Review and Critique of: *Providing Advice for Multimedia Designers*  
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**Part I: Article Summary**

*Providing Advice for Multimedia Designers* is a summary of empirical research. The authors’ research goal was to develop a set of guidelines for directing the view and reading sequence in multimedia presentations. Faraday and Sutcliff first used a case study to illustrate a method that could be used to both script and evaluate a presentation. In later work they developed an “advisor tool” capable of providing presentation critique. They tested the tool with novice presentation designers.

**Research Goals**

The authors posed several questions in their research. They wanted to know what information a user could extract from a multimedia presentation and how they could assist presentation designers in making good decisions in the process of creating presentations. To inform their research, the authors incorporated past work through which they empirically investigated attention to presentations (using eye tracking studies) and produced design guidelines.

To assess their work, they first recognized that written (e.g., paper-based) guidelines alone are seldom effective. They then designed a method to encapsulate and deliver presentation guidelines, prototyped an advisor tool to embed the guidelines as rules, and evaluated the advisor tool.

**Key Problem**

The authors’ own studies had already revealed the need to “actively direct a presentation user’s viewing/reading sequence by actively drawing attention to items within a medium.” That is, the sequence of events, taking into consideration the visual (imagery as well as textual content) and the audio content, had to comprise carefully connected sequencing and interconnections. Their key problem, as they saw it, was that the design of the thread of attention had to ideally run through media of different types to deliver a coherent message:

- to plan the “attentional” thread to guide the user’s viewing and reading sequence (the attention graph)
- to design effects and combinations of media to
  - make important facts salient
  - reinforce contact points between different media
- to determine timing and synchronization so that the user has sufficient time to assimilate content
The Tool, Tests, and Evaluation

Prior work showed that the time and effort required to prepare a multimedia presentation using paper-based guides was too great to be practical. The guidelines were therefore embedded in an interactive presentation design tool capable of evaluating presentations and highlighting potential design problems.

The tool had two parts: an authoring component and a design advisor component. The authoring component lets the designer build a first cut script of a presentation. Transitions and specific media elements are added later. The design advisor component then examines the result and compares it against the presentation guidelines. The process results in the generation of an attention graph1 and design advice. The design advisor itself has a “critic” component that critiques the presentation as the user builds it. This supports an iterative design approach, and supports the designer throughout presentation changes.

The tool was tested for effectiveness through a study of six novice designers. The subjects created presentations with and without the support of the design tool, and the results were evaluated. This approach to creating an effective multimedia presentation worked reasonably well when tested with novice designers. Using the design advisor apparently improved the designers’ presentations but it also raised a number of issues:

- creating a presentation with the tool advisor took far longer than without it
- the tool sometimes overwhelmed the designers with advice and warnings
- some designers chose to ignore the tool and instead used a trial-and-error approach to problem solving

Overall, because the result was positive for most subjects, the authors concluded that the tool was of value to novice designers. They also point out that any advice tool is only truly effective when its user has at least basic familiarity with design domain under consideration.

Part II. Critique

Suitability of Methods

The methods employed to test the tool were suitable for the authors’ research goal. By starting with the results of prior eye-tracking studies, the authors were armed with specific data about viewer responsiveness to elements of multimedia presentations, and the data was used to create the guidelines that informed the advisor tool.

The research methods detailed in this paper established at least a baseline measure of the effectiveness of advisory tools, and it shows that a design advisement tool for presentation production can work well, particularly for novice designers. The research also revealed a number of problems, many of which could be addressed through refinements in the tool.

One problem the authors do not cover in detail could be termed the “annoyance factor” of such an approach to giving design or even general advice. This is particularly true of any tool that actively makes observations about the work underway. One need only look to the relatively simple Office Assistant provided with Microsoft Office to see an example of an advisory tool that gets less than

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1 The idealized plan of the user’s viewing and reading sequence.
stellar reception from users it is intended to help. It remains to be seen how well a tool of the type described in this paper could avoid the Office Assistant stigma.

Applicability to Design Tool Assessment

There is potential overlap between this approach to tool-aided presentation design and Web design. Web design layouts could be analyzed for such content as font and color selection, the use of graphics and images, forms, and the interrelation of all Web page elements.

Many Web design tools already include design support tools, though none are tools in the sense described in the authors’ research. Currently available Web tools include basic (static) design templates and testing functions that can check for common technical (coding) errors in designs.

A key difference between the authors’ research and Web design is the presentation order. Multimedia presentations of the type analyzed in the article are linear timeline-based productions. Web designs or sites, on the other hand, tend to be non-linear; that is, given a site to explore, there’s no particular “correct” method to doing so. For Web design, then, the methodology used by an advisement tool might have to differ considerably.

For the most part, any advisement tool is best suited for designers who need direction to begin and test basic designs. In the end, the most any design support tool can do is to help designers work through guidelines. To fully develop a design, to do so effectively and with style, ultimately requires human experience and thorough articulation—and understanding —of design objectives. For that level of support, automated tool-based help is a long way off.