Term Morphologies as Meaningful Typology Characteristics for Indexing Languages

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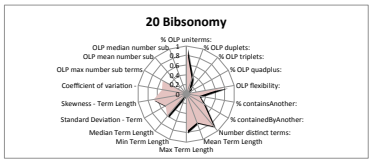
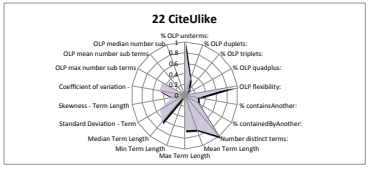
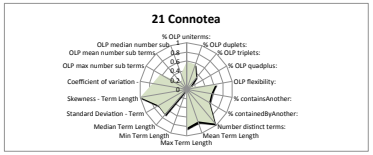
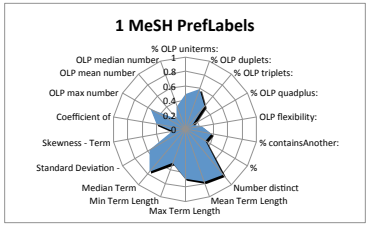
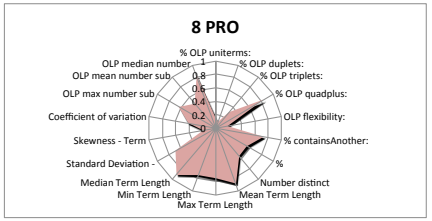
	UNI	DUP	TRI	QUA	FLE	C0N	CBY	DIS	MLE	XLE	NLE	DLE	SD	SKE	COE	0MX	0MN	0MD
Bibsonomy	0.96	.34	.11	.02	.83	.27	.42	.87	.63	.79	0	.6	.49	.68	.61	.56	.07	0
CiteULike	1	.3	.11	.01	1	.25	.3	1	.68	.65	0	.65	.52	.24	.47	.48	.06	0
Connotea	0.59	.55	.32	.09	.64	.54	.57	.95	.74	.83	0	.71	.69	1	.73	.64	.17	.33
MeSH	.49	.59	.41	.12	.23	.37	.33	.82	.77	.68	.5	.76	.57	.17	.4	.55	.19	.33
ACM	.24	.65	.48	.26	.14	.42	.4	.57	.83	.68	.75	.82	.63	.2	.4	.49	.28	.33
FMA	.02	.08	.23	1	.24	1	.78	.91	1	.72	.5	1	.74	.08	.34	.53	.7	1
PRO	.15	.1	.31	.84	.18	.73	.54	.54	.89	.76	.75	.91	.69	.18	.42	.63	.48	.83

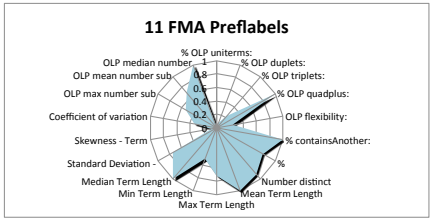


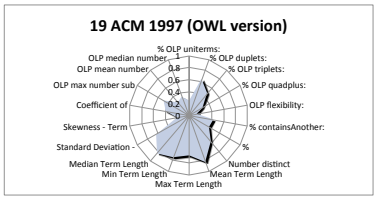












CASE	10	9	8	7	6	5	4	3
	CLUSTERS							
MeSH	1	1	1	1	1	1	1	1
PRO	5	5	4	3	3	2	2	2
FMA	5	5	4	3	3	2	2	2
ACM	1	1	1	1	1	1	1	1
BIB	8	8	7	6	5	4	4	3
CON	9	9	8	7	6	5	4	3
CIT	8	8	7	6	5	4	4	3

NEXT STEPS

(1) Gathering more data and diverse types of indexing languages and more examples of the types present here.

(2) Capturing time-lapse data to see how these term morphologies change over time [cf. 2, 3]

TERM MORPHOLOGY

Every indexing language is made up of terms. Those terms have *morphological* characteristics. These include terms made up of single words, two words, or more. We can also take into account the total number of terms.

We can assemble these measures, normalize them, and then cluster indexing languages based on this common set of measures [1].

Cluster analysis reviews discrete groups based on term morphology that comport with traditional design assumptions that separate ontologies, from thesauri, and folksonomies.

References
[1] Good, B. M. and Tennis, J. T. (2009). "Term Based Comparison Metrics for Controlled and Uncontrolled Indexing Languages." For Information Research 14(1). Available: http://informationr.net/ir/14-1/paper395.html
[2] Tennis, J. T. (forthcoming). "Some Temporal Aspects of Indexing and Classification: Toward a Metrics for Measuring Scheme Change." iConference 2012. Toronto.
[3] Tennis, J. T. and Sutton, S. A. (2008). "Extending the Simple Knowledge Organization System (SKOS) for Concept Management in Vocabulary Development Applications." In Journal of the American Society for Information Science and Technology. 59(1): 25-37.