Brief Bio and (PR)$^2$: Problems & Pitches – Rants & Raves by Peter A. Hook

Self Introduction

Peter A. Hook <pahook@indiana.edu> is a doctoral student at Indiana University—Bloomington where he is a member of Dr. Katy Börner's Cyberinfrastructure for Network Science Center and Information Visualization Laboratory. He has a Juris Doctor (J.D.) from the University of Kansas (1997) and an M.S.LIS from The University of Illinois (2000). He is also an academic law librarian at the Indiana University Maurer School of Law. His primary research focus is information visualization and domain mapping. Particular interests include the visualization of knowledge organization systems, concept mapping, and the spatial navigation of bibliographic data in which the underlying structural organization of the domain is conveyed to the user. Additional interests include social network theory, knowledge organization systems, scientometrics, legal informatics, and legal bibliography. Peter is currently working on his dissertation entitled, The Quest for the Structure of Law: Domain Maps from 30,000 Course-Coupling Events and a History of an Academic Discipline (1931-1973). In this work, he seeks to answer whether course-coupling analysis (the aggregate of the same professor teaching multiple, different courses) is a legitimate means to produce a topic map of an academic discipline.

Publications


Homepage

http://ella.slis.indiana.edu/~pahook/index.html
General Questions

1) What is (are) your main interest(s) in attending the workshop?
I am interested in the measurement of knowledge at different levels of granularity:

Meme – unique thought / contribution, hypothesis or assertion.
Paper – meme plus context and proof of validation (including background, methods, conclusions, references, etc).
Book / Research Article – Meme with numerous sub-memes (synthesized, integrated with thorough background, context, and attributions.) Sometimes, all that is unique is the manner of synthesis.
Course – Packaged ideas, usually established or accepted, of a similar topical or conceptual nature designed to train novices in order to be productive in some area or train them to research in a particular field.
Field / Discipline / Specialty. Often an administrative unit (faculty or department). Topic matter of the research is generally intelligible to other members regardless of degree of specialization.
College - Science, Social Science, and Humanities -

I am interested in making comparisons across disciplines/fields/specialties in a rigorous and consistent manner. Are some academic writings less dense? More inefficient? Is density and efficiency a valid concept in conveying scholarly knowledge?

2) Please list standards that are missing in your work.
Replicability and comparability in the spatial context. In other words, how do we best translate relatedness into a spatial layout in a way that we can make significant comparisons between different spatializations? Will there ever be a meaningful absolute measure of distance that quantifiably captures similarity/relatedness across topics? Or will this always be relative? For instance will it ever be possible to say that magnetic resonance imaging is 4.5 units away from x-ray crystallography, in an absolute (ratio or interval) sense.

3) Please list standards that are most useful in your work.
MDS for spatial layout as it is deterministic. However, that is the best I have. People like to compare stress levels across MDS layouts. However, what does goodness of fit really mean in the domain mapping context?

4) What would you like to learn / achieve at the workshop?
I am curious as to the issues that are confronting other scientometricians and in what directions we can move towards consensus in terms of standards.