Science communication in the media – how is it changing?

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Definitions

- *Culturas científicas* or *culture scientifique*
  or scientific culture
- *Apropiación social* or *divulgación* or
  popularization or PCST or science
  communication
- Media vs. news

Key ideas

- Growth, especially since 1980s
- Adaptations to new media (in every era):
  new forms, new interactions
- Difference between science “news”
  (journalism) and other kinds of science in
  media
- Strong preference for medicine/health over
  natural sciences
- Many open questions
Fig. 3.2 An index of science news fluctuations between 1820 and 2006, above and below the long-term trend. The graph shows estimated z-scores and 10-year and 25-year moving averages within a band of moving +/- 1 SD of estimates for 10-year averages.

Trends in science coverage
Bestsellers over time

Number of "science" titles added to
New York Times bestseller list

Data compiled by Diane Renbarger, Cornell Univ., 2001

Bauer, Martin W., Petkova, Kristina, Boyadjieva, Pepka, & Gornev, Galin.
(2006). Long-Term Trends in the Public Representation of Science Across the
Spanish science TV news (early 2000s)

- 3.5% of TV news about science
- Of that: 60% about medicine, 13% telecommunications, 12% food, everything else less than 10% (astrophysics, environment, energy, paleontology, etc.)
- Scientists as sources: 92%
- Primarily national, not international
- Focus on positive, hope

European science news (2003-2004)

- A chart showing the percentage of stories in science, health, environment, crime, sports, politics, and other categories.
The overall European case (2007-2008)

- Information, 8%
- Popularization, 46%
- Edutainment, 19%
- Advice, 23%
- Advocacy, 5%

Figure 1: Distributions of programme hours across countries broadcast in an average week 2007-2008 (N = 195 hours) by public and commercial channels.

The most exciting phrase to hear in science, the one that heralds new discoveries, is not 'cure?l!' but that's famous... - Isaac Asimov
What do people find online?

Nanotechnology-related keyword searches, as delivered by Google

What do people say online?


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How do people use media?

What we still don’t know, 1

- Interactions of different media

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What we still don’t know, 2

◆ Does quantity or quality matter?
  “Has there ever been a demonstrable positive correlation between quantity or quality of science information in the public marketplace and the quality of science policy or the quantity of science funding?”

◆ What is the true audience for science online?
  “Is there any truth to the oft-repeated assertion that there is a ready consuming public for science (of any stripe) whose reading/listening/attending needs are not being met?”

What we still don’t know, 3

◆ How does all this apply in developing world?
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