

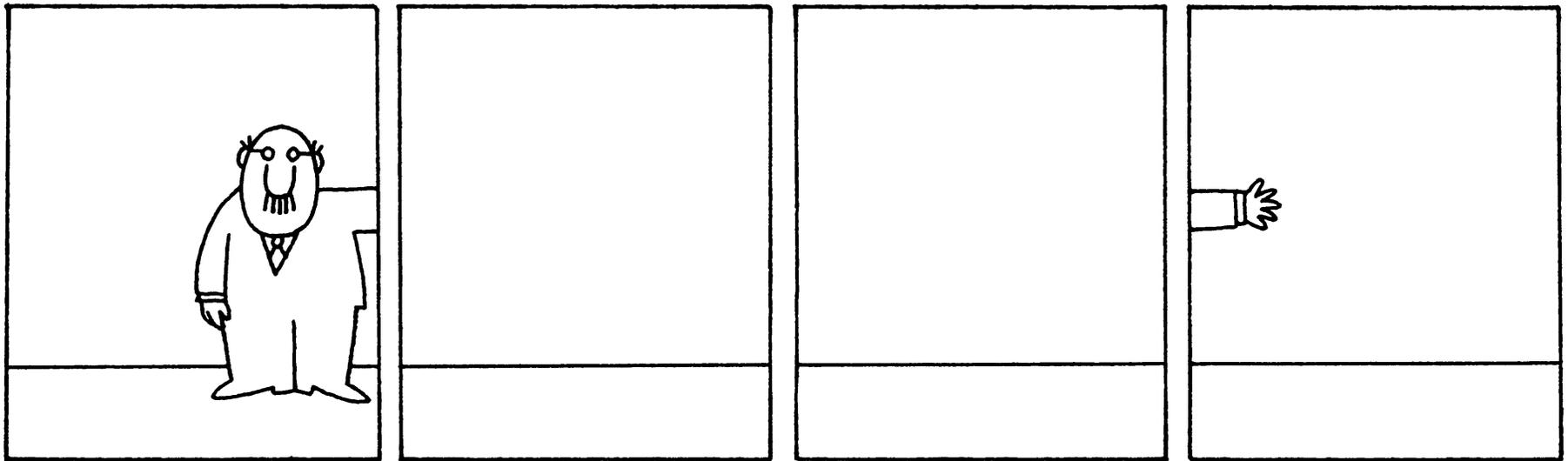
I Am Science... And So Can You!



Mariette DiChristina
Editor in Chief
Scientific American

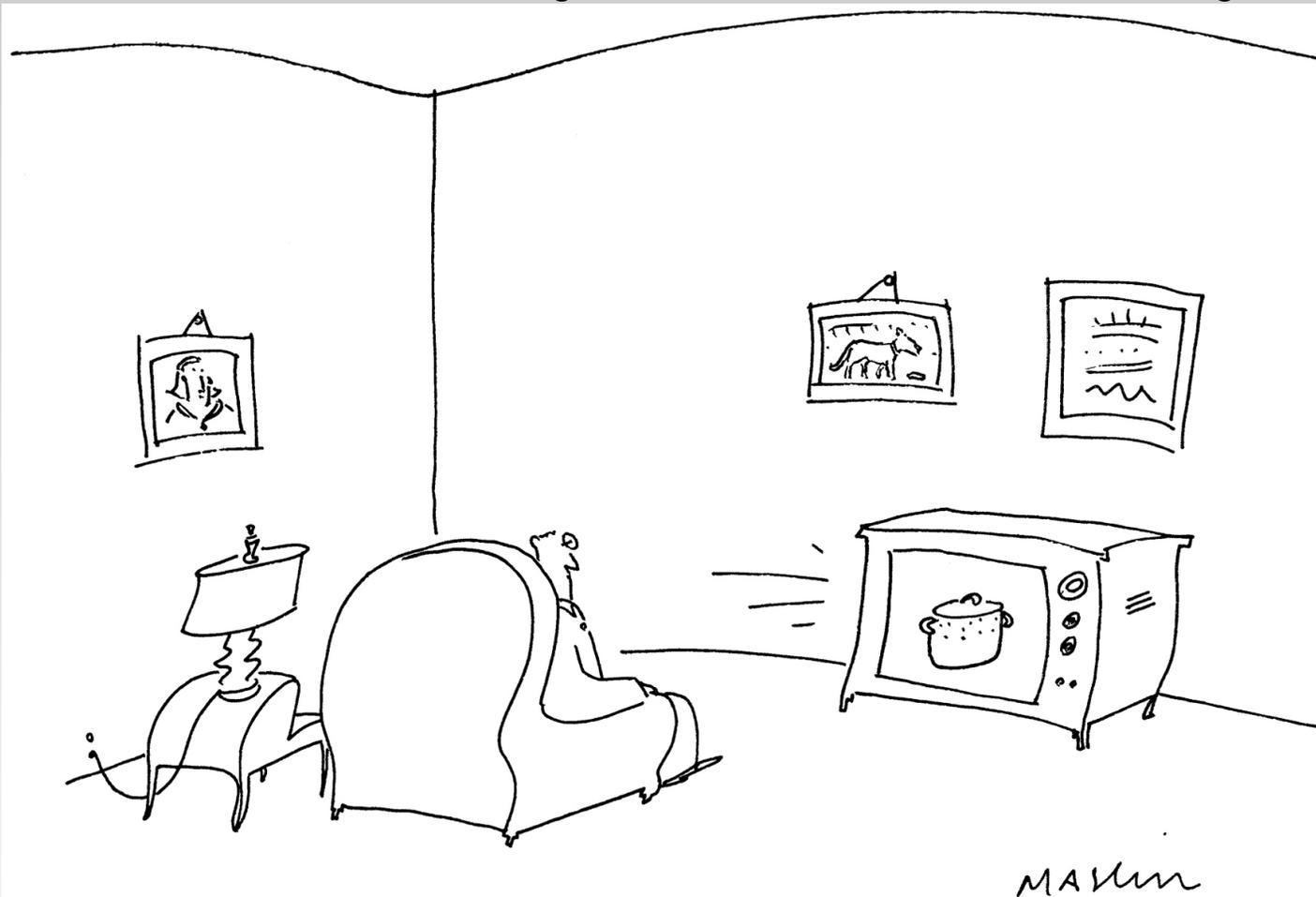
Let's Try an Experiment

THE SPACE-TIME-COMIC-STRIP CONTINUUM



C. Rovelli

Nobody Wants to Pay



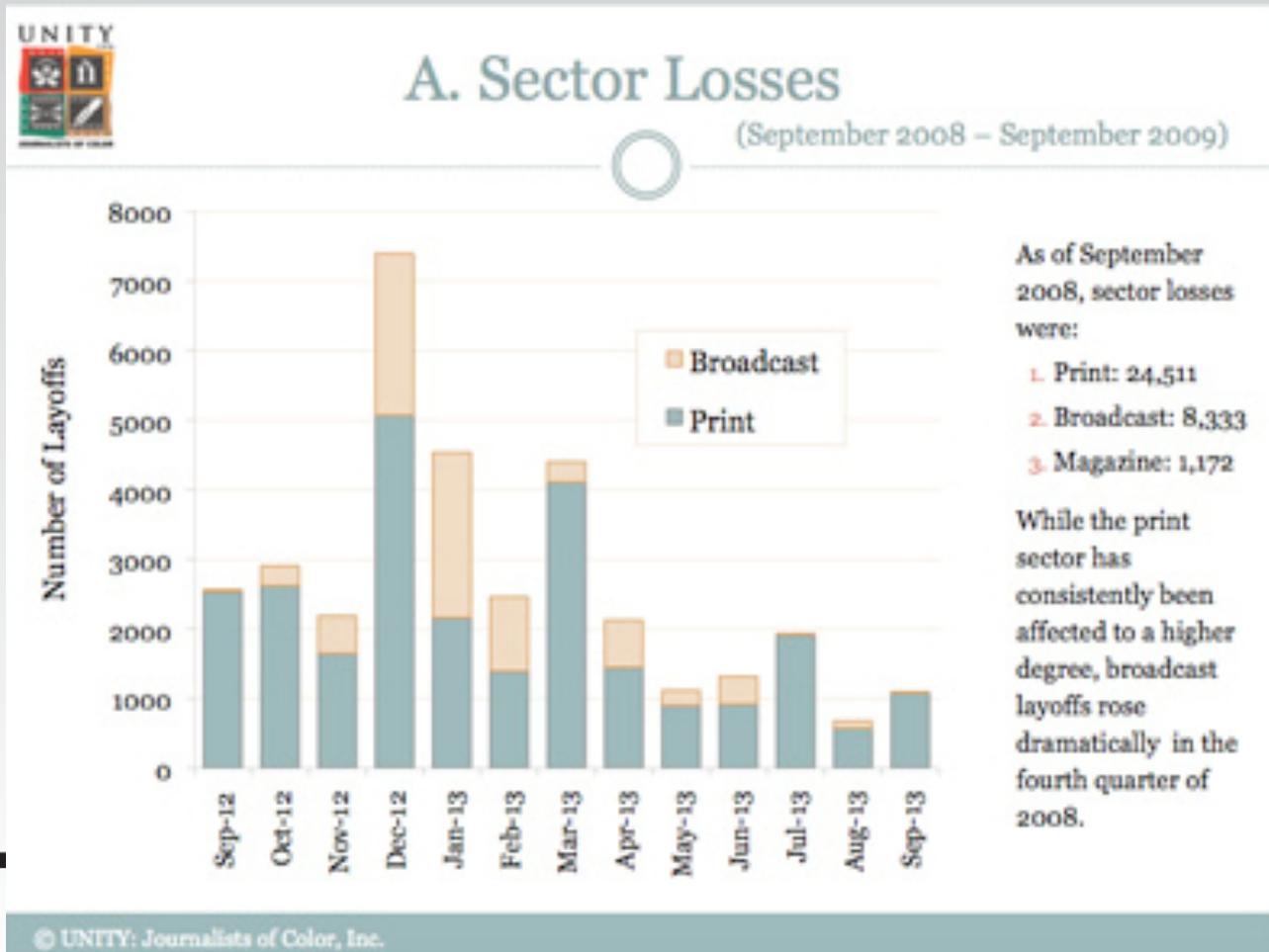
“How much would you pay for all the secrets of the universe? Wait, don’t answer yet. You also get this six-quart covered combination spaghetti pot and clam steamer. Now how much would you pay?”

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Yet Quality Has a Cost

- “A 400-year-old business model was destroyed in 15 years by the delusion that quality contents come for free.”
 - World Federation of Science Journalists survey, 2009

34,016 J-Jobs Lost in 1 Year: 3x national ave.



And Really, Were Things Ever That Great in Journalism?



“One group gets tiny copies of the ‘Times,’ the other gets tiny copies of the ‘Post.’”

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Public Opinion of Science?



“They’re harmless when they’re alone, but get a bunch of them together with a research grant and watch out.”

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Why It Matters



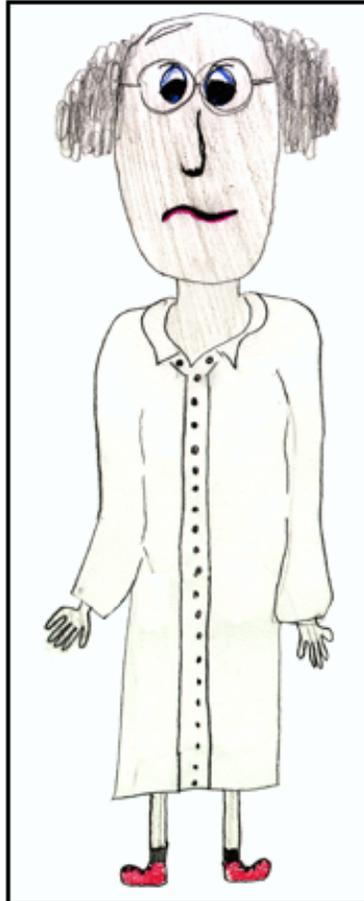
Only 18 Percent of Public Have Met a Scientist



"Carl actually is a rocket scientist."

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BEFORE



AFTER



To me, a scientist is bald and has hair coming out of the sides of his head. . . . Scientists live in their own world and the rest of society puts them there.

"You can not judge a book by the cover!" Scientists come in all shapes and forms. Women, men, chemists, biologists, and physicists are all in the field of science.

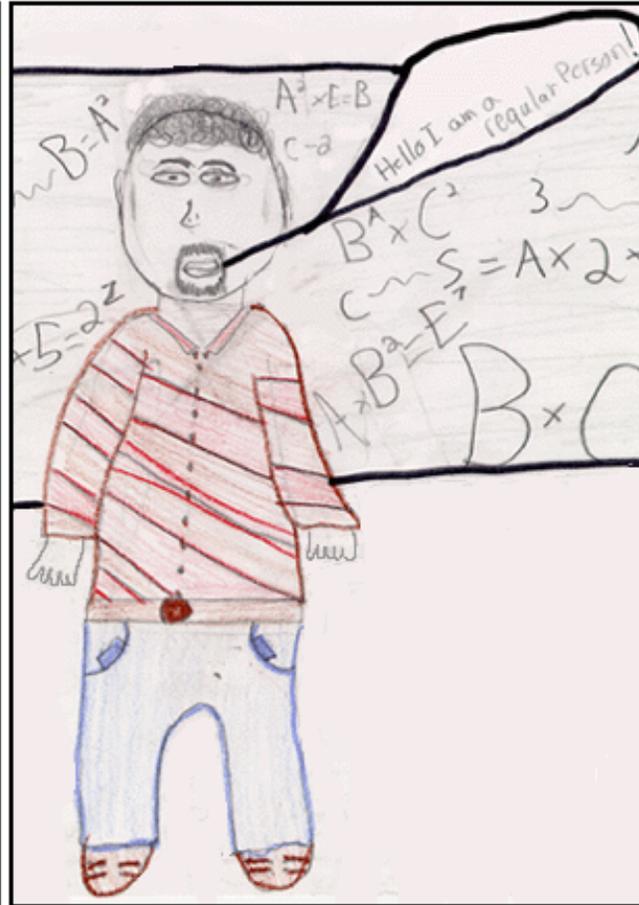
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BEFORE



I always see a scientist holding a bottle with a bubbly substance and it is usually a weird color, like green or red.

AFTER



The scientists are really nice and funny people. I first thought of the scientist as a nerdy person or someone walking around with a laptop. Now after I visited Fermilab I know what a real scientist is like. They are just like you and me.

David

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I think of a scientist as very dedicated to his work. He is kind of crazy, talking always quickly. He constantly is getting new ideas. He is always asking questions and can be annoying. He listens to others' ideas and questions them.



I know scientists are just normal people with a not so normal job. . . . Scientists lead a normal life outside of being a scientist. They are interested in dancing, pottery, jogging and even racquetball. Being a scientist is just another job which can be much more exciting.

Public Attitudes

- Pew July 2009 survey of science attitudes:
 - Public's attitudes in two telephone surveys of 2,001 adults
 - Science knowledge quiz of 1,005 adults
 - Scientists' survey of 2,533 members of AAAS

Public Has High Regard for Science and Scientists...

<i>Science's effect on society</i>	<u>Public</u> %
Mostly positive	84
Mostly negative	6
Other/DK	10

*Contribute "a lot"
to society's well-being...*

Members of military	84
Teachers	77
Scientists	70
Medical doctors	69
Engineers	64
Clergy	40
Journalists	38
Artists	31
Lawyers	23
Business executives	21

But Public Is Less Positive than Scientists about U.S. Science

<i>U.S. scientific achievements...</i>	<u>Public</u> %	<u>Scientists</u> %
Best in the world	17	49
Above average	47	45
Average	26	5
Below average	5	1
DK/No answer	4	*

Figures read down.

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Problems for Science: Lack of Public Knowledge, Sloppy News Coverage

<i>Scientists' views of problems for science...</i>	<u>Major problem</u> %	<u>Minor/ Not a Problem</u> %
Public does not know very much about science	85	15
News does not distinguish between well-founded findings and those that are not	76	24
News media oversimplify scientific findings	48	51
Public expects solutions to problems too quickly	49	51

Figures read across.

Public's Science Knowledge

<i>Contemporary questions</i>	<u>Percent correct</u>
<i>Aspirin</i> recommended to prevent heart attacks	91
GPS reliant on <i>satellites</i>	82
<i>Undersea earthquakes</i> can cause tsunamis	77
<i>Carbon dioxide</i> is gas linked to rising temperatures	65
<i>Water</i> recently discovered on Mars	61
<i>Pluto</i> no longer a planet	60
Stem cells <i>can develop into many different types of cells</i>	52
<i>“Textbook” questions</i>	
Continents are/have been shifting	76
Not all radioactivity is man-made	63
Antibiotics <i>do not</i> kill viruses as well as bacteria	54
Lasers <i>do not</i> work by focusing sound waves	47
Electrons are <i>smaller</i> than atoms	46

Yes, You Can



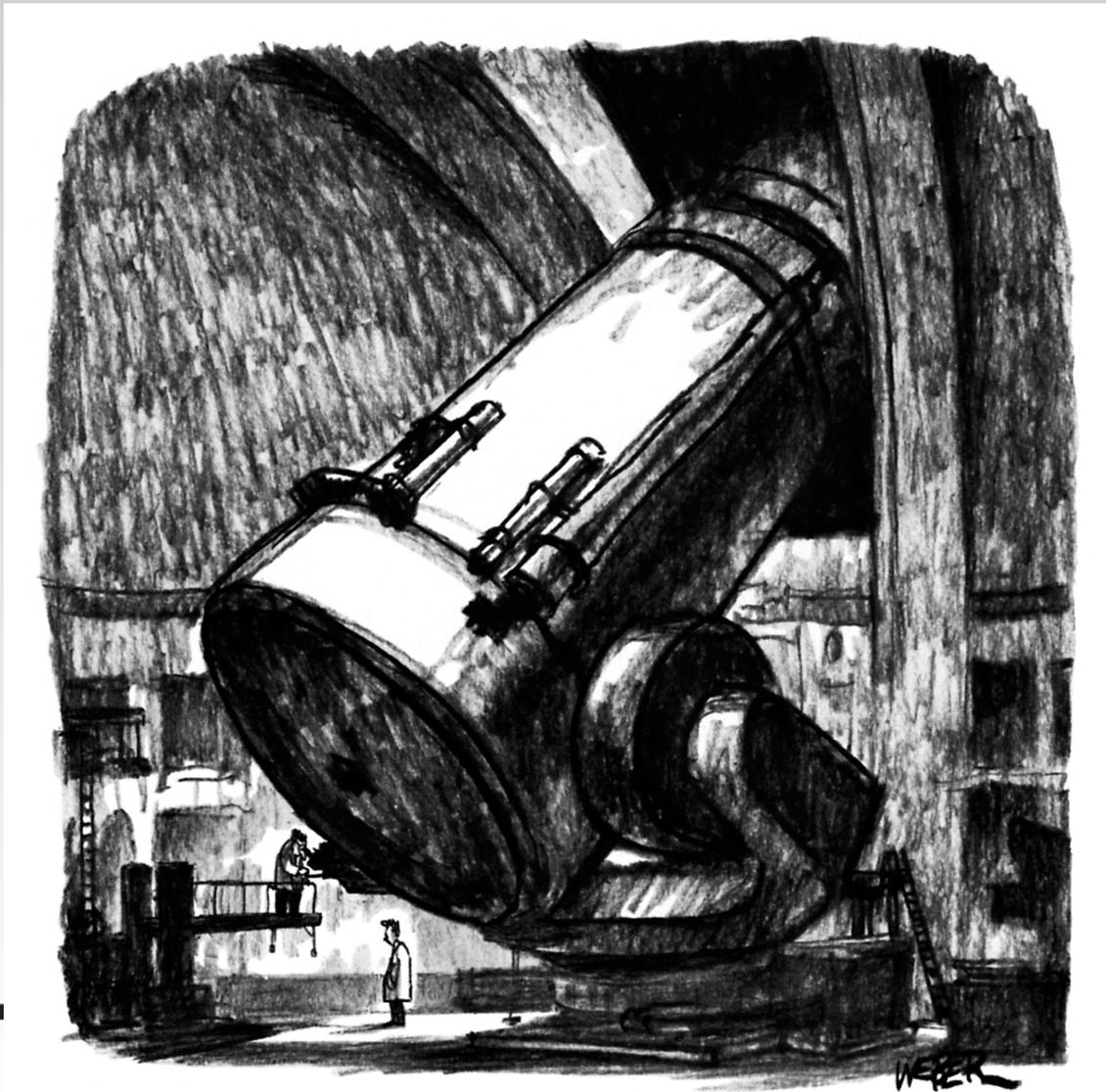
"Perhaps I can help, gentlemen.
I am a rocket scientist."

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The Good News: More Ways Than Ever to Reach Public

- Blogs
- Videos
- Audio (podcasts)
- Social media: Twitter, Facebook, Google+, Tumblr, Pintarest, Flickr....
- E-mail newsletters
- Personal and institutional lab Web sites
- Books
- Songs (LHC rap, anyone?)
- School assembly, classroom visit
- Illustrations, cartoons
- Articles in consumer publications
- Letters to the editor
- Talks to public
- Op ed opinion essays
- Citizen science, crowd sourcing, crowd funding
- Even stand up
- And the old standby....interviews with journalists

You Bring Unique Perspective



“See anything?”

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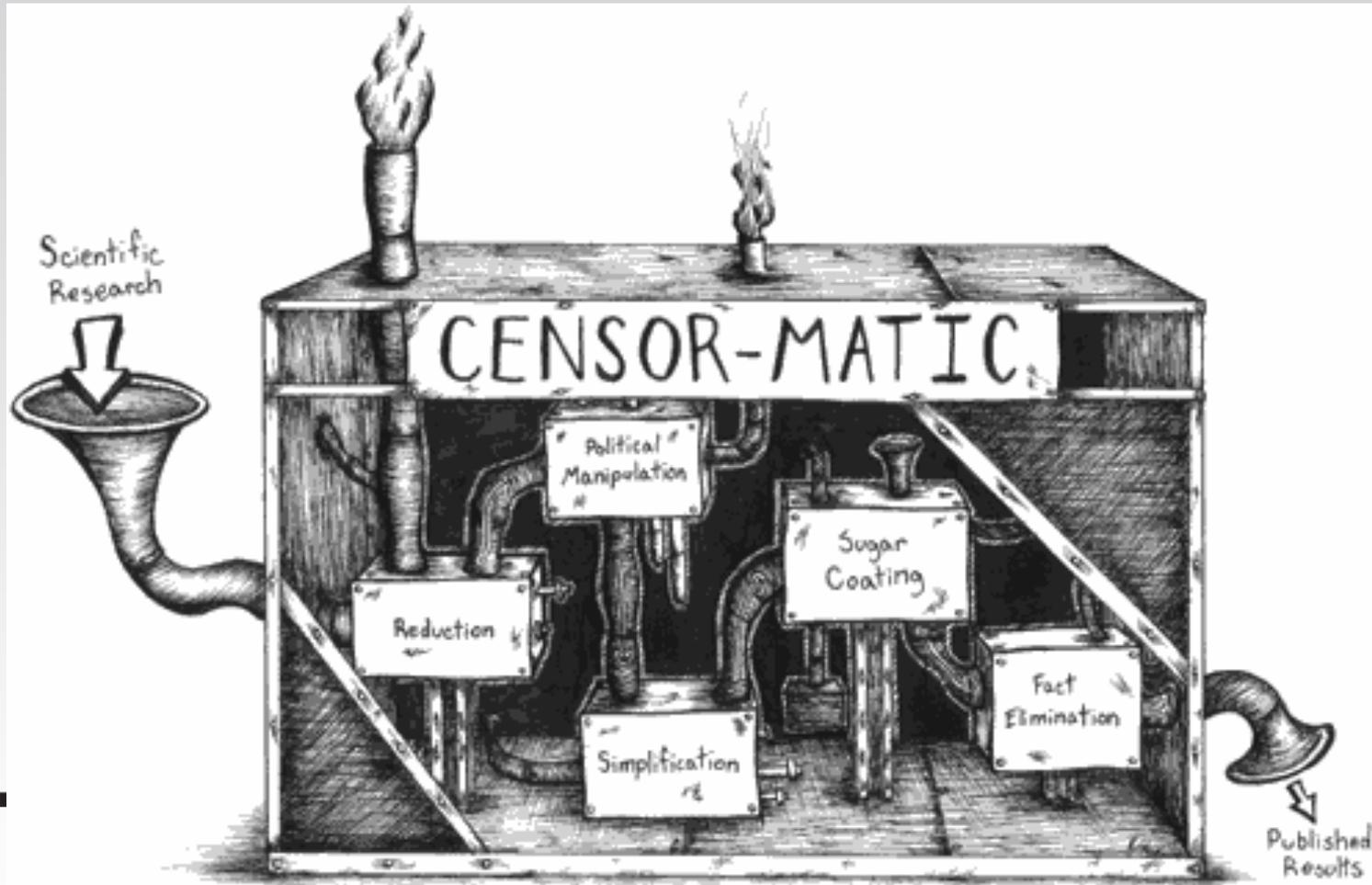
The Bad(?) News

- Still need same hallmarks of good storytelling to *really* reach audience, including:
 - Answer the “so what?” question
 - Explain in ways audience can understand, avoid jargon
 - Give anecdotes, narrative details, analogies
 - Tell why important to know now (timely)
 - Pictures, good explanatory art, video, audio...
- Most of all, have a *good story*

And Remember....

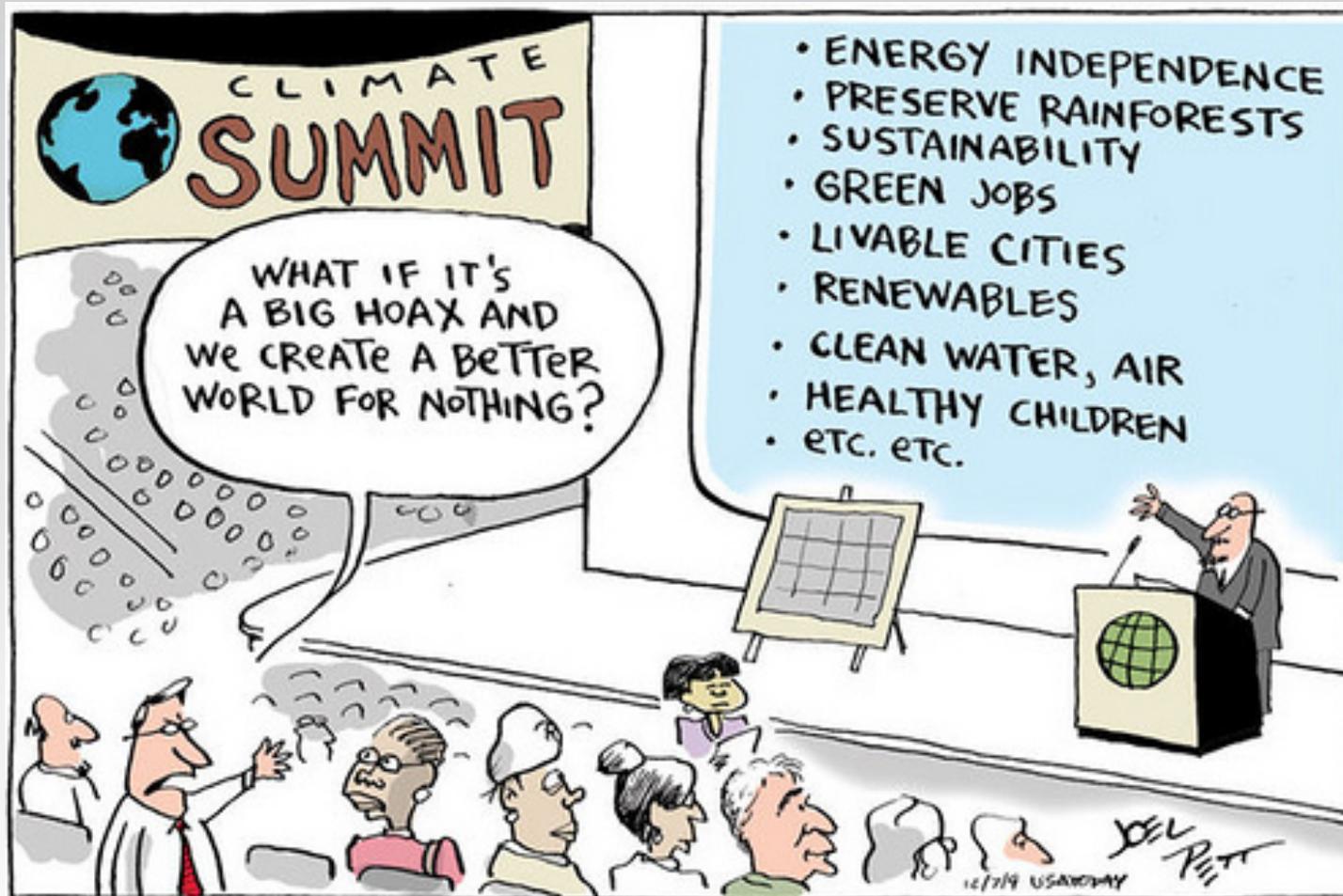
- The public are NOT your peers or professors
 - They can stop reading, looking, engaging anytime.
- In short: think of THEIR needs, not yours
 - Think of Aunt Joan

Sci-Communication-O-Matic: 5-Point Attack Plan



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2. Pick Your Message



3. Pick Your Medium



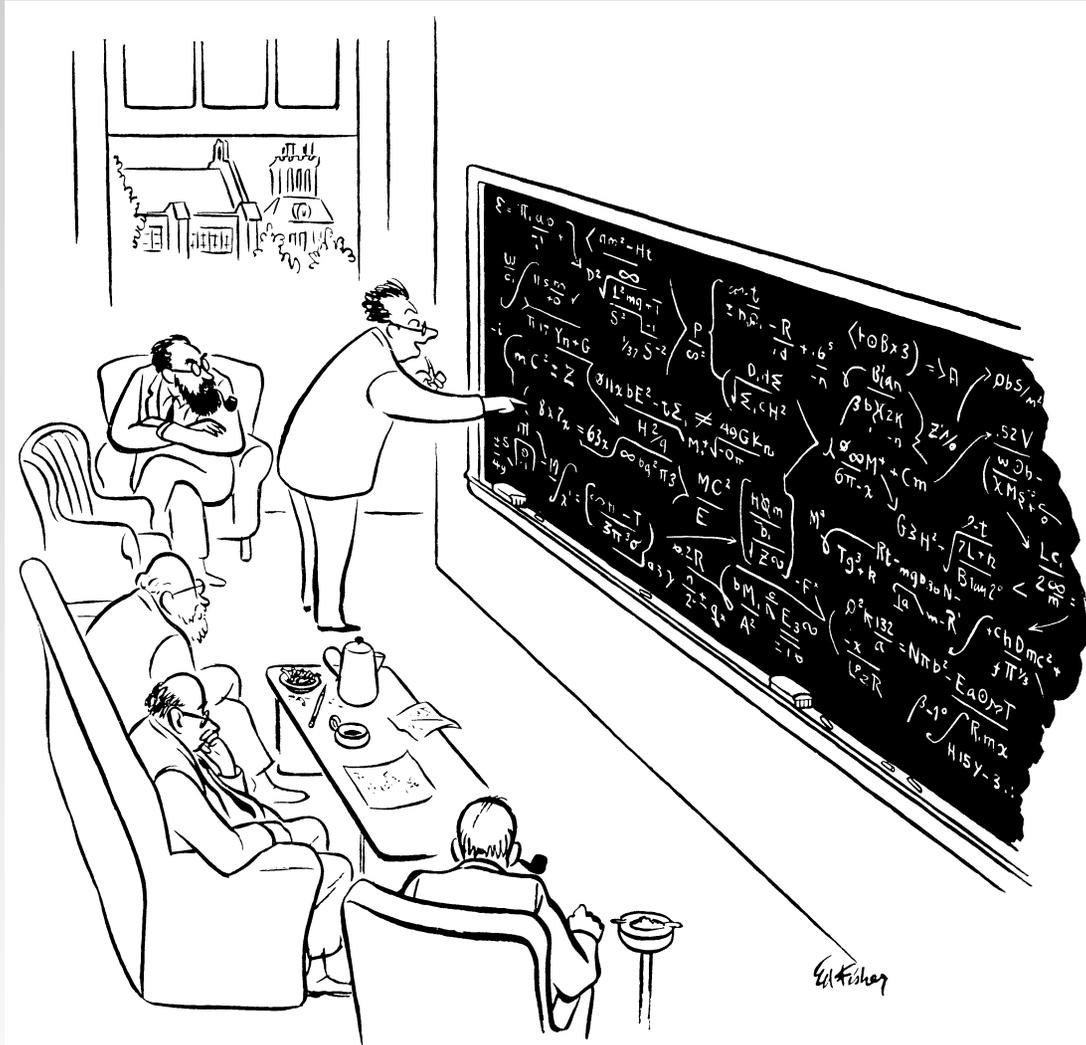
"Instead of creating life, I've decided just to establish an online persona."

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4. Speak Their Language



5. Make Connections for Them



"Say I think I see where we went off. Isn't eight times seven fifty six?"

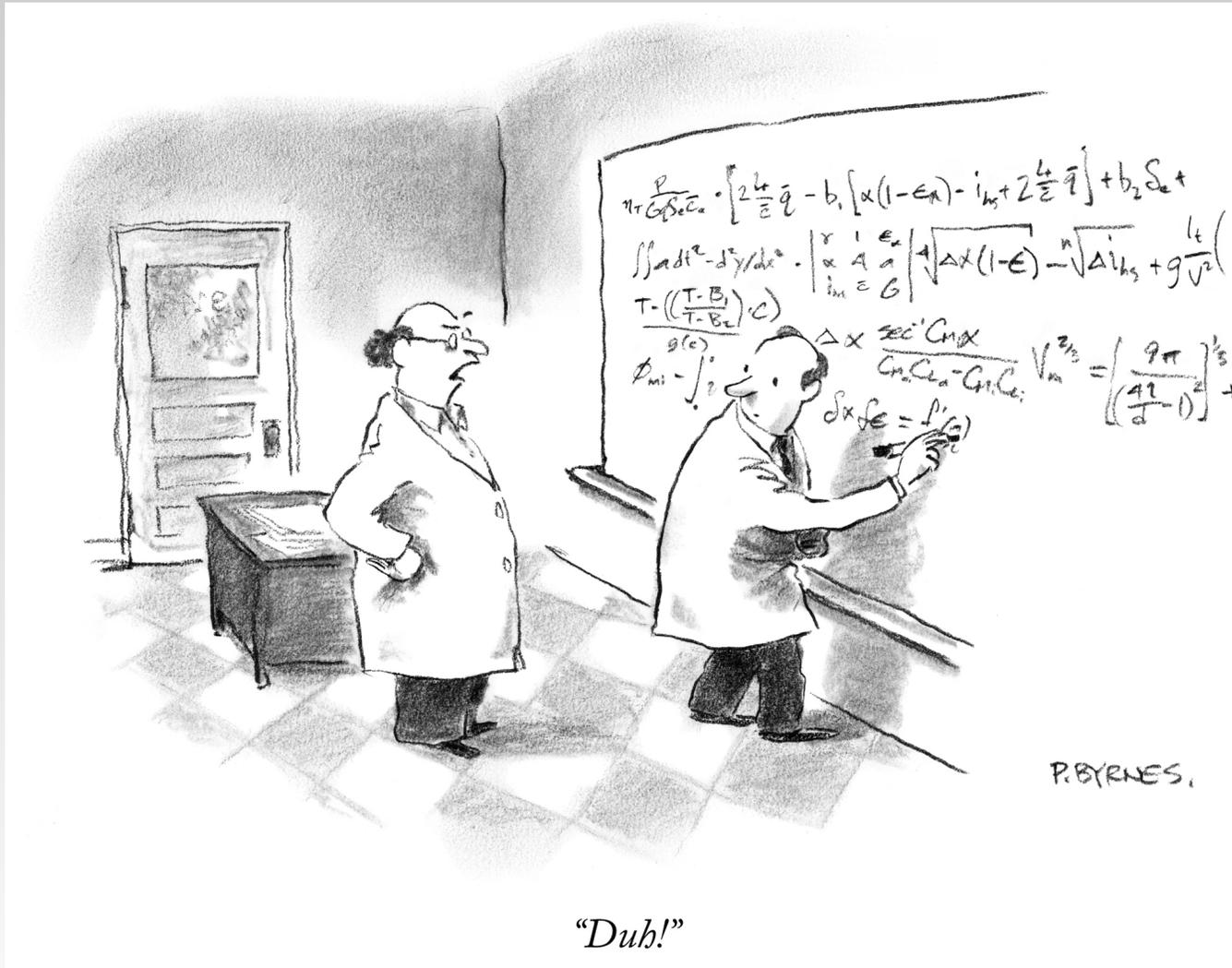
Let Go of Your Worries



“One thing I’ll say for us, Meyer—we never stooped to popularizing science.”

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With Practice, It Gets Easier



"Duh!"

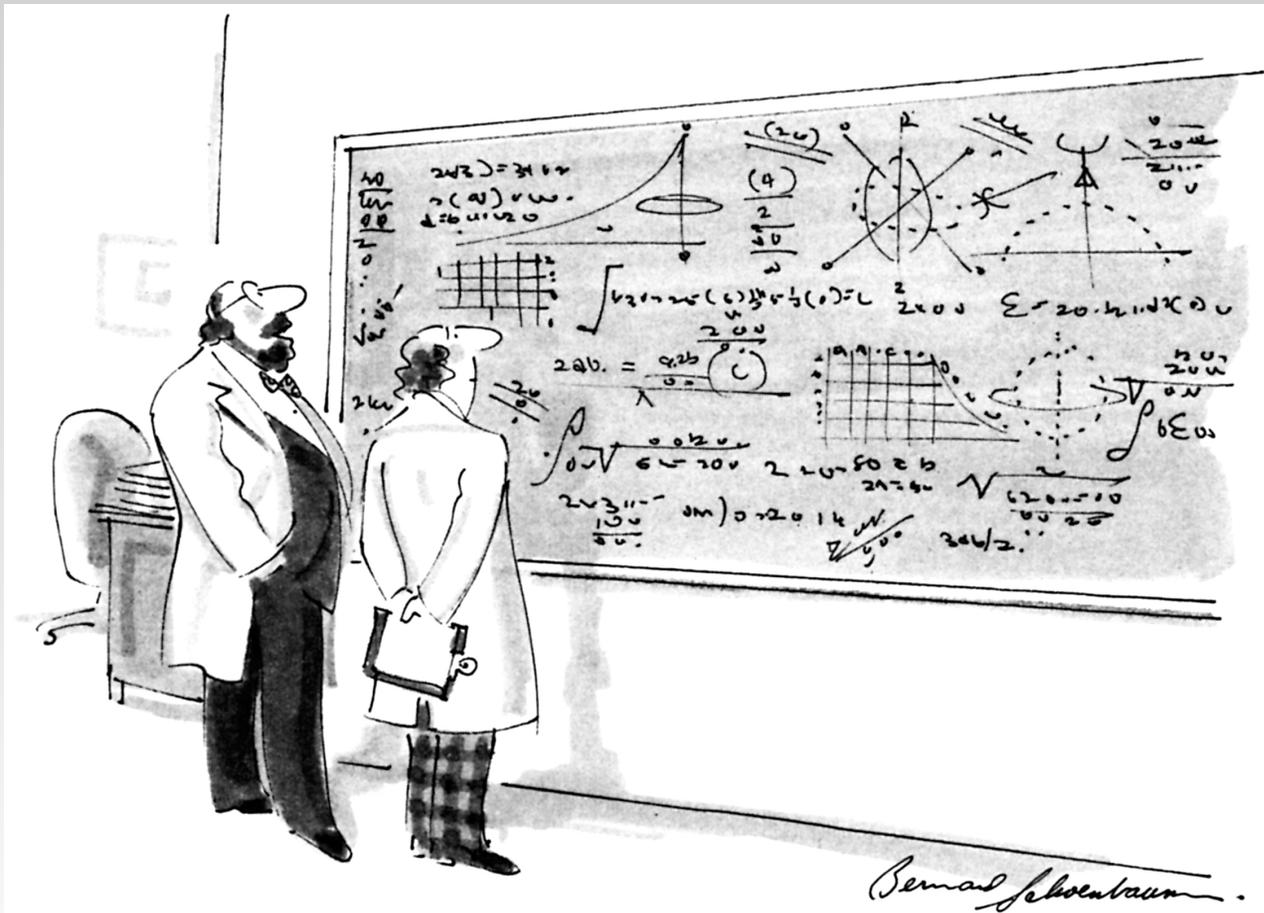
4 Things Editors Look for....



"We're in our lab coats. Now what?"

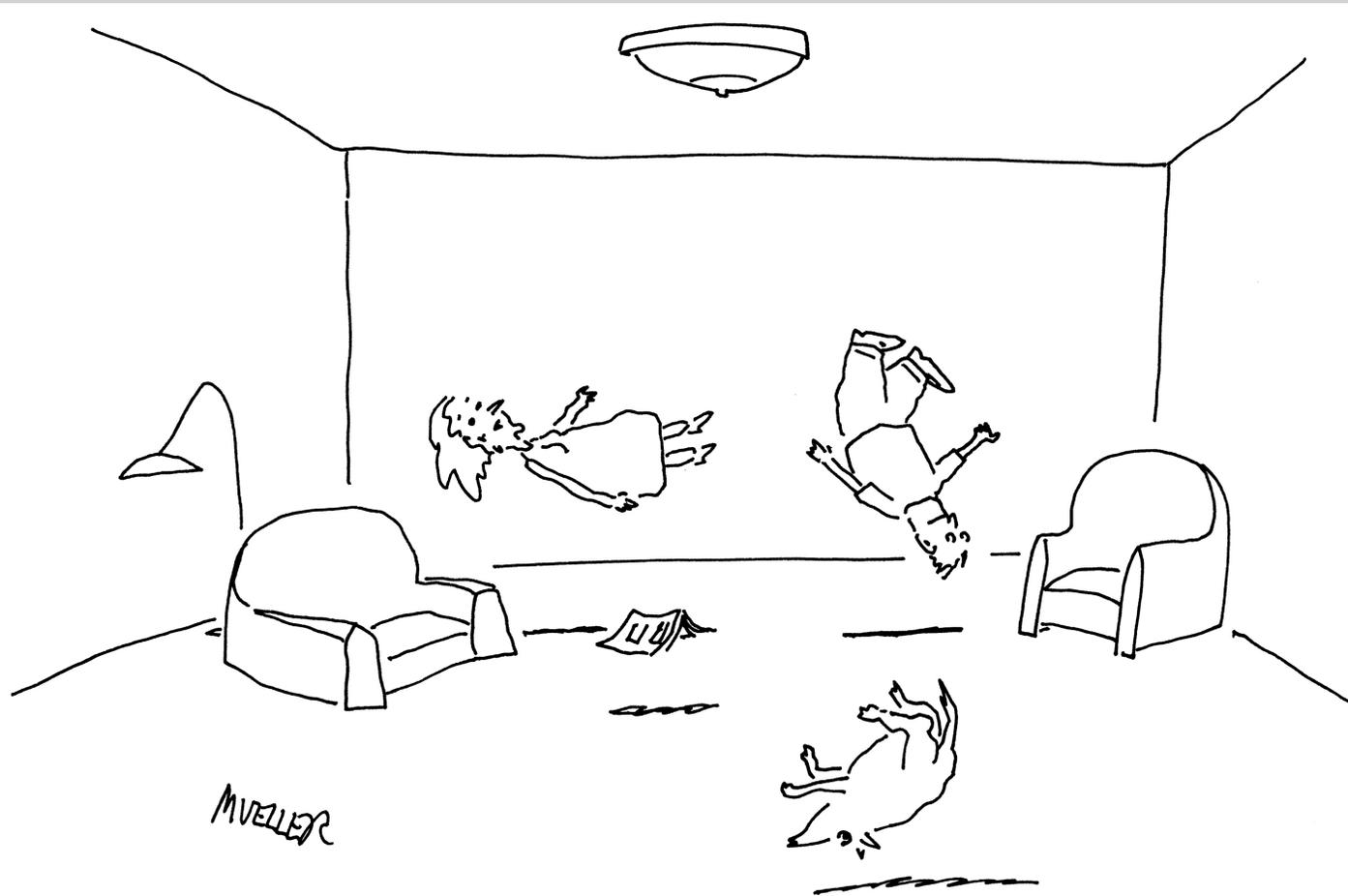
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1. A Point that Matters to READERS



"Oh, if only it were so simple."

2. Why It Matters NOW



"Did you pay the gravity bill?"

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3. Clear Examples, Good Anecdotes



“All in all, I’d say it’s a pretty convincing explication of chaos theory.”

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4. Good Visuals

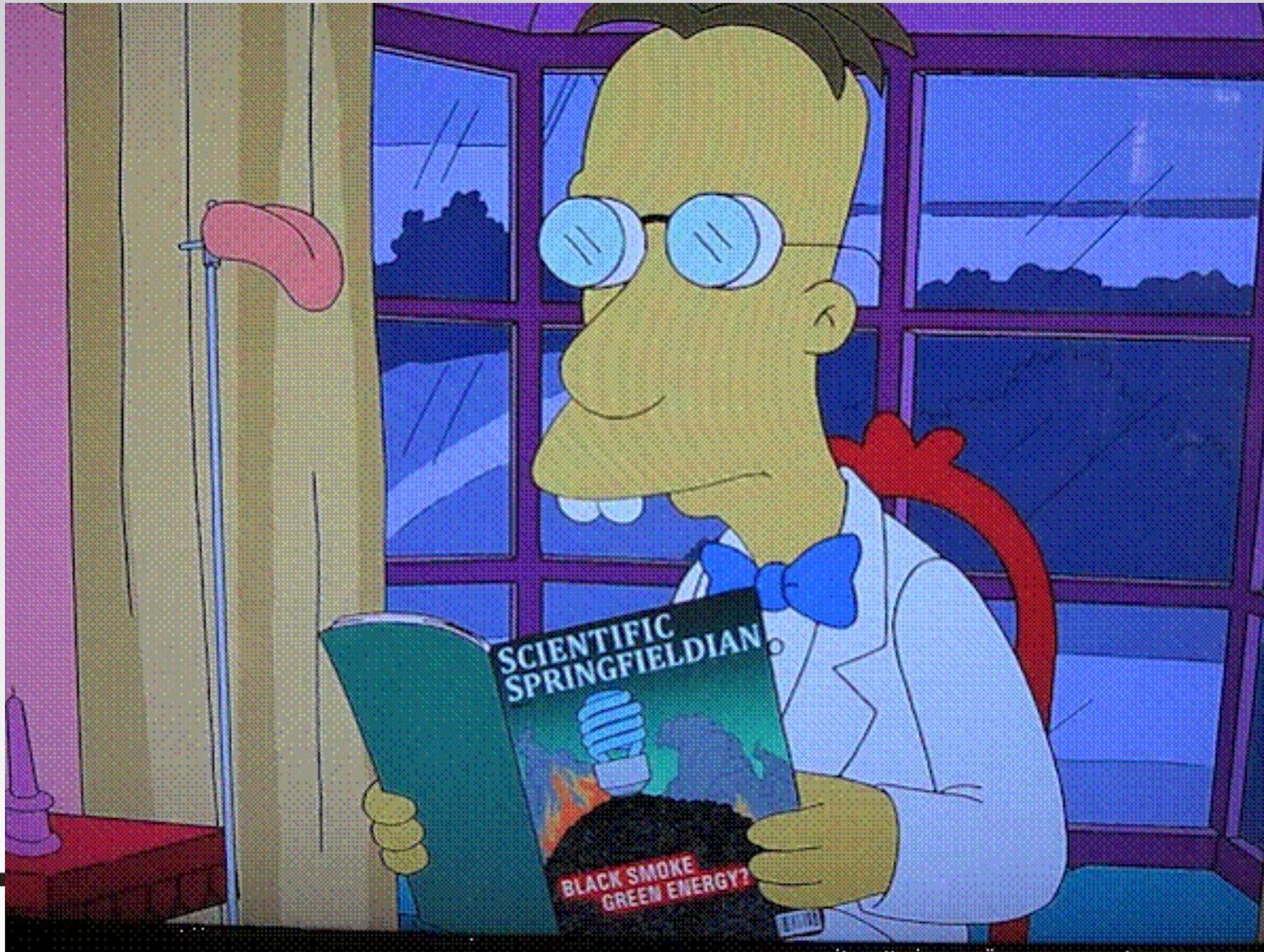


“Of course, the real charm of the place is that hole in the space-time continuum.”

Some Resources

- A wiki for scientist bloggers <http://socialnetworkingforscientists.wikispaces.com/Blogging>
- PLOS: An Introduction to Social Media for Scientists
 - Out April 23
 - 4th most read paper ever (so far)

I Know a Place to Try



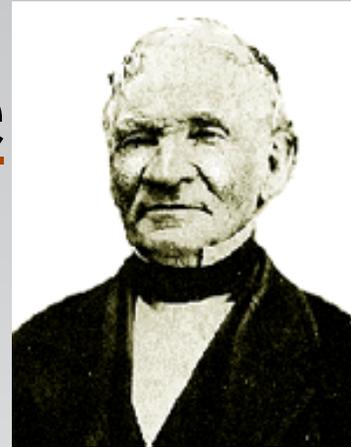
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Or, If You Prefer...



Oldest US Magazine

- Launch: Aug. 28, 1845
- Relaunched 1948 by Piel, Dennis Flanagan: Science is “the very fabric of modern life”

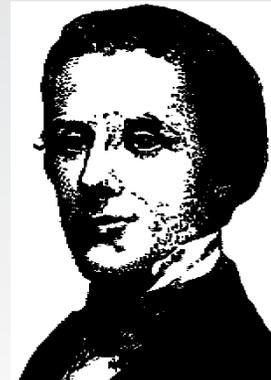


Rufus Porter
(1792-1884)

Orson
Desaix
Munn, 22



Gerard
Piel



Alfred Ely
Beach, 19

SA' s World Is Changing, Too

- Print (MRI)
 - 47 median age
 - 70% male/30% female
- Online (Nielsen)
 - 37 median age--YES, 10 years younger
 - 56.5% male/43.5% female
- Print/online readers respond differently
 - On different devices, the audience shifts
 - And on different services, they change, too

Help Tell the Science Story

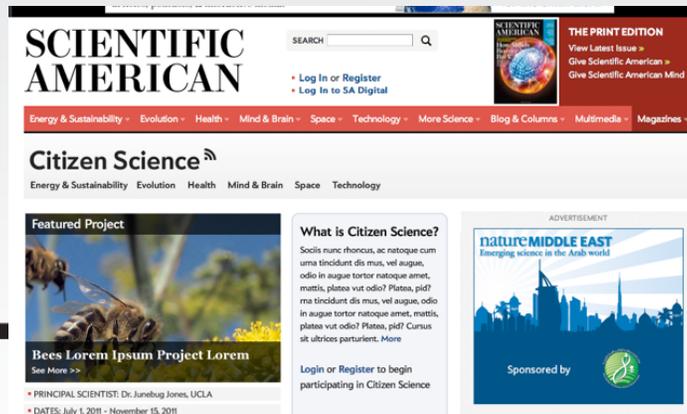
- Ask: What isn't *Scientific American* covering--but should be?
- Proposals: a one-page summary is fine
 - An editor can help you refine an idea
 - We may ask for an outline later

We're Easy to Work With

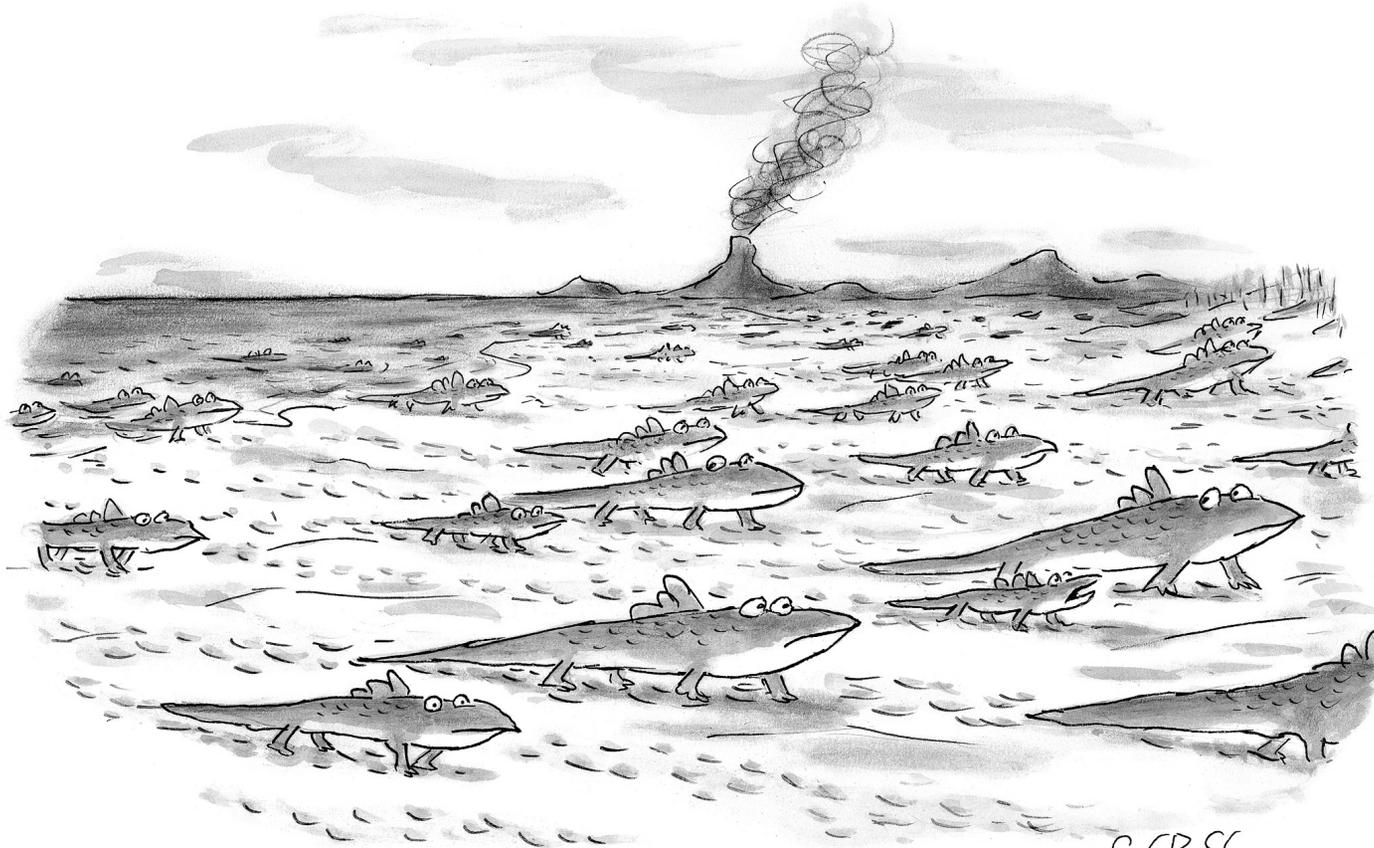


More Ways to Contribute

- Forum
- Q&As, podcasts, source for stories
- Guest Blogs
- Chats about news events
- Lab/science insights via video
- Education Series with Change the Equation
 - Bring Science Home
 - 1,000 Scientists in 1,000 Days: 2,000 registrations
 - Citizen Science
 - Whale.FM



Just One More Thing...



S. GROSS

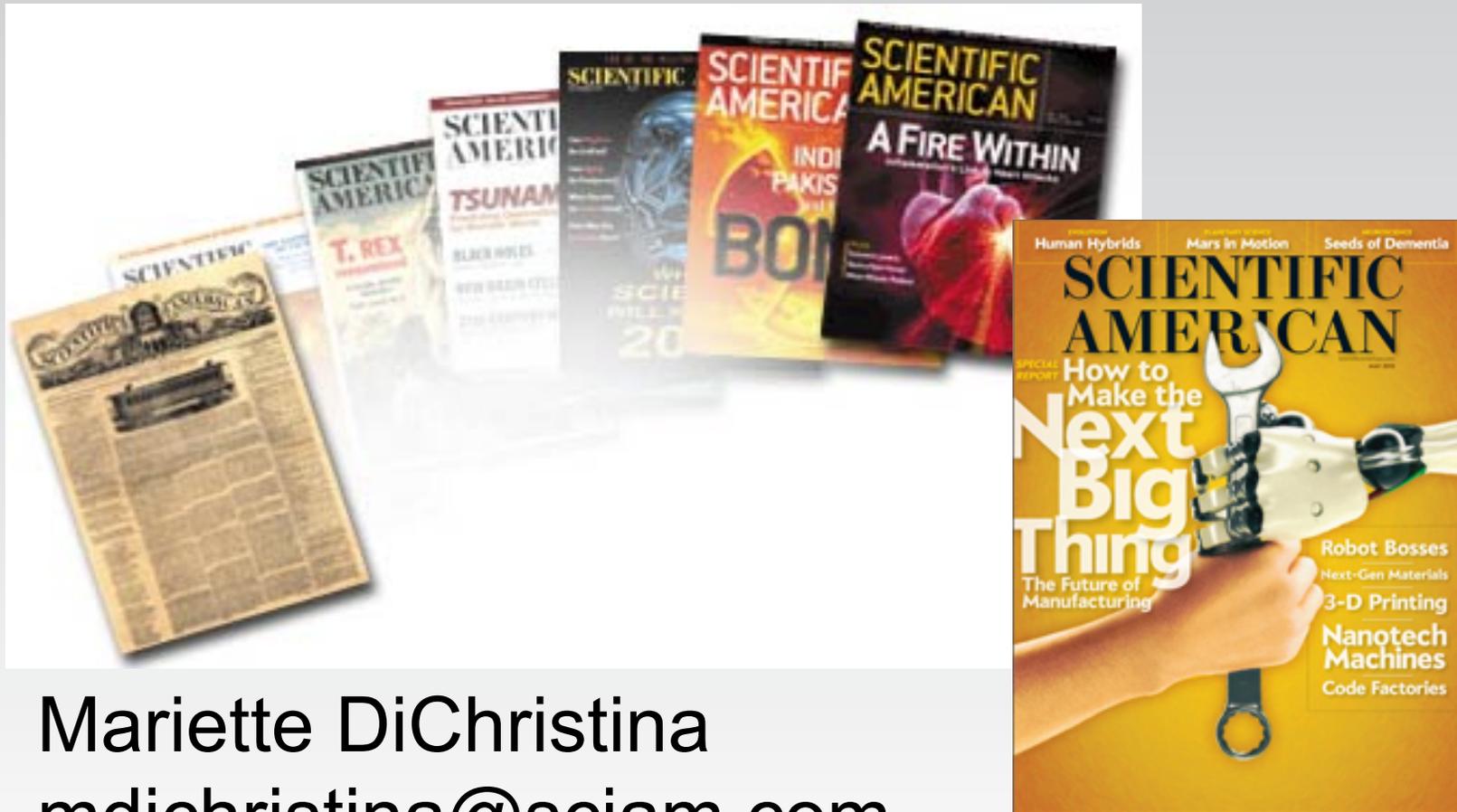
Are we there yet?"

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*"Sometimes I wonder if there's more to life than
unlocking the mysteries of the universe."*

Thank You!



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