

Supporting narrative flow in presentation software

Andreas Dieberger, Cameron Miner, Dulce Ponceleon

IBM Almaden Research Center

650 Harry Rd, San Jose, CA 95120, USA

+1 (408) 927 1470 (Dieberger)

{andreasd, minerc, dulcep}@us.ibm.com

ABSTRACT

Commercial presentation software focuses on authoring, rather than on supporting the presentation process itself. Typical slide navigation tools are disruptive to the presentational flow and could disclose slides early. We present a navigation tool for slide presentations based on design principles such as “never hide the current slide.” We kept the tool simple and easy to use to decrease the presenter’s stress during a presentation.

Keywords

Presentation tool, navigation tool, flow, calm technology

INTRODUCTION

Public speaking is a stressful experience for many people. Jerry Seinfeld once commented on this fact with the observation that “at a funeral most people would rather be in the coffin than give the eulogy.”

Commercial presentation software seems to focus on content creation, allowing us to create very elaborate presentations. However, once the presenter is on stage, there is little support for making the presentation run smoothly and for reducing the presenter’s stress.

Even seasoned presenters might spend considerable time tracking down a particular slide in order to answer a question from the audience. While she frantically navigates through slide sorters or related tools no slide is projected and the thumbnails shown by navigation tools are unreadable for the audience. Even worse, the audience gets confused by material, which is presented out of order.

Situations like these are, unfortunately, quite common. They severely interrupt the narrative flow, add to the presenter’s stress, cost valuable time and might undermine the audience’s perception of the presenter’s competence.

No matter how interesting the content, if a presentation is delivered poorly, it will be less effective. Therefore, any tool that makes the presenter’s job less stressful and ensures that the narrative flow is not broken has the potential to significantly improve acceptance of the talk.

Slide presentations are guided narratives, presented in a mostly linear fashion even if the presentation utilizes non-linear features, such as links. A likely reason these features are not used more is that they tend to be difficult to understand and use. As it is impossible to anticipate all audience questions anyway, using such features can complicate the presenter’s job without significant gain.

IMMERSION, ENGAGEMENT, AND FLOW

An audience experiences a presentation as a linear series of slides with accompanying narrative, which hopefully tells a story that is both *immersive* and intellectually *engaging*. These terms are commonly used to describe interactive fiction. Although the audience interacts with a presenter mostly through questions, we believe that presentations and interactive narratives have many similarities.

In particular, we think that for a presentation to *work* it needs to be *both* immersive and engaging. It then achieves a state of *flow*, which is characterized by the feel of “performing both supremely well and effortlessly, and, although the context for flow generally involves well-defined rules, participants (the presenter) feel their options for performance are virtually unlimited” [2]. Flow involves a continuous narrative, where the narrative thread does not vanish at any point.

Unfortunately, using current presentation tools, awkward pauses and interruptions happen all too frequently due to technical issues involved in navigation. Once a narrative side-trip is concluded, the audience has to follow the presenter through the same steps in reverse, trying to resume the main narrative from where it was interrupted.

To better support slide presentations, a presentation tool is needed, which provides fewer, simpler navigation features, and minimizes interrupting the narrative flow.

To achieve this, presentation tools should follow a few design principles based on the discussion above:

- Never hide the current slide.
- Minimize interruptions of the presentational flow.
- Make navigation tools always and easily accessible.
- When jumping elsewhere make it easy to get back.

Provide easy answers to the three fundamental questions of navigation [1]:

- Where am I?
- Where can I go?
- Where is X?

SUPPORTING NARRATIVE FLOW

Our presentation tool is based on these principles. As commercial software does a fairly good job creating presentations, our tool reads slides from image files. While presenting, the presenter steps through her slides using the arrow keys. Hitting the Shift key accesses the additional features of our tool.

The navigation tool is displayed on top of the current slide. It initially consists of a simple vertical bar, far to the left side of the screen, so it hides as little of the slide as possible. Most of the tool is drawn transparently. This ensures that the current slide is always visible under the tool, no matter what the presenter does (see Figure 1a).

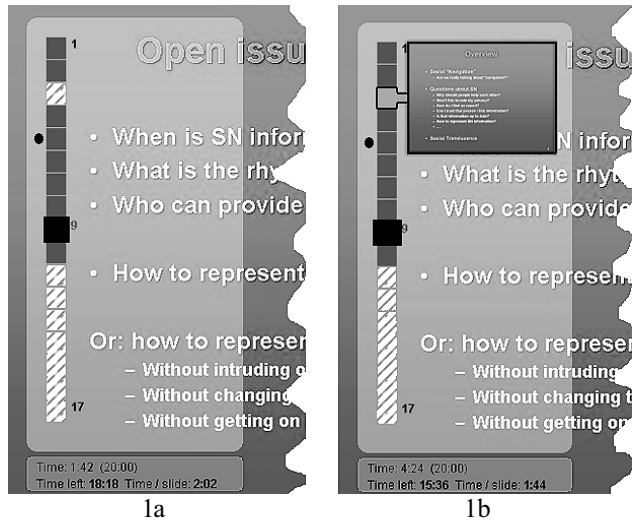


Figure 1a: The tool shows the current position, skipped slides, and which slides have not been shown yet. The current slide is visible through the transparent tool. Timing information is given at the bottom.

1b: All slides can be accessed through *brushing* while keeping the current slide mostly visible. Thumbnails are too small to be read by the audience and do not disclose slides ahead of time. The black dot is the “jump marker” (see text).

The vertical bar represents all slides and shows the current position, which slides have been skipped and what is still to be shown. A slide is considered to be presented if it has continuously been on screen for a certain amount of time (3 seconds). The navigation tool further contains information about time, remaining time, and remaining time per slide.

A second press of the Shift key hides the tool again and the presentation can continue. Thus, a quick check for the current position and remaining time is a very fluid process, with minimal interruption of the flow of the presentation.

NAVIGATING THE PRESENTATION

Navigation in the presentation is achieved using the arrow keys while the navigation tool is visible. Thumbnails of the slides are shown at their corresponding locations next to the bar; by moving up and down the bar all slides can

be skimmed. This interaction, called *brushing*, is particularly useful for navigation in linear data [4]. During brushing, the current slide is still visible, minimally covered by a thumbnail, to minimize disturbing the flow of the presentation (see Figure 1b).

Thumbnails are large enough to be recognizable by the presenter, but not large enough for the audience to read. Combined with the rapid navigation style supported by brushing, this ensures we do not disclose material out of its intended order.

If the tool is hidden using the Shift key, the presentation continues at the current slide. Alternatively, by pressing the jump key (Space) the presentation jumps to the slide selected in the tool. The presenter’s navigational actions are clearly visible to the audience. Therefore, such a jump is well enacted [3] and the audience prepared for the resulting narrative leap. The departure point is marked with a small dot in the tool (see figure 1b). Pressing the ESC key returns the presentation to the main narrative.

Our tool supports intuitive and very fluid navigation through the slides of a presentation. By caching slides and thumbnails, we ensure instant reactions to presenter commands. This immediacy increases the presenter’s feeling of being in control, which further reduces the stress of the presentation task.

In addition, the tool times the presentation and displays the collected data as a histogram at the end of the presentation. This information can help in improving the presentation in the future. Commercially available tools provide timing tools in rehearsal modes, but typically not in presentation mode. We consider this a major shortcoming because only real presentation times tell us at which slides we tend to talk too long.

SUMMARY

We discussed immersion, engagement, and flow in interactive narratives and slide presentations. We presented design guidelines meant to ensure presentation tools do not disrupt narrative flow. We described a new method to navigate slide presentations, which is based on these guidelines and minimally alters narrative flow in a presentation.

REFERENCES

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