# AuthorWeb: Co-cited Author Maps, Bibliographic Retrievals, and a Viennese Author

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### Citation Mapping and Visualization

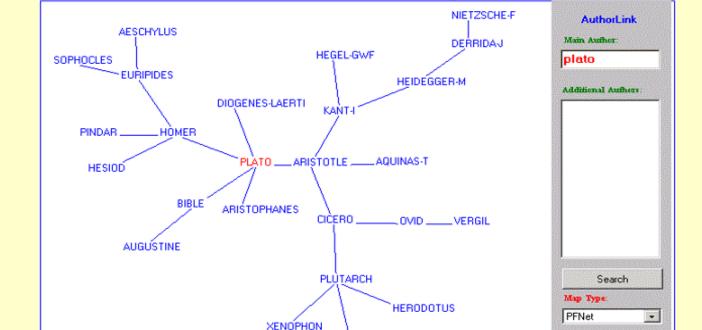
### AuthorMap: Arts and Humanities

AuthorMap explores author relationships through co-citation patterns. The assumption is that if two authors are often cited together by many other authors, these two authors likely have common intellectual interest in their research and writing. When many related authors' pair-wise co-citation patterns are explored, we will have a map of a subject domain where authors on the map represent ideas or subtopics as well as their relationships. AuthorMap currently attaches to ISI Arts & Humanities Citation Index (AHCI), 1988-1997, about 1.26 million records.

When an author search is conducted, AuthorMap generates a list of 25 authors co-cited most often with the given author. The user then can choose to interact with two types of maps that visualize how these author related to each other based on their co-citation counts. One map is based on Kohone's self-organizing feature map (SOM), the other is based on Path Finder Network(PFNET). Both maps are generated within seconds. Both maps allow the user to drag the names on the maps and drop them to a search box to activate an automatic search by the underlying search engine. The following is an example author map for "PLATO."

Instant Author Co-citation Map

### Author Search: plate Submit



THUCYDIDES

Show Numbers

# AuthorWeb Facts

- Dataset: 10 years of Arts & Humanities Citation Index, 1988-1997.
- About 1.26 million records.
- Thomson Reuters (ISI) gave dataset to Drexel University's College of Information Science and Technology for research purposes.
- Xia Lin and Jan Buzydlowski programmed AuthorWeb; Howard White contributed ideas.

# The AuthorWeb System:

- Instantly creates three kinds of citation maps, all live interfaces to document retrieval from the 1988-97 AHCI database.
  - Pathfinder networks (PFNets)
  - Kohonen's self-organizing maps (SOMs)
  - White's pennant diagrams
- Is on the Web and has been for more than a decade but is little known.
- Needs renovation and more recent data.

# Maps are live interfaces for bibliographic retrievals.

### **Input:**

The name of a single author of interest—the "seed." Today's seed is *Karl Kraus* (1874-1936), a famous journalist, satirist, novelist, and playwright who lived and worked in Vienna.

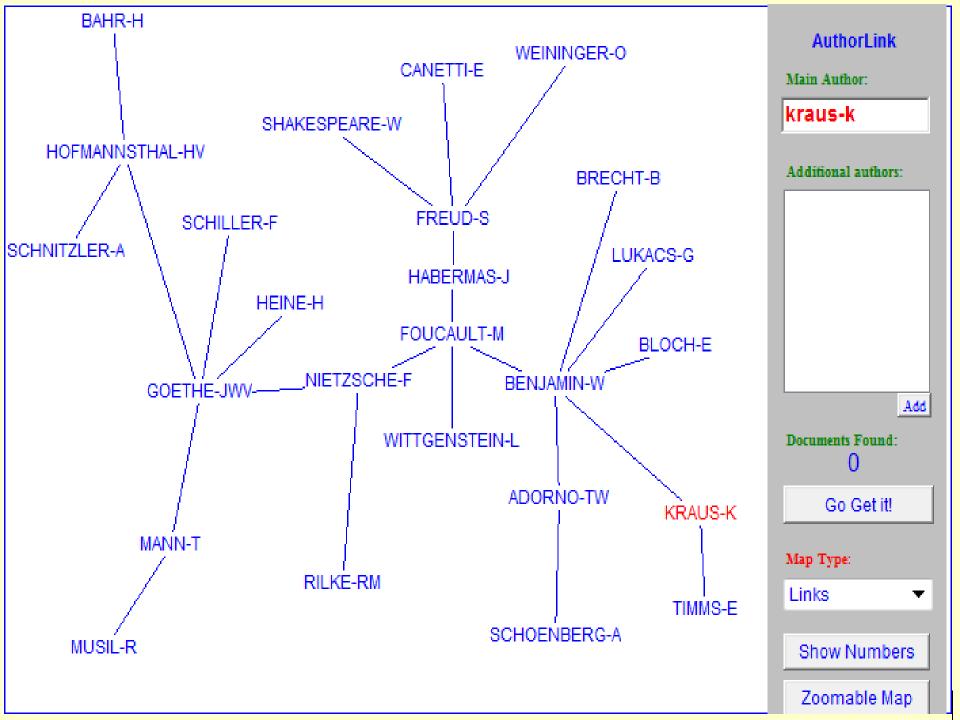
### **Instant Output:**

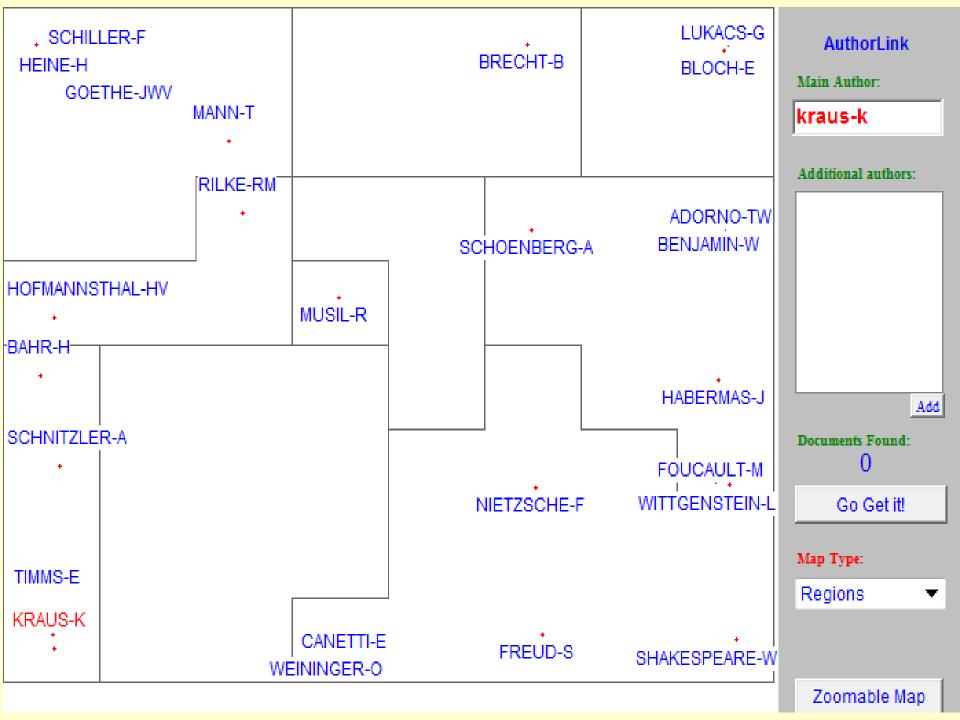
The 24 other authors who are most highly co-cited with Kraus in AHCI, ranked by their co-citation counts.

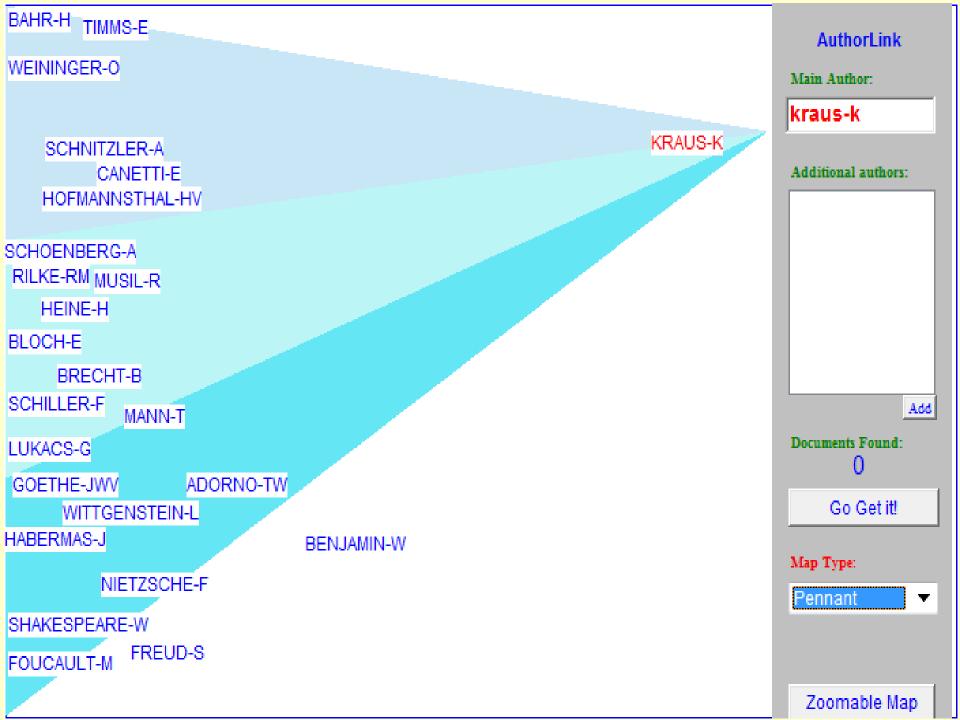


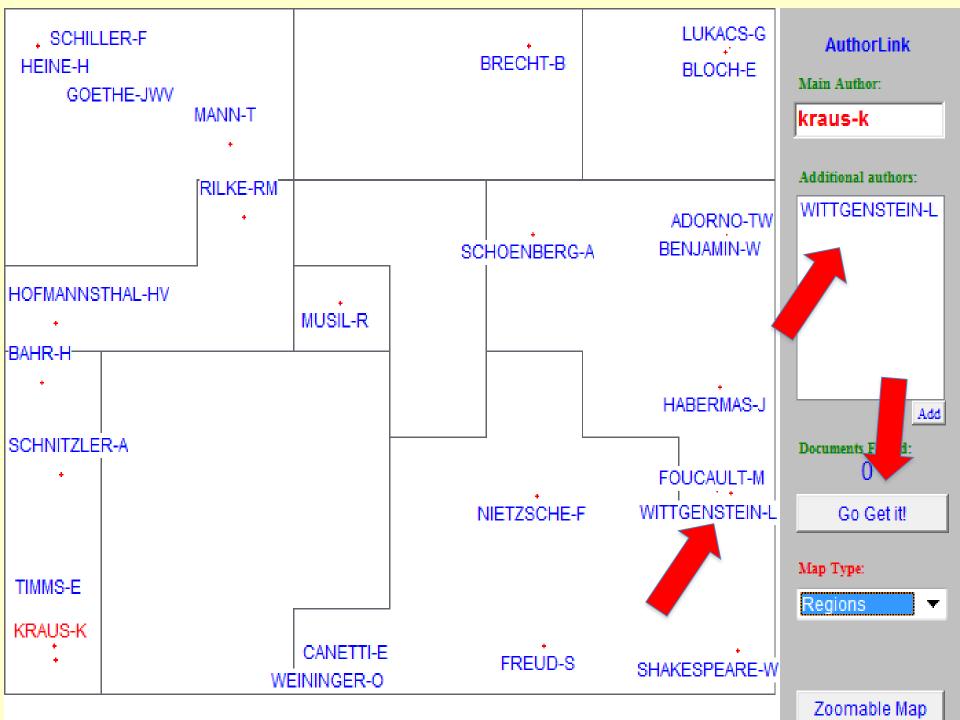
Three different maps of Kraus and "the company he keeps."











## ISI Arts & Humanities, 1988-1997

### Authors kraus-k, WITTGENSTEIN-L are co-cited in these documents:



	AUTHOR/S	<u>TITLE</u>	YEAR
1	MATZ, W	HOFMANNSTHAL,HUGO,VON AND BENJAMIN,WALTER	1989
2	COOK, N	SCHENKER THEORY OF MUSIC AS ETHICS	1989
3	BODINE, JF	KRAUS,KARL, WITTGENSTEIN,LUDWIG AND POSTSTRUCTURAL PARADIGMS OF TEXTUAL UNDERSTA	1989
4	JANIK, A	ETHIK-UND-ASTHETIK-SIND-EINS - WITTGENSTEIN AND TRAKL	1990
5	MCCARTY, DC	THE PHILOSOPHY OF LOGICAL WHOLISM	1991
6	STROHMAYER, U	BEYOND THEORY - THE CUMBERSOME MATERIALITY OF SHOCK	1993
7	BOUVERESSE, J	WITTGENSTEIN,LUDWIG - A RESIGNED MODERNIST	1993
8	GARCIAALONSO, R	THE SUBJECT IN VIENNA AT THE TURN OF THE 19TH-CENTURY + THE THEME OF IDENTITY, A	1994
9	ROSAT, JJ	THE PHILOSOPHY OF THE POSSIBLE AND THE UNDERSTANDING OF THE PROBLEM + REMARKS ON	1994
10	TERRAVECCHIA, GP	WITTGENSTEIN,LUDWIG CONCEPT OF THE INTERRELATIONSHIP BETWEEN STYLE AND CONTENT	1995
11	REVELL, D	BETTER UNSAID, ON POETIC FRAGMENTS	1996
12	BARRENTO, J	DOUBLE DISTANCE - PORTUGUESE TRANSLATIONS OF BOBROWSKI, JOHANNES POETRY	1995
13	Quack, J	The "Wissen-um-Sumpfhuhner" or how a word fell into disrepute + The use of set	1997

### Full Record Display

Author: MATZ, W

Title: HOFMANNSTHAL, HUGO, VON AND BENJAMIN, WALTER

Source: AKZENTE-ZEITSCHRIFT FUR LITERATUR

Year: 1989 Abstract: NULL

References: BAUDELAIRE-C, 1976, OEUVRES COMPLETES, v2, pNULL-

BENJAMIN-W, 1987, BERLINER KINDHEIT,

BENJAMIN-W, 1966, BRIEFE,

BENJAMIN-W, 1972, GESAMMELTE SCHRIFTEN, v1, pNULL-

BENJAMIN-W, 1972, GESAMMELTE SCHRIFTEN, v2, pNULL-

BENJAMIN-W, 1972, GESAMMELTE SCHRIFTEN, v4, pNULL-

BENJAMIN-W, 1972, GESAMMELTE SCHRIFTEN, v5, pNULL-

BENJAMIN-W, 1972, GESAMMELTE SCHRIFTEN, v6, pNULL-

BENJAMIN-W, 1986, SONETTE,

BORCHARDT-R, 1957, PROSA, v1, pNULL-

BORCHARDT-R, NULL, REDEN,

HEINRICH-K, 1982, VERSUCH SCHWIERIGKEI,

HOFMANNSTHAL-HV, NULL, COMMUNICATIONS,

HOFMANNSTHAL-HV, 1980, DRAMEN, v1, pNULL-

HOFMANNSTHAL-HV, 1980, DRAMEN, v3, pNULL-

HOFMANNSTHAL-HV, 1980, REDEN, v2, pNULL-

HOFMANNSTHAL-HV, 1980, REDEN, v3, pNULL-

KRAUS-K, 1986, SCHRIFTEN 10 HERAUSG,

SCHOLEM-G, 1975, W BENJAMIN GESCH FRE,

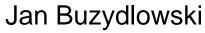
SZONDI-P, 1978, SCHRIFTEN 2,

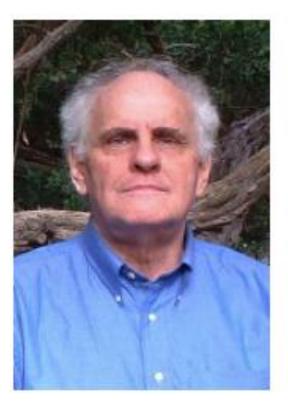
WITTGENSTEIN-L, 1963, TRACTATUS LOGICO-PHI,

# AuthorWeb and Digital Libraries

- Maps of the seed author's "intellectual company" have value in themselves. (Compare Wikipedia.)
- Maps serve as recommender systems and aids to fruitful browsing, based on citers' expertise.
- Maps could be produced in a digital library that has access to citation data on its contents.
- Maps could be linked to full-text retrievals rather than "ISI-type" bibliographic retrievals.







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