

**Report:**  
**Law meets Data Science: Findings from the EUTHORITY Project**

Dr. Nicholas Lampach

9 May 2018

The "LunchTimeSeries on Law, Technology and Society" (LTS) continued on Europe Day, 9 May 2018, with a topic which could not have been more suitable for that date: Dr. Nicolas Lampach lectured on "Law Meets Data Science: Findings from the EUTHORITY Project". The [EUTHORITY](#) Project is an interdisciplinary research project which combines legal analysis with empirical methods. Due to its interdisciplinary dimension, Lampach's presentation was a great enrichment for the auditorium at the University of Natural Resources and Life Sciences, Vienna.

Lampach started his lecture by explaining the importance of the preliminary rulings of the European Court of Justice. As a fundamental mechanism, they ensure the uniform application of EU law. Lampach emphasised that domestic courts show major disparities in their referral behaviour. Those differences exist due to various factors such as, for instance, economic, political and legal variables. The EUTHORITY project aims to identify those factors by collecting and analysing data in order to determine the position of domestic courts towards EU Law.

What data do the project collect? They include data on economic activity, political systems, legal traditions or judicial organisations, for instance. The project covers regional as well as national aspects. Currently, the EUTHORITY project has 40 data variables and is planning to expand them to up to 80 or 85.

Lampach illustrated that the number of submitted references to the European Court of Justice differs among the member states. He took Germany and France as an example to show that even the founding states of the European Union show very different referral behaviour. Whereas Germany sends a high number of references, France appears to be more reluctant to do so. Moreover, there are not only differences among the member states, but also on a regional level within a state. To stick with the example of Germany and France: Germany shows a decentralised pattern wherein various domestic courts initiate proceedings for a preliminary ruling. France, on the contrary, is very centralised and sends references primarily from Paris.

Another outcome of the EUTHORITY research is a disparity between the referral behaviour of first level courts and peak courts. The project members observed that in the beginning, the first level courts submitted references more often than the peak courts. However, in the 1980s, this pattern changed: The peak courts became more active than other domestic judicial bodies.

Lampach cited two theories to explain this turning point: The Empowerment Theory and the Judicial Behaviour Theory. The Empowerment Theory argues that lower national courts enthusiastically began referring cases to the European Court of Justice to acquire new powers of judicial review. The peak courts later stopped this trend. According to the Judicial Behaviour Theory, workload and resources define a judge's work ratio. In the beginning, the first level courts were functioning as "starts ups" which embraced the preliminary ruling mechanism. But the pressure on the peak courts increased when cooperation with the European Court of Justice gained more adherents. Furthermore, the peak courts have a smaller caseload, more support and assistance from clerks and other legal assistants, and therefore, a bigger capacity than lower domestic courts.

Despite the numbers of preliminary ruling proceedings, the content also shows disparities. The EUTHORITY project uses text mining as a data harvesting technique to obtain an overview of the topics discussed in the submitted references. Lampach illustrated that in Cargo Port Regions, words such as "product", "trade" and "custom" appear often, while in other regions, "contract", "proceed" and "service" are more common. On a regional level, the nouns "agriculture" and "fishery" appear more often in judgements, while in more urban regions, terms such as "law", "right" and "freedom" are predominant. Furthermore, intra EU-trade has a major impact on the referral behaviour: Courts in member states that trade more with the rest of the EU seem to submit more references to the Court of Justice.

The subsequent questions from the audience addressed topics such as the current developments regarding "legal tech", the challenges of data protection within the EUTHORITY project, and generally, whether data collection and machines have the capacity to find profound scientific results in legal matters. But Lampach also encountered criticism from the auditorium concerning the project. One of the targets was the variables: Several auditors opined that the chosen factors had a major impact on the research results. Moreover, text mining was subjected to criticism:

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Some viewed this method as too perfunctory and doubted that it could replace a profound legal analysis. Lampach and the audience engaged in a lively discussion which created enriching output for all sides.

*Magdalena Nemeth, May 2018*

