

Computational Philosophy and the Examined Text

(a tale of two encyclopedias)
(and more)



Colin Allen

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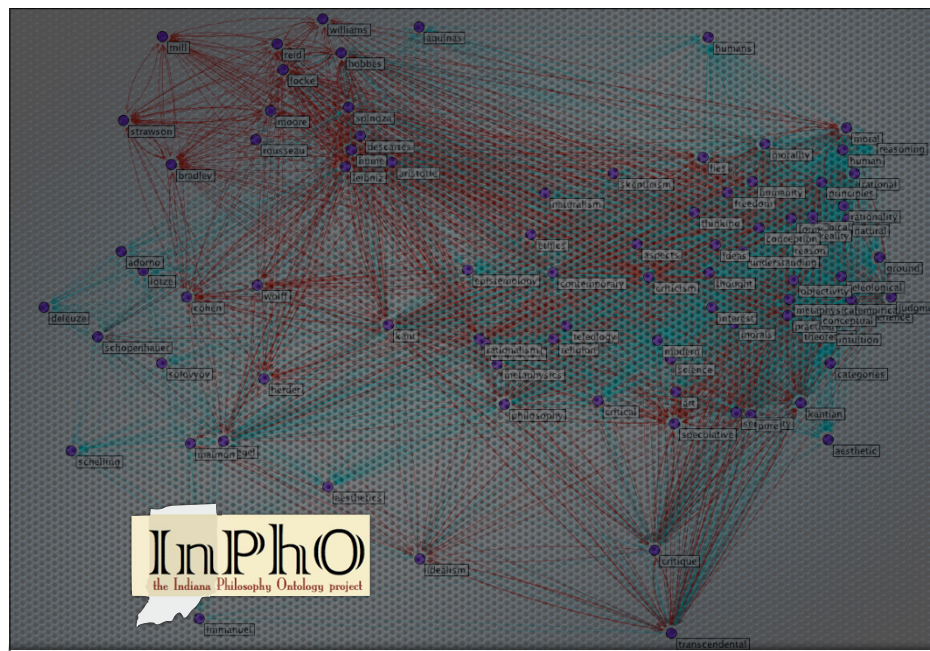


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1

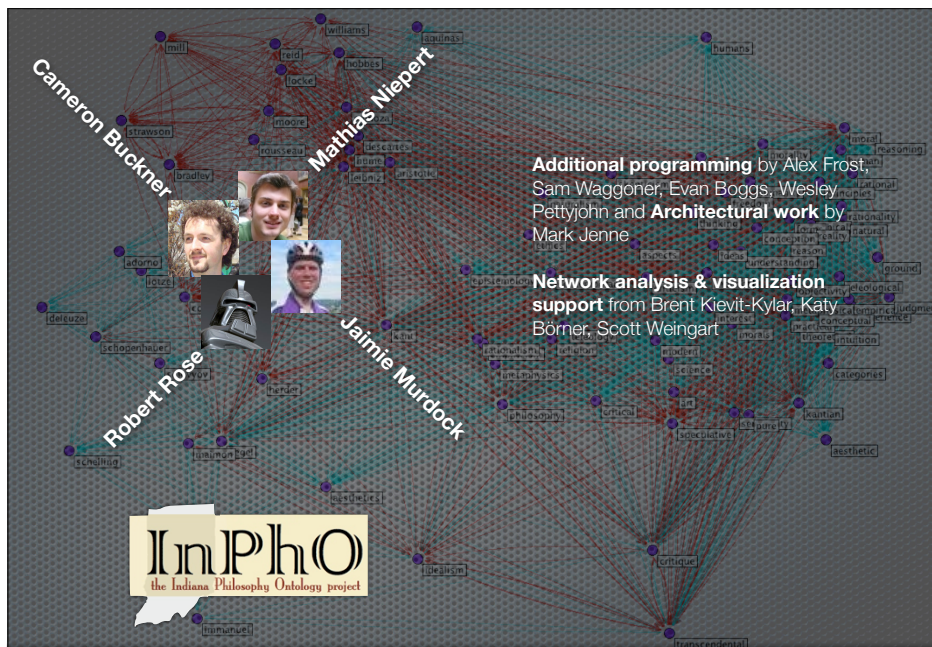


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2



Additional programming by Alex Frost,
Sam Waggoner, Evan Boggs, Wesley
Pettyjohn and Architectural work by
Mark Jenne

Network analysis & visualization
support from Brent Kievit-Kylar, Katy
Bömer, Scott Weingart

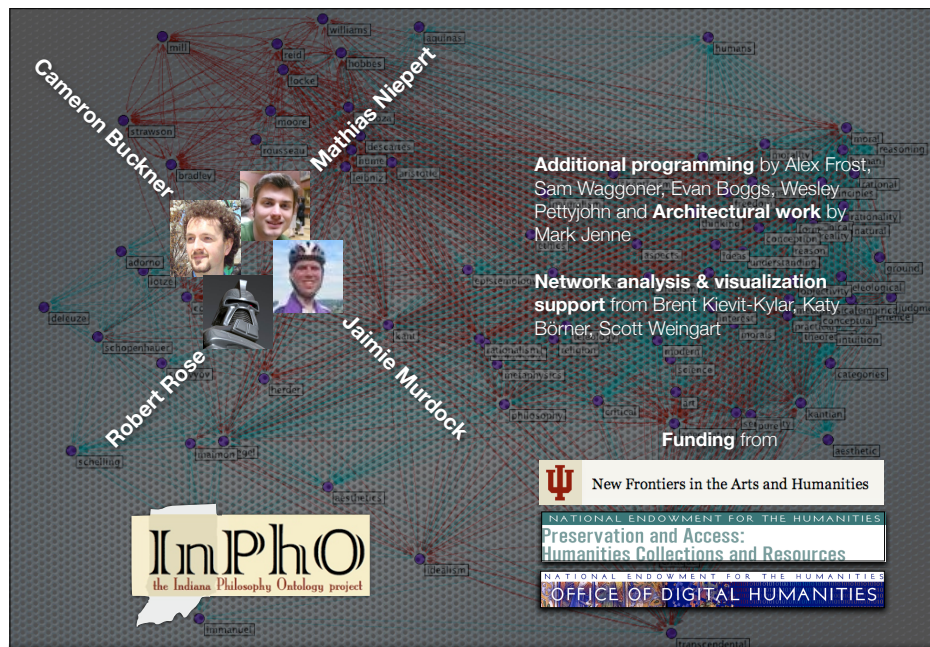


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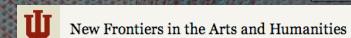
2



Additional programming by Alex Frost,
Sam Waggoner, Evan Boggs, Wesley
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Funding from

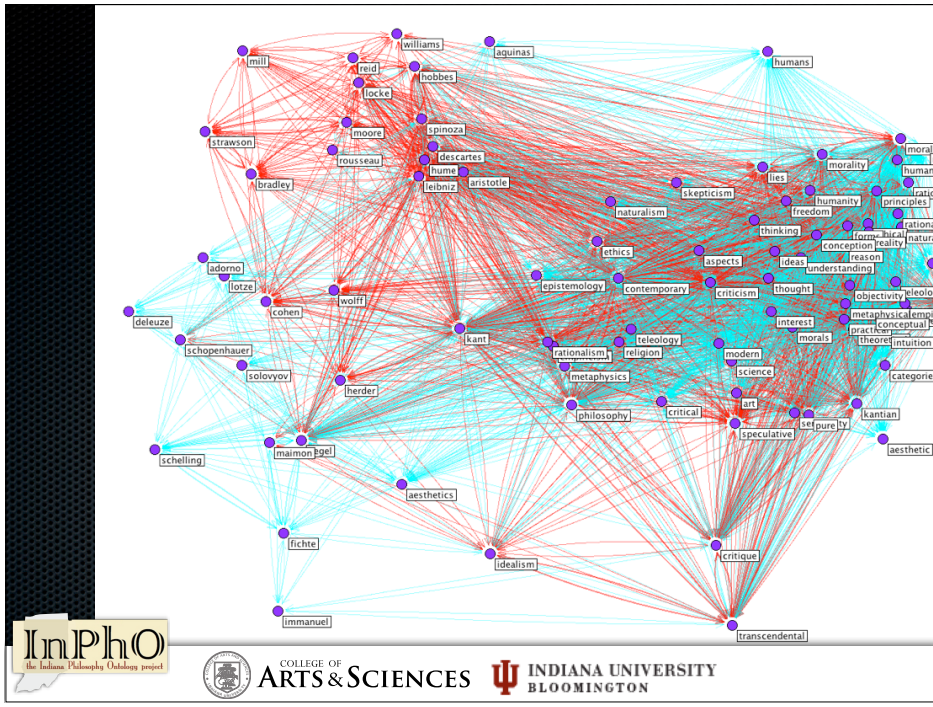


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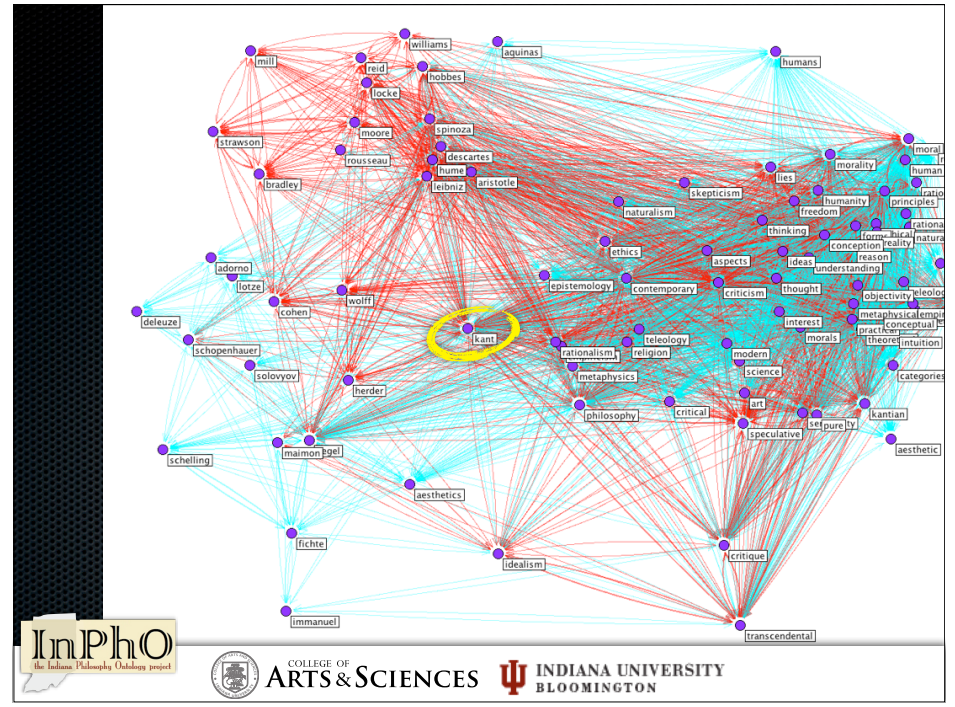


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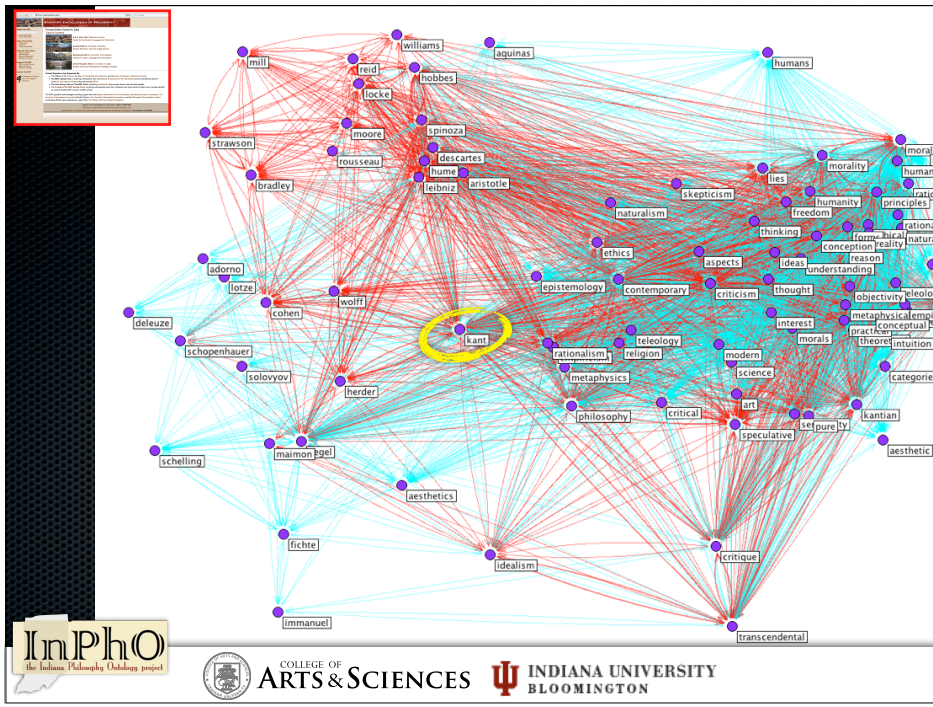
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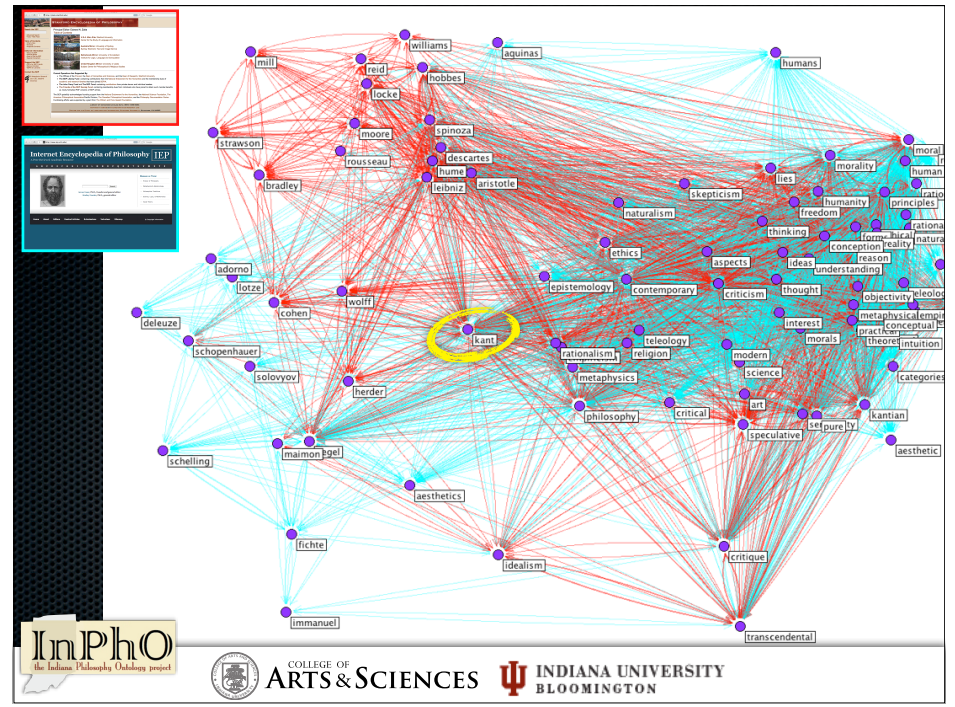
3



3



3



3

What might philosophers do with millions of words?

▪  12m  4m  21m (titles/abstracts)

What might philosophers do with millions of words?

▪  12m  4m  21m (titles/abstracts)

▪ **Read them all?**

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▪ **Read them all?**

▪ = 2,467 hrs @ 250 w/min (= 1 s.y.)

What might philosophers do with millions of words?

▪  12m  4m  21m (titles/abstracts)

▪ **Read them all?**

▪ = 2,467 hrs @ 250 w/min (= 1 s.y.)

▪ **Read them selectively ...?**

What might philosophers do with millions of words?

- 12m 4m 21m (titles/abstracts)
- **Read them all!**
 - = 2,467 hrs @ 250 w/min (= 1 s.y.)
- **Read them selectively ...?**
- **Add 2.6m HT public domain volumes?**

DIGGING BY DEBATING

Geographic Map Science Map

Maps Detail Data About

HATHI TRUST Digital Library

Mock up to show how the science map might display penetration of philosophical terms into the different disciplines, with specific links to resources from sources such as Hathi Trust. E.g., searching for 'consciousness' produces hits in various areas of science and then clicking on a specific shape, e.g., Brain Research provides a list of Hathi holdings that match the terms (next screen).

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From year 1901 to year 2010

Search by keyword consciousness Search

DIGGING BY DEBATING

Geographic Map Science Map

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Mock up to show how the science map might display penetration of philosophical terms into the different disciplines, with specific links to resources from sources such as Hathi Trust. E.g., searching for 'consciousness' produces hits in various areas of science and then clicking on a specific shape, e.g., Brain Research provides a list of Hathi holdings that match the terms (next screen).

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Funding: NIH, NSF, USDA, etc. Publications: PLoS, etc. Patents: USPTO, etc.

From year 1901 to year 2010

Search by keyword consciousness Search

DIGGING INTO DATA CHALLENGE

Digging by Debating

Download Argument Evaluate Argument

Argument Map 761

6904 venture to contend that the zoological psychologist cannot afford to dispense with that systematic framework in introspective or subjective analysis and induction which is absolutely essential for the student of human psychology.

6907 The objective study of animal life can pass by direct induction to conclusions concerning the physical faculties of animals.

6910 thinking that objective study can support conclusions about physical faculties of animals demonstrates ignorance of the methods of psychology.

6911 thinking that objective study can support conclusions about physical faculties of animals demonstrates ignorance of the methods of psychology.

6913 these human actions are explained on the assumption that your neighbour is actuated by motives and impulses similar to your own.

6914 these observers who think that their explanations are reached by direct induction are really proceeding unconsciously on the method they affect to disregard.

6958 The scheme of interpretation exhibited diagrammatically in Fig. 7 holds good in main as well for animal psychology as for the psychology of man.



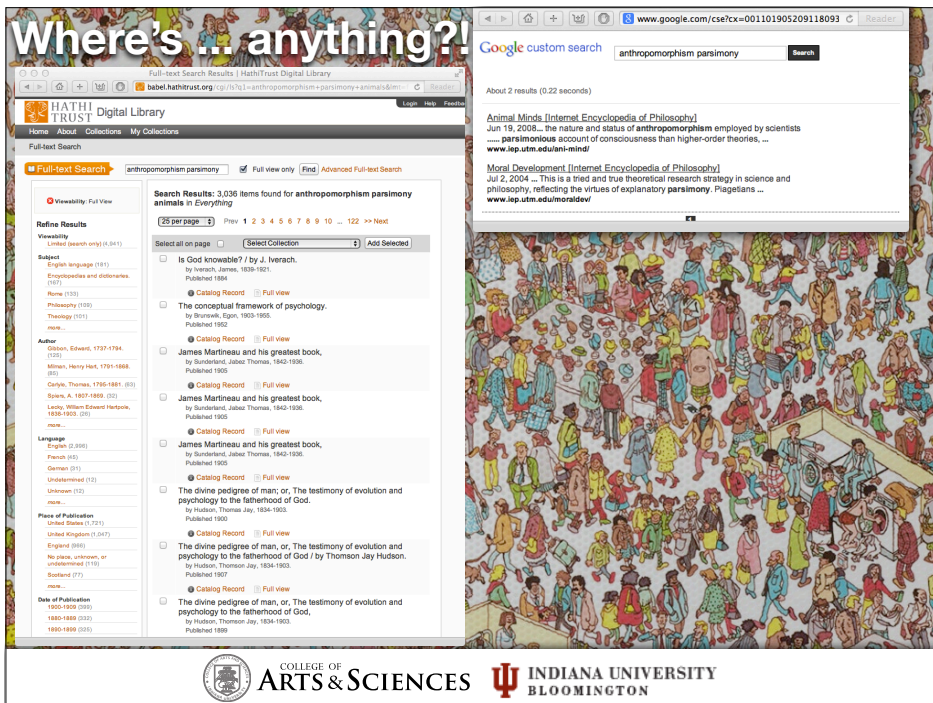
Where's ... anything?!

7



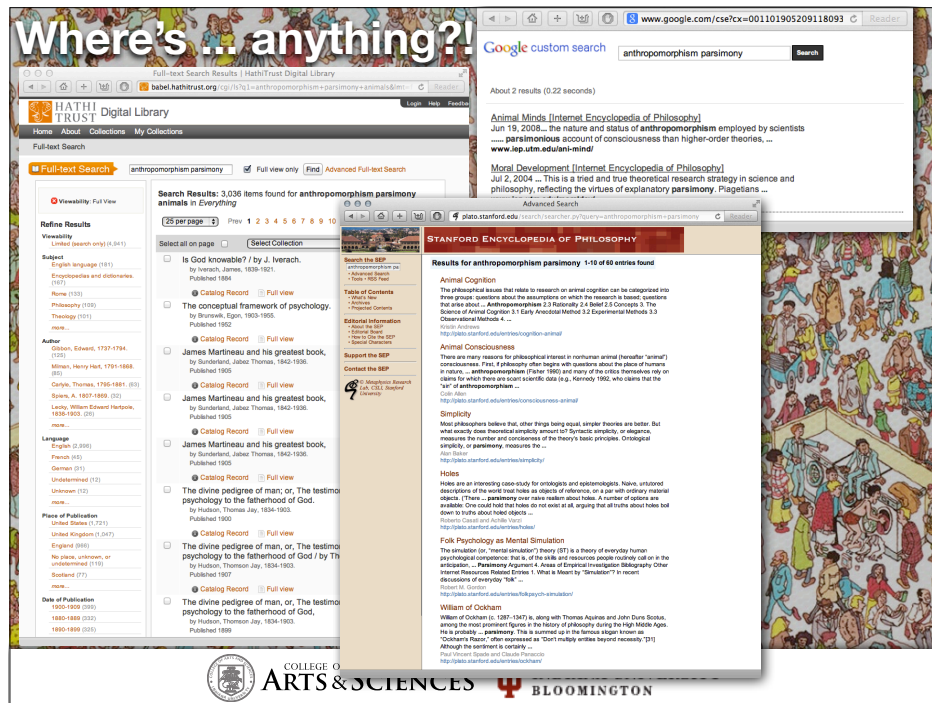
Where's ... anything?!

7



Where's ... anything?!

7



Where's ... anything?!

7

Where's ... anything?!

Google custom search anthropomorphism parsimony

Full-text Search Results | Hathitrust Digital Library

babel.hathitrust.org

HATHI TRUST Digital Library

Full-text Search anthropomorphism parsimony

Search results: 3,036 items found for anthropomorphism parsimony

Stanford Encyclopedia of Philosophy

Animal Cognition

philpapers

Search results for "anthropomorphism parsimony" | PhilPapers

Amazon Marketplace book bargains powered by PhilPapers

Search results for anthropomorphism parsimony

2015 Elliott Sober (2012) Anthropomorphism, Parsimony, and Common Ancestry. *Mind and Language* 27 (3):259-280

13. Joseph Apsell. Anthropomorphism in Science.

15. Colin Allen. Conditioned Anti-Anthropomorphism.

15. Andria Ambanis, John Case, Sanyu Jin & Madhyan Suro (2004). Parsimony Hierarchies for Inductive Inference. *Journal of Symbolic Logic* 69 (1): 93-97

William of Ockham (c. 1287-1307) is, along with Thomas Aquinas and John Duns Scotus, among the most important figures in the history of philosophy during the Middle Ages. His is probably ... parsimony. This is summed up in the famous slogan in Latin: "Ockham's Razor" (often translated as "don't multiply entities beyond necessity.")

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InPhO Semantics

Make Selections

Stanford Encyclopedia of Philosophy: Complete

Internet Encyclopedia of Philosophy: Complete

Stanford Encyclopedia of Philosophy: Comp

BEAGLE: Composite Vectors

BEAGLE: Environment Vectors

parimony

anthropomorphism

Add a search phrase...

Number of results to be returned: 30

simplicity	0.4470	argumentation	0.3590	meaning	0.2450
commitments	0.4160	ignorance	0.3580	grounding	0.2440
individuation	0.4110	essence	0.3580	truth	0.2420
entities	0.4040	aristotle	0.3570	molecular	0.2410
ontological	0.4000	modern	0.3570	logical	0.2410
generality	0.3920	providing	0.3560		
theoretical	0.3890				
rationality	0.3890				
finding	0.3870				
non-contradiction	0.3860				
epistemology	0.3850				
identifying	0.3830				
commitment	0.3800				
explaining	0.3790				
epistemological	0.3790				
providing	0.3780				
explanatory	0.3770				
establishing	0.3770				
innocence	0.3760				
distinguishing	0.3750				
interpreting	0.3710				
metaphysical	0.3700				
giving	0.3700				
defining	0.3690				
justification	0.3680				
scientific	0.3680				
inference	0.3680				
banking	0.3680				
considerations	0.3670				

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InPhO Semantics

Make Selections

SEP Complete	SEP Complete	IEP Complete	IEP Complete
BEAGLE Composite	BEAGLE Composite	BEAGLE Composite	BEAGLE Composite
parimony	anthropomorphism	parimony	anthropomorphism
Phrase	Similarity	Phrase	Similarity
simplicity	0.4470	behavior	0.3280
commitments	0.4120	unsoundness	0.3170
individuation	0.4110	altruism	0.3120
entities	0.4040	explaining	0.3040
ontological	0.4000	evoking	0.3030
generality	0.3920	explanation	0.2790
theoretical	0.3890	empirical	0.2780
rationality	0.3890	explanations	0.2780
finding	0.3870	scientific	0.2750
non-contradiction	0.3860	science	0.2750
epistemology	0.3850	psychological	0.2750
identifying	0.3830	modernity	0.2700
commitment	0.3800	phenomena	0.2690
explaining	0.3800	evolution	0.2660
priority	0.3790	jesus	0.2650
epistemological	0.3790	identities	0.2620
providing	0.3780	physics	0.2610
explanatory	0.3770	types	0.2580
establishing	0.3750	rationality	0.2560
innocence	0.3750	ethical	0.2540
distinguishing	0.3730	inference	0.2500
interpreting	0.3710	science	0.2480
metaphysical	0.3700	theoretical	0.2470
giving	0.3700	mathematics	0.2460
defining	0.3690	observation	0.2460
justification	0.3680	meaning	0.2450
scientific	0.3680	grounding	0.2440
inference	0.3680	aristotle	0.2420
banking	0.3680	modern	0.2410
considerations	0.3670	providing	0.3560

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InPhO - Idea - Animal Cognition

Animal Cognition

Animal Cognition is also an article in the Stanford Encyclopedia of Philosophy.

Related Terms

- Species
- aesthetics and philosophy of art
- af-rican and african-american philosophy
- arabic and islamic philosophy
- chinese philosophy
- continental philosophy
- epistemology
- ethics
- feminist philosophy
- history of philosophy
- japanese philosophy
- judaic philosophy
- latin american and iberian philosophy
- logic
- metaphysics
- philosophy of action
- philosophy of language
- philosophy of law
- philosophy of mathematics
- philosophy of mind
- philosophy of religion
- philosophy of science and the sciences
- social and political philosophy

Related Thinkers

- Stephen Stich
- Daniel Dennett
- Noam Chomsky
- Fred Dretske
- Ruth Millikan
- Richard-Bevan Braithwaite
- Giuseppe Ferrari
- David Pearce
- Donald Davidson
- Charles Darwin

Hyponyms

- Species
- Anthropomorphism
- Philosophy of Mind
- Belief
- Philosophy of Language
- Mechanism
- Ability
- Evidence
- Rationality

Occurrences

- Philosophy of Mind
- Philosophy of Language
- Philosophy of Science and the Sciences
- Concepts
- Individuals
- Evidence
- Argument
- Ability

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InPhO - Idea - Animal Cognition

https://inpho.cogs.indiana.edu/idea/812.html

The screenshot shows a browser window with the URL 'https://inpho.cogs.indiana.edu/idea/812.html'. The page title is 'Animal Cognition'. Below the title, it says 'Animal Cognition is also an article in the Stanford Encyclopedia of Philosophy.' There is a search bar and a navigation menu with links like 'About', 'API', 'OWL', 'Papers', 'Admin', and 'collation'. A 'Related Terms' and 'Related Thinkers' section is visible. A JSON response is displayed at the bottom, containing metadata like 'url', 'rdfs:label', and 'instances'.

Animal Cognition
Animal Cognition is also an article in the Stanford Encyclopedia of Philosophy.

Related Terms: ... Related Thinkers: ...

```

{"responseData": {"result": {"links": [], "url": "/idea/812", "related": [1711, 966, 33, 715, 962, 880, 712, 336, 5336], "sep_dir": "cognition-animal", "instances": [], "classes": [{"name": "hyponyms"}], "hyponyms": [{"name": "logic"}, {"name": "metaphysics"}, {"name": "philosophy of action"}, {"name": "philosophy of language"}, {"name": "philosophy of law"}, {"name": "philosophy of mathematics"}, {"name": "philosophy of mind"}, {"name": "philosophy of religion"}, {"name": "philosophy of science and the sciences"}, {"name": "social and political philosophy"}], "occurrences": [{"name": "Hypnyoms"}, {"name": "Q Species"}, {"name": "Q Anthropomorphism"}, {"name": "Q Philosophy of Mind"}, {"name": "Q Belief"}, {"name": "Q Philosophy of Language"}, {"name": "Q Philosophy of Science and the Sciences"}, {"name": "Q Mechanism"}, {"name": "Q Ability"}, {"name": "Q Evidence"}, {"name": "Q Argument"}, {"name": "Q Ability"}]}, "responseDetails": null, "responseStatus": 200}
  
```

InPhO - Open Data

https://inpho.cogs.indiana.edu/idea/812/graph.json

The screenshot shows a browser window with the URL 'https://inpho.cogs.indiana.edu/idea/812/graph.json'. The content is a large JSON object representing a graph of concepts and their relationships. The JSON includes a list of concepts with their IDs, labels, and weights, as well as a list of relationships between these concepts.

```

{"responseData": {"result": {"url": "/idea/812", "id": "812", "weight": 0.0005288199999999999, "weight": ...}, "responseDetails": null, "responseStatus": 200}
  
```

From InPhO to InPhoSemantics

What philosophers can do with millions of words.

The screenshot shows a web application interface for 'InPhoSemantics'. It features two main sections: 'BEAGLE Composite' and 'IEP Complete'. Each section contains a table with columns for 'Phrase' and 'Similarity'. The 'BEAGLE Composite' table lists phrases like 'philosophy', 'metaphysics', and 'ethics' with similarity scores. The 'IEP Complete' table lists phrases like 'plato', 'ethics', and 'virtue' with similarity scores. The interface includes navigation options like 'Make Selections' and 'Export Data'.

Phrase	Similarity
philosophy	0.8130
metaphysics	0.8040
ethics	0.7730
politics	0.7390
contemporary	0.7310
philosophical	0.7030
methodological	0.7030
science	0.7020
epistemology	0.7480
contemporary	0.7460
modern	0.7410
speculative	0.7400
critical	0.7360

Phrase	Similarity
plato	0.7200
ethics	0.6590
kant	0.6480
unlike	0.6450
metaphysics	0.6450
spinnoza	0.6430
leibniz	0.6360
descartes	0.6320
despite	0.6210
contemporary	0.6190
aquinas	0.6190
taking	0.6160

From InPhO to InPhoSemantics

What philosophers can do with millions of words.

Representing Word Meaning and Order Information in a Composite Holographic Lexicon

Michael N. Jones
University of Colorado at Boulder

Douglas J. K. Mewhort
Queen's University

The screenshot shows a web application interface for 'InPhoSemantics' with the title 'Representing Word Meaning and Order Information in a Composite Holographic Lexicon'. It features a table with columns for 'Phrase', 'Similarity', and 'Order'. The table is divided into sections for 'BEAGLE Composite' and 'IEP Complete'. The 'BEAGLE Composite' section lists phrases like 'philosophy', 'metaphysics', and 'ethics' with similarity scores and order values. The 'IEP Complete' section lists phrases like 'plato', 'ethics', and 'virtue' with similarity scores and order values.

Phrase	Similarity	Order
philosophy	0.8130	0.7840
metaphysics	0.8040	0.7250
ethics	0.7730	0.7170
politics	0.7390	0.7070
contemporary	0.7310	0.7010
philosophical	0.7030	0.6960
methodological	0.7030	0.6910
science	0.7020	0.6740
epistemology	0.7480	0.6700
contemporary	0.7460	0.6680
modern	0.7410	0.6650
speculative	0.7400	0.6640
critical	0.7360	0.6640

Phrase	Similarity	Order
plato	0.7200	0.7840
ethics	0.6590	0.7250
kant	0.6480	0.7170
unlike	0.6450	0.7070
metaphysics	0.6450	0.7010
spinnoza	0.6430	0.6960
leibniz	0.6360	0.6910
descartes	0.6320	0.6740
despite	0.6210	0.6700
contemporary	0.6190	0.6680
aquinas	0.6190	0.6650
taking	0.6160	0.6640

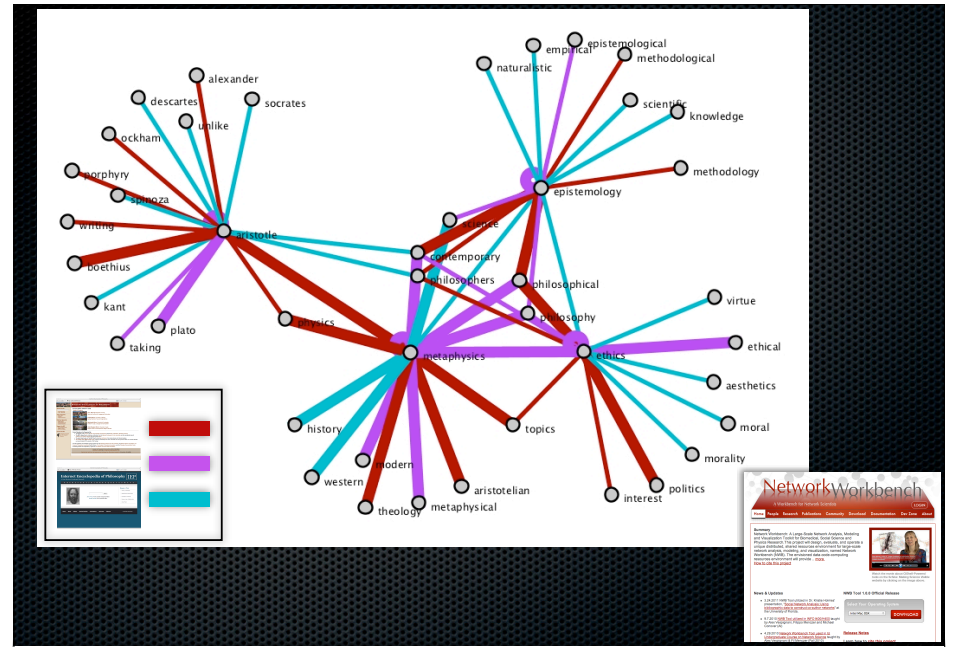
From InPhO to

What philosophers can do with millions of words.

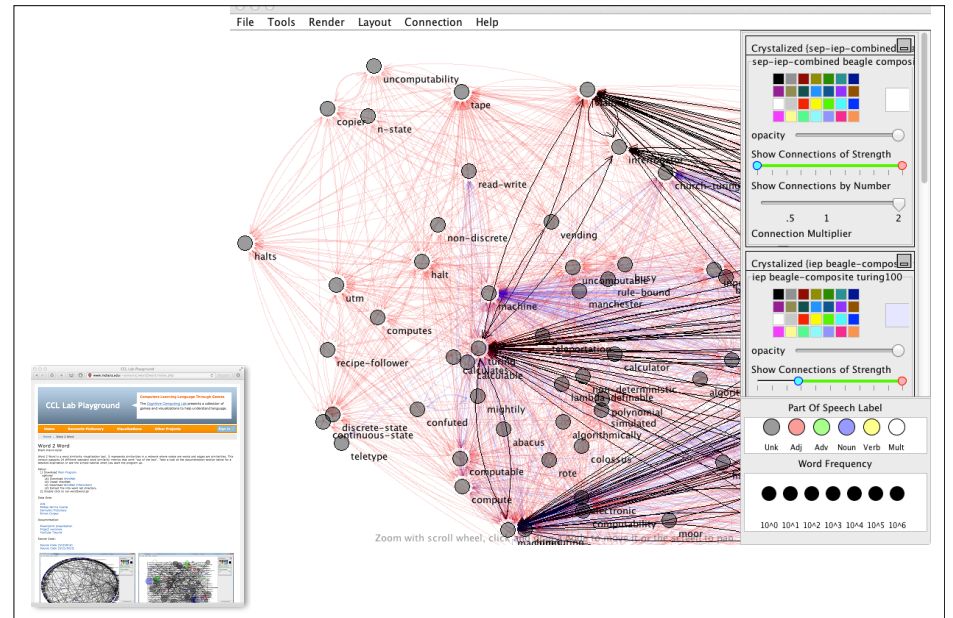
InPhO Semantics Make Selections Export Data

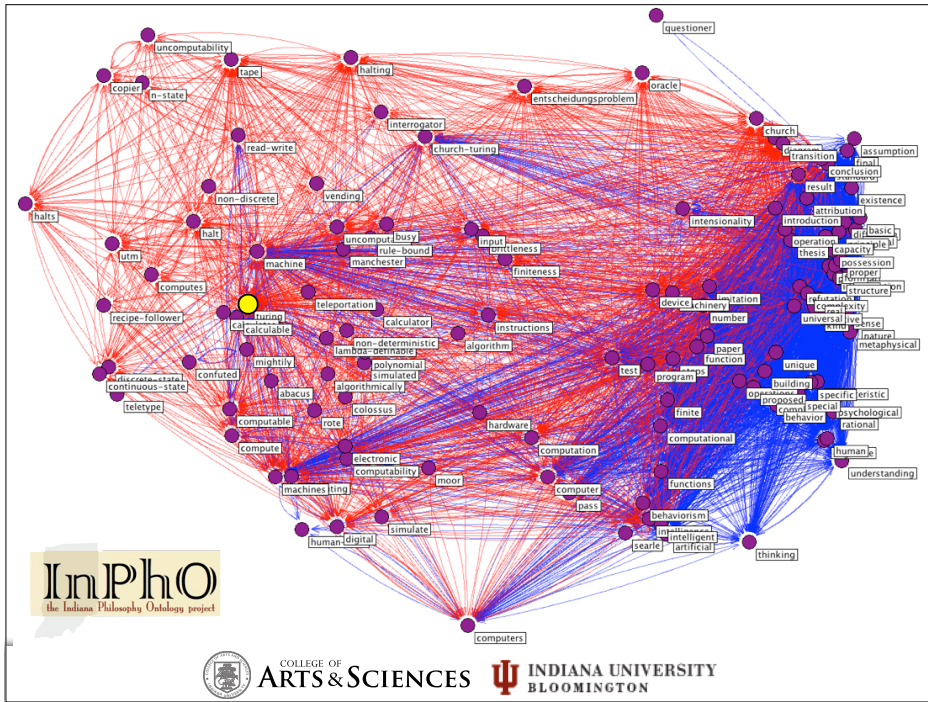
SEP Complete BEAGLE Composite aristotle		SEP Complete BEAGLE Composite metaphysics		SEP Complete BEAGLE Composite epistemology		SEP Complete BEAGLE Composite ethics	
Phrase	Similarity	Phrase	Similarity	Phrase	Similarity	Phrase	Similarity
plato	0.8290	philosophy	0.8130	philosophy	0.7520	philosophy	0.7840
metaphysics	0.7710	philosophical	0.8040	metaphysics	0.7480	metaphysics	0.7250
boethius	0.7620	topics	0.7730	contemporary	0.7390	politics	0.7170
alexander	0.7250	aristotle	0.7710	philosophical	0.7310	contemporary	0.7070
avicenna	0.6970	metaphysical	0.7670	methodology	0.7030	philosophy	0.7010
physics	0.6920	physics	0.7660	methodological	0.7030	philosophical	0.6960
works	0.6850	theology	0.7530	science	0.7020	epistemology	0.6910
porphyry	0.6770	epistemology	0.7480	philosophers	0.7000	issues	0.6740
taking	0.6750	contemporary	0.7460	epistemological	0.6940	interest	0.6700
topics	0.6730	modern	0.7410	ethics	0.6910	practical	0.6680
augustine	0.6680	speculative	0.7400	criticism	0.6890	moral	0.6650
descartes	0.6670	critical	0.7360	critical	0.6810	topics	0.6640

IEP Complete BEAGLE Composite aristotle		IEP Complete BEAGLE Composite metaphysics		IEP Complete BEAGLE Composite ethics		IEP Complete BEAGLE Composite epistemology	
Phrase	Similarity	Phrase	Similarity	Phrase	Similarity	Phrase	Similarity
plato	0.7200	philosophy	0.8070	ethical	0.7590	metaphysics	0.7250
ethics	0.6590	philosophical	0.7700	metaphysics	0.6920	epistemological	0.6820
kant	0.6480	contemporary	0.7510	virtue	0.6850	ethics	0.6730
unlike	0.6450	history	0.7280	contemporary	0.6730	naturalistic	0.6720
metaphysics	0.6450	epistemology	0.7250	epistemology	0.6730	quine	0.6600
spinoza	0.6430	modern	0.7170	moral	0.6710	contemporary	0.6490
leibniz	0.6360	science	0.7150	morality	0.6660	philosophy	0.6410
descartes	0.6320	western	0.7010	aristotle	0.6590	naturalism	0.6400
despite	0.6210	ethics	0.6920	metaethics	0.6570	knowledge	0.6350
contemporary	0.6190	metaphysical	0.6900	normative	0.6520	science	0.6320
aquinas	0.6190	aesthetics	0.6870	aesthetics	0.6460	scientific	0.6240
taking	0.6160	study	0.6710	philosophy	0.6420	skepticism	0.6180

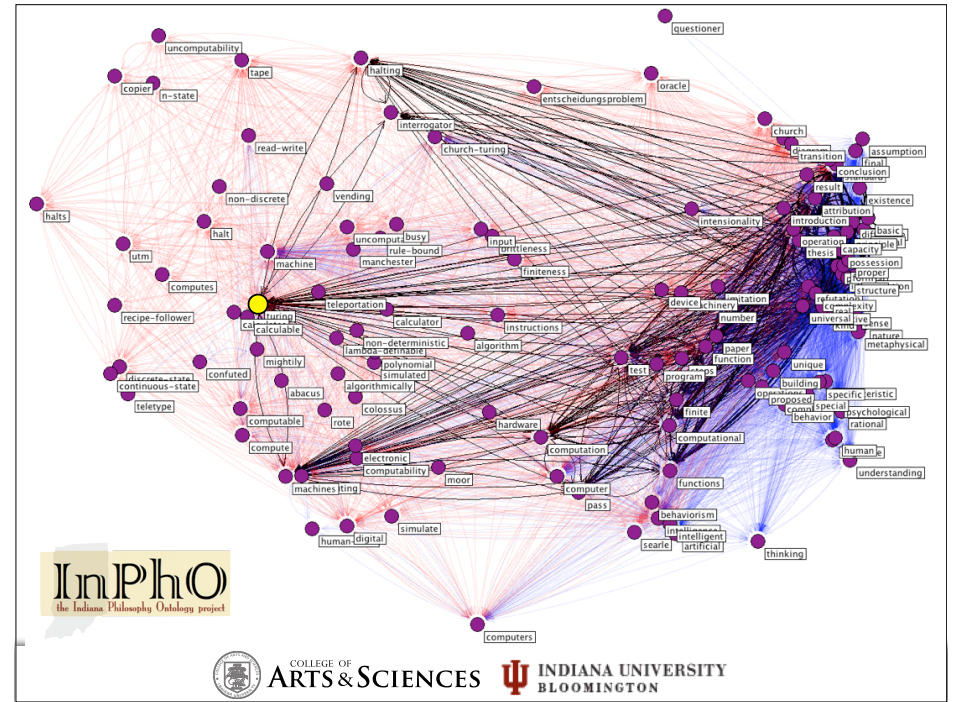


SEP Complete BEAGLE Composite turing		IEP Complete BEAGLE Composite turing		PhilPapers Complete BEAGLE Composite turing	
Phrase	Similarity	Phrase	Similarity	Phrase	Similarity
machine	0.8100	machine	0.5920	test	0.6120
machines	0.6940	computing	0.5570	machines	0.5740
tape	0.6350	machines	0.5380	interrogator	0.5390
test	0.6200	computability	0.5010	total	0.5140
computable	0.6020	test	0.4790	standard	0.5070
discrete-state	0.5990	computable	0.4750	real	0.5020
halting	0.5950	church-turing	0.4310	pass	0.5020
halt	0.5940	disqualifying	0.4120	hypothesis	0.5010
continuous-state	0.5910	intelligence	0.3990	initial	0.4940
copeland	0.5780	squares	0.3960	degree	0.4930
computing	0.5640	computer-in	0.3740	defining	0.4870
utm	0.5640	alan	0.3730	lobner	0.4870
uncomputable	0.5620	computer-would	0.3720	tt	0.4870
gandy	0.5520	computer	0.3640	so-called	0.4860
digital	0.5500	l-definability	0.3600	halting	0.4820
fact-if	0.5180	compute	0.3560	ttt	0.4820
computability	0.5140	parade	0.3560	results	0.4800
instructions	0.5130	mightily	0.3500	relative	0.4780
halts	0.5110	read-write	0.3390	limit	0.4780
compute	0.4930	teletype	0.3390	minimal	0.4770
intelligence	0.4870	interrogator	0.3380	functions	0.4760
church-turing	0.4750	computers	0.3240	computers	0.4740
computation	0.4750	artificial	0.3230	function	0.4720
machine-in-general	0.4570	human-level	0.3210	operation	0.4690
interrogator	0.4530	confuted	0.3120	nest	0.4680
simulated	0.4510	hardware	0.3120	description	0.4660
calculable	0.4500	digital	0.3100	structure	0.4650
gutterplan	0.4480	lambda-definable	0.3090	basic	0.4650
thorian	0.4460	paper	0.3070	class	0.4650
fact-that	0.4430	proposed	0.3020	controversy	0.4640





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17

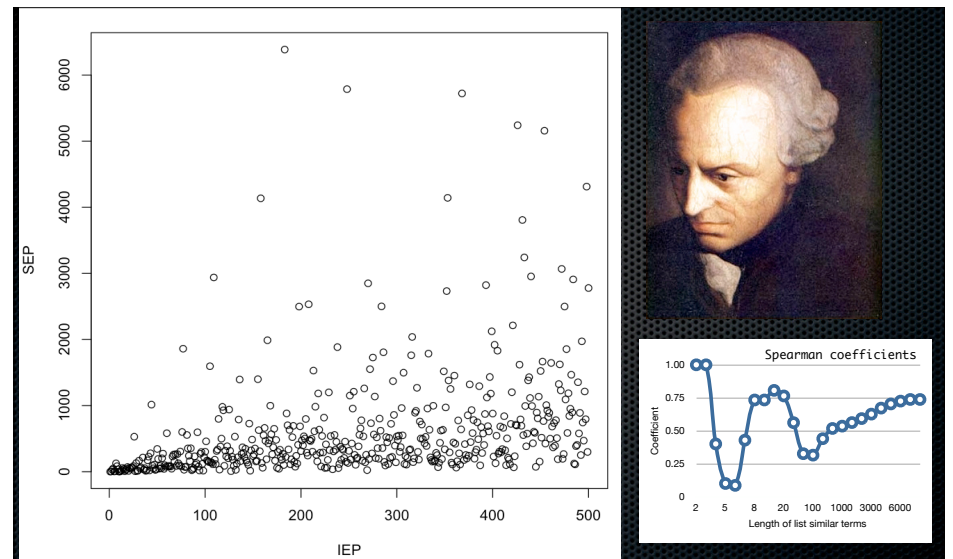
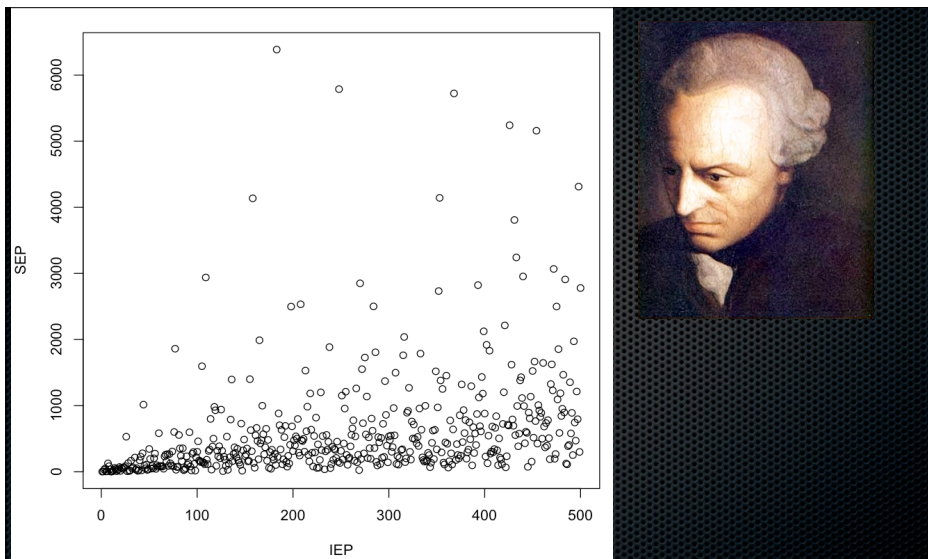
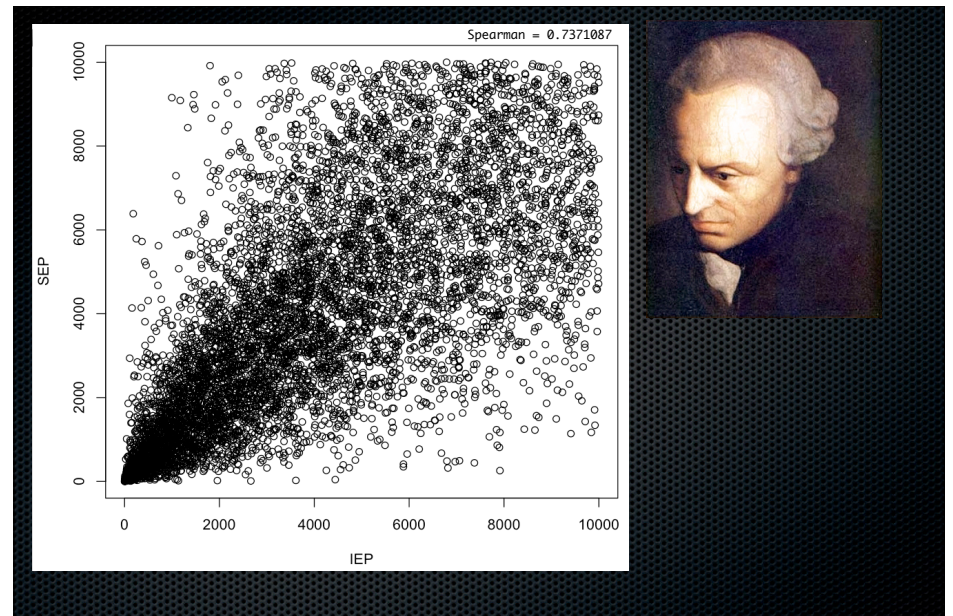
SEP Complete		SEP Complete		IEP Complete		IEP Complete	
BEAGLE Composite		BEAGLE Composite		BEAGLE Composite		BEAGLE Composite	
kant		descartes		kant		descartes	
Phrase	Similarity	Phrase	Similarity	Phrase	Similarity	Phrase	Similarity
hume	0.7920	leibniz	0.8030	reason	0.6950	reason	0.7420
pure	0.7620	spinoza	0.7590	hegel	0.6810	leibniz	0.6660
reason	0.7150	malebranche	0.7160	practical	0.6700	kant	0.6450
practical	0.7110	locke	0.6970	metaphysics	0.6690	aristotle	0.6320
critique	0.7080	amauld	0.6950	pure	0.6520	thinking	0.6190
leibniz	0.6990	ideas	0.6770	critique	0.6490	unlike	0.6110
herder	0.6920	aristotle	0.6670	contemporary	0.6490	ideas	0.6070
regarding	0.6870	unlike	0.6650	aristotle	0.6480	metaphysics	0.5950
metaphysics	0.6870	hume	0.6590	understanding	0.6470	contemporary	0.5900
sensibility	0.6860	taking	0.6590	morality	0.6460	thought	0.5880
rationalism	0.6840	thought	0.6580	leibniz	0.6450	philosophers	0.5790
understanding	0.6830	kant	0.6520	descartes	0.6450	mind	0.5790
transcendental	0.6800	metaphysics	0.6490	philosophers	0.6440	understanding	0.5760
morality	0.6750	berkeley	0.6450	schopenhauer	0.6430	hegel	0.5720
criticism	0.6750	thinking	0.6400	maimon	0.6420	distinct	0.5710
cohen	0.6740	distinct	0.6380	fichte	0.6400	dualism	0.5630
judgment	0.6740	gassendi	0.6330	philosophy	0.6400	skepticism	0.5610
unlike	0.6710	galileo	0.6320	moral	0.6370	roughly	0.5610
locke	0.6660	assuming	0.6300	hume	0.6310	humans	0.5590
wolff	0.6630	augustine	0.6280	thought	0.6300	berkeley	0.5590
taking	0.6620	drawing	0.6280	judgment	0.6300	drawing	0.5560
reflection	0.6620	cartesian	0.6270	ethics	0.6240	reason	0.5540
reflecting	0.6610	apparently	0.6270	spinoza	0.6150	anselm	0.5540
morals	0.6540	philosophers	0.6260	aesthetics	0.6140	forms	0.5540

18

SEP Complete		SEP Complete		IEP Complete		IEP Complete	
BEAGLE Composite		BEAGLE Composite		BEAGLE Composite		BEAGLE Composite	
kant		descartes		kant		descartes	
Phrase	Similarity	Phrase	Similarity	Phrase	Similarity	Phrase	Similarity
hume	0.7920	spinoza	0.8030	reason	0.6950	spinoza	0.7420
pure	0.7620	spinoza	0.7590	hegel	0.6810	leibniz	0.6660
reason	0.7150	malebranche	0.7160	practical	0.6700	kant	0.6450
practical	0.7110	locke	0.6970	metaphysics	0.6690	aristotle	0.6320
critique	0.7080	amauld	0.6950	pure	0.6520	thinking	0.6190
leibniz	0.6990	ideas	0.6770	critique	0.6490	unlike	0.6110
herder	0.6920	aristotle	0.6670	contemporary	0.6490	ideas	0.6070
regarding	0.6870	unlike	0.6650	aristotle	0.6480	metaphysics	0.5950
metaphysics	0.6870	hume	0.6590	understanding	0.6470	contemporary	0.5900
sensibility	0.6860	taking	0.6590	morality	0.6460	thought	0.5880
rationalism	0.6840	thought	0.6580	leibniz	0.6450	philosophers	0.5790
understanding	0.6830	kant	0.6520	descartes	0.6450	mind	0.5790
transcendental	0.6800	metaphysics	0.6490	philosophers	0.6440	understanding	0.5760
morality	0.6750	berkeley	0.6450	schopenhauer	0.6430	hegel	0.5720
criticism	0.6750	thinking	0.6400	maimon	0.6420	distinct	0.5710
cohen	0.6740	distinct	0.6380	fichte	0.6400	dualism	0.5630
judgment	0.6740	gassendi	0.6330	philosophy	0.6400	skepticism	0.5610
unlike	0.6710	galileo	0.6320	moral	0.6370	roughly	0.5610
locke	0.6660	assuming	0.6300	hume	0.6310	humans	0.5590
wolff	0.6630	augustine	0.6280	thought	0.6300	berkeley	0.5590
taking	0.6620	drawing	0.6280	judgment	0.6300	drawing	0.5560
reflection	0.6620	cartesian	0.6270	ethics	0.6240	reason	0.5540
reflecting	0.6610	apparently	0.6270	spinoza	0.6150	anselm	0.5540
morals	0.6540	philosophers	0.6260	aesthetics	0.6140	forms	0.5540

18

SEP Complete		SEP Complete		IEP Complete		IEP Complete	
BEAGLE Composite		BEAGLE Composite		BEAGLE Composite		BEAGLE Composite	
kant		descartes		kant		descartes	
Phrase	Similarity	Phrase	Similarity	Phrase	Similarity	Phrase	Similarity
hume	0.7920	leibniz	0.8030	reason	0.6950	spinoza	0.7420
pure	0.7620	spinoza	0.7590	hegel	0.6810	leibniz	0.6660
reason	0.7150	malebranche	0.7160	practical	0.6700	kant	0.6450
practical	0.7110	locke	0.6970	metaphysics	0.6690	aristotle	0.6320
critique	0.7080	arauld	0.6950	pure	0.6520	thinking	0.6190
leibniz	0.6990	ideas	0.6770	critique	0.6490	unlike	0.6110
herder	0.6920	aristotle	0.6670	contemporary	0.6490	ideas	0.6070
regarding	0.6870	unlike	0.6650	aristotle	0.6480	metaphysics	0.5950
metaphysics	0.6870	hume	0.6590	understanding	0.6470	contemporary	0.5900
sensibility	0.6860	taking	0.6590	morality	0.6460	thought	0.5880
rationalism	0.6840	thought	0.6580	leibniz	0.6450	philosophers	0.5790
understanding	0.6830	kant	0.6520	descartes	0.6450	mind	0.5790
transcendental	0.6800	metaphysics	0.6490	philosophers	0.6440	understanding	0.5760
morality	0.6750	berkeley	0.6450	schopenhauer	0.6430	hegel	0.5720
criticism	0.6750	thinking	0.6400	maimon	0.6420	distinct	0.5710
cohen	0.6740	distinct	0.6380	fichte	0.6400	dualism	0.5630
judgment	0.6740	gassendi	0.6330	philosophy	0.6400	skepticism	0.5610
unlike	0.6710	galileo	0.6320	moral	0.6370	roughly	0.5610
locke	0.6660	assuming	0.6300	hume	0.6310	humans	0.5590
wolf	0.6630	augustine	0.6280	thought	0.6300	berkeley	0.5590
taking	0.6620	drawing	0.6280	judgment	0.6300	rejecting	0.5560
reflection	0.6620	cartesian	0.6270	ethics	0.6240	reason	0.5540
reflecting	0.6610	apparently	0.6270	spinoza	0.6150	anselm	0.5540
morals	0.6540	philosophers	0.6260	aesthetics	0.6140	forms	0.5540



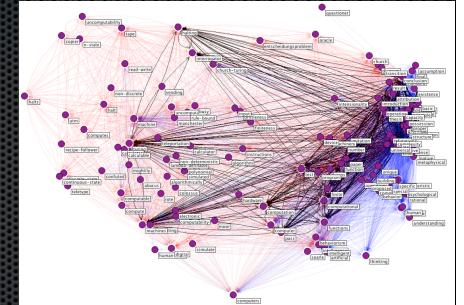
DIGGING INTO DATA CHALLENGE

- Coming July 2013: **Digging by Debating**
 - Joint project with InPhO, Katy Börner (IU), Andrew Ravenscroft (U. East London), Chris Reed (Dundee), David Bourget (U. of London)
 - 2.6 m volumes from HathiTrust/Google Books
 - 2.6 m books x ~350 pages/book x ~250 words/page = ~230 BILLION words



DIGGING INTO DATA CHALLENGE

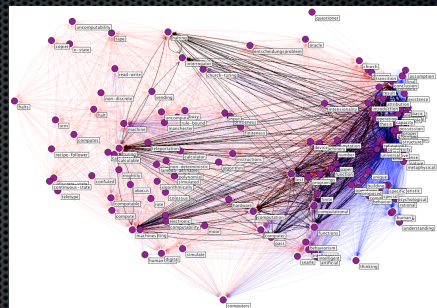
▪ Digging by Debating



DIGGING INTO DATA CHALLENGE

▪ Digging by Debating

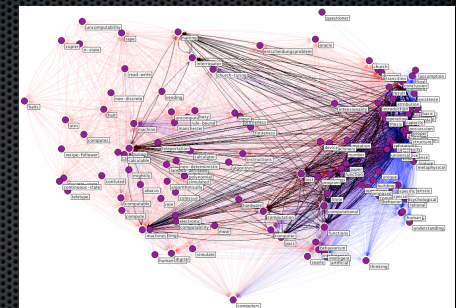
- Scaling challenges



DIGGING INTO DATA CHALLENGE

▪ Digging by Debating

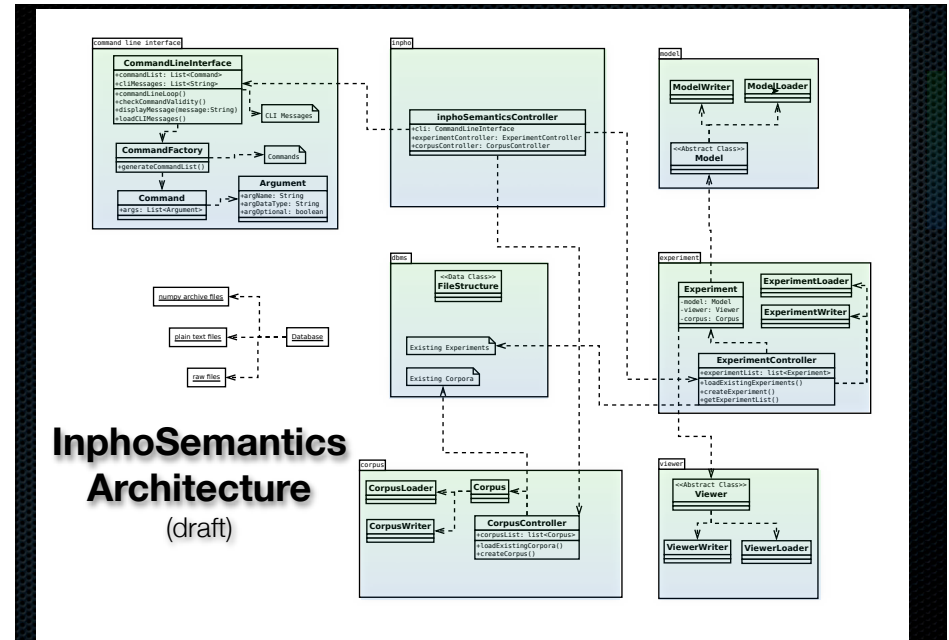
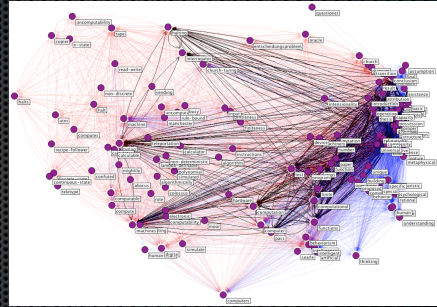
- Scaling challenges
- Context-sensitivity (more not always better)



DIGGING INTO DATA CHALLENGE

Digging by Debating

- Scaling challenges
- Context-sensitivity (more not always better)
- Need: multi-scale model comparisons



InphoSemantics Architecture (draft)



Also coming in 2013: Linked Humanities

- Joint project between InPhO and Mathias Niepert (U. Mannheim => U. Washington)
- Automated matching of InPhO entities to Linked Open Data Cloud



Research Avenues

- Model comparison
- Context Switching
- Domain Expertise
- Corpus comparisons
- State of profession
- Controversy analysis
- Historical tracking
- (and more!)



<http://inpho.cogs.indiana.edu/>