Press Releases and the Framing of Science Journalism

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Key Words

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In a recent summary of a significant publication, I devoted a few paragraphs to slamming the press release that accompanied the results, since I viewed it as presenting assumptions as established fact with no underlying data to support them. This seems to have happened at a time where a general debate has erupted over the ways science gets presented to the public and the role of journalists in the communication process. I've now viewed the internals of pretty much every step of the pipeline that runs from results to public press, and I've given some thought to what goes wrong along the way to produce press coverage that's misleading and/or inaccurate. So what follows is both a description of the process for the curious, and my take on what the problems are.

In general, most science stories start with a publication. There are exceptions to this — major astronomical sightings and large scientific meetings produce their share of press coverage — but for the most part, scientists like to keep the profile of their results low until they have passed peer review. Mostly, the press is made aware of publications through the embargo system run by the journals or through press releases from the institutions where the researchers work.

There's a number of ways for things to go sour here. The clearest problem is that press officers are dedicated to creating positive coverage of whatever institution they are a part of, be it a university or a journal. Part of that job involves making scientific results as broadly interesting and significant — as newsworthy — as they possibly can. That can often lead them to spin the results in a way that the people who actually produced them may view as inaccurate, over-hyped or oversimplified.

The chances of this happening are probably proportional to the press officer's expertise in the relevant field of research. And that, of course, is going to vary wildly. As a result, press releases vary in quality from something as good as an experienced science writer might produce to borderline incoherence.

Scientists themselves, however, share part of the blame for this wide range of quality. Part of this stems from our willingness to write in jargon that limits our audience to fellow experts in our fields. One article I covered spent much of its introduction discussing the differences between the 'cognition-based perceptual fluency/misattribution theory' and the 'affect-based hedonic fluency model' but didn't define either of these until much later in the paper. The press release announcing the results was (surprise!) difficult to fathom, and the results received almost no coverage beyond Ars: good for Ars, bad for nearly everyone else involved.

Some of the confusion could be avoided if scientists and press offices worked more closely together, but my experience is that their interactions are somewhat limited. A lot of the blame for this falls on the shoulders of the scientists, as they tend to view the press office as a distraction from their work rather than as the first step towards an informed public. My experience has been that researchers are generally cooperative with the press, but they interact very little with their own institution's press office, perhaps because they recognize that there is an unpleasantly high ratio of press releases to press coverage.

So the press releases that reach the hands of journalists can vary widely in quality. Assuming the story gets covered, one of two things tends to happen. Most news outlets no longer have dedicated science journalists (this is especially true of the web-based press), and they hand the story to someone who rearranges the press release and publishes. This is depressingly common and sends any flaws in the release straight on to the public.

Even dedicated science journalists, however, don't always have the time or ability to read and digest the underlying publication. They often end up structuring their reports around the

press releases and counting on interviews with the scientists in order to fill out the report. This again leaves the journalists highly dependent on the quality of the press release; if it's bad, the writer may reduced to squeezing a scientist's words into a story that's scientifically unsound. The interviews may give the scientists the opportunity to correct any misinterpretations by the journalist, but it depends in part on the time and effort that they expend in talking to the press. Any miscommunications between the two may result in the kind of horror stories that started the recent discussions of science/press relations.

The whole process becomes a bit like the game of Chinese whispers, where an original message gets badly distorted as it's passed around the room by word of mouth. To make matters worse, there's a lot of mistrust at both ends of the chain: scientists may view the press as prone to misreporting and sensationalism, while the press probably views scientists as being uncooperative and possessing limited communications skills. I pity the press officers that have to act as a bridge between the two.

To fix this, the scientific community is going to have to do two things. The first is to recognize that press coverage is neither a distraction nor an unseemly display of ego; rather, it is an essential part of maintaining an informed and scientifically literate public. The second is to recognize the central role that the press release now occupies in this process. Scientists can start to improve the situation by making their publications accessible to a broader audience, but they will have to go beyond that. They need to know when a press release about their research is being made, they need to work with the press officer involved to make sure it's right, and they need to recognize that the press officer probably has better communication skills than they do.

Scientists are the first step in the process and, accordingly, they need to be the first to get their act together. Once the scientific community does a better job of ensuring that the press has good material to work with, it'll be in a far better position to recognize when the journalists get things wrong and to work on ensuring that those mistakes don't get repeated.