized skepticism

CUDOS

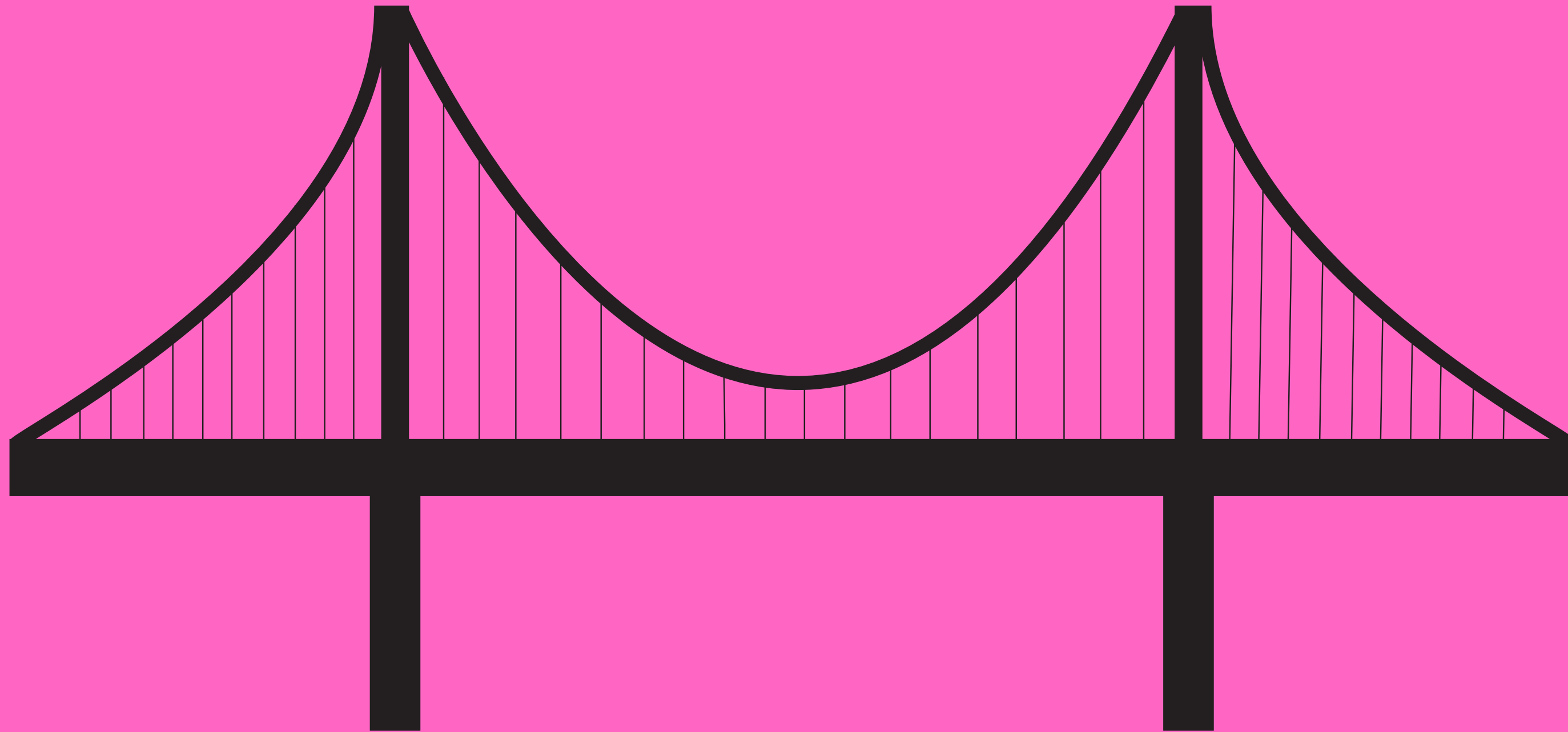
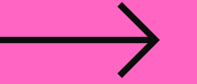
**ETHOS
OF SCIENCE**

Robert Merton

USA, 1949

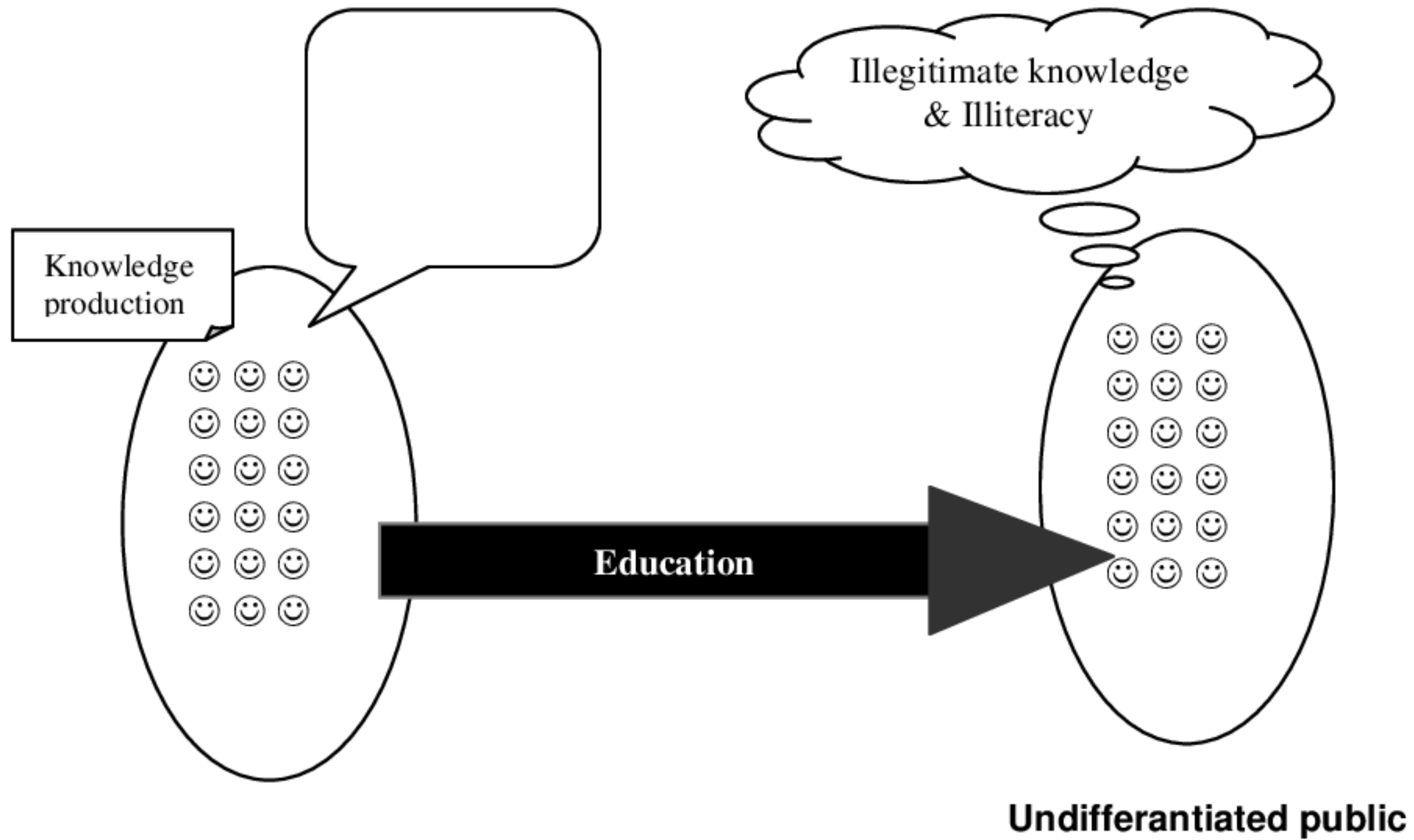
**Democracy
needs
Science**

**Science
needs
Democracy**



science communication

Deficit Model



divulgare

1. Rendere noto a tutti o a molti, diffondere: d. un segreto; d. una notizia, ecc., anche per mezzo della stampa e degli altri canali d'informazione.
2. Rendere accessibili a un più vasto pubblico, per mezzo di un'esposizione semplice e piana, di nozioni scientifiche e tecniche

fare opera di divulgazione

(talora con leggero senso spreg.: è un'opera di d., volendo significare che ha scarsa originalità e scarso valore scientifico).

[dal lat. divulgare e vulgare: «diffondere tra il volgo», der. di vulgus «volgo»]



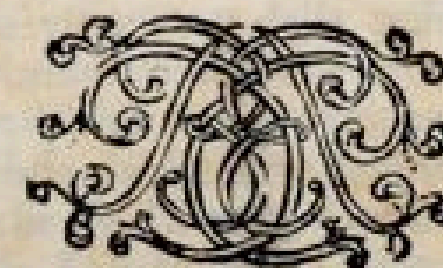
Dis. Della Piazzetta inv.

Mario Pistori sculp.

IL NEWTONIANISMO
PER LE DAME
OVVERO
DIALOGHI
SOPRA
LA LUCE E I COLORI.

— — — — — *quæ legat ipsa Lycoris.*

Virg. Egl. X.



IN NAPOLI

MDCCXXXVII.

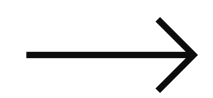
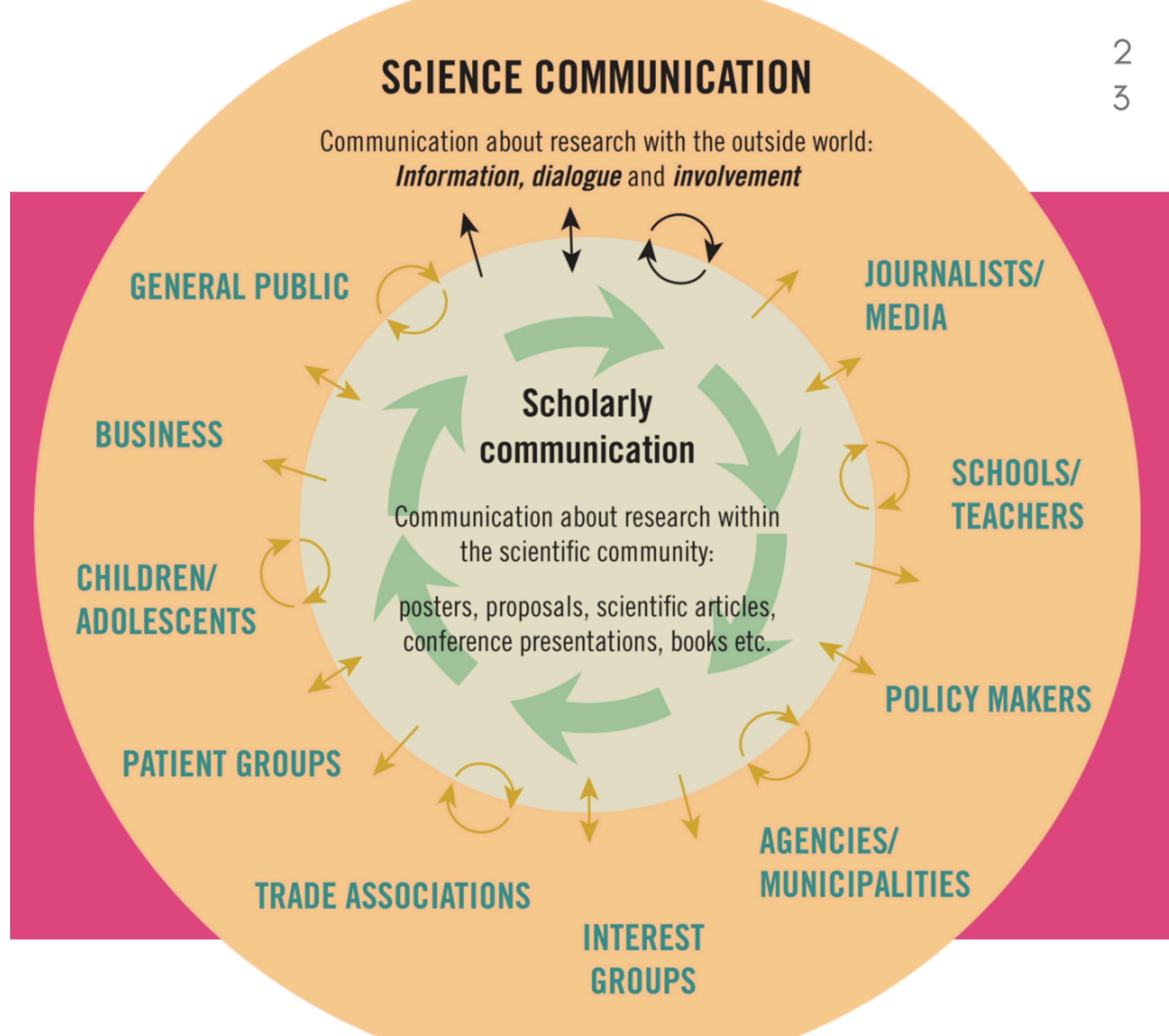
The Public Understanding of Science

The Royal Society 1985



Public engagement with Science and Technology

Public engagement describes the myriad of ways in which the activity and benefits of higher education and research can be shared with the public. Engagement is by definition a two-way process, involving interaction and listening, with the goal of generating mutual benefit



science communication as a priority in the public debate

- **quality and credibility of information**
- **trust in science and scientific actors and institutions**
- **the roles of experts in crises and emergencies**

- To address urgent issues
- To make science more transparent
- To **inform** the public and to educate/**persuade** the policy makers

Why is science communication important?



polarization of communication

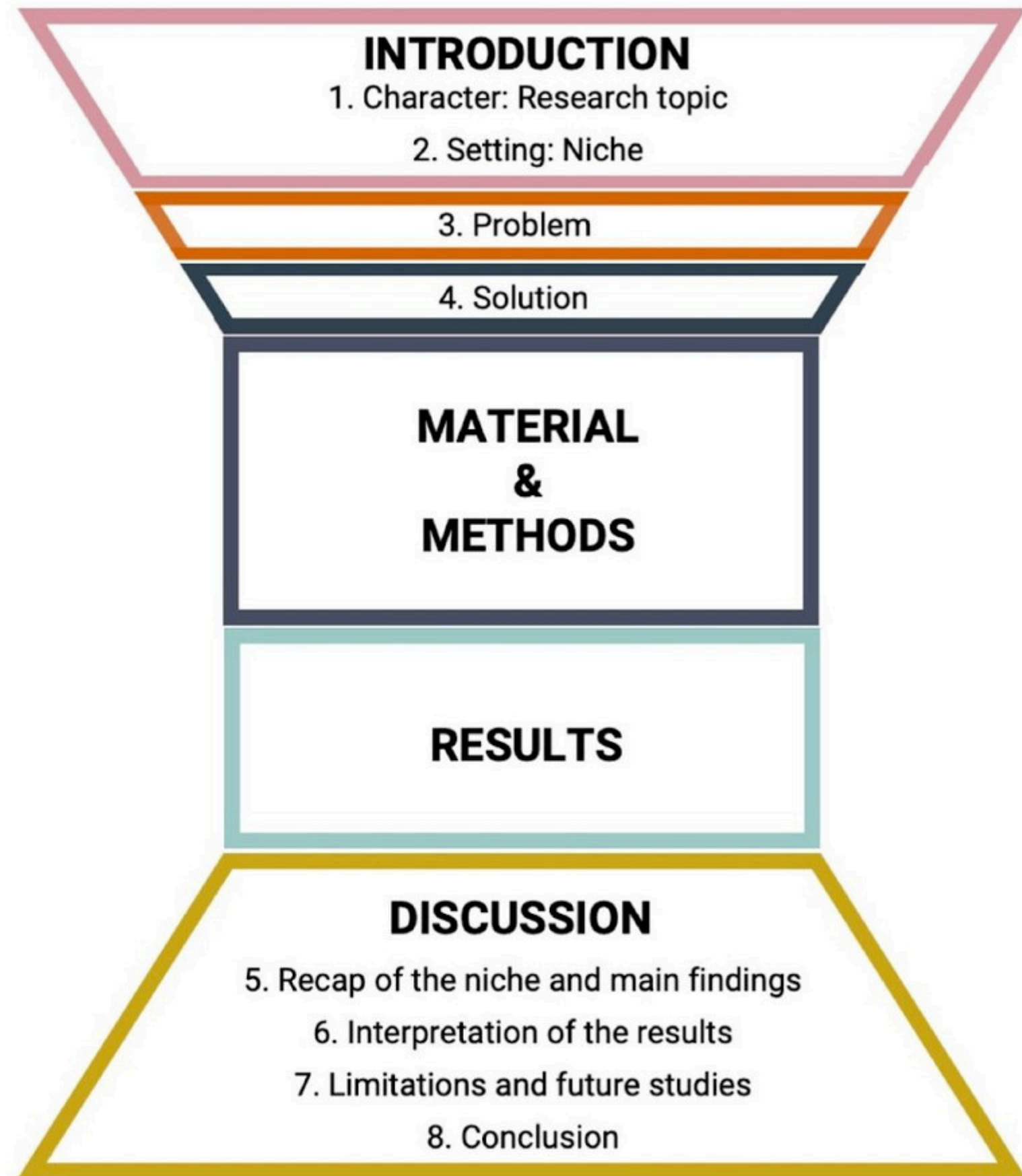
authoritative or populist



science communication



SCIENTIFIC PAPER





the LEAD

Who? What? Where? When? Why?

the BODY

the story: details and facts

the TAIL

nice
to know

PRESS RELEASE

science is slow

communication

i

s quick

CUSTOMIZE OUR COMMUNICATION

KNOW OUR AUDIENCE

we have to target the
general public

uncertainty principle

CORRECTNESS **VS** **SIMPLIFICATION**



DESCRIPTIVE VS NARRATIVE writing



KILL YOUR DARLINGS

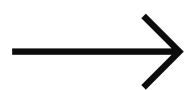
TERENCE BLACKER

Note: This is not the actual book cover

*Less
is
more!*



LANGUAGE

[illegible]

Science is not finished until it is communicated

Mark Walport, UK Chief Scientific Advisor to the UK
Government, 2013





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