

25 Years of Science Communication



BRIAN TRENCH
PRESIDENT, PCST NETWORK

Over 25 years, science communication has ...



- been written into public policies
- been incorporated into state, higher education, research and professional agencies
- become a professional practice
- become a subject of university research and education
- developed many, diverse new forms
- spread to all continents and ~100 countries

Globalisation: contexts



- New expectations and hopes of science
- Knowledge economy sees science as driver of growth
- Sustainable development requires appropriate use of science
- ‘Grand challenges’ demand scientific response
 - Energy and food security; Epidemics, pandemics; Climate change

Globalisation: agencies



- UNEP, UNDP, UNIDO, WHO, FAO, UNESCO
- OECD
- European Union
- Wellcome Trust
- Gates Foundation
- ICSU



Globalisation: promoting science awareness



Taiwan national primary and high school science fair

Professionalisation



- Job descriptions specify science communication
- Formal training and education
- Professional networks
- Conferences



PCST 2016

Public Communication of Science and Technology

April 26-28, 2016 / Istanbul - Turkey



Professionalisation: Masters programmes

MSc Science Communication



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Northumbria University and the International Centre for Life are working together to develop and deliver an MSc in Science Communication in Newcastle upon Tyne.

The Masters course, which aims to equip students with a high level of transferable academic and practical components. It will provide a balanced technical and theoretical grounding in the skills and knowledge vital for delivering science centres or related approaches.



Centre for Science Communication *the home of storytelling*

Master of Science Communication (MSciComm)

The University of Otago offers a unique post graduate degree in science communication: the Master of Science Communication (MSciComm). The task is so big and so cool, we work together with NHNZ, award winning writers, museums, script writers, poets (yes, really) and a host of other experts.

We'll train, challenge, market and package you into a lean, mean Science Communicator machine and send you off to make your mark on the world. Choose the place to make your mark from the following three options for the MSciComm:



Science and Natural History Filmmaking

Want to be the next David Attenborough? We work with NHNZ, the world's second largest producer of documentaries. You'll be driven hard to script, edit, produce, film and present a film to a baying audience. Don't like the sound of pressure and deadlines? Don't do this option.



Creative NonFiction Writing

The written word still rules, it might be on an iPad rather than vellum, but it's alive and well. We'll teach you to cut, chop and hone your writing until it's

Institutionalisation: supports for sci-comm



- Training courses in media skills
- Prizes for scientists writing popular science
- Science awareness awards for media professionals

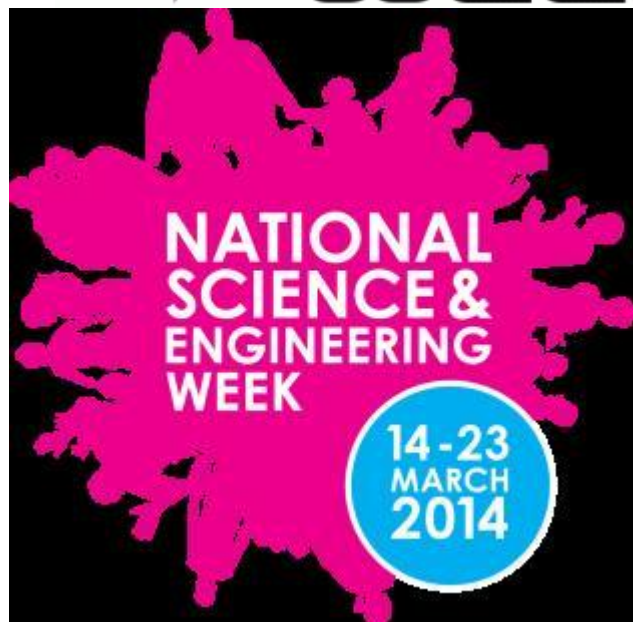


*Presentation to winner of Nigerian Academy of Science
Print Journalist of 2013, Miss Bukola Adebayo*

Diversification: sci-comm forms



- Science weeks
- Science festivals
- Science centres
- Science shops
- Science media centres
- Science cafés



Miraikan science centre, Japan



ArtScience Museum, Marina Bay Sands resort, Singapore



Science Gallery, Dublin





Fiesta de las Ciencias y las Humanidades 2014

Octubre 17 y 18 • 10:00 a 17:00 horas
Iversum • Entrada libre

World Science Festival

2014 May 28 – June
New York City



PROGRAMME du
VAUCLUSE

FÊTE DE LA SCIENCE
1^{er} au 12 octobre 2014

Manifestations gratuites, ouvertes à tous
www.fetedelascience.fr

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A l'occasion de la Fête de la Science
EXPOSITION
LE SYSTÈME SOLAIRE
RÉALISÉE PAR LES ÉLÈVES DU COLLÈGE SÉVIGNÉ

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DE 10H À 17H,
LE SAMEDI 11 OCTOBRE DE 9H À 12H.

MAIRIE DU V^e, 21 PLACE DU PANTHÉON - 75005 PARIS

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MAIRIE DU 5^e MUSEUMS COLLEGE Sévigné Observatoire



‘The Science of Brewing’ in Killarney’s Irish Pub, Nashua, New Hampshire, USA



Women's science café in St John's Church, Kampala, Uganda

Formalisation: research



- Professor appointments
- Evaluation and strategy analysis
- PhD projects
- International conferences
 - PCST; ECSITE; SCWS; WFSJ; STS (sci-comm sections)
- Academic publishing

Formalisation: research



Stellenbosch takes the lead in science communication

Author: Marina Joubert

The first research chair in science communication in South Africa has just been awarded, the first chair of its kind on the continent of Africa, positioning the University to pioneer the continent



The Science Communication Unit of Karlsruhe Institute of Technology (KIT) invites applications for the position a

Professor (W3) of Science Communication in Digital Media

Applicants are expected to fit into the context of work outlined above, to have an interdisciplinary background, and to possess a clearly defined profile in the area of "Science Communication" focusing on digital media. This professorship is intended to strengthen the research area of "Science Communication in Digital Media" at KIT. Experience and qualification in science communication research and education theoretically and methodologically based on communication science, journalism or related areas of sociology are indispensable. Candidates are expected to have an outstanding research and publication record as well as to be part of an established international network. Excellent achievements in the practice of science communication are required.

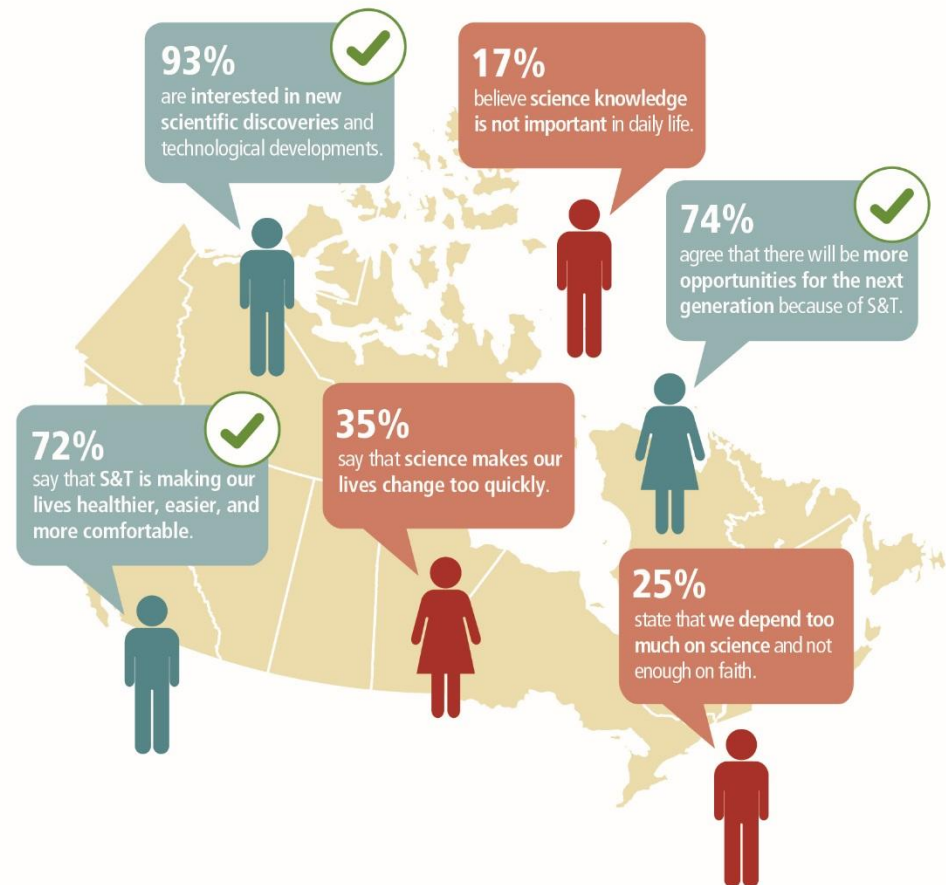
Formalisation: evaluation and strategy analysis



SCIENCE CULTURE: WHERE CANADA STANDS

Expert Panel on the State
of Canada's Science Culture

WHAT DO CANADIANS THINK ABOUT SCIENCE AND TECHNOLOGY (S&T)?



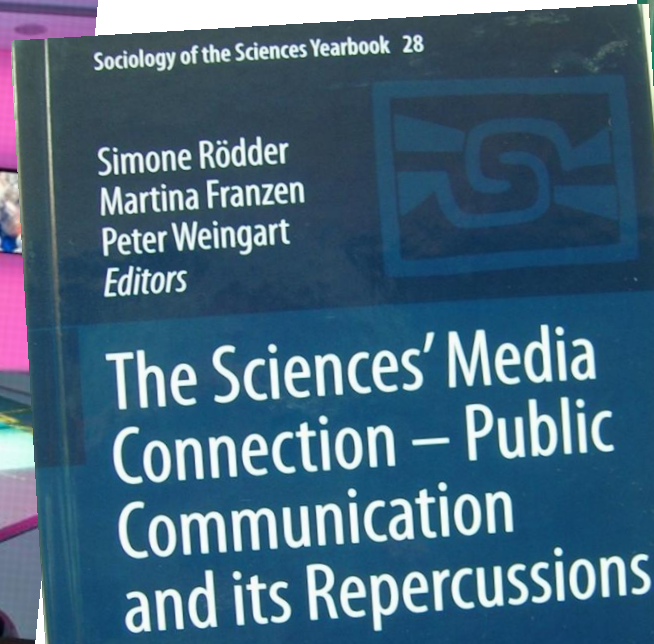
Formalisation: academic publishing



The Routledge Handbook
of Public Communication of
Science and Technology

Communicating Science

New Agendas in Communication



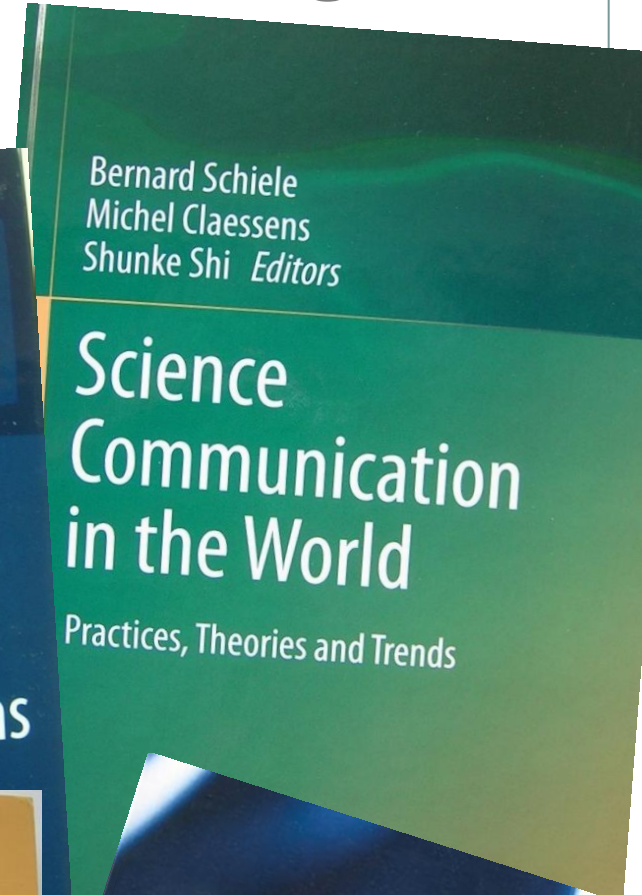
Sociology of the Sciences Yearbook 28

Simone Rödder
Martina Franzen
Peter Weingart
Editors

**The Sciences' Media
Connection – Public
Communication
and its Repercussions**

**Investigating
Science Communication
in the Information Age**

Implications for public engagement
and popular media



Bernard Schiele
Michel Claessens
Shunke Shi *Editors*

**Science
Communication
in the World**

Practices, Theories and Trends



The Culture of Science
How the Public Relates to
Science Across the Globe
Edited by
[Name]



Routledge
Taylor & Francis Group

[Subjects](#)

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Bucchi & Trench: The Public Communication of Science, 4-vol. set

Edited by **Massimiano Bucchi, Brian Trench**

Routledge – 2016 – 1,736 pages

Series: [Critical Concepts in Sociology](#)

Selection criteria for ‘major works’

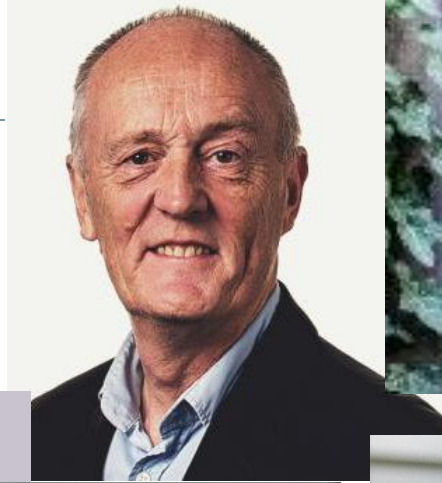


- explicitly addressed processes and contexts of communicating science
- proved their worth in the field through frequent citation
- were cross-referenced in other texts within the collection
- valuable to the editors of this collection in their own work
- endured as foundational texts in the field

Selection criteria for 'major works'



- set new directions for work in the field
- have the potential, in the editors' view, to influence future work in the field
- represent significant elements of the diversity of the field
- address big moments or big issues in the evolution of science communication

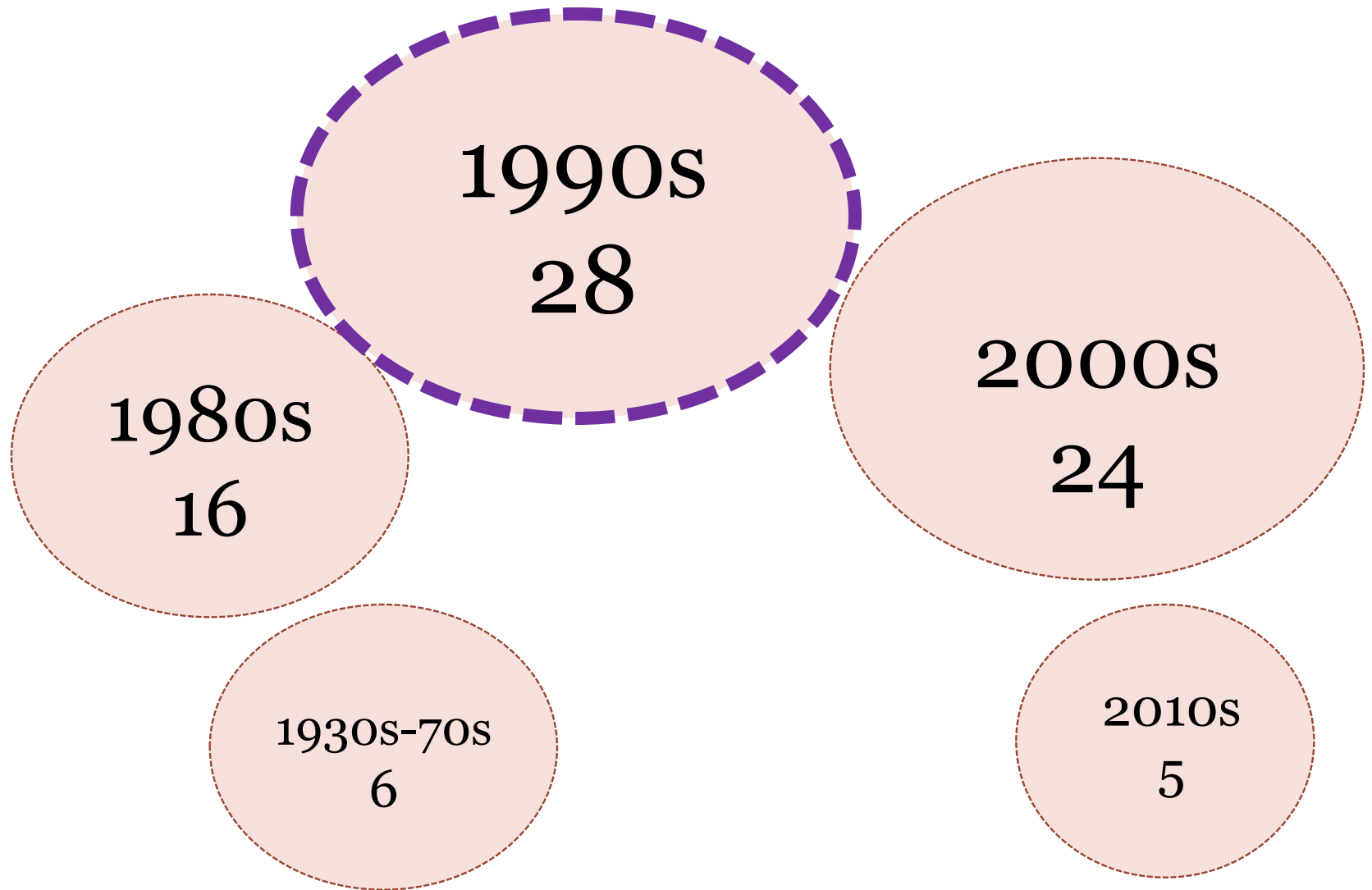


Sources for 'major works'?



- Science communication journals (19, majority PUS)
- Social studies of science journals (15)
- Edited collections (12)
- Monographs (9)
- Communication journals (6)
- Natural science journals (6)
- Others (6)
- Essay collections (5)

Period of publication



Authors' countries (- 1994, 1995-)



USA 19

USA 16

Britain
14

Britain
16

France
6

(3) Others
5

France
6

(10) Others
13

Naming 'science communication'

○ (-1994, 1995-)

2
papers

19 papers

And the next 25 years?



- Increased international collaboration
 - More comparative evaluation?
- Further global spread
- Further diversification
 - embedding science in various cultural forms
- More co-ordinated research agendas
 - E.g. examining fragmentation of media and audiences
- Difficulties to maintain sci-comm as university subject?
- Contest over promotion vs interpretation?