Per Mollerup

**PowerNotes**
Slide presentations reconsidered

IIID International Institute for Information Design
Swinburne University of Technology
Obscurity is a source of pain to the eye as well as to the mind.
David Hume

Whatever can be said, can be said clearly.
Ludwig Wittgenstein
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Downloadable from http://hdl.handle.net/1959.3/191214

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*Collapsibles, A Design Album of Space-Saving Objects.*
Introduction

Digital slide presentations – often called PowerPoint presentations – have earned a bad reputation through countless mediocre presentations. Behind this sad state of affairs is the fact that a vast majority of professional lecturers and other speakers have never come to terms with slide presentations based on software like PowerPoint and Keynote. In classrooms, at seminars, at conferences, and at business meetings they deliver slide presentations that demonstrate poor design thinking.

Most presenters give presentations that don’t use the didactic potential of the bimodal format (speech + visuals). They give presentations where the visual part is not coordinated with the spoken part. In many presentations, the visual part works against the spoken part with counterproductive results. As a result, they don’t present themselves and their subject to their best.

The term ‘most presenters’ includes all kinds of speakers, among them designers and design educators who consider themselves experts in information design, as well as business people and other presenters without a formal design background.

There are three phases in working with a slide presentation: planning, design, and delivery. PowerNotes covers all three parts. Readers who must present before they can read the full book should rush to the Instant guidelines section. It presents seven useful guidelines.

PowerNotes addresses users of PowerPoint, Keynote, and other presentation software that enables presenters to make professional looking slide presentations. Professional graphic designers typically make their presentations with more advanced software and store them as PDF. These professionals may also benefit from PowerNotes, which is not software specific.

PowerNotes is rich on recommendations that will help presenters to improve their performance. Professional opera singers sometimes turn their back to the audience, sometimes lie down, or even eat, while singing. In the same way, skilled presenters may occasionally bend some of the sensible recommendations presented in PowerNotes. That is their professional prerogative. They earn it with talent and practice, lots of practice. Everyone should learn the rules before breaking them.
PowerNotes is a simple guide to simple and powerful presentations. Although simple, the principles are advanced enough to help almost all presenters to improve.

Per Mollerup
Melbourne, 2011
This chapter is written for those who cannot read the full book before delivering their next slide presentation. These seven warnings will save you from an unprofessional presentation that wastes your own time and that of your audience.

These seven warnings won’t make you a master presenter, but they will make you better than many of your colleagues. If you want to improve further, keep reading.

1. **Avoid too much text.**
   Your audience came to listen to you, not to read your slides. Reading more than a few words on a presentation screen is difficult.

2. **Avoid text that is too small.**
   If the type in a book is too small, the reader can take a closer look. If the type in a slide presentation is too small, the audience stops reading. They conclude that the presenter doesn’t know the basics of slide presentations or, worse, that he doesn’t care. Don’t use type smaller than 24 points.

3. **Don’t read aloud from the screen.**
   The audience can read better without your help.

4. **Avoid reading times that are too short.**
   If you have to show text, be sure that everyone has the time to read it. Anything else is insulting.

5. **Avoid uncoordinated text and talk.**
   Few people can read more than a few words and listen to a presenter saying something else at the same time. If you must show a slide with more than a few words, you must give the audience time and silence to read it.

6. **Avoid a flying circus.**
   Suppliers of presentation software offer a broad range of graphical gags where text and images appear and disappear in funny or startling ways. Don’t use these animations and animated transitions. They only take attention away from you and your talk.

7. **Avoid knickknacks.**
   Stick to your message. Don’t obscure it with esoteric backgrounds, clip art, funny drawings, or cliché-ridden consultant visuals. Nothing is more boring to an intelligent audience.
You should plan any slide presentation away from your computer. However tempting it may be, it is foolish to start designing slides without a robust presentation plan, including the outline of your presentation. This chapter discusses the planning that precedes designing slides. The planning tools are pen and paper, or perhaps yellow stickers, or a whiteboard.
The purpose of slide presentations is to deepen, clarify, and strengthen pitches, speeches, and lectures. You cannot meet these goals by accident. Planning is the foundation on which all good slide presentations rest. The planning outcome is an outline of the story to be told by the presentation. The outline is organized in a logical sequence that drives home the goal-oriented message of your presentation. Planning builds on three basic questions: why, what, and who.

**Why? Deciding the objective**
Why must this presentation be given? Is the objective to share knowledge, to create understanding, to change attitudes, or to provoke action? If you cannot answer this question clearly, call off the presentation and stay home.

**What? Deciding the message**
What is the message that will realise your objective? What should the audience take home? Be prepared to explain the message in one sentence. Boiling the message down to one sentence will increase your own understanding and enable you to state it in a lift between the tenth and eleventh floors.

**Who? Understanding the audience**
The third question to be answered before crafting the story is a blanket question with many sub-questions: Who is in your audience?

- Number?
- Age?
- Sex?
- Language?
- Nationality?
- Education?
- Knowledge?
- Special interests?
- Why will the audience listen to this presentation?
- What are their expectations?
- How can you make the presentation relevant to this audience?
- Are there issues that you should avoid or treat with special care for this audience?
- How much time does the audience have for your presentation?
- What will your audience do before and after your presentation?
Answering these questions will help to make your presentation relevant and indicate the appropriate knowledge level to aim for. This will ensure that your presentation speaks to the audience. Hitting the right knowledge level includes using understandable concepts, expressions, and visual elements.
After defining the objective and the message, and considering the audience, it is time to craft the story, still away from your computer. There is no one infallible way to do this, but these suggestions may help you find a way that suits your presentation.

A logical start includes three points:

1. Collecting the elements, arguments, cases, pictures, and anything else, that you should include in your presentation.
2. Listing the main arguments of your presentation.
3. Sorting the elements according to the main arguments that they support.

These three activities take place more or less concurrently. The result is information chunks that serve as building materials for your story.

Sorting the main arguments in a logical sequence can follow several patterns, among them:

- Problem > Pathway > Solution
- Problem > Solution > Benefits > Call to action
  (A typical sales pitch)
- Question > Details > Answer
- Question > Answer > Details

Some presenters prefer to start with the conclusion. Think twice, before you do. Choose a sequence that will keep the audience interested throughout the whole presentation.

Remember the time-honored rule:

*Say what you are going to say*
*Say it*
*Say what you have said*

You don’t need to take these guidelines too literally. Start with a general introduction, perhaps suggesting why this presentation is valuable to your audience. Continue with the full story. End with a short recap.

Think of your presentation as a play with one actor (you) and three parts: a beginning, a middle, and an end. Each of these parts of your presentation should meet some specific, functional expectations.
The beginning
The first slide should include the title of the presentation, the presenter’s name, and perhaps the presenter’s organization. The next slide can perhaps show a short outline of the presentation.

The middle
If you want the audience to keep track of the presentation, you can show the outline of the presentation, whenever you go to a new part. See figures 36–55.

You can show the outline as a breadcrumb path at the top of the screen. See figures 56–60.

The end
The very last slide can include your name, and perhaps your organization. You can also show your email address here, if you do not provide a special handout.

Don’t write Thank you
If you want to thank the audience for their attention, say it. It is more personal.

Don’t write Questions?
If there is time and you want to take questions, say it. It is more personal.
Every presenter must decide whether he needs a complete manuscript.

This question has several aspects:

- It is problematic to read a presentation from a script. Most of us speak more freely without a script. As a rule, we make up for the details we lose by delivering a livelier presentation. Details that we cannot remember may not be worth remembering, and they will probably not be missed by the audience.

- In most cases, carefully prepared cue notes serve the presenter better than a full script. Occasional glances at notes don’t harm the presentation in the same way as reading from a script.

- The notes can be written on numbered cards (best) or pages of paper and include cues, keywords and perhaps some figures to remember. The Notes feature of PowerPoint tends to tie the presenter too closely to the computer screen.

+ A manuscript can be a great help when preparing the presentation.

+ Speaking from a script may be needed, if the speech is very important, if the speech is very long, or if the speech is very complicated and cannot be simplified. Write as you normally talk. A presentation is not an article.

+ Some event organisers, such as academic conferences, require a full script and sometimes include it in printed conference papers. This doesn’t force the presenter to read from the script.

+ It may sometimes be a good idea to give a full script to the press.

+ It may sometimes be a good idea to give the script to the audience. However the audience will often be better served by a specially prepared handout. See Handouts page 59.

+ A manuscript will help in the preparations the next time a similar presentation is required, even if it is not read aloud.
1. Some skilled speakers use a mind map as their only memory help when presenting. Courtesy Professor Ken Friedman.
Strategy elements

An armory of experiences, observations, and heuristics (rules of thumb) may inspire and help presenters.

Memory aids
Use the slides as prompts. Organise the slides in a way that they drive home the spoken message for the audience and help you to remember. However, never forget that the slides are for the audience.

Simplicity = clarity
Clarity is the most desired and most often missed quality in slide presentations. Clear expression, verbal and visual, builds on clear thinking. Only shallow minds want to obscure.

Simplicity = brevity
Presentations are often too long, seldom too short. It often takes more time to plan a short presentation than a long one, but it pays in terms of an attentive audience.

The beauty of three
Dividing arguments into three parts may sometimes strengthen the message. Three-point statements have a certain appeal, they are good to say, good to hear, and easy to remember. Think of catchphrases such as I came, I saw, I conquered; Blood, Sweat, and Tears; The Good, the Bad, and the Ugly. Three elements are easier to remember than four or five, and more appealing than two.

Learning styles
Speaking of three, there are three ways of learning: auditory, visual, and kinaesthetic. People have different preferences. Some want to listen, some want to see, and some prefer to do. Different subjects lend themselves with different ease to the three learning styles. It is probably easiest to learn riding a bicycle in the kinaesthetic way, while geometry calls for visuals, and pronunciation should be heard. Slide presentations naturally employ both auditory and visual styles, but can occasionally be seasoned with practical demonstrations or exercises.

Humour
Most of us would rather be entertained than taught. A touch of humour may help your message, but you should never use material from clip art or other prefab sources.
This part of *PowerNotes* deals with the design of slides. Design is here understood as a *result*, contrary to a *process*. We discuss the nature of the generic slide types, not how the single slide is made by using a certain version of PowerPoint, Keynote, or other software.
Simplicity

The design proposals presented in PowerNotes recommend simplicity at the expense of complexity and complicatedness. Easy reading and understanding are primary. They are the raison d'être of slide presentations. Aesthetic pleasure is a welcome side effect.

We achieve simplicity by using few elements, by using few and relatively discrete effects, by using simple structures, and by overcoming the fear of empty space. Just as a good sportsman moves using as little effort as possible, good presenters deliver their message without visual commotion. The beauty resulting from economy of means in slide presentations compares with the beauty of a skilled sportsman. An elite runner, jumper, or swimmer makes no unnecessary movements. Simplicity is beauty.

Presentation slides are not advertising spaces. Logos, slogans, and similar presenter-promoting elements should be used with restraint. Remember the saying, little doctor large sign, great doctor small sign, and go for simplicity. It is normal to credit the presenter and his organisation on the first and perhaps the last slide. This may change if other slides are used as handouts. In that case all slides should discreetly identify the sender. See Handouts page 59.

Some presenters prefer to use only one word on each slide, presenting many slides. This may work well or it may become very boring depending on the length of the presentation.

Using one visual style during the presentation with function-based variation adds to clarity. Use variation in form to signal variation in meaning.

Whenever possible test your slides on a large presentation screen.
2–4. A good slide presentation can be compared with an elite athlete’s performance. Nothing is superfluous; economy of means is beauty. Courtesy Thomas Porathe.

Conspicuity

“Clearly visible, easy to be seen, obvious or striking to the eye” (Oxford English Dictionary)

The visibility of an object **taking context into account**
Don’t use ready-mades

The majority of ready-made graphic solutions offered by PowerPoint, Keynote, and other software providers are useless for good slide presentations. By taking attention from the real content, superfluous graphics disturb rather than inform.

Useless special effects include transitions between slides with or without such noises as braking cars, guns fired, and crushed glass. A clear, clean transition from one slide to the next leaves the viewers’ focus on the subject matter undisturbed.

5–8. Extraneous PowerPoint transitions between slides, with or without unnecessary sounds, have no place in professional slide presentations.
A slide presentation is not a book.

Slide presenters should bear in mind that the word *audience* is derived from Latin *audentia*, hearing, listening. The audience comes to hear what the presenter says.

A slide presentation is not a book. A book is a *work*. A slide presentation is a *performance*. The performance is an oral presentation accompanied by a series of slides.

A series of slides is a work, but it is not a book. Today it is a computer-based series of slides, screened by the presenter.

The immediately apparent difference between series of slides presented on large screens and books is that slides are in landscape format, while most books are in portrait format. However, other differences have more serious implications for the functionality of slide series:

- Viewers of slide presentations don’t control the viewing time of the single slide, while readers of books decide how much time they will devote to each line, paragraph, page, and spread. The design answer to this difference is simple content on slides and sufficient time to read it.

- When studying a table or a complicated graph in a book, readers can use as much time they want. Also, it is much easier to look at details up close on paper than on a distant screen. The design answer is once again simplicity and sufficient time to read.

- Slide series are accompanied by speech, while books are read undisturbed. The design answer to this difference is strict coordination of speech and slides.
Three generic slide types cover the functions of a slide presentation:

- Text slides
- Image slides
- Break slides

Text slides and image slides can be combined. Break slides can have a short text.
Obscurity is a source of pain to the eye as well as to the mind.
David Hume, 1711–1776

Artist Drawing a Nude with Perspective Device,
Albrecht Dürer, 1525

More to come
Text slides give slide presentations a bad reputation because they typically show too much text, too small, for too short a time while the presenter says something else. These problems boil down to one issue: You should not write text slides as pages in a book. Text on slides serves several functions. These are different to the function of text in a book.

Text on slides should

- clarify main points in speech,
- clarify new words that may be difficult to hear,
- clarify important concepts,
- present definitions,
- recap earlier topics.

The title of a slide presentation is traditionally presented on the first slide. Repeating the title on all slides will

- remind the audience what they are attending,
- remind the audience that the show is still running when break slides are shown,
- remind the audience about the source, if prints of the slides are used as handouts. (See Handouts page 59.)

Repeating the title on all slides requires presenting it in a simple, inconspicuous graphic format.

Avoid writing full sentences on slides. A slide presentation is not a book. Use keywords and short phrases instead of full sentences to help the audience focus on the presenter and allow him to explain.

Simplicity and clarity are achieved by short lines and few lines. Some authors suggest a maximum of 8 lines each with a maximum of 8 words; others recommend 7x7 or 6x6 as the maximum. No such rules should be given. What is right always depends on the situation, including the way that lines are presented, clarity should be foremost.
12. Text slides should carry short text.

13. Bullet lists with or without bullets are garden varieties of text slides.

14. A text slide with a short, relevant quote should not be spoken. The audience should have exposure time to read it.
Pictures have power. Psychologists talk about *Picture Superiority Effect*. Pictures can support both immediate understanding and memory. Nevertheless, this is not a license to drown the audience in images. Slides with images – photos or graphics – should follow the same simplicity rules as other slides. Enough is enough. Images should be simple, ensuring that essential features are clear and discernible.

**Frames**

Use frames around illustrations only when necessary for showing boundaries between illustration and background.

- Images that fill the screen need no frame.
- Images smaller than the screen and with good colour contrast to the slide background need no frame.
- Images smaller than the screen and with poor colour contrast to the slide background need a thin contrasting frame.

**Pointers**

Use arrows or other pointers whenever something specific should be noticed on an image. What appears clear to the presenter may be less obvious to the audience, even if explained verbally.

About graphs and detailed illustrations on slides, see *Graphs* on pages 44–46 and *Detailed illustrations* on page 47.
15. Image with good colour contrast to the slide background: No frame is needed.

16. Image smaller than the screen, with poor colour contrast to the slide background: A thin contrasting frame is needed.

17. Pointers enable fast perception. The arrow points at Frisland, a nonexistent island in the Atlantic Ocean on Abraham Ortelius’ Atlas from 1570.
Break slides are basically blank slides. Their function is to give the audience a visual break, devoting full attention to the spoken word in parts of the presentation with no visual support. The break slide lets the audience focus on the presenter.

Keeping the previous slide on the screen when the talk moves on to something else functions as visual noise, inspiring the audience to irrelevant thinking.

A short service text on the break slide prevents viewers from thinking that the show is over or that something is wrong. The service text can be the title of the presentation, the words ‘More to come’, the slide number, or a combination of these.
Multimedia

Short sections with audio or video clips can be welcome parts of a slide presentation if they are relevant and if they work. This requires restraint and rehearsal.

Online resources can be used as part of slide presentations when there is a reliable internet connection. With careful planning they can offer effective variation. However, many web sites have type that is too small to be readable projected on a screen.
Background

Don’t use background patterns or photos. They are visual noise. If they are noticed, they disturb the presentation. If they are not noticed, they are redundant.

Text slides and break slides always have a background colour, so do image slides that don’t occupy the full screen.

Black is a good background colour for most slide presentations for several reasons:

- A black slide background lets bright text stand out with maximum colour contrast. The content catches the eye, rather than the background.

- A black (or grey or white) slide background is compatible with all other colours.

- A black slide background reduces the effect of the imperfections of less than perfect screens (or walls) used for presentation.

The most obvious choices of background colour apart from black are white and grey. Other background colours can be used, but they should always be checked for functionality.

Some presenters work with two or three different background colours in one presentation and assign each colour, e.g. black, grey, and white, to a specific type of message.

To appear as clear as possible in the reduced size of this document, most of the examples in PowerNotes are shown with a white background.
29. Conspicuous background colours may be tiring, and may be incompatible with other colours.

20–23. Any slide presentation that is not extremely short should have a relatively calm background. Black, grey, and white are the best choices, leaving strong colours for text and images.
It is better to use a robust sans serif typeface in slide presentations, than to use typefaces with delicate details.

When a slide series must be shown on a computer other than the one on which it was created, it is best to use a commonly available typeface. Commonly available means one of the faces included in the Microsoft Office software package. If the presenter of PowerPoint or Keynote slides uses a typeface that is not installed in the computer used for the presentation the type will automatically change and unwanted rearrangements may follow. This does not apply if the presentation is stored and presented as a PDF.

Slide presentations are not the place for typographic subtleties. Rather than looking for the most advanced typeface, the presenter should use something like Arial, a robust sans serif typeface with acceptable space economy that is included in the Microsoft Office software package and is installed on practically all computers.

Bold and italic fonts should only be used for emphasis. Use them with moderation, never for long strings of text.
24. Arial is a robust, sans serif typeface in the Microsoft Office software package. It is available for presentation on any computer.

25. Gill Sans is not part of the Microsoft Office software package.

26. Typefaces with delicate details such as Didot should not be used on screen. However elegant they appear on the printed page, they create problems in on screen presentation formats.
Type size

The size of type on slides is decisive for readability. Type that is too small is unreadable. Type that is too large – visual shouting – is not easy to read either.

Standard
24 point text on slides is easily readable on the screen. This size should be chosen as standard.

Small text
Text smaller than 22 point is more difficult to read and should be avoided.

Large text
Text larger than 26 point occupies too much space. It is not easier to read than 24 point, but it can occasionally be used for effect.

Vertical space
Leading, the vertical space between successive baselines of type, should always be ample, 26 point or 28 point when using 24 point type.

Large rooms
Should type be larger when the slide presentation takes place in large rooms? Not necessarily. The screens in large rooms are as a rule proportionally larger than the screens in small rooms.
27. 18 point type is very space-economical but hard to read on the screen.

28. 24 point type is both space-economical and readable on the screen.

29. 36 point type is not space-economical and hardly more readable on the screen than 24 point.
Type emphasis

The presenter’s full control of the viewer’s attention to what is said and what is shown is essential to the success of a slide presentation. Design should guide the viewers. Viewers should know where to focus their gaze on the screen. The presenter can achieve this goal by only showing one simple item at a time.

The presenter can emphasize type to guide attention and to indicate importance by using colour, size, weight, italics, capitals, typeface, etc. Some designers use several of these effects at the same time. That is bad attention economy. One form of emphasis is enough. As a rule, one form should be colour. Clear yellow or clear green type gives a crisp effect on a black background. On a white background, use green, blue, and red type for emphasis.

Don’t use underlining for emphasis in slide presentations. In most typefaces, including Arial, underlining collides with the descending lines of lower case g, j, p, and q.
Skyscraper challenges

- Vertical transport
- Load bearing
- Temperature
- **Construction time**
- Wind
- Earthquakes
- Terrorism

30–32. Colour change for emphasis.
Simple lists

Many of us ridicule slide presentations for their bullet lists.

The function of bullet lists is to help the audience notice and remember important points in a presentation. Such lists may be good in moderation.

An unindented headline combined with indented points can sometimes make bullets obsolete. If indicating a sequence is appropriate, numbered points may be useful.

Hierarchical bullet lists with several levels of indentation are complicated to read and should be used with restraint.
33. A flush left headline combined with indented points can sometimes make bullets obsolete.

34. Numbers instead of bullets describe a sequence and are easier for reference.

35. Bulleted or not, hierarchies of indented lines are, difficult in print, and more difficult on screens.
Growing lists

Rather than showing a full list from the beginning, it is often good to build up the list in concert with the speech. That prevents the audience from getting ahead of the presenter.

Working with growing lists — especially growing lists with colour change of the current point — may take extra design work and extra slides, depending on the software. However, this extra work is generously rewarded by the control this affords the presenter over audience attention.

The same effect can sometimes be more elegantly achieved by de-emphasizing, dimming previous points in a bullet list and reserving ‘full light’ for the point under discussion. On a black background the current point can be white, while the previous points change to a — still readable — light grey. On a white background the point under discussion can be black, while the previous points can be grey.
36–40. A growing list without colour change. Such a list can also be used to show the progress of a slide presentation.
41–45. A growing list with colour change for emphasis. Such a list can also be used to show the progress of a slide presentation.
46–50. A growing list with dimmed past points to draw attention to the latest line shown. Such a list can also be used to show the progress of a slide presentation.
A growing list with dimmed past points to draw attention to the latest line shown. Such a list can also be used to show the progress of a slide presentation.
A growing list with dimmed past points to draw attention to the latest item shown. Such a list can be used to show the progress of a slide presentation.
Graphs illustrate relationships, comparisons, and change that cannot easily be explained with words alone.

To work in screen presentations, graphs must meet three conditions:

- Be simple
- Have a title
- Have easily readable type

Tables
Tables are facts organised in columns and rows. These are problematic in slide presentations. They seldom work well because they contain too much information and have too small type. Tables can often be replaced by bar charts.

Pie charts
Pie charts compare percentages, or fractions of a whole. Pie charts should only be used with a maximum of four or five slices. The slices should be organized by increasing size, clockwise, starting at 12.
It is possible to emphasise one slice by exploding it.
If there are only two fractions or percentages to be compared, it is easier to present them as fractions or percentages side by side without using a pie chart.

Bar charts
Bar charts, vertical or horizontal, compare values. Vertical bar charts can compare values at different times. If there are several bars, a line chart may be a better solution. Horizontal bar charts can compare values at one time. The landscape format limits the number of horizontal bars.

Line charts
Line charts (fever curves) are typically used to show development over time. The time is shown along the horizontal axis while the corresponding values are shown along the vertical axis.
Table on slides should have as few columns and rows as possible.

Pie chart with one exploded slice. Pie charts on slides should not have more than four or five slices.
Vertical bar charts on slides should have as few columns as possible.

Horizontal bar charts on slides should have as few bars as possible.

Line charts with horizontal grid lines facilitate reading trends. Line charts with vertical grid lines facilitate reading isolated values.
Detailed illustrations including all types of complicated charts and technical drawings represent a difficult problem in slide presentations. Ignoring the problem and just pretending that the slide shown on the screen is a page in a book where the audience can see everything in detail is not a good solution.

In principle, there are four ways to deal with illustrations with details too small for the screen:

1. The presenter can say that the illustration will be given as a handout after the presentation.

2. The presenter can make a break in the slide presentation, give the audience a handout with the illustration in question, and discuss it immediately before continuing the proper slide presentation.

3. The slide designer can simplify the illustration without losing the features that need to be explained.

4. The slide designer can divide the illustration into clearly visible parts that can be shown one at a time. Later, he can perhaps show the full illustration.

Each of these possibilities has its strengths and weaknesses and should only be chosen after careful consideration.

Sometimes, general features, for instance the composition of a painting, can be discussed without attention to the details.
General arrangement

Text on slides should be asymmetrical, running from left to right. This complies with our habit of reading in a Z-pattern. As a broad rule, symmetry should not be sought. Symmetrical arrangement of a text of more than one line means that reading starts at different horizontal positions, which means reduced readability.

As a rule, text on slides should begin at the top of the screen. One reason is that, when part of the screen is blocked, it is typically the lower part. Another reason is that beginning at the top allows text on all slides to begin at the same position, no matter how much text. This adds to the clarity of the presentation.

Illustrations that are narrower than the screen can be centred horizontally, but should, for the same reasons that apply to text, be positioned at the top of the screen.

Skilled developers of slide presentations can draw on their expertise to deviate from these rules, making idiosyncratic presentations in the same way that skilled writers can sometimes present their messages in particular ways to great effect.
Skilled presenters make their own idiosyncratic slides. Courtesy Gerhard Besau.
As a broad rule, text on slides should develop incrementally on the screen from the upper left corner to the right and down. However, the presentation may sometimes benefit from other spatial arrangements. Words can achieve a special meaning through their spatial location on the screen.

If a process to be described in a slide presentation consists of four consecutive steps, it may, for instance, prove useful to present the process as a staircase consisting of four steps beginning with the lower step in the left side of the screen and then moving to the right and up slide by slide. The typographical arrangement and the sequence of the presentation go hand in hand, saying more than several words. Also, this arrangement breaks the general right/down movement of text with good reason. Variety in form is used to show variety in meaning.

Other dynamic patterns are possible, hierarchies being one example. The crucial factor is a tight structural analogy between what is described and the way it is described, between the real world and its description.
69–72. The design maturity scale developed by Danish Design Centre is best illustrated by a staircase.
73–75. Good slides clarify the spoken message. Courtesy Martin Foessleitner.
76–79. Colour used to guide the attention of the audience.

<table>
<thead>
<tr>
<th>PowerNotes</th>
<th>Matrix adapted after Pierre Guiraud: Semiology, 1975</th>
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<tbody>
<tr>
<td></td>
<td><strong>RULE FOLLOWING</strong></td>
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<td>OBJECTIVE</td>
<td>Personal ID</td>
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<td></td>
<td>Identity</td>
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<td></td>
<td>being</td>
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<tr>
<td>SUBJECTIVE</td>
<td>Identity</td>
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The advantage of slide presentations is that they work by ear and eye both. This is also the main cause of problems. Speech and slides must work in concert. Special conditions apply for talking while showing slides.

Break slides
The function of break slides is to let the audience concentrate on listening to the presenter.

Image slides
The function of image slides is to illustrate what the presenter talks about. This is where slide presentations are at their best; they address hearing and seeing at the same time so that one supports the other. Sometimes, an image slide can conclude an argument without the presenter’s comments.

Text slides
The function of text slides is to show in writing what can better be read than heard. Two basic rules apply:

1. Text on screen should be short.
   Write short cues instead of full sentences.
   The audience has come to hear you, not to read your slides.

2. The presenter should stop talking while giving the audience time to read text on slides.

The few situations where the presenter can talk while showing new text slides include showing absolutely succinct cues, adding absolutely succinct points to a list, and confirming difficult words.

The presenter should not read long texts from the screen.

If the presenter must show long text, the presenter should not say anything else while presenting the long text until after the audience has had sufficient time to read it. Some attendees will listen without reading, some will read without listening, and some will try to listen and read at the same time and lose understanding of both speech and what is written.
Few people are natural presenters. Others think they are, but they are not. All of us can improve our presentations by learning, rehearsing, and practicing. Most good presenters were not good before they were good. The rules presented here are not hewn in granite, but they are useful.
Presentation

Engagement
Audiences are sensitive to the presenter’s engagement. Is he merely obliged to make this presentation or is it a matter of deep personal involvement? If the presenter doesn’t find his subject interesting, the audience probably won’t either.

Confidence
Present your material with confidence. Easier said than done, but confidence can be achieved by robust preparation and rehearsal. Know your message. Know your slides. Know your audience.

Light on
Don’t switch off the light to operate in darkness. The audience wants to see you, and you want to see them. Modern projectors are strong enough to work with light in the room, perhaps slightly dimmed. Spotlights should not point directly at the screen.

Stand naturally:

- Don’t stand with your hands in your pockets.
- Don’t stand with your hands in a fig leaf position.
- Don’t stand with your hands at your sides.
- Don’t touch your face.
- Do use body language to drive home arguments.

Move/don’t move:

- Do stand beside the screen.
- Don’t stand or move in the dark.
- Do move around if you feel like it.
- Don’t move into the front of the screen.
- Don’t move when you change slides.

Face the audience
Don’t talk to the screen while turning your back to the audience. Maintain eye contact if possible.

Be someone:
Be yourself.

Practice
It cannot be said too often: practice makes the master.
Be prepared:

- Rehearse.
- Come in good time.
- Check the equipment.

If the time is short
Winners are good at plan B. Be prepared to shorten your lecture if necessary.

Laser pointers
Don’t jump in front of the screen to point at a detail. Use laser pointers with moderation.

Handheld presenters
A handheld presenter allows you to advance the slides from anywhere in the lecture room. Most presenter-tools include a laser pointer.
Questions

A final Q and A session will sometimes be the part of a slide presentation that the audience remembers best. Be prepared to take questions if time allows.

Rehearse answers to the most likely questions. Prepare special slides if needed to answer highly likely questions.

Prepare a first question in case nobody wants to break the ice. If possible also prepare a short encore, an interesting, perhaps funny, case or incident that supports your main argument.

Don’t say That is a good question. It is a too often heard cliché. Rather, dignify the good question with a good answer.

Repeat questions and clarify if necessary.

Don’t be afraid to say I don’t know that.

Show your superiority by giving kind answers to aggressive questions.

If there is no time left for questions, you can invite attendees to meet you during the coffee break or email you.
Handouts

It is a good idea to leave something behind after a slide presentation. Presentations are often given along with other presentations at conferences and similar events, a fact that puts extra demands on the viewer’s memory.

If the audience is told beforehand that a handout will cover the main points they will not feel obliged to take notes, and they can concentrate on listening. Handouts can also include information and references that don’t fit into a slide presentation.

Prefab handout formats with prints of the slides and ruled space for the listener’s notes given before the presentation inevitably create absent minded listeners.

The question is what the audience should be given when. Several possibilities are available. The right choice depends on the kind of objective, message, and audience. Do you remember the why, what, and who questions on page 8?

Manuscript
Participants at academic conferences will often get the manuscript as part of their conference papers. Sometimes, and only sometimes, a full transcript may be a good idea in other fora.

All slides
Handing out all slides, hard copy or digitally, is easy but seldom a good idea. Slides that work well accompanied by the presenter’s spoken words in a presentation are not necessarily understandable or useful when standing alone.

Selected slides
Prints of carefully selected slides with complicated formulas or technical details may be a great help to the audience. Remember to mark them with the sender’s communication details.

Made to order
In most cases, the ideal handout solution is a separately prepared paper with carefully edited text and illustration. Preparation takes time. Good design often does.

Other material
Other material may include carefully selected company literature, technical information that is not suitable for the presentation itself, and other documentation.
Before/after
When should handouts be handed out? After the presentation. Only
in rare situations when the presenter wants to discuss something
that doesn’t fit the screen should the handouts be handed out
before or during the presentation.

Credit
No matter what kind of handout is chosen, it should always be
clearly marked with the sender’s name and communication details.
Be sure that the presentation does not infringe on any intellectual
property rights.
By now, you have been through the three phases of a slide presentation: planning, design, and delivery. Before filing PowerNotes on your ‘need to know’ shelf, you should consider how to measure the quality of your presentations. The Feedback chapter suggests how. Measurement inspires improvement.

As well, you might want to re-read the warnings of slide presentations. The Pathology of slide presentations enables you to do that.

Finally, you might want to have a second opinion about slide presentations. Further reading presents four good books.
Presenters should welcome all the honest feedback they can get. Presenting is a lifelong learning process. One way to get useful feedback is by encouraging event organizers to ask attendees to complete evaluation sheets.

As a presentation can be good in several dimensions it is a good idea to ask for evaluation on more than one aspect. Evaluation given as answers to questions like *Was it a good presentation?* is not particularly useful to the presenter.

A better way to get useful information is to make questionnaires with three quality dimensions:

<table>
<thead>
<tr>
<th>Give points 1 to 5  (1 = least, 5 = most)</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Was the subject of the presentation interesting?</td>
</tr>
<tr>
<td>– Was the content chosen for the presentation interesting?</td>
</tr>
<tr>
<td>– Was the presentation style good?</td>
</tr>
</tbody>
</table>

Feel free to comment
This list of common errors in slide presentations repeats some of the important features of slide design presented in *PowerNotes*. Use it as a quality check for your next presentation.

The purpose of slide presentations is to deepen, clarify, and strengthen pitches, speeches and lectures. However, slide presentations frequently fail. The reasons concern perception, cognition, and memory: the slides cannot be seen, read, understood, or remembered.

The text content of a slide presentation cannot be *seen* when

- text and other visual elements are too small,
- the colour contrast between figure and ground is too little.

The text content of a slide presentation cannot be *read*, when

- the text cannot be seen,
- the text is presented in too short a time,
- type and other graphic elements are unclear,
- the graphic arrangement is unclear,
- the presenter disturbs reading.

The text content of a slide presentation cannot be *understood* when

- the text cannot be read,
- there is too much text,
- the text is presented in too short a time,
- there is too much visual noise.

The content of a slide presentation can perhaps not be *remembered* in necessary detail, when

- the presentation is not supported by a carefully prepared handout.
Most books dealing with slide presentations emphasize planning, design, or delivery. Some books explain how to use PowerPoint software; many are critical to the ready-mades delivered by PowerPoint, and almost all present visual solutions that are less than perfect.

Four books stand out and supplement, each in its own way, the reading of PowerNotes:

Stephen M. Kosslyn
*Clear and to the Point*
*8 Psychological Principles for Compelling PowerPoint Presentations*

Stephen M. Kosslyn, a professor of psychology at Harvard, applies eight psychological principles to a great number of presentation issues. Although the graphic solutions are not ideal, this book is valuable for everyone interested in understanding the psychology behind professional slide presentations.

Nancy Duarte
*Slide:ology*
*The art and science of creating great presentations*
O’Reilly Media, Sabastopol, California, 2008

Nancy Duarte runs a leading design office specialising in slide presentations in Silicon Valley. She offers a rich selection of experience about planning and designing slide presentations. Most of Duarte’s examples are work consuming storytelling projects. Nevertheless, her advice is absolutely applicable on a more modest scale.
Stephen Bayley & Roger Mavity  
*Life’s a pitch*  
*How to be businesslike with your emotional life and emotional with your business life*  

Stephen Bayley is an acclaimed design writer. Roger Mavity is the CEO of the Conran business empire in London. *Life’s a Pitch* is about all kinds of presentations. It’s extremely well written, it’s funny, and, most important, chock-full of useful real-world knowledge.

Robert R. H. Anholt  
*Dazzle’em with Style*  
*The art of oral scientific presentation*  

Robert R.H. Anholt, Professor of Zoology and Genetics at North Carolina State University, describes how scientific presentations can be composed with several practical examples. Although aimed at academics, his thoughts may interest other kinds of presenters as well. One useful issue is zooming in and zooming out, going from context to focus to context.