

Advanced Collaborative Annotation Management for Adobe Acrobat

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Related Literature Review

- ▶ **Effects of annotations on student readers and writers (Joanna Wolfe)**
 - Allow readers to retrieve annotations based on the text in the primary document
 - Provide capabilities to categorize annotations by positive or negative content
 - Provide information about annotators including their general position about a particular topic or texts.
- ▶ **Pedagogical Uses of Annotations and Annotation Technologies, (Joanna Wolfe - PhD dissertation)**
 - **Two main alternatives for displaying collaborative annotations on documents:**
 - ▶ Layered layout of notes with transparencies
 - ▶ Discussion thread like
- ▶ **Xlibris: The Reading Appliance Revolution. Bill N. Schilit et al**

Related Literature Review

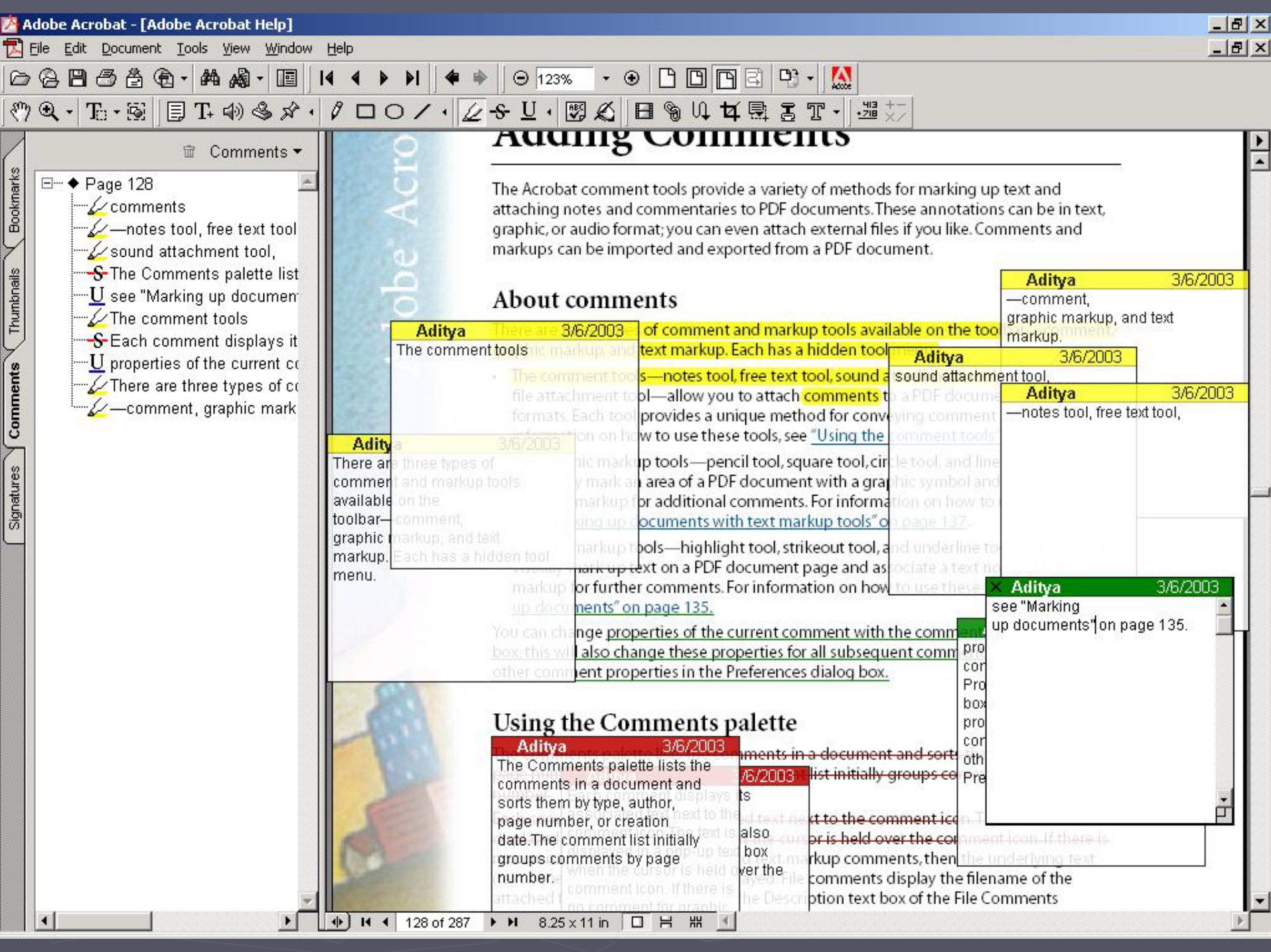
- ▶ **Arguing across the margins: How text layout affects reading-to-write strategies, Joanna Wolfe**
- ▶ **Annotea: An Open RDF Infrastructure for Shared Web Annotations (2001) Jose Kahan et al**
 - Classifies annotations as questions/notes/explanations/replies etc
 - Uses discussion thread-like approach for laying out annotations
 - Limited to web-pages with no other annotation support other than text
- ▶ **Computer Support for Distributed Collaborative Writing: A Coordination Science Perspective, Christine Neuwirth et al, CMU**
 - Identifies different tasks in the collaborative writing process: planning, drafting, reviewing
 - Tests a design prototype – PREP editor, that supports these tasks
 - Conducts a study of text v/s voice annotations and concludes that voice annotations are superior in terms of supporting collaborative discussion

Project and Goals

- Problem
 - Collaborative annotations of PDF documents.
- Goals
 - Allow multiple users to review and discuss each other's annotations.
- Project
 - A plugin for Adobe Acrobat reader
 - A study to compare two different layouts for displaying collaborative annotations.

Current solutions

- ▶ Two possible solutions for annotations layout.
 - Layered display of annotations using transparency
 - ▶ e.g. Adobe Acrobat
 - Discussion threads interface



What's wrong?

- ▶ Reviewing annotations on a PDF document.
 - Single level of independent annotations.
 - No classifications of annotations
 - No compilations of annotations to achieve overview

Our project

- ▶ Implementing the discussion thread layout for adding and reviewing annotations in Adobe Acrobat.
 - Annotations migrate with the document.
 - Annotations are classified into different types (comments, questions, negative, positive,...)
 - Color coding positive and negative comments to generate a compilation for the whole document

Validation

- ▶ A usability study to compare the two layouts
 - Or relying on the results of an existing study if it exists (in progress contact with researchers)

Discussion

