Jack G. Conrad and Daniel P. Dabney
West Group, The Thomson Corporation, Eagan, Minnesota, USA

The Structure of Judicial Opinions: Identifying Internal Components and their Relationships

Abstract: Empirical research on basic components of American judicial opinions has only scratched the surface. Lack of sufficient legal experts and adequate computational resources are but two reasons responsible for this deficiency. Aided by a team of expert attorney-editors, we have undertaken a three-phase study to uncover fundamental components of judicial opinions found in American case law. We hypothesized that after years of working closely with thousands of judicial opinions, expert attorneys would develop a refined and internalized schema of the content and structure of legal cases. In this study participants were permitted to describe both concept-related and format-related components. The resultant components are reported on in this paper. Additional experiments currently underway further validate and refine this set of components and apply them to new search paradigms.

Introduction
This experiment grew out of our need to establish a knowledge base for related legal corpus research. Of West's thousands of full-text databases which represent many terabytes of information, the majority focus on the legal domain. With a sizable staff of highly-skilled attorneys employed to identify and summarize points of law, it seemed reasonable that over time, these professionals would form a set of stable notions of what components form a judicial opinion (Rumelhart, 1980). Our experimental objectives included learning more about the discourse-level or «macrostructure» textual features of judicial opinion documents (van Dijk, 1980). For large print or on-line publishing enterprises which may invest hundreds of thousands of person hours each year in the review and editing of judicial opinions, such an endeavor could result in editorial savings as well as a new means of accessing judicial opinions. Longer-range goals for our research included automating the process of identifying and connecting such added features. Our results are both suggestive and promising. They address a long-ignored gap in information science: the integration of the domains of information retrieval and information seekers.

Experimental Methodology and Conclusions
We developed a three-phase study to focus on the internal components of case law documents. Procedures were designed to describe and formalize the extensive knowledge of the legal-editing experts who averaged over 11 years of legal-editorial experience each. The phases consisted of: (1) recording the experts' notions about the common elements in a representative opinion; (2) analyzing how reliably the experts could independently identify and agree on these common elements; and (3) re-evaluating the resultant set of elements based on our quantitative and qualitative findings, including factors such as cost of identification, utility, and coherence of the elements. We ultimately discovered and analyzed a total of 52 case law components. Our results suggest that a closer examination of the supra-textual, discourse-level components in full-text judicial opinions reveals features that have traditionally remained inaccessible. The potential for these components to enhance existing access methods—especially in the area of case law—is encouraging. Such features could clearly help improve existing natural language information systems.

References