VISUAL LOGORRHEA

On the Prevalence of Slideuments

Contact Info Tim.Themann@die-computermaler.de http://die-computermaler.de

TIM THEMANN

Recent literature on presentation design advocates highly visual slides avoiding a lot of text. Reading and listening at the same time is assumed to be impossible; long bulleted lists of text are thought to be distracting from the speech and therefore to be avoided. Although the critique of so-called "slideuments" is ubiquitous, there is little to no quantitative research on their prevalence in presentation design. In order to close this gap, almost 1,500 random presentations freely available on the internet have been examined. Besides the analysis of the textual content (i.e. word and line counts) that forms the primary basis of this publication, font and layout have also been analyzed. The results have been compared with different advice on presentation design found in a selection of widely known sources.

INTRODUCTION

The term "slideument" was first coined by Garr Reynolds.¹ As a portmanteau created from "slide" and "document", it basically refers to any presentation consisting of enough textual content to merely "speak for itself". Although on first sight, a document which "speaks for itself" appears to be something handy, slideuments are thought to distract the audience from the orated content of the presentation – the actual speech.² Most people can read much faster than any speaker can speak and almost nobody can effectively read and listen at the same time. Consequently, slideuments are often referred to as one of the typical reasons for "death by PowerPoint".³

The fact that slideuments are frequently seen in presentations and "death by PowerPoint" is a widespread issue is widely noted.⁴ Nevertheless, there is almost no quantitative research on the prevalence of slideuments in presentation design. The aim of this publication is to close this gap.

Though the term "slideument" is extensively used in recent publications and blog posts on presentation design and rhetorics, it is not

¹ Reynolds, Garr, Presentation Zen: Simple Ideas on Presentation Design and Delivery (Berkeley: New Riders, 2008), 68-70.

² Reynolds, Garr, "Slideuments' and the catch-22 for conference speakers," April 05, 2006, http://www.presentationzen.com/ presentationzen/2006/04/slideuments_and.html (accessed January 1, 2014).

³ A term first coined by Angela R. Garber in 2001, see Garber, Angela R., "Death By Powerpoint," April 1, 2001, http:// www.smallbusinesscomputing.com/biztools/article.php/684871/Death-By-Powerpoint.htm (accessed February 14, 2014).

⁴ Microsoft, PowerPoint, Office and Windows are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries. All other company and product names may be trademarks of their respective companies registered in the United States and/or other countries. PowerPoint as the predominant application for presentation creation merely serves as an example in this document. It is assumable that most of the findings will apply to other products of the same class, too.

explicitly defined anywhere. Most publications on presentation design (including those of Garr Reynolds) focus on how to create effective presentations – which includes avoiding slideuments. Consequently, these publications do not talk a lot about bad presentations. Nevertheless, for the purpose of this document, we need a definition or at least some metrics which can be applied to our sample.

Looking at different specific guidelines on textual content for effective presentations, we can make assumptions regarding what a bad presentation might look like and especially what kind of criteria and metrics we can apply:

• GUY KAWASAKI recommends a maximum of ten slides and a minimum font size of thirty point.⁵ Using a typical presentation template with an aspect ratio of 4:3, this results in a maximum of about 10–12 lines of text (not including the slide title line).⁶

Unfortunately, people tend to treat advice intended for special cases (in this instance: presentations in front of venture capitalists) as universal rules. The ten slide maximum rule might be applicable to an entrepreneur's pitch but definitely will not fit into a university lecture scenario. The thirty point "rule" will almost certainly lead to the creation of a slideument if followed literally.

Searching the internet for guidance on presentation design, one cannot fail to notice the following: Shortly after deducing a *general* rule from some *specialized* recommendations, virtually the same sources start to criticize the "rule" for not being suitable for any case. It is apparent that people tend to look for simple-to-follow, easy "rules". On the other hand it is comforting to see that they are still able to identify a improper generalization.

Marcus Tullius Cicero: De oratore

cumque esset omnis oratoris vis ac facultas in quing partis distributa, ut deberet reperire primum quid diceret, deinde inventa non solum ordine, sed etiam momento quodam atque iudicio dispensare atque componere; tum ea denique vestire atque ornare oratione; post memoria saepire; ad extremum agere cum dignitate ac venustate.

 Etam ina cognoram et acceperari, ante quam de re diceremus, initio conciliandos eorum esse animos, qu audirent; deinde rem demonstrandam; postea controversiam constituendam: tum id quod nos

⁵ Kawasaki, Guy, "The 10/20/30 Rule [sic!] of PowerPoint," December 30, 2005, http://blog.guykawasaki.com/2005/12/ the_102030_rule.html (accessed January 1, 2014).

⁶ Currently, this is the most widespread aspect ratio for presentation slides. As widescreen projectors become more and more popular, starting with PowerPoint 2013, 16:9 is the new default aspect ratio for powerpoint slides. This might cause slides to become even more textual.

- SETH GODIN explicitly recommends, "No more than six words on a slide."⁷ This advice will indisputably avoid slideuments. Nevertheless, if not accompanied by a meaningful visualization or image, in order to leave an impression, these six or less words would have to be really strong and meaningful words.
- GARR REYNOLDS does not give metrics in terms of numbers; instead he gives the nonspecific guideline that "Projected slides should be as visual as possible [...]", "The verbal content [...] come[s] mostly from your spoken word."⁸ This general advice has compared to the exact numbers advised by many others the unbeatable advantage of not being very prone of being changed to a dogmatic "rule". Nevertheless, Reynolds clearly advises not to put the textual content (which he explicitly refers to as "verbal content") into the slides. Basically, text put onto slides should be reduced to what is necessary to be illustrative (in the same way an image can be illustrative).
- NANCY DUARTE referring to and further specifying Reynolds' critics on slideuments – differentiates between slides packed with "more than 75 words" and thus being a "document or whitepaper", slides containing "50 or so words" which "serve as a teleprompter" and "true presentations" which "reinforce the content visually".⁹
- EDWARD TUFTE'S essay "The Cognitive Style of PowerPoint: Pitching Out Corrupts Within" is certainly one of the mostcited (and one of the harshest) criticisms on PowerPoint.¹⁰ As regards textual content, his critique is twofold: First, he states that the "cognitive structure" of PowerPoint presentations "[...] harms the quality of thought [...]" through "[...] foreshortening of evidence and thought, low spatial resolution, an intensely hierarchical single-path structure as the model for organizing every type of content [...]".¹¹ Second, he criticizes the "[...] much *lower* rates of information transmission than the talk itself [...]" and the "[...] poverty of content [...]" caused by



⁷ Godin, Seth, "Really Bad Powerpoint," January 29, 2007, http://sethgodin.typepad.com/seths_blog/2007/01/really_bad_powe.html (accessed January 1, 2014).

⁸ Reynolds, Garr, Presentation Zen: Simple Ideas on Presentation Design and Delivery (Berkeley: New Riders, 2008), 68.

⁹ Duarty, Nancy, Slide:ology: The Art and Science of Creating Great Presentations (Sebastopol, CA: O'Reilly Media, Inc., 2008), 7.

¹⁰ Tufte, Edward R., *The Cognitive Style of PowerPoint: Pitching Out Corrupts Within* (2nd ed. Cheshire, Connecticut: Graphics Press LLC, 2006).

¹¹ *Ibid.*, 4.

limited space and large type.¹² From his opinion, "It is thoughtless and arrogant to replace the sentence as the basic unit for explaining something.",¹³ specifically with bullet lists, and he recommends to "[...] replace PP [PowerPoint] with word-processing or page layout software."¹⁴

- For his essay, Tufte examined slides in order to get some numbers on the count of words per slide in typical presentations. These numbers will be compared to the numbers found in this analysis.
- A lot of advice regarding the maximum number of words or text lines (specifically, "bullet points") on a single slide refers to "the magical number seven, plus or minus two". Though I would consider this application of Miller's research as an invalid over-simplification, the frequently recommended maximum of seven lines with a maximum of seven words is a quantitative metric is applicable.¹⁵
- In addition, there are quite a lot of recommendations or "rules" in the form of "x minutes per slide". Whereas time constraints unquestionably limit the amount of slides which could be shown during a presentation, a direct linear correlation between time and the number of slides shown is to be expected only in case of pure slideuments, i.e. if the text displayed by the slides is merely *read* to the audience. In case of more visual slides, a direct relation between slide count and time is contrary to expectations.

The aim of the following analysis is to compare a corpus of more or less random presentation files against the recommendations given above. That way, some insight will be gained into the current use of PowerPoint for presentation design, the ubiquity of textual content on slides and last but not least into the prevalence of slideuments.

Looking at what we could derive from the above, it becomes evident that from the metrics point of view, being a slideument is a characteristic of a single slide, not of a presentation. A highly visual slide, on the other hand, would almost surely only contain a very

¹² Tufte, op. cit., 16.

¹³ Ibid, 17.

¹⁴ Ibid., 31.

¹⁵ Miller, George A, "The magical number seven, plus or minus two: Some limits on our capacity for processing information," *Psychological Review* 63 (1956), 81–97.

limited amount of text. As empty slides are unquestionably very peculiar, the number of words on a slide is virtually reciprocal to the degree of visualness of the slide and consequently can serve as a valid metric for the purpose of this analysis.

MATERIALS AND METHODS

The following chapters describe the methods used to acquire the sample presentation files used for analysis, the necessary data cleansing and the analysis itself. The intent of this chapter is to make the results reproducible. Any reader focused mainly on the outcome is advised to (at least first) proceed to p. 8 (chapter "Results") or (cursorily) p. 18 (chapter "Summary and Conclusion").

SAMPLE DATA

In order to get a more or less random sample of publicly available presentation files, a Google search for english-language documents of type "PPT" has been conducted (basically, the search string was "filetype:ppt" with no other keywords). In addition, an analogous Bing search on "filetype:ppt language:en" has been carried out. From the search results, the first 1,000 files have been downloaded (if available and possible within a time limit of 300 seconds). As Google and Bing's search algorithms are unpublished, it is uncertain whether the sample is perfectly random from the statistical point of view. Though the use of two different search engines reduces the risk, the possibility of a systematic error caused by the sampling methodology should be kept in mind.

Only PPT files have been included in the Google sample, and the more recent filetype PPTX has been omitted. At the moment of writing, Google has indexed about 4.230 million PPT files compared to 0.773 million PPTX files (16%). Bing does not distinguish between PPT and PPTX (and has indexed about 7.090 million files). In the Bing sample, there are 751 URLs pointing to PPT files compared to 230 URLs pointing to PPTX files (23%). As presentations stored as PPTX files must be more recent by nature, the omission of PPTX files in the Google sample might cause some systematic error and should be kept in mind.

Not all URLs in the search results have been accessible and some files have been damaged.

SAMPLE CLEANSING

In order to remove the obvious duplicates, redundant files have been identified and removed based on their MD5 checksum. In addition, presentation files containing less than five slides have been removed from the sample – it is assumed that presentation files shorter than five slides might only represent a subset of the actual slides used in a speech and therefore are not suitable for analysis. All presentation files containing five or less slides have been categorized manually (for the findings, see chapter "Abuse and Misuse", p. 15); any file identified as an actual (very short) presentation has been added back in to the sample.

Notably, the percentage of presentation files shorter than 5 slides was nearly ten times higher for the Bing sample (40.2%) than for the Google sample (4.4%). The behavior of the search engines when searching for a specific file type as the only search term seems to be quite different. As we omit these very small presentation files from the sample, hopefully there is no remaining systematic error caused by this different behavior.

In addition, the Bing sample had quite a lot of files containing only non-english (mainly spanish) text. It looks like Bing determines the language by looking at the document metadata compared to Google which is known to determine the language by looking at the concrete content.

DEFINITIONS

Surprisingly, there is no universally accepted definition of what a word is. Despite the fact that virtually any word processor helpfully offers to count words, none offer an explanation of what a word actually is. For the purpose of this document, WORD COUNT is defined as *the number of sequences of three or more letters or one of the commonly used one or two letter sequences ("words"), both separated by a non-letter character.*¹⁶ In addition, CHARACTER COUNT is defined as *the number of characters in a string not including whitespace.* A LINE OF TEXT is what PowerPoint 2013 thinks is a line.¹⁷

		Google	Bing
	URLs	863	981
-	Host not resolved	193	20
-	Timeout	20	5
-	Not found	52	23
-	Other error	22	11
-	File damaged	7	3
+	File repaired	3	1
-	Duplicates	5	10
=	Remaining files	567	910

i, a, ad, am, an, as, at, be, by, do, ex, go, he, if, in, is, it, me, my, no, of, ok, on, op, or, ox, so, up, us, we

¹⁶ A subset of "Two-letter words," Oxford Dictionaries, Oxford University Press, http://www.oxforddictionaries.com/us/words/two-letter-words (accessed January 27, 2014).

¹⁷ PowerPoint seems to resemble what is shown on the screen: Every single line of text in a shape (including slide titles) is counted as a line.

DATA ANALYSIS

The 1,477 presentation files remaining after the sample cleansing have been analyzed using a script specifically developed for that purpose. Basically, the script iterates through the slide deck and each slide's shapes and collects text and metadata information. For any shape which contains text, the text is extracted and reduced to actual words (see definition above). In addition, all "runs" within a text (a "run" in the PowerPoint object model terminology is basically a continuous sequence of text with the same attributes as regards font size and type, emphasis etc.) have been treated the same way in order to get the numbers for the font and font size distribution.

Any text found on the slide masters is automatically omitted by the script. On the other hand, text rendered as a bitmap is not recognized and will not be counted. The same is true for any textual data embedded as an object (for example, a spreadsheet embedded into a slide). Basically, the analysis focuses on text typed into the presentation software – which is what slideuments are made of. As there might be text which is omitted by the technical reasons described above, the real word counts might be even higher. During further analysis, it will become pretty clear that an even higher word count will not affect the conclusions made from the results.

DATA CLEANSING

It was assumed that the raw data had to be cleansed manually in order to limit the results to the actual textual content of the presentation, that for the purpose of this analysis, copyright notes, legal disclaimers and comparable elements had to be removed from the data set manually. When inspecting the sample data manually, luckily only 2.75% of the characters fell into that category. Therefore, it is assumed that the positive effect of further data cleansing would be outrun by the possibility of a systematic error introduced by that manual and more or less arbitrary procedure.

Title slides (slides of layout "Title", about 8% of the sample) have not been omitted from our analysis on purpose: First, the PowerPoint slide layout is not a safe indicator for the real intent of a slide. Second, many title slides contain a lot of textual information not limited to the actual title and the presenter's name. In fact, there are instances of title slides including even a short summary of the presentation's topic.

RESULTS

The data automatically extracted from the sample presentation files have been aggregated and analyzed. The intend of this chapter is to present the analysis' results and their interpretation. In addition, some analysis has been done on the application of PowerPoint for non-presentation purpose found during the inspection of the sample data.

SLIDE COUNTS

About half of the presentation files in the sample contain 20 slides or less. An average presentation consists of $\bar{x} = 25.4$ slides with a surprisingly high spread (s = 23.7) and a median of Md = 20. Only about 10% of the slide decks are larger than 45 slides.



Guy Kawasaki's advice of a maximum of ten slides is only met by 19.4% of the presentations. This finding is not remarkable at all, because Kawasaki's recommendation clearly focuses on pitches held in front of venture capitalists – a focus which might be shared by very few of the presentations in the sample analyzed.

The fact that there are only a few very long presentations is almost certainly related to the obvious truth that time constraints are the limiting factor for presentation length (and consequently are an indirect limit for the slide count). This limit appears to be widely understood by people creating slide decks.

WORD AND LINE COUNTS

On an average slide, there are $\bar{x} = 30.8$ words with a very high spread (s = 31.0) and a median of Md = 24.

Though this seems to be a high number of words per slide, it is far less than what Edward Tufte found (a Median of Md = 40) – a discrepancy which almost surely is related to the fact that Tufte limited his analysis to "text-only *slides*", whereas this analysis is based on a corpus of entire *presentations*.¹⁸ Limiting the sample to slides of layout "Object" (see chapter "Slide Layouts" on p. 13) containing exactly two shapes with text (a subset of the sample which should almost match Tufte's sample criteria), the median is Md = 35 (\bar{x} = 41.1, s= 30.5). Remembering Tufte's critic on "[...] much *lower* rates of information transmission than the talk itself [...]", these even lower numbers support Tufte's findings.¹⁹



Only about a quarter (23.1%) of all slides honor Seth Godin's advice not to have more than six words on a slide. Taking into account that about 8% of all slides in the sample are title slides (according to their slide layout, see below), we can clearly state that virtually nobody follows his recommendation. Whether it is realistic or not – it is ignored.

10.7% of all slides in the sample are what Nancy Duarte calls a "teleprompter" (50-69 words), 9.2% are what she defined as a "document" (70 or more words). This definitely does not mean that the remaining about 80% of the slides are highly visual or suitable as a good support for the orated speech. From the author's experience, a highly visual slide as suggested by most authors cited in this publication does not need (or have space for) more than a couple of words; in fact, most of them follow Godin's advice. Subtracting the 8% title slides, it is safe to say that only about a fifth of all slides in

¹⁸ Tufte, op. cit., 16.

¹⁹ Ibid.



the sample might meet that criteria, whereas at minimum another fifth is to be considered a slideument.

An average slide in our sample has $\bar{x} = 8$ lines of text (s = 6.8, Md = 8), and about half of the slides (49.0%) have seven or less lines of text and hence honor the "rule" of the "magical number seven". Only 10% are packed with 15 or more lines of text. Remembering that 8% of the slides are title slides (see above), we can conclude that nearly two thirds of the slides are packed with too much text and thus almost certainly distract from the spoken content.

Surprisingly, there is no correlation between the number of slides in a presentation and the average number of words per slide (r = 0.0178). There is neither an indication that people forced to present only a limited amount of slides tend to put more content on their slides nor that people creating presentations made of many slides also incline towards using many words on their slides.

FONT SIZES

The font size within a shape containing text can vary, consequently, font sizes have been analyzed by "run" (which is a continuous sequence of text of the same formatting as regards font type, size and emphasis). The frequency is shown based on both number of occurrences and the actual count of characters (not including whitespace).



The font size distribution practically follows the defaults of Microsoft PowerPoint, especially the defaults for hierarchical bullet lists (for PowerPoint 2013: 44 pt. for the slide title, 28, 24, 20 and 18 pt. for the text). This leads to the assumption that at least in bulleted lists, there is very little custom design work being done.

Recent versions of PowerPoint automatically adjust the font size in a shape as needed in order to fit any amount of text into the shape. For example (as of PowerPoint 2013), the font size of the slide title is reduced to 40 pt. when needed and the font size of bullet lists is decreased in steps down to 5 pt. In addition, when decreasing the font size manually, PowerPoint does this in certain steps (44, 40, 36, 32, 28, 24, 20, 18, 16, 14, 12, 11, 10.5, 10 pt. and further down to 1 pt. [*sic*] in one-point steps). Thus, the only unanticipated outcome of the font size spectrum above is the very low prevalence for 10.5 point.





Only about one quarter to one fifth of the textual presentation content follows Guy Kawasaki's recommendation to use a minimum font size of thirty points (25.6% of all occurences, 19.7% of all characters). Taking into account that a considerable amount of text written in larger font sizes is contained in slide titles, virtually no actual presentation content honors his advice.

Assuming that 24 pt. is the smallest font size readable by anybody in a larger audience, more than two fifth of all text is at least barely readable (if not too small to read) – an additional distraction for the audience, beyond the distraction already caused by far too much text.

FONTS CHOICES

Most of the characters have been formatted in a font which has been or is PowerPoint default (Times New Roman, later Arial and now Calibri, together 69.2%). 95% of all text found on the slides is formatted in a font which is delivered with the operating system (Microsoft Windows²⁰ or Apple Mac OS²¹) or Microsoft Office. We can assume that the distribution of fonts about exactly follows what was the default at time of creation (of the presentation or the presentation template it is based on). In conclusion, most of the presentations or their respective templates might not conform to corporate standards (which do not base on default fonts in many cases).



²⁰ Microsoft Inc., "Microsoft Typography - Fonts and Products", Accessed February 16, 2014, http://www.microsoft.com/typography/ fonts/.

²¹ Apple Inc., "OS X: Fonts included with Mountain Lion", Accessed February 16, 2014, http://support.apple.com/kb/HT5379. Apple and Mac OS are trademarks of Apple Inc., registered in the U.S. and other countries.

Only 3% of all text is formatted in a font supplied by 3rd parties – another indication that there are almost no specific design customizations being done (and that practically nobody wants to pay type foundries or font designers for their work – or at least look for a suitable free font). Font choice is largely not recognized as a way to differentiate; in particular for recent presentations created using the very distinctive Calibri font, this is more than evident: "You cannot use Calibri and expect to create a 'PowerPoint that does not look like PowerPoint."²²

In summary, compared to the ubiquity of text, the importance of font choice appears to be astonishingly underrated.

SLIDE LAYOUTS

Only 17% of all slides are based on a blank slide layout, and more than half of the slides (58%) are created from a layout called "Object". The name of this layout is quite misleading: In fact, "Object" is a generic layout composed of a title shape and a generic shape which could hold virtually anything (bullet lists, but also tables, diagrams, SmartArt, [online] pictures and videos).²³ It is the default slide layout of PowerPoint. The default text in the empty shape says "Click here to add text" – which is what is done in case of about two third of all slides of layout "Object": 62.1% of all slides of that specific layout comprise exactly two shapes containing text (which almost doubtless are the two default shapes). 43.6% of all text lines and 48.3% of all words in the sample are on a slide of layout "Object".

When the first design specification for PowerPoint (at that time still called "Presenter") was written, Robert Gaskins (one of the inventors of PowerPoint) conducted a survey based on overhead transparencies he collected from all over the world during his work for Northern Telekom. In his sample, only 22% of all transparencies were text-only (mostly bullet-lists), whereas about "55% of the overheads contained bulleted lists, about 70% of the overheads contained bulleted lists, about 70% of the overheads combined both.".²⁴ This is something which apparently has changed since 1985 – not necessarily caused by the nearly universal availability of PowerPoint, but almost certainly also related to the ubiquity of





²² Schultink, Jan, Pitch It!, (Axiom One Ltd., 2012), accessed February 16, 2012, https://itun.es/de/xG72I.l.

²³ Screenshot used with permission from Microsoft.

²⁴ Gaskins, Robert, Sweating Bullets: Notes about Inventing PowerPoint (San Francisco and London: Vinland Books: 2012), 88-89.

presentations as a instrument of communication and the short time available to create them.

In his 2012 book "Sweating Bullets: Notes about Inventing PowerPoint", Gaskins further assumes that,

"A similar tally could be repeated now, using modern PowerPoint slides found on Internet slidesharing sites. My guess is that current PowerPoint slides would exhibit somewhat greater novelty, because novelty is so much easier, even despite the fact that most organizations use the PowerPoint defaults ultimately derived from these patterns of more than twenty-five years ago ."²⁵

- a nearby prediction, but nonetheless, the opposite is what turns out to be the outcome of our analysis. In fact, it looks like surprisingly uninspired uniformity instead of creative novelty is what people tend to create using PowerPoint.

In particular, to some degree, these findings at least partly prove Edward Tufte's hypothesis that PowerPoint created a specific " cognitive style"; he is indeed right that "[...] the standard method for making a presentation is to talk about a list of points organized onto stylized slides projected up on the wall.".²⁶ Gaskins point that "the style of PowerPoint's defaults and templates was shaped by analyzing a corpus of manually produced overheads that I had gathered" and consequently just reproduces a style already existent is certainly right, but nonetheless, since 1985 that style has become significantly less visual and increasingly reduced to hierarchical lists.²⁷

Almost certainly, this is not only caused by the limited amount of time available to create the lots of presentations needed in today's corporate communication culture, but also encouraged by the availability of pre-formatted (default) layouts – something which did not exist when Gaskins conducted his survey on transparencies handdrawn or created using a typewriter and a copier. On the other hand, the actual product's functionality does not seem to have a lot of influence on what the users do with it: The predominant slide

²⁵ Gaskins, *op.cit.*, 89-90.

²⁶ Tufte, *op. cit.*, 3.

²⁷ Gaskins, op. cit., 420.

layout "Object" is designed for flexibility – and still used merely for bullet lists.

ABUSE AND MISUSE

Whereas boring your audience with a slideument definitely has to be considered as PowerPoint *abuse*, there are also various forms of PowerPoint *misuse* which became evident during the inspection of the sample files. In particular, for very small presentation files (five slides or less, 26.5% of all files) which have been examined and categorized manually, a lot of unmistakeable misuse of PowerPoint as a DTP software has been found:

Desktop Publishing (DTP)			Presentation			
Certificate		0.3 %	Subset of presentation slides	74	5.0 %	
Placard or bulletin		1.4 %	Single presentation slide	114	7.7 %	
Form		0.4 %	Presentation or slide template	37	2.5 %	
Letterhead		0.1 %	Excercise or quiz	12	0.8 %	
Publication title page		0.1 %	Joke presentation or slide	4	0.3 %	
Classroom material		0.9 %	Slide redirecting to new download location	1	0.1 %	
Flowchart or other process diagram		0.6 %				
Organizational chart or other tree diagram		1.4 %				
Other diagrams		0.2 %				
Map		0.3 %				
Research poster		1.4 %				
Presentation handout		0.1 %				
Others	10	0.7 %				
	117	7.9 %		242	16.4 %	

7.9% of all PowerPoint files examined were not presentations at all, but some sort of use of PowerPoint for the creation of diagrams or (hugely one-page) documents like bulletins or posters. Using PowerPoint for these aims requires a lot of customization far beyond the defaults – something which turned out to be remarkable seldom for presentations, but apparently typical (if not needed) for these repurpose scenarios.

Highly astonishing is the frequent use of PowerPoint for the creation of research posters. We can assume that most scientists have more appropriate tools available and are unquestionably capable to learn how to use them. Nonetheless, the use of PowerPoint for this application is prevalent. Genigraphics, Inc. (the company which partnered with Microsoft providing a print service for PowerPointcreated 35 mm slides in the late 80s) even provides PowerPointbased templates and a special print service dedicated to the creation of research posters.²⁸

Many of the uses mentioned in the table above seem to be the product of Maslow's hammer, and almost none of them looks like the result of a serious search for "the best tool for the job" (which definitely is some sort of page-oriented DTP tool).

PowerPoint was initially developed with a clear focus on monochrome overhead transparencies (and later for the 2.0 version on 35 mm color slides), but is often used as "a very general editor for all kinds of 'sequence of single page' documents":²⁹

> "The same technical features which are present in Presenter [the name of PowerPoint until very short before the initial release] could be used to make any number of other one-page documents – flyers, posters, point –of-sale information, bill stuffers, sales bulletins, and so on. We expect some customers to discover this, and to use the product for purposes other than presentations."³⁰

From the findings above, it could be clearly stated that what we see here has been initially foreseen by the people at Forethought, Inc. (the company which initially worked on PowerPoint, bought by Microsoft in 1987).

A New Class of Presentation Documents

Not yet common enough to be in scope of this analysis, but prevalent enough to have been noticed during the investigation, there is a new class of PowerPoint documents evolving: "Presentations" not really intended to be *presented* to an *audience*, but intended to be *read* by a *single person* on the screen. For this specific type of document, Nancy Duarte recently coined the term "slidedoc", defined as "[...] a document created using presentation software, where visuals and words unite to illustrate one clear point per page [...]" which "[...]

²⁸ Gaskins, op. cit., 260-261.

²⁹ Ibid., 35.

³⁰ *Ibid.*, 104.

can be read and digested more quickly than either a document or a presentation." and has a high "spreadability".³¹

Sending presentation files or offering them for download is increasingly becoming a method of communication – including, but not limited to, corporate communication. Particularly, lecture notes for distance learning are more and more published as PowerPoint files intended to be read by an individual person on the screen. On the reception side, there appears to be almost no advantage of using presentation files instead of traditional written lecture notes: Current e-book readers and devices like tablets can display both types of publications; multimedia content can be embedded in any case. The apparent assumption is that the benefit lies on the production side: On first sight, creating a presentation might be thought of as being of less effort than preparing a traditional written document.

Remembering Tufte's hypothesis on the "Cognitive Style of PowerPoint" harming the "quality of thought", this development is definitely to be watched carefully.³²

There is little to no research on the implications of this trend for text production and reception. Taking into account the increasing prevalence of this new class of documents in particular for learning, this is a deficit to be urgently compensated. 17

³¹ Duarte, Nancy, *Slidedocs*, (Sunnyvale: Duarte Inc., 2014), accessed February 25, 2014, http://www.duarte.com/slidedocs, 6.

³² Tufte, op. cit., 3.

SUMMARY AND CONCLUSION

By analyzing a sample of nearly 1,500 random presentations freely available on the internet, the often cited thesis that extremely text oriented slide decks ("slideuments" assumingly not really appropriate to support the speaker's oral presentation) are ubiquitous has been confirmed:

- About two thirds of the slides are packed with too much text to be supportive for the orated speech, and about a fifth can be addressed as a "slideument".
- Two fifths of all text on slides has a font size below 24 pt. and therefore is to be considered nearly unreadable by a larger audience.
- Despite its undeniable flexibility proven especially by many forms of misuse as a DTP software, for presentation design, PowerPoint is mainly used using the defaults as regards font choice, font size and slide layout. There is very little additional design work being done, and almost no third party fonts are being used. Slides with a title line above a hierarchical bullet list are prevalent.

Ignoring the broad range of publications on presentation design advocating a highly visual style and omitting lengthy text and especially bullet points, presentation culture turned out to be mainly text-oriented. In addition, the value of design as an important part of the visual communication appears to be broadly underestimated.