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Presentation Skills for Scientists

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INTRODUCTION: When Speaking is a Problem

Most of the time, speaking is not really a problem. Imagine your workgroup discussing the setting of a test, or you calling a friend with whom you are going to organize a meeting, or sitting at the coffee table together with your colleagues, talking about an article you have read. If there are any difficulties, they are not difficulties of speaking.

This is the kind of speaking we consider normal. You say something. Then your partner says something. You start a sentence, then restart, correct it, maybe stop or get interrupted and someone else finishes it.

It is dialogic: You are producing a spoken text together. Everybody who has participated in the conversation will be responsible for its outcome.

It is informal: There is no official speaking order and there are no time limits.

It is weakly structured: Some contributions to the conversation are longer, some shorter, some even unintelligible. Beginning, main parts and conclusion are not as clearly identifiable as, e.g., in a written article.

But there are situations in which speaking is felt to be a problem – speaking in public. You may be sitting in the audience of a conference, whispering something to the person next to you. Then you stand up and go to the lectern. Many things will be different when you are given the floor:

It is monologic: Only you are responsible for content and form of what is said.

It is formal: There are rules to be obeyed – from the length of your speech to the language that is considered appropriate for it.

It is highly structured: Your speech will have a beginning, main part, and ending. You make complete sentences and speak loud and clear.

Maybe you feel pressure that you don't normally feel in every-day conversation. This course is about reducing this pressure. Its purpose is to make you feel at ease when speaking.

Rhetoric: The Art of Speaking in Public

Speaking in public is all about the changes that occur when the situation changes from a dialogue to a monologue, from *taking with* somebody to *speaking to* a group of people.

Because there is an audience (even if it is a small group) we call it a change from non-public to public speaking. In fact there is not really one type of public speaking situation. There is rather a gradual scale of speaking situations, ranging from more private to more public.

A speech in parliament is highly ritual and has many more features of „public speaking“ than a presentation in front of your team, but they have some important features of public speaking in common. Even in a chat with a friend your speaking behaviour can change into a more public form, even if there is no-one else around to listen (You may suddenly start to „lecture“ on your favourite subject. Or you may disagree with your friend and correct him by referring to common [public] principles, using less formal language and a louder voice than before.).

Public speaking means the use of conventions (such as a proper language, or dress) that simply have to be observed.

But public speaking also means an adjustment to conditions in which you feel less at ease. This affords training. Its most important goal is to learn how to feel at ease, even in difficult situations.

PART I: Time and Space are Yours

Speaking always stands in relation to time and space. In order to speak, to produce words and the silence in between, we need time. And by the movements of our bodies that accompany our speaking we occupy a larger or smaller part of the space around us.

When you deliver a speech there is an agreement between you and your audience about how long you are going to speak and where you will stand or sit and how free you and they will be to move.

As a rule, you will be given time during which you won't be interrupted, and you will have more freedom of movement than your audience. Unfortunately, most of us don't enjoy this situation. The first step, therefore, is that you accept your role and make use of the time and space that are yours.

Take Your Time

Many inexperienced speakers start too early. They don't take their time when going up to the podium, or to establish nonverbal contact with their audience. Often they don't allow themselves those small breaks within their speaking that help them to plan the next steps and to be understood.

There is also no need to hurry away after your last words (or, even worse: during the last words). Enjoy the effect your conclusion makes on your audience. Enjoy their applause. Look somebody in the eyes once more. Only then take your papers and leave.

Be Aware of the Space Around You

The space in which you move is considerably larger than the one of the listeners. You don't have to use it constantly, but you should be aware of this freedom of movement. Whereas everybody else in the room is confined to their seats (and every move of a listener is unexpected or can even be distracting), you are allowed to do gestures of any kind, even to walk up and down, if you wish.

Once again, you don't have to move about. But it is helpful to be aware of the space around you: It makes you feel free and your facial and body expression will be more natural.

But what are "natural" facial expressions, "natural" gestures? It means moving in a way that is normal *to you*. People will only be convinced of your body language if it goes along with your personality. This happens automatically if you feel at ease:

1. Stand firmly on the ground. Carry your weight with both legs (do not stand on one leg predominantly).
2. Your legs should be a shoulder's width apart, so you won't have problems keeping balance.
3. Bend slightly at the knees. Don't lock them.
4. Let your breath flow deep into your body. Feel it fill your mid-section.
5. Let your arms hang down at your sides. Whatever gestures are natural for you will develop in due time.

PART II: Dialogue

Dialogue is the basic form of human communication: You say something, your partner says something. He or she may start to speak at the same time as you or even interrupt you. There is little hierarchy; the same rules apply to both of you.

In a dialogue the presence of the other person(s) is mostly helpful: You develop your ideas together. If you don't find the right word, your partner will fill it in.

In a monologue there is a clear distinction between speaker and listeners. This is often annoying (e.g., if it occurs in private problem solving situations). But it can make sense, especially if there is an agreement between speaker and listeners about this role distinction.

Speaking at a conference or in front of a class is such a situation: You have some special knowledge the others don't have. So they accept being silent for some time in order to listen and learn.

Speaking in public is easier and more effective if you include dialogical elements in these „monologues“. This does *not* mean that you have to ask questions and get them answered. A dialogical element can be, for instance, short eye contact, a few seconds of silence, or the reaction of speaker and audience as a group – e.g., laughing or pondering together.

You can plan your speech this way. Add small instances of dialogue, short periods in which your listeners are active, or laugh, or think for themselves, or do anything to show you that they're with you.

Dialogue with 300 People

Dialogue seems to be extremely difficult in huge auditoriums, in front of 100, 200 or more people. You ask a question, nobody answers. You tell them about your greatest discovery. Nobody even seems to notice. They are just sitting there.

At the begin of a lecture, people may be listening politely. Then contact starts to fade; you seem to lose the ones sitting in the last row, then also the ones in the middle. And in the end there are just two or three faithful students near you who look at you and maybe answer some questions.

There are, however, speakers whose appearances are dialogical even with large audiences. What is their secret?

Well, first they know that it is not so easy for their audience either. One has to be brave to expose himself in the middle of hundreds of listeners by answering a question, or by showing that you didn't understand, or even by laughing at one of your jokes.

So experienced speakers try to make it easy for the audience to respond by first of all showing the dialogical style of their speaking as early as possible.

Dialogue in Teaching: an Example

Dialogue seems to be extremely difficult in big auditoriums, in front of 100 or more people. What can you do to reach them and even get responses from them?

Watch an experienced university teacher in the first minutes of her lecture and notice her small efforts to get feedback from her audience:

Time	The speaker...	The audience...
0.00	... says hello.	... responds nonverbally (more or less)
0.02	... tells a joke / anecdote / personal story	... smiles / laughs
0.05	... asks for survey data (e.g.: Who has experience in the field of work I am going to talk about?)	Some raise their hands.
0.06	... asks more specifically (e.g.: Who has a project of his own in this field?)	One or two raise their hands.
0.07	... asks the ones who responded about the theme of their projects.	One or two answer shortly.

In this way, the teacher has led the audience in small steps from responding as a group to responding as individuals. She has made clear that the lecture is going to be dialogical. And the students themselves have proven that participating is not hard at all.

Dialogue: More Things You Can Do

Before your speech: Get to know the room you'll be speaking in. Get to know it from both sides – the speaker's and the listener's. You might sneak in some minutes before and sit in one of the back rows in order to get a feeling for the distance and the distracting features back there.

During your speech: Use feedback producing elements:

- real questions (that can be answered aloud)
- rhetorical questions (these need not be answered aloud, but the listeners need a few seconds to ponder them)
- funny remarks, jokes (anything that makes the people laugh)
- group discussions („Ask the person sitting next to you what he has had for breakfast...“)

But above all: Make clear that it's going to be a dialogue right from the start.

And don't forget to show your audience that you are interested in them.

PART III: The Words

The most important thing is not how you say it – it is what you say. You have done a lot of study and research. Now you have something to tell. And you will tell it, however crude the words you use in phrasing it.

Of course it helps to say it in a beautiful prose. But remember that your paper won't be read by critical aesthetes (?) but heard by colleagues or students. The most important thing is to be understood. This means saying good-bye to a lot of writing rules you may have learned in composition class – and hello to a simple sequence of short phrases.

Say it in Smaller Portions

Every sentence you come accross can be divided into two or more shorter sentences. Try it out and see what happens:

Saying it in smaller portions can mean bringing dull sentences to life.

Saying it in smaller portions can mean repetition, thus making it easier for listeners to follow you.

Saying it in smaller portions can mean explicating your presuppositions.

You don't have to say everything in extremely short sentences. But whenever it gets difficult, it helps you to control the speed, to say it simple and to make yourself understood.

Fighting Monotony: Variation in Verbal Acts

Every speech is a sequence of quite different things you do:

- you establish contact with your audience
- you tell them the subject of your paper
- you present a thesis
- you discuss empirical evidence
- you explain
- you ask
- you answer
- you tell a story etc.

Each of these acts takes a short amount of time – from 10 or 20 seconds to a few minutes. So there is a constant change of action. If you are aware of that, it will be heard and seen: There will be small changes in tempo and volume, in gesture and posture, which show that you are actually developing your thoughts and not just reading from your paper. People will recognise a connection between you and your subject, and this makes them enjoy what you say and helps them understand.

PART IV: The Way You Sound Tells a Lot

Whereas the verbal part is everything that a written record of your speech would show, the prosodic (or paraverbal) part includes all the signals that are added by the fact that it can be heard:

- the pitch of your voice
- loudness
- the precision of pronouncing consonants and vowels
- tempo, rhythm, intonation

Adequacy and variation in paraverbal expression help a lot to establish and maintain contact to your audience, and to make your message understood.

A Message, not Words

And how should it sound? What are the words you should emphasize, which are the letters you should pronounce distinctly?

Forget about the words. Deliver the message.

1. You are the one who understands best what you want to say.
2. Reflect on what you are saying. By thinking it anew, you will produce variety in volume, rhythm, and melody.
3. Show your enthusiasm.
4. Find the information units in your sentences. The boundaries between these units can be marked by caesuras (short pauses), thus making the meaning clearer.
5. Emphasize what is new: Every sentence contains new information, things that were not said before. These are the keywords, and you should focus on them. The other words in the sentence just help to nest the keywords. Treat these other words in a more nonchalant way. (Stress is an important feature of English and German: You put some words in focus and use less time for the rest.)
6. Change the rhythm: Some things can be said faster, some slower; some will be understood only because you accelerate or slow down your pace.
7. Change the melody: If you ask a question, the tone follows a different course than giving an answer. And so, every other speech act has its own melody. If you are aware of the constant changing of action, this melodic variety will come in automatically.
8. Stop every once in a while: Bring the sentence to an end by getting the melody down. Make a short pause that allows you and your audience to organize your thoughts.

Declarative Endings

Prosody adds important information to your words. It signals to your audience what is important (and therefore emphasized), what is of lesser importance (because you say it faster and in a lower tone). It lets them feel your personal involvement (through the timbre of your voice), and it helps them recognize the organisation of the speech as a whole (because of the breaks in between paragraphs and before important messages).

But most of all, the way you intone your speech announces if there is still something to come or not. In English – as in German and in many other languages – you can hear that a speech has come to an end just by prosodic information. The melody goes down to reach one of the deepest tones of its spectrum, and the pace usually slows down as well.

By using a clear paraverbal ending, you don't need one of those dull ritual verbal endings („That's about all, folks“), but you can concentrate on a more meaningful last message (a „conclusion“, a „take-home message“ or whatever you might call it). You can indicate to your audience that you have finished just by the melody. And what's more, you indicate this to it yourself as well. This is important, because it lets you stop and breathe and wait for applause.

Within your speech the same trick gives you a break in between sentences. It allows you to relax and plan your next step. A falling ending marks the end of a paragraph, whereas a rising ending indicates that it's still going on. By deliberately speaking a sentence with a falling ending, you reduce pressure for yourself and your listeners.

Manuscripts that Help You

The language style of a longer speech is a mixture of extemporaneous and reading from your manuscript. You will formulate anew most parts, but read what has to be precise (such as definitions, numbers, conclusions).

Your manuscript is there to help you switch from one style to the other whenever necessary: **Titles** tell you right where you are in the course of your argumentation. Wide margins provide **keywords** that remind you of the order of your thoughts and show you where you can jump to the full phrases, if needed.

In order to read easily what you have written, write in big characters (I suggest 14 pt. Rather than 12) and a line spacing of at least 1.5. The wider the margin, the easier the words are to be captured by a glance. The end of a line is marked by the end of an informative unit. This supports your intonation. At the end of a page should always be the end of a sentence, so you don't make pauses just because you have to turn pages.

Your prosody will be much better if the words to be stressed are underlined. You can add further elements (e.g., apostrophes, arrows) when you read your text for the first time. Read it aloud in order to hear your intonation and rhythm.

PART V: Visual Aids and You

Flipchart – overhead projection – slides – video: The visual aid you are using is there to support what you say, not to dominate your speech.

Even if the main part of the information is conveyed by charts and pictures, it is your message, and you should not lose contact to your audience. But don't let the visual aid take over. There are substantial parts in your speech that you can say directly to the audience with eye contact and without a rivalling picture on the wall .

Deliver at least the beginning and the last bit of your speech this way. A message may be visible on the screen, concise enough to support what you are saying, but not so long that it distracts the viewer from your words.

Looking at the Screen Together

Every picture you project on the screen invites to interaction. No picture speaks for itself. You show it and comment on it:

You give the context: You say something the picture does not say. Without your help people cannot realise its function in your speech.

You create captions: You name the parts of the picture and the relations between them. You explain symbols and other aspects of the graphic. Even if everything seems to be self-explanatory, people will be grateful to hear you tell them they are right.

Finding out together: Whenever there is a chance to let the audience talk (as in any teaching situation), you can discuss the picture with them. Let them tell you how they perceive it. Add your own observations based on your expertise. Thus, you will describe and understand the picture together.

Always be aware of the fact that you are watching and interpreting together. Your students or colleagues have a certain competence in decoding the picture, and they start with it as soon as it is projected on the screen. So there is no other way than discussing it together – either explicitly (questions and answers) or implicitly (by giving them time to find their way through the picture and by reactions to what they might recognize).

Further Reading

Coblenzer, Horst / Muhar, Franz (1979:2002): Atem und Stimme. Anleitung zum guten Sprechen. Wien: öbv&hpt.

Ebel, H.F. / Bliefert, C. (1992): Vortragen in Naturwissenschaft, Technik und Medizin. Weinheim etc.: VCH

Huges, Dominic / Philips, Benedict (2000): The Oxford Union Guide to Successful Public Speaking. London: Virgin Books.

Franck, Norbert (2001): Rhetorik für Wissenschaftler. München: Franz Vahlen.

Wilder, Lilyan (1999): Seven Steps to Fearless Speaking. New York etc.: John Wiley & Sons.