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How to give great research talks to any audience

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Standfirst

Being able to deliver a persuasive and informative talk is an essential skill for academics, whether speaking to students, experts, grant funders, or the public. Yet formal training on how to structure and deliver an effective talk is rare. In this How To piece, we give practical tips to help academics to give great talks to a range of different audiences.

How to give great research talks to any audience

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Giving persuasive, informative talks are an essential skill for academic success. Unlike academic publishing which is supported through Ph.D. milestones (e.g., thesis/dissertation writing), joint publications with mentors and collaborators, and even the peer-review process, public speaking skills are often developed through trial-by-fire experiences. Opportunities to test public speaking styles are limited to a few internal presentations during doctoral studies, and, perhaps, occasional talks at academic conferences. Symposia are selective and competitive, and often favor more established scholars or networks over early career scholars, limiting their utility as practice grounds.

The absence of formal training opportunities is even more worrying given that careers depend upon individuals delivering an effective research presentation at a job interview, followed by conference presentations, grant panel interviews, and engagements with the public and policy makers. It is essential to *be* a great speaker, but how can someone *become* a great speaker, one who inspires their audience rather than simply telling them what they have to say?

The aim of this How To guide is to offer scholars across career stages practical insights and advice for becoming noteworthy public speakers, no matter their target audience. We begin by delving into the challenges researchers face and then summarize our practical advice (Table 1).

Table 1. Summary of advice by topic.

Topic	Advice
Giving a great talk with anxiety	1. <i>Preparation.</i> 2. <i>Create a persona.</i> 3. <i>Habituate to the physical anxiety.</i> 4. <i>Manage the psychological anxiety.</i> 5. <i>Engage in calming rituals on the day.</i>
Giving a great job talk	1. <i>Tell a story.</i> 2. <i>Make the case for why your research is important.</i>

	3. <i>Provide a springboard at the end.</i> 4. <i>Be excited about your research.</i> 5. <i>Be clear about who your audience is.</i>
Giving a great conference talk	1. <i>Identify your ONE sentence you want people to remember.</i> 2. <i>Reinforce your sentence.</i> 3. <i>Understand the role of detail in building trust in the sentence.</i> 4. <i>End at the end with your sentence.</i>
Giving a great “TED-style” talk	1. <i>Know your audience.</i> 2. <i>Connect with the audience.</i> 3. <i>Identify your through-line.</i> 4. <i>Stress test that through-line.</i> 5. <i>Think about yourself as a tour guide.</i> 6. <i>Use language that is concrete and vivid.</i> 7. <i>Stimulate curiosity.</i> 8. <i>Tell stories.</i> 9. <i>Practice (for real!).</i> 10. <i>Open and close powerfully.</i>

What makes giving a good talk so challenging?

It may be easy to say what makes a talk “bad”: lack of preparation or perceived unfamiliarity with the content, monotonous or unengaging vocal tone and demeanour, or failing to adjust the talk to match audience expertise. But the inherently nuanced, context-dependent, subjectivity of public speaking that makes it harder to pinpoint exactly what makes a great a talk *great*.

In our experience (VL & FK), the biggest obstacle to giving great talks is being too “me” focused: this talk is so important for *my* career; I don’t want anyone to know how anxious *I am* right now; I want to showcase how brilliant *I am*. The problem is, when people focus on themselves, they forget one of the most important parts of the talk: the *audience*. Most academics can recall instances where they have walked away from a talk confident that the speaker knows their stuff, but at the same time having no idea what that “stuff” might be because the speaker had forgotten to tailor the talk to the needs of the audience. For early career scholars, without the weight of reputation behind them to convince job panels, grant panels, students, or the public that they are worth a second

chance, those moments can be career killers. For those with more established careers, they can lead to a reputation for being self-centered and out of touch. Rather, great speakers are able to overcome the temptation of self-focus by elevating their audience to peers, giving them all of the information that they need to understand specialist terminology and techniques without feeling lost or overwhelmed. This captures the key difference between “telling” and “inspiring”: When people focus on what *they* need to get out of a talk, they “tell” the audience what they think the audience needs to hear. When speakers manage to put themselves into the audience’s shoes, they can “inspire” the audience by helping them to feel as informed and connected to the material as the speaker.

Giving a great talk when you have anxiety.

I (AR) consider myself someone who both started out being an acutely anxious speaker, and am still an anxious speaker. Yet, between teaching MBAs and executives, giving academic talks, and speaking about my research at organizations, I do it a lot. Here, I want to share some tangible pointers I have learned over the years to help me manage the anxiety and stress, so that it’s not a painful experience every time. I hope this, in conjunction with the excellent content-focused advice that follows, will help others who also struggle with anxiety to manage those inner-voices that can get in the way of a great talk.

Everyone feels public speaking anxiety¹. However, some of us feel extreme and overwhelming anxiety that distracts us and our audiences from our brilliance, because it impedes our ability to communicate effectively. It is exhausting, both psychologically and physically. While people who experience less extreme anxiety during public speaking might walk away feeling exhilarated by their performance despite initial apprehension, those of us who are extremely anxious are more likely to be left tired and worn out. These negative emotions can significantly impact how we

evaluate our own performance², and can make us wonder, over time and with repeated experiences that leave us feeling drained and down, whether the career is worth the cost.

Anxiety can also trigger physiological responses that lead people to sweat profusely, and in those early days, I had not considered picking the “right” kind of fabric that would help me to conceal this. Having to worry about whether people are judging you for this anxiety reaction only adds to the stress. Of course, I found tricks to help hide my anxiety: I wore dark-colored layers to hide sweat, held a coffee cup to hide shaking hands, found shoes that didn’t make noise as my leg shook, and plastered a big smile across my face hoping it would project a more confident facade. Still, the anxiety still made public speaking more challenging and unpleasant than it needed to be. Realizing the stakes associated with giving a good talk would only get bigger as I continued through my academic career was enough to make me question whether this was the right career path for me. This is when I made an effort to connect with others who had similarly struggled to get advice, which culminated in the strategies I share next. While I might never have the experience of giving an anxiety-free talk, by using these strategies I am now able to feel a sense of joy and flow, alongside the anxiety, when giving talks. Remember that it may feel slow to start, and it may take some experimentation, but you will gain momentum as you begin learning what works for you.

I hope these five strategies for preparing a great talk as an anxious person prove as helpful to you as they have for me:

1: Preparation. The more anxious you are, the more you need to practice your talk and the earlier you need to start preparing. I now segment my talk preparation into 4 stages (or more as needed):

- i. Prepare and revise talk, round 1.

- ii. Practice your talk in front of close, trusted others, round 1. Close, trusted others will help reduce your anxiety, and they will be able to see through any signs of anxiety to focus on the talk content.
- iii. Re-revise and re-prep the talk, round 2. This round is crucial, but it's the one we often forget to plan time for. If you don't, your anxiety about the talk will rapidly increase.
- iv. Practice talk, round 2+. Another round (or few) of practice helps you to integrate the changes, increase your comfort, and practice pacing, intonation, and gestures so you can deliver the talk you know you have the potential to despite the anxiety.

2: Create a Persona. Another practical step that helped me manage my anxiety was creating a persona for the talk. This does not have to be a completely fake persona. Rather, identify a slice of yourself that you can spin into a positive character for the event. For example, if you are someone who experiences high levels of negative arousal, your persona might be someone who redirects all that extra energy and channels it into an outward-facing social positivity (e.g., “I’m so grateful that all of you came”, “I’m so grateful to be here!”). If you are someone who gets quieter and draws into yourself due to anxiety, then imagine yourself as “the serious scholar” and express the persona of gravitas and careful consideration. Spin your energy into a persona that works for you so that even as your anxiety builds, so does your ability to feel authentic in the way you are presenting.

3: Habituate to the Physical Anxiety. As important as it is to take the time to carefully prepare your talk, it is equally important to put time into managing the physical symptoms of your anxiety. Practice talks that are as close to the real thing as possible—similar room, wearing your planned talk outfit, asking practice audiences to frown, play on their phones—will help you habituate to the anxiety. If any friends will be attending your actual talk, ask them to spread

themselves around the room so you make it appear like you are looking around the room engaging people, when you are actually just focusing on friendly faces in the crowd. You also will need to habituate to the physical experience of anxiety. The way I went about doing that was to try and experience the physical symptoms in advance. Put another way, practicing your talks under “ideal” conditions that make you feel warm, safe, and comfortable might make you feel a lot calmer in the buildup to the talk, but will not help you get used to presenting confidently once those nerves start to kick in. I jumpstart the physiological arousal of anxiety by walking on a slightly inclined treadmill while practicing, or running up a flight of stairs and practicing the first few slides. Speaking out loud while doing this is essential so that you have to get used to projecting your voice and managing your breath while your heart is racing.

4: *Managing the Psychological Anxiety.* I structure my talks in a way that my opening feels like an affirmation of myself as a scholar. This is meant to directly combat the worries and doubts that plagued me over the years when I was struggling with public speaking (e.g., “am I meant to be an academic”, “can I do this?”). Instead, I use my opening to my audience as a way of not only communicating what important topics I will be covering that day, but affirming myself. For me personally, the best affirmation reminds me of why I study what I study. This is not just about communicating my excitement about the topic to the audience – it’s a way to tapping into the deep well of meaning and motivation I experience in my work, the purpose that drew me to my field in the first place. For example, I might open by saying that I am giving this talk because the topic matters so much to me (e.g., “I am passionate about [topic]”, “In my scholarship, my goal is to understand”, “the problem I want to solve is”). Rather than making the speaker sound overconfident or self-absorbed, I have found that these affirmations communicate who I am as a scholar and invite people to engage on these broader topics later. As you think about where to place this type of affirmation, make sure you consider the “pace and timing” of your anxiety. Are you

someone who feels a peak of anxiety at the beginning, and it slowly decreases as you go on, or are you someone who will experience second and third waves of anxiety throughout the talk? Knowing when these waves are likely to hit will help you to adapt your content to fit these experiences. You can try to time either an affirmation, an example that lifts you up, or a point you are particularly confident about for those peak anxiety moments. I also schedule sips of water or tea during those moments, to create natural pauses that help me breathe, calm, and mentally regroup, while avoiding an awkward silence.

5: *Rituals on the Day.* Having little rituals on the day of can help too. For example, I set up my tech early so that I can take a bathroom break before the talk itself. This gives me the alone time I need, and lets me do an internal calming routine—in my case mentally walking through a sun salutation from my everyday yoga practice, or doing some pranayama (i.e., meditative breathwork) which helps me to feel centered. Other people like to listen to music right before the talk, and this might be effective for some at channeling some of their anxious energy into their speaker persona, whereas for others the added arousal from the music might make things even worse. You really have to find the ritual that works for you, so that when you start your talk, you feel your best – after all that’s when you will give your best talk.

Giving a great job talk.

Throughout my career, I (EJ) have had experience both giving my own job talks and serving on interview panels for both departmental and interdisciplinary hiring committees. Giving a job talk is stressful (and anxiety-provoking!). But this is also an exciting opportunity to show people how cool your research is and get them interested in something you are passionate about. Yes, you are competing with other candidates, BUT you have also been invited to give a job talk because someone in that room already thought very highly of you. *Be engaged, mindful, and intentional in your preparation.*

What is distinctive about a job talk compared to other academic talks is that you are trying to balance two concerns. On the one hand, you want to engage the listeners with a compelling talk that makes them feel as though they have learned about your research and about you as a researcher. On the other hand, you want to showcase your strength as a candidate for this position. These goals are not necessarily in competition, but they are distinct, and focusing too much on one can come at the expense of the other. Here are five steps people should keep in mind when preparing a job talk and presenting on the day.

1: Tell a Story. Humans have a long history of storytelling. We use narratives and stories to help us make sense of the world and of ourselves. Consequently, people connect more strongly with information that follows a narrative arc^{3,4}. It is therefore very important for a job talk to have a clear arc. It should focus on a specific (unanswered) research question, the research should directly address that question, and the presented studies should set the scene for a future research program.

2: Make the Case for Why Your Research is Important. One of the most important parts of a job talk is convincing others that the talk has meaning and is important, and that your research question has value. But this also needs to be communicated to the audience in a very accessible way. One way to think about this is to try and convince non-experts in the audience (e.g., people from other sub-disciplines in psychology, people from disciplines outside psychology, students) that they can understand the value of your research question. It is also important that you return to this question repeatedly throughout the talk. Do not assume that your audience can intuitively see how all the different pieces of your research all loop back to support the big picture on their own. Finally, make sure your studies are coherent and compelling. For example, people (in psychology) generally prefer hearing about a set of complete studies rather than work in progress that can raise more questions than it answers. Until the last part of the talk, that is.

3: Provide a Springboard at the End. Your presented research should have clearly addressed the important question you identified at the beginning of your talk, but where you are going next is as—or even more—important than where you have just been. The future directions section of your talk is the opportunity to showcase your creative thinking and your future growth trajectory to your future colleagues. This is a very memorable part of the talk and highlights that you are not only capable of the nuanced thinking needed to put together and interpret an important set of studies, but also that you have the blue-sky thinking to have an important impact on the field in the years to come. The people on hiring committees want a colleague who not only *has* done brilliant work, but also *will* be productive, creative, and ground-breaking in the future as well. Give this section of your talk as much consideration as you would dedicate to justifying your methods and theoretical rationale.

4: Convey Excitement About Your Research. If you are not interested or excited by your research, who will be? You are doing the research that you are doing because you find it compelling. In your talk, try to convey the reasons you find it compelling. A helpful way to approach this is to think about your talk as a performance. As an actor, you are trying to get your audience to understand why you have dedicated your life to this work by getting them to feel the same excitement about the topic. You do not need to be inauthentic to yourself: just focus on finding that mindspace that reminds you why *you* are doing what you are doing, why *you* are passionate about this work, and the audience will feel this energy coming through as well.

5: Be Clear About Who Your Audience Is. Do your homework about who will be evaluating you. Your talk should be tailored so that it is accessible to your audience. Keep in mind that it is unlikely that everyone in the audience is from the same research area—or even discipline—as you. Specifically, your talk should be accessible such that researchers across all subdisciplines find your core research question interesting, even if they are not familiar with the specific problems of

your field. One way to test the accessibility of your talk is to practice it with people outside of your research area. You might be surprised by what feels like “common knowledge” until you are speaking to someone with no background in your area. If your non-expert practice audience struggles with any parts of your talk, there is a good chance that someone on your hiring committee will struggle as well.

Giving a great conference talk.

Think back to the last conference you attended. What is one thing you learned at a talk there? Can you explain it to someone who did not attend the talk? If you find this difficult, you are not alone. It is a common pitfall many people experience at conferences: attending many talks yet walking away remembering very little, if anything at all. Imagine an audience in a multiday conference—they are typically distracted and oversaturated with information, despite their best intentions otherwise. While it would be easy to put all the blame on attendees for letting their minds wander, I (TW) suggest that presenters often structure their talks in ways that make it virtually impossible for listeners to remember. My perspective here will focus on how to give your conference talk so that it has the best chance of leaving a lasting impression on an often oversaturated audience.

First, we need to understand that even the best talks get very little into an audience member’s head. One culprit is information overload. The mental space of the audience is never as large as you think. And speakers could start to feel very negatively about this reality: Why even bother if people aren’t going to remember anything? What about my cool findings or the amazing boundary conditions I identified? Will all the beautiful detail and nuance in my talk be lost forever? Realistically, yes. But there is an optimistic way to reappraise this reality: You just need to get **ONE** sentence into people’s heads. And this is something everyone is capable of doing. However, despite this being a low bar, it is simultaneously one that very few presenters reach.

1. What is your *ONE* sentence? You know hundreds if not thousands of sentences about your work, but you are only getting ONE into the audience's head. Which is the one you will choose? What do you want this one sentence to be? For most scientific talks, this sentence should be an effect, and it should be said as *simply as possible*. As Einstein said, “everything should be made as simple as possible and not simpler.” Here is one example: *Music and movement express emotion with the same dynamics*. This sentence is simple to understand yet has all the relevant details to understand the core finding. In contrast, *music and movement share a representational geometry that affords equivalent emotional expressions* is too complex and jargony to be easily processed by an audience. *Music and movement are dynamically similar* would be too simple as it misses the key finding about emotion.

2. Once you have your sentence, reinforce it. Every point you make throughout the rest of your talk should be in the service of reinforcing your one sentence. There are lots of different devices you can rely on to help reinforce your sentence: visuals, storytelling, emotions, etc. But all these devices can equally detract if they are not directly related to *the* sentence. I, for example, always use one video in my talks. The video always reinforces either the paradigm or the results, and it ALWAYS reinforces the sentence. Too many scientists feel that it is a waste of time to create a fancy visualisation. But a visualization that helps the sentence stick is not a waste of time. What is a waste of time is an intended communication that is not actually communicated. If a communication does not land, it was not—by definition—a communication. It was merely a momentary disruption of air molecules. This is the biggest failing of talks. If a conference talk is not set up to be remembered, the audience might as well have all sat in a room together watching an oscillating fan.

3. The (real) purpose of scientific details. All the beautiful scientific details and statistical tests shown will likely be forgotten. But this does not mean that they should be excluded from your talks, or that they do not serve the “one sentence”. The real purpose of scientific details, which is often overlooked in the “how to” guides on giving great talks, is that they generate trust among your

audience. That is, the details are meant to make the one sentence credible. The sentence does not stand a chance of being remembered if people do not trust your rigor. The amount of detail needed to build trust will depend on the audience, but you need to make sure to give that audience enough detail and no more; use detail sparingly and effectively. Some key tips on effectively using detail include:

- i. *Selectively drill down.* One way to achieve goodwill among your audience is to convince them that you could drill down into the fine-grained details for hours if you wanted to, but you are sparing them that fate. The best way is to know your details and analyses so well that you can talk about them simply.
- ii. *Offload details when you can.* Reference resources, such as published reports or online repositories, where people can look up the fine-grain details if they want or need to later.
- iii. *Provide a few cleanly presented details that demonstrate rigor at-a-glance.* At-a-glance details could include data distributions, visualizations of a compelling statistic, or a schematic of the analytical process. But be mindful with your presentation—hurrying through the visualization or visuals with typos or mislabelled axes can undermine the rigor of your details and thus your credibility.
- iv. *Follow technical bouts with short lay summaries.* Get technical sparingly and for short periods. After a technical period, give a short summary so the people who have lost focus can recover. Submerge in the weeds and come up for air. And each time you come up for air, that summary should connect with *the sentence*.
- v. *Do not end on a memory-wipe.* Do not end with the acknowledgements slide that is effectively a memory wipe for whatever came before it. End with the one key sentence; acknowledge the people who contributed to your work at the beginning of the talk and not at the end. Or, better yet, acknowledge key individuals during the talk itself, as you talk about their

contributions. People will be much more likely to remember your collaborators and what they actually did, than putting them in a long list at the end. And, this way, you can leave the audience exactly where you want them: hearing your one sentence, one last time.

Giving a great “TED-style” talk to the general public.

We live in an era when a great talk to change the world. Thus far, we have focused on talks for academic audiences, but social and behavioural scientists give talks aimed at the general public. On occasion, such talks reached millions of people. The most famous examples are TED talks.

Here, I (EF) will offer a “top 10” countdown list for giving an excellent TED-style talk public, incorporating insights from Chris Anderson,⁵ the Head of TED, and from Steven Pinker’s *The Sense of Style*⁶. Some items on this list overlap what suggestions we have seen for academic talks; others are more novel.

1. ***Know your audience.*** Laypeople who attend academic presentations in their free time tend to be intelligent and intellectually engaged. But that does not mean that all such audiences have identical motives. Are they there to be entertained? To be inspired? To learn useful information? You cannot be certain what motives a given audience member may have, but you will have useful clues. If you are presenting to corporate executives on a boozy boondoggle, perhaps entertainment tops the list. If you are presenting to a graduating class, perhaps inspiration is in order. The person who invited you to give a talk should be able to give you valuable information about the priorities of the audience.
2. ***Connect with the audience.*** This might seem self-evident, but remember there is a divide between you and the audience. Bridge this gap by establishing meaningful human connection. The simplest way is through eye contact—not by scanning the audience in a general sense, but by identifying specific people sitting in various parts

of the room and making direct eye contact with them. Also remember that not everyone in the room will have the identical moral, ideological, or political views as you. If you are going to make a politically controversial claim, remember you might lose some members of your audience—make sure these comments are worth it.

3. **Identify your through-line.** The through-line is the connecting theme that ties together each narrative element of your talk—akin to your “single sentence.” For example, *more choice makes us less happy* or *vulnerability is something to be treasured*. Practice developing succinct through-lines on talks or papers that are lacking them. TED curator Chris Anderson offers an example of a weak opening: *I want to share some experiences I had during my recent trip to Cape Town, and then make a few observations about life on the road*. This excerpt from Life of a Traveller does not clearly communicate to the audience what the specific theme of the talk will be nor what we might learn. Anderson proposes an improved version of the opening: *On my recent trip to Cape Town, I learned something new about strangers—when you can trust them and when you definitely can’t*. Then, you can share with the audience the two different experiences you had. Now everything you will present is going to hang on this through-line for the rest of the talk. You want to encapsulate your through-line in as few words as possible—no more than 15 or so. If you can’t do it that succinctly, your through-line probably is not precise enough.

4. **Stress test that through-line.** Ask yourself, is this a topic you are passionate about? Are these ideas, as TED says, “worth spreading”? Will your through-line inspire the audience and make them better off than they were before? Will they know more than they did before because of your talk? Use the answers to these questions to help you

refine your through-line so that you can be confident that these audience needs will be met.

5. ***Think about yourself as a tour guide.*** This is similar to the idea in the writing literature called classic style, in which the guiding metaphor is that the writer is a lucky guide who gets to share cool information with smart people who are excited to learn. You and your audience are equals and, the talk is a conversation in which you get to share something the audience has not seen yet⁷. What a privilege!
6. ***Use language that is concrete and vivid.*** Use, concrete language, short sentences, strong metaphors, emotional evocation, and lots of examples. As much as possible, talk about things that are visible to the naked eye. Academics can sometimes get lost in technical language like “processes” and “functions”, which are neither vivid nor evocative of sensory experiences.
7. ***Stimulate curiosity.*** You want the audience to hunger for the information that you are sharing with them. Curiosity is a form of cognitively induced deprivation that results from the perception of a gap in one’s knowledge⁸. The gap makes you feel like need to discover the rest of the story—how it all fits together. As a speaker, you want to elicit this pleasant form of hunger in your audience.
8. ***Tell stories.*** A powerful way to stimulate and sustain curiosity is by telling stories. When telling stories, keep in mind the fundamental elements of good storytelling, such as 1) basing the story on characters the audience will empathize with, 2) building tension (e.g., through curiosity or social intrigue or danger), and 3) ending with a satisfying resolution—perhaps something funny, moving or revealing.
9. ***Practice (for real!).*** Nearly every time you have heard what sounds like an effortlessly perfect talk, the amount of effort that went into preparing and practicing

it was immense. There is no substitute for preparation: Draft the talk, practice it, and then revise it. Then practice it, then revise it. Then practice it, then revise it. Be brutal with your cuts—everything extraneous must go. Polish your stories until they shine. Practice for people you trust to be not only supportive, but also critical. Some things to ask them: Did I get your attention from the get-go? Was I making eye-contact? Were there enough examples to make everything clear? How were the visuals? Did I seem to have any physical or verbal ticks?

10. ***Open and close powerfully.*** The opening and closing of the talk are crucial. Chris Anderson of TED offers four ideas for how to start: 1) deliver a dose of drama; 2) ignite curiosity; 3) show a compelling slide, video or object; or, 4) tease but don't give away. One option for a strong ending is narrative symmetry, and my favourite example comes from a paper by Gilbert, Morewedge, Risen, and Wilson (2004)⁹. The paper opens with a famous *Casablanca* quote from Rick to Ilsa:

Inside we both know that you belong with Victor. You're part of his work, the thing that keeps him going. If he gets on that plane and you're not with him you'll regret it. Maybe not today, maybe not tomorrow, but soon, and for the rest of your life.

After presenting a series of studies demonstrating that people mis-forecast distress, Gilbert and colleagues conclude the paper as follows:

Elsa could not face the possibility of looking back in anguish and so reluctantly boarded the plane, but had she stayed with Rick in Casablanca, she would probably have felt just fine. Not right away of course. But soon. And for the rest of her life.

Conclusions

Giving great research talks takes practice, intentionality, and mindfulness to master.

Although our advice cuts across different audiences and types of talks, some common themes

emerged across our perspectives (Figure 1). Great speakers overcome the “me-focused” aspects of important talks (e.g., I feel so anxious; this moment is so important for my career; I need them to realise how smart I am) and instead generously focus on the needs of their audiences so they can excite and inspire them. Great speakers therefore know their audiences and carefully anticipate their needs. Whether this audience are friends, a search or hiring committee, information-overloaded researchers, or curious and smart people who are eager for their intellectual “tour guide” to take them on a new journey—great speakers meet the audience where they are and speak in a way they will understand and remember.

Becoming a great speaker takes practice, intentionality, and mindfulness. A great talk does not begin when you start to speak. It begins long before the audience arrives, with conscientious thought and planning. It is essential to know stressful triggers, how they may interrupt the ability to communicate clearly or obfuscate important messages. Practice is key, not just under ideal conditions but under conditions likely to trigger unease in order to maximise resilience to on-the-day stress. And finally, it is imperative not to assume that the audience shares the same perspectives, insights, or motivations. Talks should be carefully refined so that it is widely accessible, gripping, and memorable.

Giving a great talk is about creating a clear line of communication between the speaker and their audience. Speakers must foster curiosity to create a strong connection with the audience, and change perspectives by sharing the unique and interesting knowledge the speaker possesses. The speaker has seen something that the audience has not yet noticed and now it is their job to let the audience experience and see this for themselves. Once the speaker has created an appetite for information, it is essential that the audience both remembers and trusts the message that is being shared. This is achieved, first, by identifying the core take-away that is central to the talk, and communicating it in one sentence or a simple message that everyone can easily understand and

remember. Finally, a message will not spread unless it is trusted. It is essential to build coherent and trustworthy stories around the message, without getting lost in the weeds that will lose or distract the audience.

References

- ¹ Kirschbaum, C., Pirke, K. M., & Hellhammer, D. H. (1993). The 'Trier Social Stress Test'—a tool for investigating psychobiological stress responses in a laboratory setting. *Neuropsychobiology*, 28(1-2), 76-81.
- ² Gallego, A., McHugh, L., Penttonen, M., & Lappalainen, R. (2022). Measuring public speaking anxiety: self-report, behavioral, and physiological. *Behavior Modification*, 46(4), 782-798.
- ³ Bruner, J. S. (1990). *Acts of meaning*. Cambridge, MA: Harvard University Press.
- ⁴ Foy, J. E. (2015). Encouraging comprehension: Insights from research on reading stories. In K. Brakke & J. A. Houska (Eds.). *Telling stories: The art and science of storytelling as an instructional strategy* (pp. 49–59). Washington, DC: American Psychological Association.
- ⁵ Anderson, C. (2016). *TED Talks: The official TED guide to public speaking: Tips and tricks for giving unforgettable speeches and presentations*. Hachette UK.
- ⁶ Pinker, S. (2015). *The sense of style: The thinking person's guide to writing in the 21st century*. Penguin Books.
- ⁷ Thomas, F-N., & Turner, M. (2017). *Clear and simple as the truth*. Princeton University Press.
- ⁸ Loewenstein, G. (1994). The psychology of curiosity: A review and reinterpretation. *Psychological Bulletin*, 116(1), 75–98. <https://doi.org/10.1037/0033-2909.116.1.75>
- ⁹ Gilbert, D. T., Morewedge, C. K., Risen, J. L., & Wilson, T. D. (2004). Looking forward to looking backward: The misprediction of regret. *Psychological Science*, 15(5), 346-350.