Christopher Klamm*, Martin Hock* a CPSS, KONVENS 2021

Legal Elements

All legal concepts are composed of legal elements, these are the requirements that have to be fulfilled in order to achieve legal consequences and effects.

(Wienbracke, 2013)

TAXONOMY

Research Question

Can we find legal elements¹ in parliamentary debates by using Natural Language Processing to enable the analyses of legal elements regarding the validity of legal concepts?

legal studies, political science and NLP



Legal Background

The use of force by states is unlawful. Charter of the United Nations, art. 2 (4)

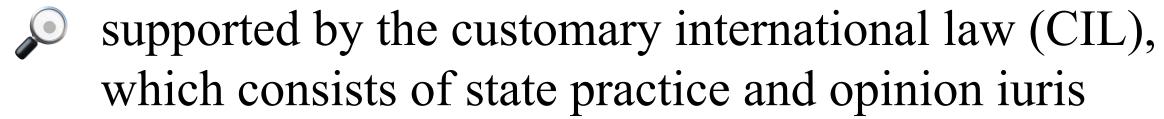
undisputed exceptions:

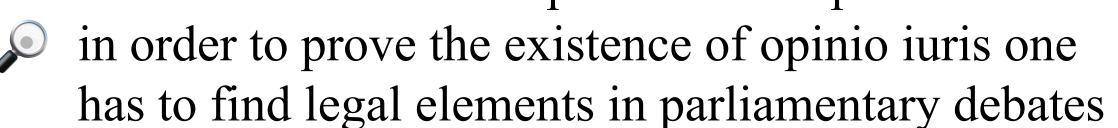
- self-defense (art. 51) and
- authorization by the Security Council of the United Nations (art. 39+42)

disputed exceptions:

- humanitarian intervention (HI) and
- responsibility to protect (R2P)

Annotation Framework





Legal Element Classification on German Parliamentary Debates



Dataset

We base our work on four German parliamentary debates² regarding the authorization to use force:

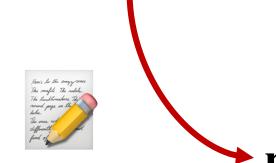
KOSOVO (BTP 13/248), LIBYA (BTP17/095), **SYRIA** (BTP 18/042 & 18/044)

Parliamentary debates are interesting for several reasons:

- parliamentary debates cover questions of international law, as part of a political speech
- legal concepts might be mentioned but will be intertwined with genuinely political arguments
- legal elements mentioned may be vague or ambiguous due to the political nature of the texts

EXAMPLE

Es kann keinen Zweifel darin geben, daß es überfällig war, den boshaftesten Despoten in Europa [right intention], der Krieg gegen sein eigenes Staatsvolk führt, es entwurzelt, in die Wälder treibt und ermorden läßt, [failure to protect] in seine Schranken zu verweisen, um eine humanitäre Katastrophe noch größeren Ausmaßes zu verhindern [humanitarian catastrophe].





The situation in this country is a human-

itarian catastrophe, people starve and

suffer, therefore we must use force to

We have to use our country's military to

This country is not protecting its people

from the crimes against humanity oc-

curring, thus we need to use our mili-

We have tried every diplomatic means

available but to no avail, there is no

When we use force we take every pos-

sible precaution to protect the civilians

Using the military is always risky but

We have every right to use force and

our actions are covered by the Security

This is not a war for our national inter-

we are sure that we will succeed.

choice but to use force.

from our attacks.

est it is a moral duty.

Council.

protect the civilians in this country.





multilabel statements

Example

tary.

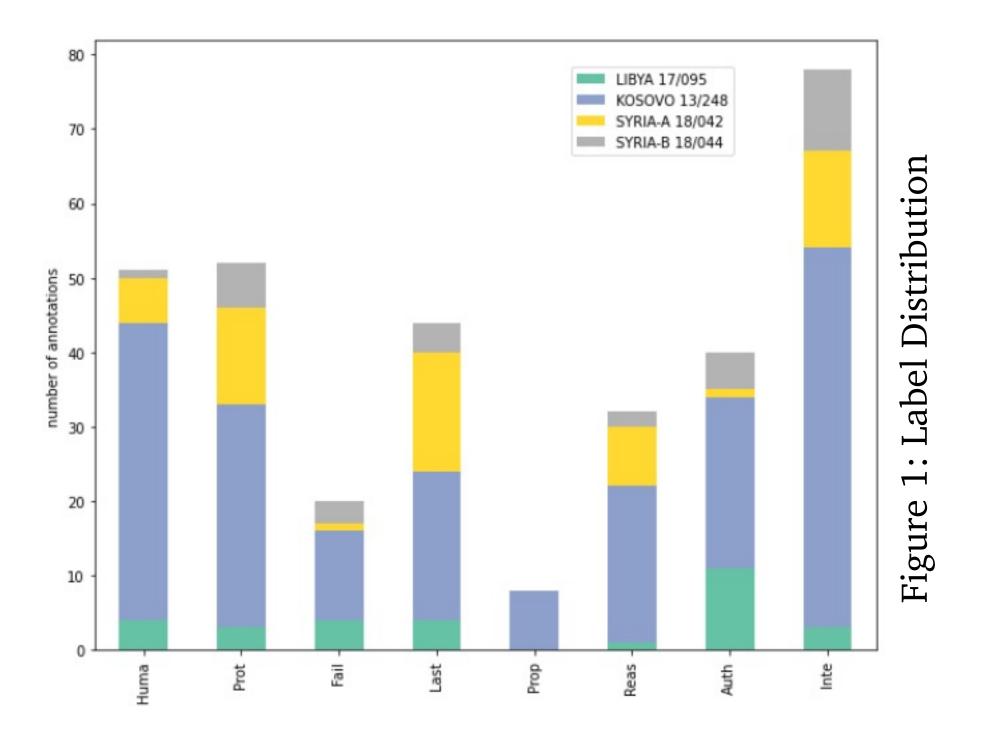
stop the aggressor.

∠abel	Legal Element	Definition
Huma	Humanitarian catastrophe	The code is used if the speaker refers to a humanitarian
		catastrophe taking place or being imminent (major hu-
		man rights violations that amount to war crimes, geno-
		cide, ethnic cleansing and crimes against humanity) that
		makes the use of force necessary.
Prot	Protection of local civilians	This code applies if the speaker considers that the need
		to protect the local civilians from major human rights
		violations, that amount to war crimes, genocide, ethnic
		cleansing and crimes against humanity makes the use of force necessary.
Fail	Failure to Protect by home state	This code applies if the speaker considers that the
	randic to 1 lotect by home state	home state has failed to protect its population from war
		crimes, genocide, ethnic cleansing and crimes against
		humanity makes the use of force necessary.
	Last Resort	This code applies if the speaker considers to the use of
		force as a last resort and that all peaceful means (such
		as diplomacy) are exhausted.
Prop	Proportionality of the use of force	This code applies if a speaker sees the way force is used
	to the threat	in a proportional manner (including that civilians are
		protected as far as possible or receive special treatment
		to help with the suffering.)
3	Reasonable prospect of success	This code applies if the speaker argues that a reasonable
	D: 146 1 41 4	prospect of success is given.
n	Rightful authority given	This code applies if the speaker argues that a rightful
		or legitimate authority for the use of force is given (this includes but is not limited to references to the Security
е	Right intention	Council). This code applies if the speaker refers to having the
-	Augut intention	right intention of the use of force. This might be the
		case, for example, if speakers refer to a moral cause for
		case, for example, if speakers feler to a moral cause for

Table 1: Framework adapted from codebook from Hock (2021), drawing on work from Wagner (2020).



- ~700 legal elements
- only 1-2% of all sentences (~15k) in the debates included legal elements



Results

We perform two tasks with similar experiments:

- legal element detection: legal or non-legal element
- legal element classification: [label₁, ..., label_n]

		binary		multilabel	
	model	acc	f1	acc	h-score
Baselines	Majority-Vote	.551	.550	.059	.128
Dascilles	Dictionary	.558	.479	.113	.312
3 .					
Context	GermanBERT-MLP	.597	.595	.134	.289
Embeddings ³	MultiSentBERT-MLP	.664	.662	.310	.497
Embeddings	GermanBERT-SVM	.586	.585	.184	.313
	MultiSentBERT-SVM	.649	.648	.260	.435
Language	LegalBERT-MLP	.538	.534	.105	.252
Language	EuropeanaBERT-MLP	.590	.589	.109	.222
Adaptation ³	LegalBERT-SVM	.561	.558	.101	.246
	EuropeanaBERT-SVM	.601	.598	.105	.216
Task	RoBERTArg-SVM	.586	.585	.214	.366
Adaptation ³	RoBERTArg-MLP	.630	.629	.230	.382

Findings

- our NLP models used do not provide sufficient accuracy but they can act as a helping filter in-between to support legal research on large scale datasets
- we find a surprisingly low amount of legal elements mentioned in parliamentary debates
- specific domain knowledge is still needed

Literature

Martin Hock. 2021. The Influence of Strategic Culture on Legal Justifications Comparing British and German Parliamentary Debates Regarding the War against ISIS. Erasmus Law Review, 15(2))

Wolfgang Wagner. 2020. The Democratic Politics of Military Interventions. Oxford University Press.

Mike Wienbracke. 2013. Juristische Methodenlehre. C.F. Müller, Heidelberg; München; Landsberg; Frechen; Hamburg.

going to war as being given.