JURISDICTION IDENTIFIERS

MANAGING MULTINATIONAL RESOURCES

FRANK BENNETT

LAW VIA THE INTERNET RUTGERS UNIVERSITY, NEWARK 2017-10-21

1

TABLE OF CONTENTS

- In Brief
- Okay: What I Really Want
- Identifiers
- What does comparative law do?
- Legal Resource Registry
- Moving forward
- Thank You

IN BRIEF

Herein of the problem and what I have to say about it.



IN BRIEF

- Legal jurisdictions maintain separate electronic collections.
- Electronic collections need machine-readable identifiers.
- Multiple jurisdictions? You need *jurisdiction* identifiers.
- So we should expect them to exist.
- Because globalization.
- But they don't, although ...

IN BRIEF

- ... building a set of jurisdiction identifiers is a *relatively* simple thing to do.
- So we should.
- (coffee!)

OKAY: WHAT I REALLY WANT

Herein of the effect of research habits on residual artifacts of scholarship.



Dammit Jim, I'm a comparative lawyer, not an IT specialist!

Let's think skeptically for a sec about the impact of technology on our scholarship.

DATA AND LEGAL RESEARCH

- Where can I find stuff online?
- What resources are easiest to access?
- How can I quantify things?
- Can I bring large amounts of data into play?
- Search
- Lotsa PDF

In legal research as elsewhere, the things that can be done more easily tend to be done more often and to receive more emphasis.



Remnants of research past

When all you have is a digital hammer, things can easily end up looking like this behind the scenes.

OLD-SCHOOL COMPARATIVE LAW

- A focus on specific primary sources
- Multiple national jurisdictions
- Multiple languages
- Each project a bespoke voyage of discovery

In times of higher search cost, credible comparisons of phenomena across jurisdictions began *of necessity* with systematic study of structures within the respective systems. Commentaries, outlines, ontologies, indexes: these were the raw materials that the scholar fashioned into a narrative emerging from comparison.



Research memories

Research habits vary, but paper-based research methods lent themselves to the production of well organized personal document collections over the course of an academic career. (Overstuffed chairs and velvet curtains are an optional extra.)



A Legal Research Multi-Tool

In an ideal world, the power of digital search and text analysis would supplement tools for managing personal libraries. This is a trend in "digital humanities" that has been late to reach legal and multilingual scholarship.

🗟 🔬 🛛 Juris 🖗 🗸	🞯 🔻 🔏 🕏 🖉 🗸 🔍 🔍 Title, Creator, Y	
📁 Nary Demo	Title 🛤	Info Notes Tags Related
🔊 Paper	Immigration Law and Policy Asian Community-Building	
📁 Asia+America HO	🕨 🖹 Early Development of Modeto China, Japan and Korea	Item Type: Journal Article
🔤 Asian countries	Judicialisation, Juridificategal Scholarship of Vietnam	Title: Commercial Legal Framework in
🖻 Asia-only HO	Commercial Legal Framewos Development and Issues	Vietnam Since the Asian Crisis
🖻 Asia-only JSTOR	Regulating Religion in Post-Sc Institutions in Tajikistan	Development and Issues
🖿 Asia-titled	▶ Transboundary Pollution inronmental Law Perspective	 Author: Pham, Nghia D. Abstract:
🖻 By authorship	▶ Rule of Law in a Globalizing An Asian Perspective, The	Publication: International Business Lawyer
▶ 🔤 By country/region	Bise of Environmental Law in the Asian Region, The	Volume: 32
🖻 Cite-worthy	Recent Trends in Asian Traw - Changes and Challenges	Issue:
🖻 Comparative La	Principles of Asian Contractf Contract Law in East Asia	Pages: 175-180
🖻 Dupes	▶ On the Public-Law Characteson from Asian Capitalism	Date: 2004 y
🖻 Kyoto Confo+	▶ On Rule of Law Rhetoric, E…pment, and Northeast Asia	Status:
🖻 Post-2014	▶ Navigational Rights and Fr Law of the Sea Convention	Series: Series Title:
🖻 Pre-1990	Legal Oddities in Southeast Asia	Series Text:
🖻 Recipes	▶ ■ Law Association for Asia a Regional Cooperation, The	Journal Abbr: Int'l Bus. Law.
🖻 reffies	Belleting How Leadership in Internatiernational Criminal Courts	Jurisdiction: Odefault
🖻 reffies 10/1/2015,	Domestic Violence Lawmakids in Feminist Lawmaking	Language:
🖻 Terms of Use paper	Developing Development Thrtheast Asian Experience	DOI:
🖻 Testie	Convention on the Rights ofnt in the Asia Pacific, The	ISSN:
🖻 国際交流委員会	Compliance with the United in the Asia-Pacific Region	Short Title:

Juris-M Reference Manager

Juris-M is a variant of the Zotero reference manager built to fill this gap in the scholar's toolchest.



Housekeeping

While a body of law is a highly structured body of instrumental declarations, their publication is often an ad hoc affair. A reference manager provides a means of properly organizing documents gleaned from the "Tale of Data Chaos (aka the Internet)" for research purposes.

IDENTIFIERS

As noted at the outset, to build that ideal research platform, we're going to need identifiers.

THINGS COME IN FLAVORS

- Developers
 - Repository wranglers
 - Antique collectors
- Identifiers
 - Document identifiers
 - Jurisdiction identifiers

The complexity of an identifier system grows in proportion to its <u>proximity to real-world artifacts</u>. Large-scale legal archives need unique document identifiers to manage collections under their respective umbrelias. For ease of maintenance, a lot of thought goes into crafting expressive identifiers that make sense to humans—and jurisdiction is often implicit. In a "little-data" library of eclectic resources, expressive identifiers for jurisdiction are critical, while documents can satisfactorily be identified by arbitrary slugs.



Assuming a jurisdiction identifier

Jurisdiction identifiers are useful in at least three ways.

GENERATING CITES

United States

Henley v. DeVore, 733 F. Supp. 2d 1144 (2010). England & Wales Rhone v. Stephens, [1994] 2 AC 310 (HL). Japan Tokyo High Court, (ne) 4593, judgment, October 4, 2007.

In cites to secondary sources, the citation format is a property of the "parent" style (Chicago, Vancouver, APA, Indigo).

But in cites to primary legal sources, the citation format is a property of the *jurisdiction*.

This adds a layer of complexity to the design of stylesheet schemata for generating human-readable references—more than once, citation technlogists have memorably characterized legal citation practices as "insane." However, the complexity is unavoidable in our time, given that legal systems are heavily invested in specific shorthand reference forms, and that citations often foreground features of the underlying archives that are unique to the jurisdiction. As a practical matter, these differences must be respected, and jurisdiction identifiers are the key to doing so.

USER INTERFACE

Info Notes Tags Related	
Item Type: Case	4
Case Name: Matthew Bender & HyperLaw v. West	
 Author: (full name)	
Document Name: Abstract:	÷
Jurisdiction: US Second Circuit S.D. New Odefault	
Bankruptcy Court	
District Court Reporter: Civ.	
Year As Vol.: Reporter Volume: 94	
First Page: 0589 Date Decided: May 1, 1996 m d y	
Filing Date:	
Reign: Call Number: Publisher:	U P

Typeahead search of controlled lists

When machine-readable jurisdiction identifiers are known, they can be leveraged to fashion user-facing interface helpers that make for ease of use and uniformity in the underlying metadata stored in the personal library.

DOGFOOD FOR DEVELOPMENT (1)



Juris-M legal style editor

The Juris-M project "eats its own [identifier] dogfood." Stylesheet support for the plethora of local citation practices demands an expanding set of jurisdictionspecific legal citation modules. The Juris-M Style Editor (built atop GitHub Pages), supports per-jurisdiction selection of supplementary stylesheets for editing.

DOGFOOD FOR DEVELOPMENT (2)

Juris Style Editor Field Maps -	Docs 🗸 ? 🧻
ootnote ▼ Source ▼ United States ▼	Remove Load with - Juris-M Validate Download
	Success and welcome!
Editor Errors Sampler	Some tips:
	Juris-M Style edit style code
Source	Validate check code syntax
<pre>1 <?xml version="1.0" encoding="utf-8"?></pre>	Sampler preview citations
<pre>2 - <style -="" 3="" <info="" xmlns="http://purl.org/net/xbiblio/csl"></pre></td><td>Submit submit code for review</td></tr><tr><td>4 <title>United States</title> 5 <id>http://juris-m.github.io/modules/juris-</td><td>-us</td></tr><tr><td><pre>6 <link href="http://juris-m.github.io/module 7 <link href="http://juris-m.github.io" rel="</pre></td><td>"documenta</td></tr><tr><td>8 - <author> 9 <author>https://www.second.com/second/secon</td><td></td></tr><tr><td>10 <email>bennett@law.nagoya-u.ac.jp</email> 11 </author></td><td>•</td></tr><tr><td>12 <category citation-format="note"/> 13 <category field="law"/></td><td></td></tr><tr><td>14 <summary>Juris-M style module for the Unite 15 <updated>2013-01-26722:06:38+00:00</updated</td><td></td></tr><tr><td>16 <rights license="http://creativecommons.org</td><td>g/licenses/by-sa/3.0/">This work is licensed under a Creative Commons Attribution-ShareAlike 3</td></tr><tr><td>.0 License</rights> 17 </info></td><td></td></tr><tr><td>18 - <locale> 19 - <terms></td><td></td></tr><tr><td>20 - <term name="article"></td><td></td></tr><tr><td>21<single>article</single>22<multiple>articles</multiple></td><td></td></tr><tr><td>23 </term> 24 - <term name="article" form="short"></td><td></td></tr><tr><td></td><td></td></tr></tbody></table></style></pre>	

Juris-M legal style editor

Loading a jurisdiction to the editor brings up its XML code.

DOGFOOD FOR DEVELOPMENT (3)

• Secure https://juris-m.github.lo/editor/ Juris M Style Editor Field Maps -	Docs + ? 🚺	@ ☆ @
Footnote Source United States	☐ Remove Load with ▼ Juris-M	Validate Download Submit
Editor Errors Sampler		
United States	drag fields to add or remove them	
Case -	Included fields	Excluded fields
Citations	Creator	Creator
Full plain Document Name, Case Name, 555 Rept. 333 (Jurisdiction Court 1953) Full with locator Document Name at Locator, Case Name, 555 Rept. 333 (Jurisdiction Court 1953) Ibid plain <i>Id.</i> Ibid with locator <i>Id.</i> at Locator	Author Text Case Name Court Document Name Jurisdiction Place Publisher Reporter Short Title Number	Commenter Contributor Text (Abstract Archive Loc. in Archive Extra History) (Language Supp. Name) (URL)
Supra plain Short Title, <i>supra</i> note 1 Supra with locator rjpg ^ = star-trek-mccoy.jpg ^	Docket Number First Page Reporter Volume Year As Vol.	Number (Call Number (Issue)

Juris-M legal style editor

Edits to the stylesheet XML can be validated through the editor, and the behavior of validated code can be explored by drag-and-drop removal, addition, and editing of item metadata input.

WHAT DOES COMPARATIVE LAW *DO*?

Herein of a preliminary empirical study of comparative law discourse in Germany and Asian countries in transition, presented at the Asian Law and Society Association conference, August 4, 2015.

In HeinOnline and JSTOR, for the years 1980 to 2014 ...

california* AND (law* OR legal*)		
german* AND (law* OR legal*)		
japan* AND (law* OR legal*)		
(cambodia* OR kazakh* OR lao* OR mongolia* OR tajik* OR uzbek* OR viet*) AND (law*	6 OR	legal

The study was based on English-language law review articles concerning several jurisdictions. We will focus here on the results from Germany and a subset of Asian countries in transition.

DATA COLLECTED

Category	HO LJL
California	317
Germany	412
Japan	396
Other Asia	201

Note: "Other Asia" includes nine articles from JSTOR.

The aim was to explore the topic patterns in collected documents via Latent Dirichlet Allocation, using MALLET and associated visualization tools. For stable results, this method relies on large document sets of 1,000 items or more. It is a point of weakness in this study that the volume of documents collected for each target was much smaller.



- compani,corpor,sharehold
- constitut,administr,bverfg
- privat,econom,theori
- crimin,crime,victim
- intern,treati,nation

Germany

Patterns are consistent with German participation in multi-party cross-border conversations within and beyond the European Union concerning its solutions to common problems of law and governance. This is the familiar face of "comparative law" as the term is commonly understood.



- bank,bankruptci,secur
- foreign,invest,investor
- human, militari, forc

• lawyer,reform,train Asian Countries in Transition The small sample size as well as the limitations of LDA analysis dictate caution in drawing firm conclusions from these patterns; but they do appear to reflect the

exogenous preferences of remote actors, either for purposes of control or for the attraction of foreign investment. If that is correct, horizontal communication between systems about detailed aspects of law, policy and procedure is yet to emerge; and given the language barriers within Asia, legal and multilingual reference management will have a role to play in fostering such dialog.

LEGAL RESOURCE REGISTRY

Herein of the home-brew infrastructure behind Juris-M jurisdiction identifiers.

	Home Jurisd	Updating a Jurisdiction	n Develope
urisdictions marked with	stripes are stubs that do not	yet provide court lists.	
US Neutral Cites	rbitrations African Un	ion Australia Cambodia (Canada
Czechoslovakia Peop	ole's Republic of China	Council of Europe	
Common Market for Ea	stern and Southern Afric	Denmark European Commun	ity
European Economic Ar	European Economic C	Community European Union F	inland Fra
German Democratic Re	public International C	riminal Court International	Monetary Fi
Japan League of Na	cions Mongolia The M	etherlands New Zealand	
Organization of Amer	ican States Palestinia	Comunidad Andin	a
Sistema de la Integr	ación Centroamericana	United Kingdom	
Union of Soviet Soci	alist Republics United	Nations United States Vi	et Nam
Western Sahara Wor	d Bank Group World Tr	ade Organization Yugoslavia	Afghanist

Juris-M jurisdiction identifiers are derived from the "Legal Resource Registry" (LRR). The idea for the LRR emerged during discussions of the Legal CiteM OASIS standards group chaired by John Joergensen and Fabio Vitali. The initial data set was built from IDs provided by CourtListener, and the World Law Guide collection national court information, reused with the consent of its author Harry Moers of Lexadin. Grey-stripped jurisdictions in the LRR contain court information that has not yet been verified.

 ←) − •	Legal Re Courts, Tribunals, a	source Ro	0	
	Home	Jurisdictions	Updating a Jurisdiction	Developers
	Uni	ited State	S	
Supreme Court	C. Circuit First Circuit	Second Circuit	Third Circuit Fourth	Circuit
Fifth Circuit Si:	xth Circuit Seventh Circ	uit Eighth Circ	cuit Ninth Circuit Fede	eral Circuit
Tenth Circuit El				
Tenth Circuit El	eventh Circuit (Alaska)	Alabama	American Samoa (Arizo	ona
California Color	ado) (Connecticut) (Distric	ct of Columbia	Delaware) (Florida) (Georg	jia Guam
Hawaii Iowa Ida	aho Illinois Indiana (Kansas Kentuck	y Louisiana Massachuse	tts Maryland
(Maine) (Michigan) ((Minnesota) (Missouri) (Nor	rthern Mariana Is	alands) (Mississippi) (Mont	ana
Navajo Nation No:	rth Carolina) (North Dakot	a Nebraska Ne	w Hampshire New Jersey	New Mexico
Nevada New York	Ohio Oklahoma Oregon	Pennsylvania	Puerto Rico Rhode Islam	d
South Carolina So	outh Dakota Tennessee	Texas Utah Vi	rginia U.S. Virgin Islar	nds Vermont
Washington Wiscon	nsin) (West Virginia) (Wyor	ming		
		/		

The user-facing view of the LRR is a simple layer of HTML hosted via GitHub Pages.

$\left(\leftarrow\right)$	Legal Resource Registry (
	Home Jurisdictions Updating a Jurisdiction Developers
	United States
	D.C. Circuit
×	Appeals for the D.C. Circuit
	(casename: reg'd)

For US courts, the LRR contains details of reporters in which decisions of each listed court might be published. This information is derived from CourtListener data (and has not been updated in some time).

fbe	ennett / legal-resource-registry	O Unwatch - 6 ★ Star 7 8	Fork
Branch:	master - legal-resource-registry / data / courts / us / c0 / court.appeals /	index.txt ≔ 🗈	
the star			<
Ver ibei	nnett Monster revision of everything.	ad26b7f on Jan 21	(
1 contril	putor		
			ĩ
11 lin	es (7 sloc) 254 Bytes	Raw Blame History 🖋 🗑	
1	court:: Court of Appeals for the D.C. Circuit		
2	:court-id: us:c0;court.appeals		
3	:url: http://www.cadc.uscourts.gov/		-4
4	:flp-key: cadc		
5			
6	reporter-key:: Fed. R. Serv.		
7			
8	reporter-key:: Fed. R. Serv. 2d		3
9			
	reporter-key:: Fed. R. Serv. 3d		

Clicking through to an identifier reveals the underlying plain-text source file, which resides in a simple file hierarchy on GitHub. The format of the identifiers themselves is defined in the IETF draft URN:Lex specification proposed by PierLuigi Spinosa, Enrico Francesconi and Caterina Lupo. Source files are set in reStructuredText, and the repository contains tools for grinding the data set into forms required by consuming applications.

This should be converted to a database of some sort, obviously, with a proper set of front-end tools for collaborative maintenance.

MOVING FORWARD

Herein of stovepiping and the DIY challenge facing modern comparative law scholarship.



In closing, a rough observation on come of the jurisdictions where archival work has given rise to fine-grained jurisdiction identifiers. There are certainly others, but those shown above are perhaps those with the highest profile. These are federal jurisdictions, in which amalgamating resources from multiple realms is necessary in order to present a global view of legal resources. This creates an incentive for development of uniform jurisdiction identifiers, but the incentive evaporates at the border of each federal entity.



The primary Asian target jurisdictions of postgraduate research in the School of Law at Nagoya University, the home of Juris-M, do not form a federal entity. Here, and for the world at large, experience tells us that if legal researchers desire a comprehensive system for the proper organization and study of the legal instruments of the world, it is up to us, as a community of researchers, to establish its foundations.

THANK YOU

https://juris-m.github.io/

https://fbennett.github.io/legalresource-registry

In conclusion, things to click on!

Slides by F Bennett