

LegalVis: Exploring and Inferring Precedent Citations in Legal Documents

Appendix

Lucas E. Resck*, Jean R. Ponciano*, Luis Gustavo Nonato *Member, IEEE*, Jorge Poco *Member, IEEE*

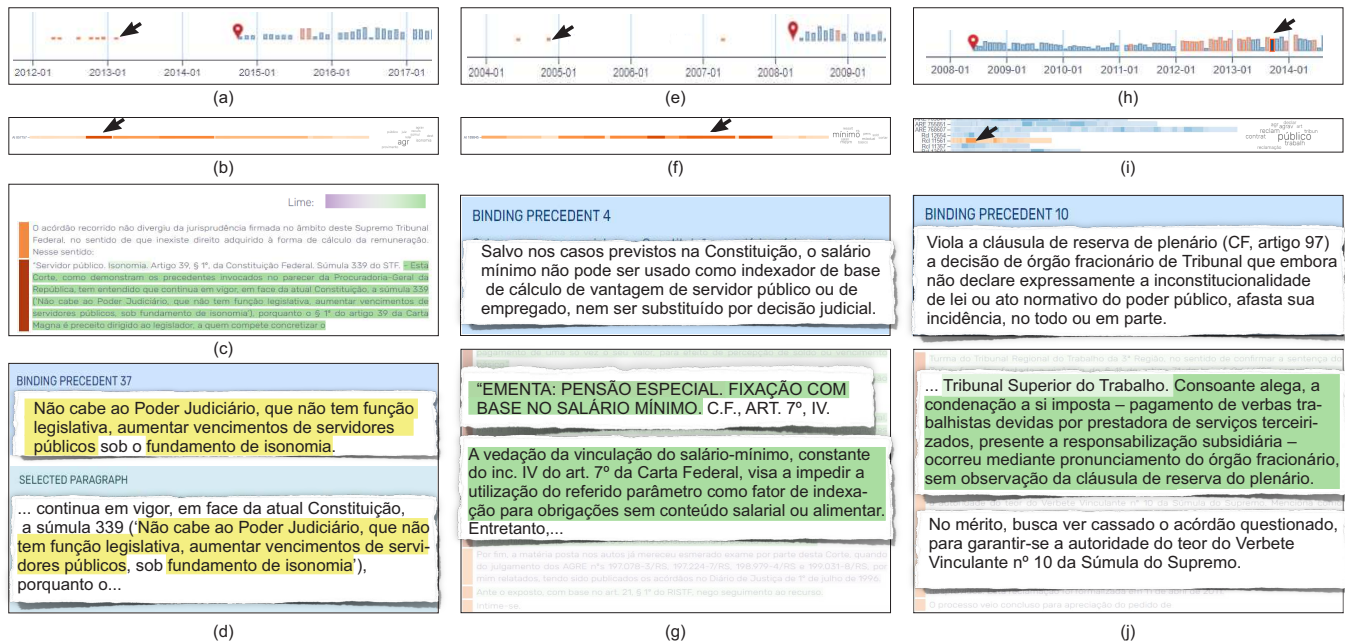


Fig. 1. Three potential citations to different binding precedents – original texts (in Portuguese) shown. (left) a document with the entire BP 37’s text but published before creating this binding precedent. (middle) a document published before the creation of BP 4 that potentially cites its underlying reasoning. (right) a document potentially citing BP 10 while adopting a different terminology to refer to this binding precedent (unlabeled document).

1 ORIGINAL IMAGES IN PORTUGUESE

Through two usage scenarios (Sect. 7) validated by domain experts, our paper demonstrates the usefulness of LegalVis to assist users in exploring legal documents and binding precedents. In the first usage scenario, we focused on highlighting the system’s capabilities in identifying potential citations under different situations. Here, we show in Fig. 1 the original texts (in Portuguese) of those parts of the binding precedents and documents explored throughout this scenario. Our second usage scenario, by its turn, showed an exploratory analysis that aimed to find patterns and behaviors related to particular justices and types of documents. To help in the analysis, we presented parts of a decision reported by justice Edson Fachin (Fig. 8 (d)). Here, Fig. 2 shows the original texts (in Portuguese) that compose those parts.

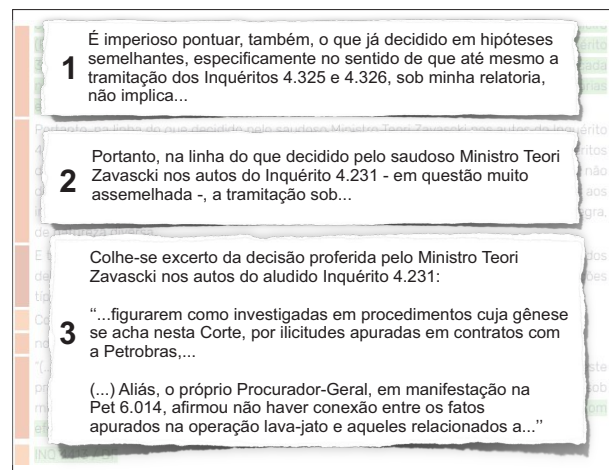


Fig. 2. Original parts (in Portuguese) of a decision reported by Edson Fachin that is related to other reported by Teori Zavascki on the Lava Jato operation.

* The first two authors contributed equally to this work.

• Lucas E. Resck and Jean R. Ponciano are with Fundação Getulio Vargas, Brazil. E-mail: lucas.domingues@fgv.edu.br, jean.ponciano@fgv.br
 • Jorge Poco is with Fundação Getulio Vargas, Brazil and Universidad Católica San Pablo, Perú. E-mail: jorge.poco@fgv.br.
 • Luis Gustavo Nonato is with ICMC-USP, São Carlos, Brazil. E-mail: gnonato@icmc.usp.br.

2 WORD COUNT HISTOGRAM

Fig. 3 shows a word count histogram of the documents considered in our study (i.e., 29,743 documents that explicitly cite at least one of the ten most cited BPs plus 30,000 documents without explicit citations). In general, we have less than four thousand words.

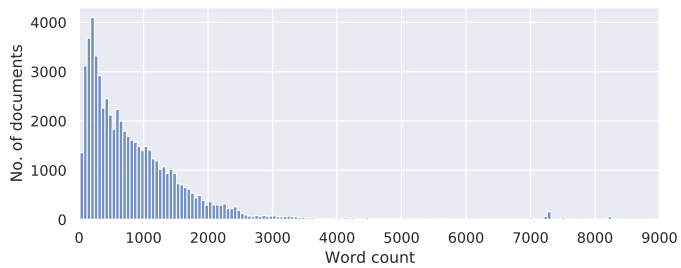


Fig. 3. Word count histogram of our filtered dataset.