

The Roots of Social Informatics Through Tri-Citation Analysis of Rob Kling's Oeuvre

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INTRODUCTION

We build on an earlier analysis of the academic career of Rob Kling, the founder of the field of social informatics (SI) (Cronin & Shaw, 2007), through a two-time-period author tri-citation analysis. The two time periods—1972-1995 and 1996-2008—represent distinct parts of Rob Kling's career. Our analysis of Kling's career and influence through the lens of tri-citation analysis allows for the understanding of SI's roots and evolution. In particular, we show how early SI concepts evolved and grew in influence as they moved beyond the fields of management information systems (MIS) and organizational research, where the concepts of social informatics were initially established.

METHODS AND SAMPLE

Author tri-citation data are similar to co-citation data with the additional requirement that the specified author of interest also be included in the data collection—thus providing important context for the co-citation counts. We followed the author tri-citation data retrieval protocol in McCain (2009), limiting each data set to the top 40 authors co-cited with Kling in SSCI. The data were mapped utilizing multi-dimensional scaling (MDS) and clustered following McCain (1990). Only 9 authors are shared between the two time periods and these are displayed in Table 1 along with the respective clusters.

Author	Early	Late
IVES B	MIS	MIS/Org. Research
MARKUS ML	MIS	MIS/Org. Research
MUMFORD E	MIS	MIS/Org. Research
ROBEY D	MIS	MIS/Org. Research
ZUBOFF S	Org./Power Relation	MIS/Org. Research
GIDDENS A	Org./Power Relation	MIS/Org. Research
ROGERS EM	Communication Theory	Communication Theory
RICE RE	Communication Theory	CMC/Social Network Analysis
WINNER L	Social Constructionist	Social Constructionists/ANT

Table 1: Authors in both time periods and their cluster

EARLY KLING

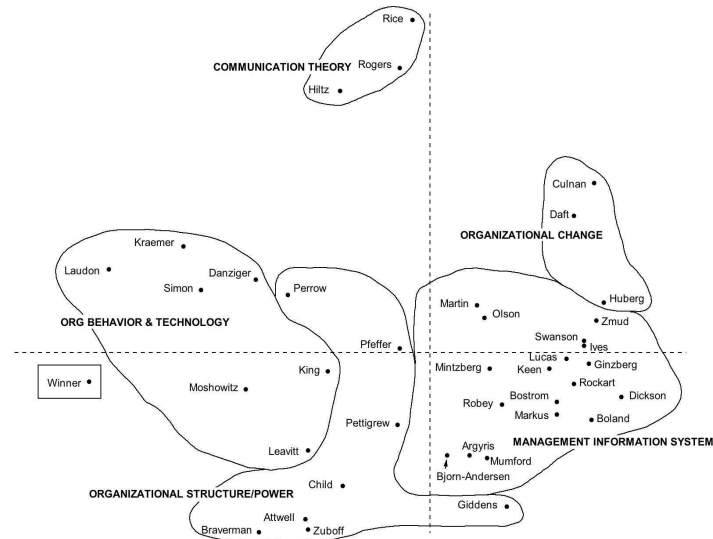


Figure 2: MDS Plot of Early Tri-citation Data (1972 - 1995)

LATE KLING

The later map of Rob Kling's career from 1996-2008 (Figure 3) shows a shift in Kling's research and influence. Dividing Rob Kling's career into two distinct time periods illustrates the shift in his research interests and highlights his later influence in domains outside of organizational theory and management information systems. In these later periods the MIS and organizational theory and behavior researchers are contained within their own large cluster. There are also six other clusters that are further differentiated from MIS and Organizational research. These new clusters illustrate Kling's widening appeal both methodologically and substantively.

In the second phase of Kling's career, a new cluster of individuals appear in the tri-citation analysis. This cluster includes Blaise Cronin, Christine Borgman, Elizabeth Davenport and Peter Ingwersen. This new cluster represents Kling's shift in research agenda when he moved in Indiana in 1996 and just as social informatics was being recognized by others as a discipline (Kling, 2000).

The cluster-enhanced maps illustrate distinct disciplines of influence. Four clusters in the 1972 - 1995 map (Figure 2) focus on MIS and organizational theory and behavior. A fifth cluster includes communication researchers Everett Rogers, Starr Roxanne Hiltz and Ronald E. Rice; social constructionist Langdon Winner is an isolate.

The existence of a large set of MIS researchers in Rob Kling's early tri-citation data demonstrates where Kling's work originated and the early roots of social informatics. The highly differentiated clusters pertaining to MIS and the numerous Organizational Studies areas demonstrate the early foundation of Kling's work and illustrate where much of the theoretical underpinnings of social informatics originate. In the later data these clusters converge into one as Kling's work is more widely adopted.

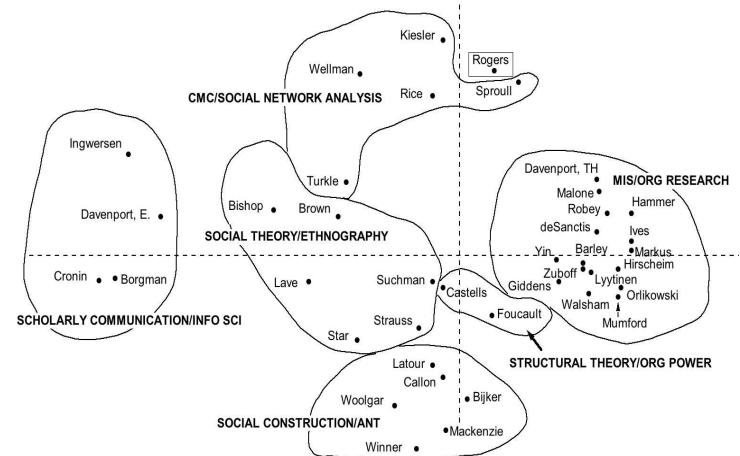


Figure 3: MDS Plot of Late Tri-citation Data (1996 - 2008)