

The Association of American Law Schools (AALS) Dataset: Visualizations, Informetrics and the History of a Discipline

By Peter A. Hook

The Association of American Law Schools (AALS) was founded in 1900 and seeks “the improvement of the legal profession through legal education” (AALS, 2007). It is the main learned society for law school professors in the United States. Since 1922, the AALS has produced an annual directory of its members that contains biographical information for law professors and librarians at each member school (AALS, 1923). In addition to the institutional affiliation for each educator, the directory includes the subjects that each educator taught. Furthermore, starting in 1931, the directories contain a controlled list of subjects (AALS, 1931) complete with syndetic structure (*see and see also* cross references between subjects). As part of a grant from the Law School Admissions Council (LSAC) entitled *The Production, Content and Consumption of Legal Scholarship: A Longitudinal Analysis*, student workers hired by the grant recipients have been harvesting the content of the AALS directories by hand and storing it in a relational database.

The AALS dataset provides powerful insights into the history and development of the legal academy in the United States. Of foremost interest are domain maps produced from the data. The rigorous spatial distribution of subjects taught in American law schools has been accomplished using a multi-prong approach. The first is leveraging the syndetic structure of the controlled list of subjects to create network relationships between the subjects. The second is using the co-occurrence matrix of subjects taught by individual faculty members and visualizing it by using network visualization techniques and principal components analysis (PCA). This reveals, in the aggregate, what subjects are most related such that they are taught by the same people, the assumption being that similar topics are taught by the same people.

Additional informetric inquiries include what subjects are co-taught the most, the mean number of subjects taught by each faculty member, how the mean number of courses taught changes over time, and how the mean number of courses taught breaks down by law school relevant to faculty size. Additionally, the dataset allows for mobility studies that will ultimately be the basis of a ranking system for law schools that predates the availability of the US News & World Reports ranking data (“Brains for the Bar,” 1987; Gest, 1990; Henderson & Morriss, 2006), the assumption being that in the aggregate, tenured faculty members move to more prestigious law schools.

This work builds on that of other informetricians who use spatial distributions of interlinked data to garner insights about the history of a domain (White & McCain, 1998). In addition, the work draws from the author’s own work visualizing legal subjects (Hook, 2007b, In Press). Ultimately, the domain maps produced will be utilized to enhance legal education—from the selecting courses to building conceptual frameworks for the contents of each course and seeing how courses interrelate. To this end, educational psychology that supports the use of domain maps for these purposes will also be discussed (Hook, 2007a; Hook & Börner, 2005).

References:

- AALS. (1923). *Directory of Teachers in member Schools: 1922*. Saint Paul: West Publishing Co.
- AALS. (1931). *Directory of Teachers in Member Schools: 1931*. Saint Paul: West Publishing Co.
- AALS. (2007). What is the AALS? , from <http://www.aals.org/about.php>
- Brains for the Bar. (1987, Nov. 2). *U.S. News & World Report*, 72.
- Gest, T. (1990, Mar. 19). America's Best Graduate and Professional Schools. *U.S. News & World Report*.
- Henderson, W. D., & Morriss, A. P. (2006). Student Quality As Measured by LSAT Scores: Migration Patterns in the U.S. News Rankings Era. *Indiana Law Journal*, 81(Winter), 163-204.
- Hook, P. A. (2007a, 4-6 July). *Domain Maps: Purposes, History, Parallels with Cartography, and Applications*. Paper presented at the 11th International Conference Information Visualization (IV 2007), Zurich, Switzerland.
- Hook, P. A. (2007b). *Visualizing the Topic Space of the United States Supreme Court*. Paper presented at the 11th International Conference of the International Society for Scientometrics and Informetrics, Madrid, Spain.
- Hook, P. A. (In Press). The Aggregate Harmony Metric and a Statistical and Visual Contextualization of the Rehnquist Court: 50 Years of Data *Constitutional Commentary*.
- Hook, P. A., & Börner, K. (2005). Educational Knowledge Domain Visualizations: Tools to Navigate, Understand, and Internalize the Structure of Scholarly Knowledge and Expertise. In A. Spink & C. Cole (Eds.), *New Directions in Cognitive Information Retrieval* (pp. 187-208). London: Springer.
- White, H. D., & McCain, K. W. (1998). Visualizing a Discipline: An Author Co-citation Analysis of Information Science, 1972-1995. *Journal of the American Society for Information Science*, 49(4), 327-356.