

STICKY WICKET

The sting

Mole



Can't. Stay. Awake. I'm doing all I can, taking notes, nodding my head sagely, pinching myself, hard. But my notes veer into jibberish, my eyes close and I'm dreaming that tantalizing mer-moles are pinching me. I keep passing out at this seminar.

Look, I'm a science junky. I thrive on seminars, meeting talks, journal clubs and reading papers (not to mention going over new data, which really gets me going). But now and then, it's just boring, snooze worthy, sleep inducing, hypnagogic, narcotic, somniferous, soporific. Bor. Ing. I'm just not engaged. And trust me, I'm not hard to engage.

One of my favorite movies is *The Sting* – that classic film about con artists, hoodlums, a hit man (actually, woman), revenge and redemption – that plays out a master confidence game, not only on the bad guy, Doyle Lonnegan, but also on us. There are many parallels between great films and great talks, and even great con games.

No, I'm not saying that scientific talks are a con game. Far from it. Confidence (con) games are fraud, even when they might be used to exact revenge against an evil foe (this pretty much only happens in the movies). Science is the quest for understanding of the physical world, and when we listen to our best angels, we seek to communicate our findings and insights with absolute honesty and transparency. We certainly shouldn't seek to 'con' our listeners (and readers). But, as I say, there *are* features in common between talks and a con game, at least, as *The Sting* tells it. Stick with me, you'll see what I mean. Let's break it down.

The Set Up

In talks, as in papers, there should be an introduction. What does our audience need to know to appreciate what follows? Why is this area important? In some cases, the importance is fairly obvious; we can

engage our audience with the deep relevance to human health (but even then, be careful, as we'll see). In other cases, it's a bit trickier; it really isn't enough to show us that there is a gap in our knowledge of something we can agree is probably important. Sure, we want to fill those gaps but that doesn't mean we want to sit through an hour or so of excruciating detail to gain an incremental insight.

There are a couple of ways to think about this. If I am in a room of people who study butterfly wing development, and I've found a new gene in the pathway, they are likely to be engaged because it is useful for their own work. This isn't what I'm talking about. The communication of information on butterfly wing development *might* be useful to me, but you'll have to convince me. But a good talk doesn't have to help my own research if it helps me think about broader topics. We're not there yet.

It was a maxim in the Golden Age of movies (to which *The Sting* pays homage) that we have to *care* about our protagonists and their story. Sure, this maxim disappears in many post-modern films, and yeh, for me this often has the same effect as a bad talk. Snooze city. (Okay, I'm a philistine. But what do you want? I eat *insects*.)

But back to the Set Up. How do you make us care about what you want to tell us? Even talks with relevance to human health can falter here if we're fed statistics on disease prevalence, which can elicit yawns if we don't buy it that you're going to give us data to change these numbers. Make it personal. Make us care.

I heard a wonderful talk from a pulmonary oncologist, who rather than giving us grave statistics, took us through his anguish regarding how little previous advances impacted the lives of his patients. I listened, rapt, to an amazing talk on host-microbe co-evolution that began with a heart-wrenching story of how her father had died of sepsis in an age when bacterial disease is thought to be treatable. And I was captivated by another Set Up, in a talk on structural biology, when the speaker described her passionate quest to probe the cell cycle at the deepest molecular levels. So I'm not saying it has to be about curing something; it's about making it personal. You can be funny or serious, but I have to care about what you are doing. That's the Set Up.

In *The Sting*, Johnny Hooker and Luther Coleman (Robert Redford and Robert Earl Jones – tell me you've seen it? If you haven't, stop reading and go watch it; it's great) steal from a bag man who carries money for the notorious Doyle Lonnegan. Lonnegan has Luther killed, and Hooker enlists Harry Gondolff, a con artist in hiding from the FBI. He convinces Gondolff to join forces in getting back at Lonnegan (played by a terrific Robert Shaw, whose limp was real, owing to a sports accident). By the time they plan the con, we already want them to get their revenge. We are Set Up. See? It's all about caring.

The Hook

So now you have our attention. We care (hopefully). Draw us in. That's the Hook. What specific question are you going to ask? What

novel insight or technique do you have that is going to give us a perspective we didn't have before we sat down? Here's where we shift from caring to being *interested*.

In *The Sting*, Gondolff cheats Lonnegan in a poker game. Hooker informs Lonnegan that he's been bilked, and Lonnegan demands his money back. But he is drawn in by the prospect of making much more, learning that Gondolff is working a system that is paying off big. Lonnegan is hooked. (Here's another tidbit: Gondolff, played by Paul Newman – you knew that, right? – demonstrates amazing dexterity with a deck of cards. But the hands that juggle the pasteboards actually belong to the legendary card magician and gambling expert John Scarne. Just so you know.)

In your talk, though, you are not going to juggle, cheat or tempt us with riches. But you have something just us tantalizing to us science geeks: a question we care about, which you are going to answer. We're Hooked.

Next we come to *The Tale*, but first I need to back track a little and clarify a few things. First, we are talking about talks, but not every sort of talk. If you are giving a ten minute mini-presentation at a workshop, the Set Up and Hook may have to come in just one or two slides. (We don't actually use *slides* any more, but we still call them that. Actual slides fell out of carousels, got put in backwards or upside-down, or melted as we spoke. Still, I think you know what I mean.) For longer talks, more introduction (Set Up and Hook) is not only permissible but likely to be essential.

That said, we are data junkies. If you are giving a full seminar, it can be disastrous to go 10 or 15 minutes without showing us some data. Be creative. Illustrate the points you are making (at least by the time you get to *The Hook*) with some of your own data as examples. This does not generally need to be exhaustive – just enough to whet our appetites so that we *care*, we're *interested* and we see the quality of the work you'll be presenting.

As a rule of thumb, it usually takes about one minute to describe one slide, although you may be able to go more quickly (or have less on each). Always, always, practice your talk and plan to finish *before* the time runs out. Nobody minds if a talk finishes early. Many mind if a talk goes over time. There's nothing worse than the talk that finishes only when the moderator stands and demands the last slide, and we sit through a speaker hurrying through reams of data to try to make one or two last points. If your time runs out, stop, go to the acknowledgements and finish. You may think you're getting in more information, but we're just waiting for the part where you sit down. Finish on time. Or better, a little early. We'll thank you.

As I said, we are up to *The Tale*, but I want some popcorn. Maybe a drink and a few bugs. We'll be back.

INTERMISSION