

Quantifying Legal Cultures

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Aim of this paper: Assess possible differences in judicial styles between

- France
- the Netherlands
- Belgium – Wallonia (French-speaking) and Flanders (Dutch-speaking)

Our objective is to develop a methodology to research possible determinants of **tradition** and **external influence** in legal culture.

This is relevant in order to

- understand stylized differences between two legal cultures (French and Dutch)
- possible transplant/external influence effects (within Belgium given the coexistence of both French and Dutch legal cultures for almost 200 years).

Motivation

Legal families and associations with development, GDP growth, more effective financial markets, and other sociodemographic variables (La Porta et al, 2008).

Outside L&E: the importance of culture and language in shaping the law (Nelken, 1997).

There is disagreement wrt **legal culture**: concept widely used in law and society, and to some extent in L&E.

Little empirical evidence about how it actually works, namely persistence of local elements and influence of external elements

Legal Culture

A fundamental concept in explaining differences in the role of law and legal institutions across societies (Gibson & Caldeira, 1996).

A vague, unspecific black box with a large scope of possible meanings (Silbey, 2010; Mautner, 2011; Nelken, 2014).

Different authors refer to legal culture in varying confusing, occasionally contradictory, ways.

Still, legal culture can be broadly defined as a generic confluence of ideas, values, attitudes toward law and legal institutions (Nelken, 2004).

Map of Belgium



Source: Euronews (<https://www.euronews.com/2019/06/20/divided-belgium-nationalist-parties-struggle-to-form-government>)

Belgian Legal Cultures



We suggest the following court taxonomy:

- French courts reflect “pure” French legal culture
- Dutch courts reflect “pure” Dutch legal culture
- Belgian-French speaking courts can be perceived as reflecting French legal culture with some Dutch influence by virtue of being part of Belgium
- Belgian-Dutch/Flemish speaking courts can be perceived as reflecting Dutch legal culture with some French influence by virtue of being part of Belgium

Data and Empirical Strategy

We create a novel dataset composed of court verdicts on construction cases that have been decided by:

- 1 French courts
- 2 Dutch courts
- 3 Belgian-French speaking courts (Wallon region)
- 4 Belgian-Dutch (Flemish) speaking courts (Flanders region).

Methods of computational textual analysis were used to create variables on the stylistic features of court opinions, such as:

length of the verdict, lexical diversity, references to legislation, linguistic complexity, writing style and legal language tone and emotions cognitive activities and perceptual dimensions.

- ① France vs Netherlands:

$$\text{JudicialStyle/Formalism} = \alpha + \beta_1 \text{Dutch} + \gamma X + \epsilon$$

- ② Belgium: $\text{JudicialStyle/Formalism} = \alpha + \beta_1 \text{Flemish} + \gamma X + \epsilon$

- ③ All: $\text{JudicialStyle/Formalism} =$

$$\alpha + \beta_1 \text{Dutch} + \beta_2 \text{French} + \beta_3 \text{Belgium} * \text{Flemish} + \gamma X + \epsilon$$

Verdict Length and Lexical Diversity

	(1)	(2)	(3)	(4)	(5)
	Characters	Tokens	Sentences	Sentence Length	Ratio Unique Words
Netherlands	9452.5*** (1433.4)	1239.4*** (229.0)	92.78*** (7.481)	-13.14*** (0.837)	-0.0450*** (0.00541)
Observations	813	813	813	813	813

	(1)	(2)	(3)	(4)	(5)
	Characters	Tokens	Sentences	Sentence Length	Ratio Unique Words
Flanders	940.9 (2572.7)	-94.90 (419.0)	24.84 (14.71)	-5.918*** (0.669)	-0.0369*** (0.00971)
Observations	364	364	364	364	364

	(1)	(2)	(3)	(4)	(5)
	Characters	Tokens	Sentences	Sentence Length	Ratio Unique Words
Netherlands	2845.9 (1779.1)	117.1 (291.2)	44.62*** (9.639)	-6.879*** (0.528)	-0.0445*** (0.00622)
Flanders	137.1 (2006.8)	-249.9 (327.4)	21.50 (11.22)	-6.494*** (0.687)	-0.0284*** (0.00754)
France	-6410.5*** (1530.3)	-1079.6*** (256.5)	-47.35*** (7.796)	6.774*** (0.634)	-0.00289 (0.00609)
Observations	1177	1177	1177	1177	1177

Case Law and Complexity

	(1)	(2)	(3)	(4)
	Ref Case Law	Grade Level	Reading Ease	Long words
Netherlands	-4.740*** (0.595)	-2.704*** (0.254)	6.505*** (0.774)	0.0220*** (0.00195)
Observations	813	813	813	813

	(1)	(2)	(3)	(4)
	Ref Case Law	Grade Level	Reading Ease	Long words
Flanders	2.119** (0.676)	-1.341*** (0.255)	2.115* (0.859)	0.0359*** (0.00283)
Observations	364	364	364	364

	(1)	(2)	(3)	(4)
	Ref Case Law	Grade Level	Reading Ease	Long words
Netherlands	0.320 (0.654)	-2.206*** (0.186)	5.555*** (0.641)	0.0316*** (0.00189)
Flanders	1.539* (0.700)	-1.499*** (0.250)	2.612** (0.803)	0.0365*** (0.00239)
France	5.163*** (0.573)	0.672** (0.219)	-1.374* (0.690)	0.00884*** (0.00169)
Observations	1177	1177	1177	1177

Standard errors in parentheses

Writing Style and Legal Language

	(1)	(2)	(3)	(4)	(5)	(6)
	Function Words	Passive Voice	Latin	Third Person	Prepositions	Nouns
Netherlands	0.0374*** (0.00225)	0.00566 (0.0164)	-1.710*** (0.318)	0.698*** (0.0419)	-0.0112*** (0.000995)	-0.0533*** (0.00295)
Observations	813	808	813	813	813	813

	(1)	(2)	(3)	(4)	(5)	(6)
	Function Words	Passive Voice	Latin	Third Person	Prepositions	Nouns
Flanders	0.00424 (0.00283)	-0.0201 (0.0145)	-0.681 (0.553)	0.365*** (0.0537)	-0.00799*** (0.00122)	-0.0656*** (0.00212)
Observations	364	364	364	364	364	364

	(1)	(2)	(3)	(4)	(5)	(6)
	Function Words	Passive Voice	Latin	Third Person	Prepositions	Nouns
Netherlands	0.0228*** (0.00235)	-0.0191 (0.0120)	-2.207*** (0.468)	0.542*** (0.0438)	-0.00262** (0.000958)	-0.0279*** (0.00280)
Flanders	0.00606* (0.00252)	-0.0564*** (0.0167)	-0.995* (0.469)	0.371*** (0.0504)	-0.00684*** (0.00111)	-0.0648*** (0.00191)
France	-0.0159*** (0.00159)	-0.00485 (0.0162)	-0.456 (0.480)	-0.156*** (0.0266)	0.00811*** (0.000883)	0.0253*** (0.00165)
Observations	1177	1172	1177	1177	1177	1177

Tone and Emotion

	(1)	(2)	(3)	(4)	(5)
	Clout and Analytical Emotion, Tone and Cognitive		Authentic	Polarity	Subjectivity
Netherlands	-0.0224*** (0.00298)	-0.00813*** (0.00178)	0.115*** (0.00606)	-0.0247*** (0.00326)	0.0667*** (0.00431)
Observations	813	813	813	813	813

	(1)	(2)	(3)	(4)	(5)
	Clout and Analytical Emotion, Tone and Cognitive		Authentic	Polarity	Subjectivity
Flanders	-0.0200*** (0.00356)	-0.0142*** (0.00224)	0.0393*** (0.00830)	0.00517 (0.00380)	0.00663 (0.00629)
Observations	364	364	364	364	364

	(1)	(2)	(3)	(4)	(5)
	Clout and Analytical Emotion, Tone and Cognitive		Authentic	Polarity	Subjectivity
Netherlands	-0.0178*** (0.00316)	-0.00986*** (0.00197)	0.111*** (0.00635)	-0.0230*** (0.00344)	0.0350*** (0.00412)
Flanders	-0.0216*** (0.00316)	-0.0147*** (0.00195)	0.0485*** (0.00688)	0.00429 (0.00362)	0.00893 (0.00514)
France	0.00553* (0.00240)	-0.00147 (0.00150)	-0.00752 (0.00436)	0.000462 (0.00283)	-0.0323*** (0.00389)
Observations	1177	1177	1177	1177	1177

Conclusions and ways to proceed

- Significant differences between French and Dutch courts.
- Less salient differences between Flemish and Wallon courts.

How to proceed?