Phenomenological Event Structures of Serendipity

A Multi-Model Network Approach to Information Behaviour in Context

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The word *serendipity*, "...making discoveries, by accidents and sagacity, of things which [one is] not in quest of ...", was born in 1754.[1] As one researcher bemoaned (back in 1965), "About this fact there is a unanimity of agreement ...that is unique vis-à-vis almost any other fact relating to serendipity."[2] This pointed remark still has resonance today.

The relational nature of serendipity, in combination with other aspects of its nature, poses a considerable challenge to empirical researchers. Much existing research follows one of two approaches—interview-based or experiment-based—with interview-based designs historically the more successful; however, such qualitative studies seem to be reaching saturation point in terms of the new knowledge they can contribute.

In particular, new approaches are needed to address the problem of moving from theory to application. Serendipity is an important research topic in both academia and the commercial sector, in part, because the financial rewards for the control of serendipity may be considerable; however, if we aim to design for serendipity, we need more detailed, precise and, most probably, quantitative findings.

This talk explores the use of a multi-model network approach for the study of narrative texts* that describe experiences of serendipity in research. The approach relied on a combination of narrative methods, relational text analysis, network methods, inferential statistical network modelling, and traditional statistical techniques. Although both theoretical and methodological aims motivated the use of the approach, today's talk focuses on the methodological aspects of the research.

References

[1] Horace Walpole in: Merton, Robert K. and Barber, Elinor (2004). *The Travels and Adventures of Serendipity*. Princeton University Press; Princeton, NJ. p. 2.

[2] Remer, Theodore G. (1965). *Serendipity and the Three Princes*. University of Oklahoma Press, Norman, OK. p. 15.

[3] Campanario, J. M. (1996). Using *Citation Classics* to study the incidence of serendipity in scientific discovery, *Scientometrics* 37(1): 3–24.

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*The *Citation Classics* dataset was studied. A *Citation Classic* is a one-page first-person narrative that provides the author of a highly-cited research paper the opportunity to discuss events and experiences surrounding the research project not reported in the formal research report. Approximately 8% of the *Citation Classics* discuss some sort of luck or chance event, and between 1–2% refer specifically to serendipity.[3]