EDITOR'S BLOG

An actor’s journey from TV doc to science champion

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An accomplished actor best known for his portrayal of Captain Benjamin “Hawkeye” Pierce in the US television series *M*A*S*H*, Alan Alda has taken on another impactful role in recent years: champion of science communication. Having served for 14 years as the host of *Scientific American Frontiers*, a public television show devoted to explaining recent advances in science and technology, in 2009 Alda founded the Alan Alda Center for Communicating Science at Stony Brook University, which seeks to help scientists better engage nonexperts in scientific discourse. His podcast, *Clear+Vivid with Alan Alda*, regularly features conversations with scientists and journalists with a knack for communicating science to the public.

I interviewed Alda for an editorial we published today that reflects on the challenge of communicating science in a time of misinformation. Highlights from our conversation can be found below. The interview has been edited for clarity and length.

Holden Thorp: I’ve been writing a lot about how scientists have been surprised that the public didn’t just accept everything we said about COVID. And some of that’s been political, but I think a lot of it is also about communication and there are two schools of thought. There are people who think that all of us should become great communicators in addition to being great scientists. And then there are people [who think] that we need to respect folks who are great communicators and partner with them. So how should we think about that?

Alan Alda: I think, regardless of the talent we have for communication, we can all get better at it. And I really think we have a responsibility, all of us, [to communicate more effectively] in every area of our lives. We can’t do anything about the politics, can’t do much about the politics that’s hurt science. We can’t do much about the whirlpool of internet communication that has not only hurt science, but every form of human intercourse. It’s just astonishing what we have to live with. But what we can do is communicate better. People who read your magazine are already interested in learning more about science. The daily newspaper and alerts that come up on your iPhone are a different story. They’re trying to attract attention. So they have a tendency to give you a headline that says “gigantic breakthrough, everything fixed.” And then if you read the article, the last thing you read is more research is needed.

Holden Thorp: That’s something that we have been working on a lot, because more people read news stories about our research papers than read the research papers by a mile. And so we’re always trying to figure out how we get the reporters to tell the whole story.

Alan Alda: [Journalists] have to get a story out and they have to make it readable. There’s a natural tendency to avoid ambiguity. Not just ambiguity, but nuance. Science has to make it clear that it’s on a road to truth or it’s on a road to understanding, and an express stop along the way isn’t the whole thing. The letter hasn’t been delivered at the first two pony stops.

Holden Thorp: That’s a great analogy. Science is an honorably self-correcting process, we like to say, but we have a hard time getting people to see that. And that’s a communication challenge. But how do we fix that?

Alan Alda: That’s a little bit of the curse of knowledge. It’s not a curse to have knowledge. It’s a curse to think that everybody has [the same] knowledge [that you do].

I spent my life on movie sets. So I know the language of movie sets. I know what a martini shot is. I know what a gobo is. “Get me the gobo on the century stand and be quick about it, because this is the martini shot,” is an unintelligible phrase to most people, because they haven’t spent the decades speaking that language. Neither has the public spent that much time learning the ins and outs of science, not only the jargon, but the principles, the importance of peer review. Most of us don’t know about that.

Holden Thorp: Where in the presentation do we say, "Well, this whole thing could change in a few more months after we do some more experiments"? How do we work that in?

Alan Alda: Speak to what’s inside the other person’s head, exercise empathy. And if there’s a tussle over caveats, engage them in a partnership rather than a tussle.

We have to protect the finding that we’ve made by not calling it the end product. “This is an important finding,” let’s say, or “this could be an important finding.” Let’s not ruin it by saying, this is the be-all and end-all of the process.

Holden Thorp: So has all of this gotten harder since you started doing this work 15 years ago?

Alan Alda: No. Quite the opposite. When we started, it was sometimes difficult to get scientists in our own university to make time for their students to learn communication because my hope was we could help teach scientists to be good communicators while we were teaching them the good scientists. Now they’re knocking at our door. And we’re teaching all over the world and even during COVID. It’s really been wonderful.

One of the things that surprised me was that I thought that it was mainly going to help scientists communicate with the public. And I began to learn it was making it easier for them to communicate with one another. It was shocking when Obama pulled together the BRAIN initiative and he brought nanoscientists together with neuroscientists[and] they didn’t speak one another’s language. They argued for hours about the meaning of the word “probe.”

Holden Thorp: So what informs how you think about science communication now, in terms of thinking about how scientists’ minds work?

Alan Alda: When I did *Scientific American Frontiers*, I felt that the reason the interviews were going so well was because they weren’t conventional interviews. I didn’t come in with a list of questions that I read out. I went in just wanting to understand. And if I didn’t understand, I said “I don’t get what you’re telling me. Tell me again. Tell me in a different way.” And the real person in them started to come out. It wasn’t the guru on the hill. If they had a sense of humor, that came out. If they could get cranky, that came out.

I was interviewing a scientist in China and we were in the back of a bus and he reached over the railing of the seat and he grabbed me by the shirt and he said, "Alan, try to understand." He was doing a great job because he was really picking up whether I was getting it or not and he was funny about it, but we had more of an understanding in that moment than in any other time.

Holden Thorp: So would you say the biggest problem is that scientists are so excited about the details that we focus on that first rather than actually making a connection with somebody?

Alan Alda: I would say the details are so exciting that it’s hard not to remember that the details are not as meaningful to the person you’re talking to if that person hasn’t been at your side while you’ve been discovering.