



研究成果を英語で伝えるスキルに磨きをかけたい皆さんへ：このシリーズでは、東京大学のウッドワード先生が、あなたの今の英語能力を使って成果をより効果的に上手に伝えるためのアイデア、作戦、ヒントを紹介します。また、日本語でのプレゼンにも役立つ多くのアイデアも見つかるでしょう。

## By Invitation of the Editor-in-Chief

# English Scientific Communication Part 11—Tips and tricks

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Since the beginning of the year, these articles have covered ideas and techniques for delivering effective scientific presentations in English. We are almost at the end of the series now and have considered in detail how to prepare and deliver a presentation from start to finish, and how to go about making the next one even better. In the final two articles, we will consider some tips and tricks that can add style and polish to our lectures. We begin with the concept of signposting.

### Signposting

Signposting is a well-established technique in writing and presenting. The idea works as follows. If you visit a university campus for the first time, it can be very difficult to find your way around; the buildings all look similar, making it a challenge to tell which is which, and the campus can be very large and overwhelming. Fortunately, campuses generally have a map at the entrance and signposts placed all around, indicating which buildings you will find if you walk in a particular direction. While walking, it is quite straightforward to follow the signs to get to your desired destination. Signposting in presentations works in a very similar way—you provide the audience with information about what you are going to talk about and use particular language to help them to understand the contents of the presentation, how they relate to other things, why they are important and so on.

There are basically two main aspects to signposting in a presentation. Back in article 4, I mentioned the concept of,

“Tell them what you’re going to tell them, then tell them, and then tell them what you told them,” which contains some important examples of signposting. The first aspect is to, “Tell them what you’re going to tell them” at the beginning of the presentation, so the audience knows how to deal with what they are about to hear. This is sometimes referred to as “major signposting” —providing a clear roadmap about what you will present. This is common in many presentations as an introduction slide, in which the presenter explains how the presentation is organized and what they are going to present. This is like arriving at the University campus and looking at a large campus map at the entrance.

After viewing the map and beginning to walk through the campus, this is when we normally rely on signposts to confirm that we are going in the right direction and to help us choose the correct route when we reach a junction and are sure which path to take. The second aspect of signposting works in a very similar way. The presenter uses particular words and phrases to link sections of the presentation together and to indicate to the audience their progress through the presentation and where they should be filing the next information in their mental notebook. The language prepares the mind, so that the audience knows when the speaker is about to, for example, compare two things, refer to previous studies, ask a question, conclude one part and begin another etc. These examples could be signposted by phrases such as;

“A differs from B in a number of significant ways”

“An important example of C is…”

“We can now begin to consider an important question”

“Having now established that D is true, we can move on to look at the influence of E”

These signpost expressions do not contain actual content, but instead prepare the audience to accept the content that will follow and also sometimes to remove focus on what has gone before. Good presenters use linking words and phrases effectively to always allow the audience to follow them through the presentation and not get lost. There is not enough space here to provide a large list of example expressions, but fortunately there are many excellent existing resources online. In particular, I recommend the academic phrase bank at the University of Manchester (<http://www.phrasebank.manchester.ac.uk>), which is a really great online resource for phrases to improve your scientific presentations.

One slightly more advanced form of signposting is to prepare your audience in advance for something you will address later. For example, a graph in your presentation may show a particular feature which is not the focus of your current discussion. However, if you don’t mention it, then it will distract the audience. Instead, you can use a phrase like, “I’d like to draw your attention to the reduced values in this region of the plot. These are due to an important phenomenon called, “phenomenon X” that I will talk about in the second part of this pre-

sensation, however for now I would like to focus your attention on..." The audience members' brains will subconsciously start working to see if they already know something about "phenomenon X" or not and if not, what it might be or why it might be important. This means that when you come to talk about this idea later, the audience is better prepared to understand what you say.

### The power of three

The second of this month's tips is a slightly unusual one. Take a look at the following parts of some famous speeches and statements:

"Life, liberty, and the pursuit of happiness"  
- The American Declaration of Independence

"Government of the people, by the people, for the people"  
- The Gettysburg Address

"There are three kinds of lies: lies, damned lies, and statistics"  
- Benjamin Disraeli

"Veni, vidi, vici" (I came, I saw, I conquered)  
- Julius Caesar

These are just a few of very many examples of the use of three. The idea is that things feel more satisfying or are somehow more effective or memorable when they come in threes. Arguments for why this is true span from the idea that the use of three things is both short yet sufficient to create rhythm, right through to the idea that we experience many groups of threes in our childhoods and so are conditioned to like things grouped in this way. These include things like children's stories and fairytales (e.g. three blind mice, three wise men, three musketeers, three little pigs etc), the use of three acts in plays and movies, the use of three in creating slogans and adverts (e.g. "Mind, Body, Spirit", "Liberté, égalité, fraternité", "Faster, Higher, Stronger") and the law of thirds in photography. The list goes on and on.

We can exploit the power of three when creating presentations in a number of different ways. Already, we have seen that it is common to use a three-part

structure to our presentations—the introduction, the main discussion and the summary / conclusions. We can build upon this by using threes in other ways. The first is when using slides containing bullet points. Try fixing the number of bullets as three. As well as ensuring that there is not too much text on the slide, it is often suggested that three is the most effective number of bullet points for both understanding and recall.

We have previously discussed the idea of a "take home message" for your presentation—one key idea that you would like the audience to remember and take home with them. Sometimes there is more than one important message in a presentation. In such cases, using the power of three can help by identifying "three key concepts" or "three important lessons" that you want the audience to take from your presentation. By signposting these three ideas early in the presentation and then highlighting them as important ideas one, two and three during the presentation you can then proceed to have a summary slide with the three key ideas reiterated. Building and reinforcing a strong structure to your talk based around three can be extremely effective. Some of you may have noticed that throughout this series or articles, I basically always present 3 ideas, techniques or sections in each article. Now you know the reason why!

At a smaller scale, we can use expressions and explanations in our presentations that invoke the power of three. For example, when discussing data, we can choose three examples—one that is too low, one that is too high and one that is just right. We can use the rhythmic power of three when speaking by making statements in groups of three with pauses between each statement and, for example, using rising pitch / volume on the first two and falling pitch / volume on the third. For example, "In my talk I hope I have demonstrated the importance of X (rise), explained how X can be simply determined using Y (rise) and convinced you that our approach is the most effective method for this determination (fall)."

Hopefully you will have noticed that the expression, "Tell them what you're going to tell them, then tell them, and then tell them what you told them" is a classic example of the power of three!

### The hook

What makes some of the most famous songs in popular music so great? The answer is that they almost always have a great hook. A hook is a short, phrase, passage or riff that catches the ear of the audience and remains in the memory for a long time, causing the listener to start humming or singing the phrase involuntarily. We often refer to songs getting, "stuck in our heads," usually due to a very effective hook.

We can apply a similar idea when presenting. In this case, the hook is a theme, aim or focus which drives the talk, provides motivation and interest and remains in the memory of the audience. The important idea is to make trying to identify a hook during the early stages of the design of your presentation. In some cases, the contents of the talk have a clear theme or relevance to an important human problem that means that they will naturally grab the audience's attention. In many cases, however, there is no natural hook and you will have to work to create one.

A good way to create a hook is to try to draw an analogy between the topic of your talk and something of relevance to your audience—relating it to their day to day experiences (e.g. food, travel, childhood, adulthood, the internet, music, film etc.). It is not always necessary to use a really deep analogy but simply drawing the comparison with something interesting will grab the audience's attention. Try to keep the hook repeated in simple ways throughout the presentation, which will embed it in the mind of the audience. This may cause the audience to think back to your talk when they encounter the thing with which you drew the analogy in their daily lives.

A powerful generic hook is to pose a single question early in the presentation and then try to answer it, referring back to the original question throughout the talk.

Give a try—put a hook in your presentation and try to grab and keep hold of your audience with it!

Next month will be the last article in this series and will introduce more tips along with some conclusions from the series as a whole.

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