

Contributions of cognitive science to information science: An analytical synopsis

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ABSTRACT

Emergence of cognitive science as a distinct field of study has left an important impact on various disciplines including information science. Research questions relating to the study of thinking, intuition, and intelligence were considered unimportant for scholarly inquiry before the beginning of cognitive science; however, a greater attention has been given to these questions since the beginning of the cognitive paradigm. Cognitive science brought a different perspective to the study of a user's mental models, context surrounding a user, knowledge representation, its production, and transfer. This perspective then took roots in the discipline of information science and subsequently influenced the research. This paper is a synopsis of the various contributions of cognitive science to information science with a particular emphasis on information retrieval research. In addition to the review of various contributions, some new research avenues are discussed and the relevance of the cognitive paradigm to these avenues is presented. It would be important for information scientists to consider the application of the cognitive approach to these research areas so that the theoretical and practical scope of the discipline of information science could be enhanced.

Keywords: Cognitive Science; Information Science; Behavioral Science; Information Science.

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1. Introduction

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2. Traditional Examination Techniques

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3. Advanced Imaging Technologies in Information Science

Emergence of cognitive science as a distinct field of study has left an important impact on various disciplines including information science. Research questions relating to the study of thinking, intuition, and intelligence were considered unimportant for scholarly inquiry before the beginning of cognitive science; however, a greater attention has been given to these questions since the beginning of the cognitive paradigm. Cognitive science brought a different perspective to the study of a user's mental models, context surrounding a user, knowledge representation, its production, and transfer. This perspective then took roots in the discipline of information science and subsequently influenced the research. This paper is a synopsis of the various contributions of cognitive science to information science with a particular emphasis on information retrieval research. In addition to the review of various contributions, some new research avenues are discussed and the relevance of the cognitive paradigm to

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4. Applications of Advanced Imaging

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6. Conclusion

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