# Anonymization of court desicions in Germany

### **An essential requirement for E-Justice**

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#### Why anonymization of court decisions?

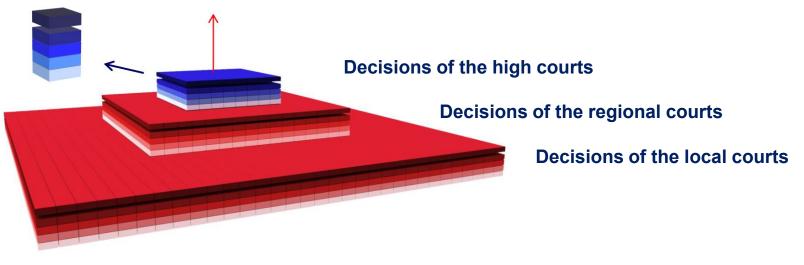
Protection of personal identifiable information and legitimate interests.

Publication of court decisions

Decisions as training data for legal tech applications



#### **Publication practice in Germany**



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- But only about 2 % of all court decisions are published.
- Most of these decisions originated from courts of last instance and high courts.
- First-instance decisions regarding questions of facts are underrepresented.
- Inconsistency in the features that need to be anonymized and in the used anonymization techniques.



#### **Obligation to publish court decisions**

- There are only a **few statutory** publication obligations in Germany.
- However, a general obligation to publish jurisprudence has been developed by case law. The obligation is directly derived from the constitution, namely the principle of democracy and the rule of law.
- The publication obligation exists regardless of the court instance, the right to appeal and an objective interest in the decision.
- The protection of overriding interests of the parties involved must be ensured. Anonymization is required.



#### Anonymity in the GDPR

- Focusing on the protection of natural persons and their individual rights. Legal persons are not included (recital 14 second sentence GDPR).
- In the german statistics law it is prohibited to link official (anonymized) statistical datasets (e.g. judicial statistics) for deanonymization. Court decisions can be seen as individual linkable datasets. Thus the decisions entail a higher risk of deanonymization than statistical datasets. Therefore an even stricter standard needs to be applied.
- Risks of deanonymization are still insufficiently researched. Empirical data on effort, time and additional knowledge is required.

#### $\rightarrow$ Rethinking of anonymity is necessary.





#### Which features need to be anonymized?

#### **Direct** identifiers:

- Names (natural and legal persons)
- Addresses
- Dates of birth
- ...

#### Indirect identifiers:

- Profession details
- Academic titles
- Health data
- Descriptive informations about local conditions or companies
- Unique features (e.g. the only red house in a small village)

#### → Risk of cross-referencing



# Research project on the automatic anonymization of court decisions

Goal:

Evaluation of the legal and technical issues concerning the ability to automatically anonymize decisions, in particular by using corpus linguistic methods.

#### **Participants:**

 FAU - Law School (Prof. Dr. Adrian / Michael Keuchen) and FAU - Chair of Computational Corpus Linguistics (Prof. Dr. Evert / Philipp Heinrich / Natalie Dykes) as well as 4 - 8 student assistants.

→ Interdisciplinary project: legal theory and methodology, linguistics, mathematics, computer science

Funded by the Bavarian State Ministry of Justice



#### **Research subject of the project**

#### **Court decisions**

- 604 machine-readable decisions from a bavarian local court concerning traffic accident law and residential tenancy law.
- 1,3 million tokens (words and punctuation) approx. 2,200 tokens per decision.

#### Files containing the corresponding legal documents

- 557 files (hard copy) are available.
- Scanning only the complaint, statement of defense and other written pleadings regarding the facts of the case.
- Use of text recognition software to achieve machine readability.



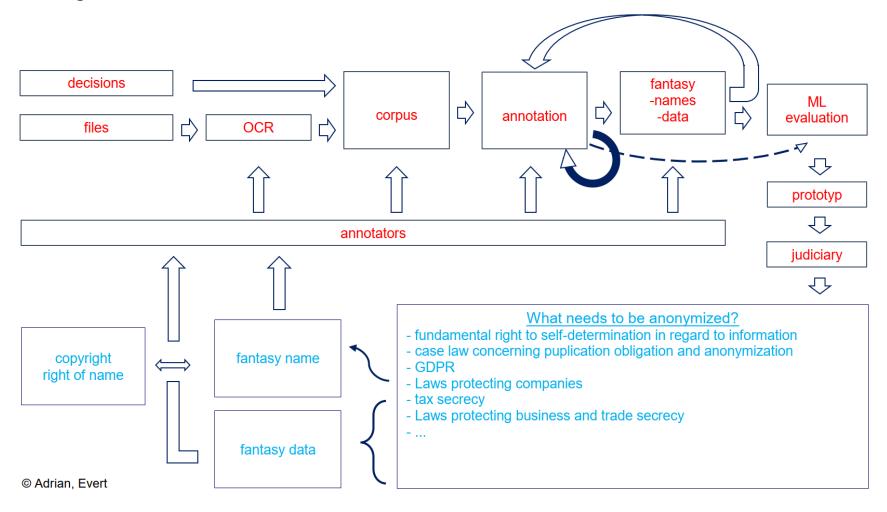


# Why files are required? - Decision **Hermeneutic** development - Statement of the claimant - Statement of the defense - Complaint **Decisions of the high courts Decisions of the regional courts Decisions of the local courts**

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#### **Project workflow**







#### **Example: annotation and tagging**

38	0re 90762 Fürth , Gz.: 557/01		
40	wegen Räumung		
42	<u>िन्त</u> erlässt das Amtsgericht Hof durch Richter am .	Sonstiges Name	
	ENDURTEIL	New Annotation	×
		Text Beklagten	]
46	I. Die Beklagten werden verurteilt, das Anwes	Search google, wikipedia	ĺ
48	II. Die Kosten des Rechtsstreits werden gegen	Entity type	ן ר
50	III. Das Urteil ist vorläufig vollstreckbar. Die B	Name Telefonnummer	
52	Tatbestand:	O Titel O Adresse	
54	Die Kläger begehren von den Beklagten die Rä	Ort Datum Kennzeichen	
	Kennzeichen Ort	Entity attributes	
	Die Kläger sind Eigentümer des Anwesens Dö Mietvertrag (BI. 6/16 d. A.) enthält u. a. folge	□ unsicher Risiko: ?   ▼   ▼	J
58	Inhalt:		J
60	"…	OK Cancel	
62	§ 2 Nr. 2 Vertragsdauer		



#### **Development of algorithms (logics)**

- Annotators produce a gold standard that is used to develop, train and evaluate machine learning algorithms.
- The machine uses this training data to search for patterns in the language in order to identify the text passages which need to be anonymized.
- Based on these algorithms, automatic anonymization may be possible.

М	enu		Bava	arian Court Decision	s (0!	5/2020): powered by CQPweb		logic	
Corpus	Corpus queries			Standard Query				logio	
Standard query	Standard query								
Restricted query	Restricted query Word lookup		[Herr,Frau,D	[Herr,Frau,Dr?,Prof?,Zeuge,Richter*] {????*/N}					
Word lookup									
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Keywords									
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Saved q			Query mode:	Query mode:     Simple query (case-sensitive) >     Simple query language sy, tax					
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© Axel Adrian						auf die Bewertung der Einlassungen			



#### **Outlook and expected outcomes of the project**

- Legal foundations for the anonymization.
- Gold standard for the annotation and anonymization of court decisions.
- Possible software prototype for an automatic anonymization.
- Hermeneutic approach with the help of the legal documents.
- Fully anonymous dataset from court decisions and legal documents (after approval by the Bavarian State Ministry of Justice).

## **Thanks for your interest!**

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