

# Legal Frames: Applying Frame Semantics to specialized languages



Anderson Bertoldi  
Rove Chishman  
Thaís Domênica Minghelli  
Carolina Müller  
Carla Krieger Valle

Applied Linguistics Graduate Program  
Universidade do Vale do Rio dos Sinos (UNISINOS)



# Some initial aspects regarding FrameNet:

- ❑ FrameNet for different languages: Spanish (Subirats, 2009), Japanese (Ohara, 2009) and Portuguese (Salomão, 2009).
- ❑ Frame-based lexicon for the soccer language (Schmidt, 2009).
- ❑ Semantic annotation of corpora (Burchardt et al., 2009).
- ❑ Legal ontology improvement (Agnolini et al., 2010).
- ❑ Legal text annotation (Venturi, 2011).
- ❑ This work: discusses the development of legal frames and the use of FrameNet frames for legal applications.

# Methodology:

- (1) Selection of FrameNet frames, which describe legal events or are related to legal domain;
- (2) Identification of such frames into a more principal-oriented legal frame or based-oriented legal frame;
- (3) Contrastive study of such frames, searching for correspondences in the conceptual and linguistic levels;
- (4) Selection of examples to illustrate occurrences of LU in Portuguese.

# Levels of correspondence in the legal domain:

- ❑ **Law** is a **social-oriented science** and due to this legal terms may not find **equivalents** in another language, in another legal system.
- ❑ Some legal events described by FrameNet, a criminal process for instance, may not be **equivalent in different legal systems**.
- ❑ It is not only an issue of **linguistic equivalence**, but an equivalence of **systems**.

# FrameNet Criminal\_process frame & Brazilian Criminal\_process frame

- ✓ Different **equivalence levels** between frames;
- ✓ Frame equivalence **involves**:

- ☐ **Conceptual correspondence**

(How close are the legal events being compared?)

- ☐ **FE correspondence**

(How similar are the participant`s roles in both frames?)

- ☐ **Lexical correspondence**

(How is the legal concept`s translation?)

# The simplest correspondence case

The FrameNet frame Try\_defendant  
&  
The Brazilian Try\_defendant frame

- ❑ Equivalent frames;
- ❑ Describe similar legal events;
- ❑ Correspondent:
  - \*FE
  - \*LU evoking the frames

## FrameNet

Try\_defendant

### Legal event:

A **DEFENDANT** is tried by a JURY or **JUDGE** in a COURT for **CHARGES**. This frame perspectivalizes the general Trial frame.

### Frame elements:

**CHARGES**

**DEFENDANT**

**GOVERNING\_AUTHORITY**

**JUDGE**

**JURY**

### Lexical Units:

try.v →

## Jur-FrameNet.Brasil

Try\_defendant

### Legal Event:

The Try\_defendant frame describes the trial of a **DEFENDANT** who is charged of a crime. A **JURY** is responsible for evaluating the **CHARGES** and deciding whether the **DEFENDANT** is guilty or not-guilty.

### Frame elements:

**CHARGES**

**DEFENDANT**

**GOVERNING\_AUTHORITY**

**JUDGE**

**JURY**

### Lexical Unit:

Julgar.v

# A more complex correspondence case

The FrameNet frame Notification\_of\_charges  
&  
The Brazilian frame Notification\_of\_charges

- ☐ **Correspondence on lexical level**  
(charge/*acusação*/ indictment/*pronúncia*)
- ☐ **Lack of correspondence on the legal event**  
(Notification of charges & *Denúncia*)  
(Judge & Prosecutor)



## FrameNet

Notification\_of\_charges

### Legal event:

The judge or other court officer (the **ARRAIGN\_AUTHORITY**) informs the **ACCUSED** of the **CHARGES** against him/her, i.e. the alleged actions and the relevant laws.

### Frame elements:

**ACCUSED**  
**ARRAIGN\_AUTHORITY**  
**CHARGES**

### Lexical Units:

*accuse.v,* →  
*charge.n,* →  
*charge.v,* →  
*indict.v,* →  
*indictment.n* →

## Jur-FrameNet.Brasil

Charging

### Legal Event:

The Charging frame represents a legal event in which the prosecution, **PROSECUTION\_AUTHORITY**, charges the **ACCUSED**.

### Frame elements:

**ACCUSED**  
**PROSECUTION\_AUTHORITY**  
**CHARGES**

### Lexical Units:

Acusar.v  
Acusarção.n  
Acusar.v  
Pronunciar.v  
Pronúncia.n

# Example of an annotation:

## Charging

The Charging frame represents a legal event in which the prosecution, **PROSECUTION\_AUTHORITY**, charges the **ACCUSED**. The core frame elements of this frame are **ACCUSED**, **PROSECUTION\_AUTHORITY**, and **CHARGES**. The frame-evoking lexical units in this frame are *acusar* (to charge v.), *acusação* (charge), *denunciar* (to charge), and *denúncia* (charge n.).

A partir desses documentos, [**o Ministério Público**  
PROSECUTION\_AUTHORITY] **denunciou** [**os bicheiros**  
ACCUSED] novamente e ficou comprovado que eles mantinham suas atividades mesmo de trás das grades.

# The most critical correspondence case

The FrameNet frame `Arraignment`

- ☐ A hearing session in which the accused enters a plea in response to the charges;
- ☐ Lack of a correspondence in the Brazilian Law;
- ☐ Difficulty of establishing lexical and conceptual equivalence.

## FrameNet

Arraignment

### Legal event:

At a court hearing, a **DEFENDANT** is informed of the **CHARGES** against him or her, (usually) enters a plea, and a decision is made by a **JUDGE** as to the amount of bail, if any.

### Frame elements:

**CHARGES**

**DEFENDANT**

**JUDGE**

### Lexical Units:

*arraign.v.* →

*arraignment.n* →

## Jur-FrameNet.Brasil

No corresponding frame

### Legal Event:

No corresponding legal event in Brazilian criminal process.

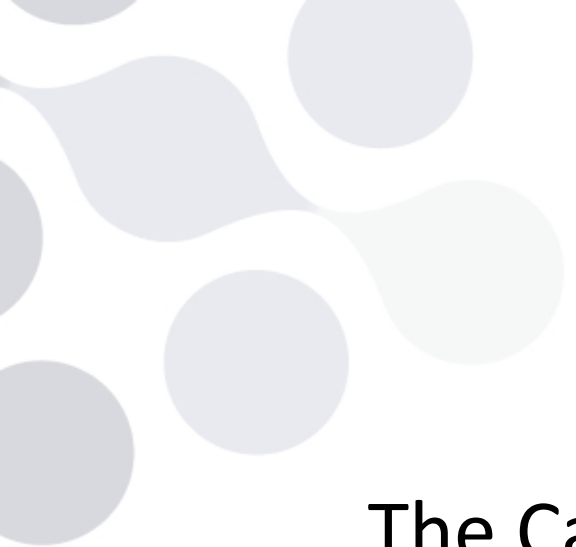
### Frame elements:

No frame elements

### Lexical Units:

No corresponding lexical units

No corresponding lexical units



# The Case of Non-Complex Frames

# FrameNet

Law

## Legal event:

A **LAW** regulates activities or states of affairs within a **JURISDICTION**, dictating what **REQUIRED** states should be the case and what **FORBIDDEN** states should not.

## Frame elements:

**LAW**

**JURISDICTION**

**REQUIRED**

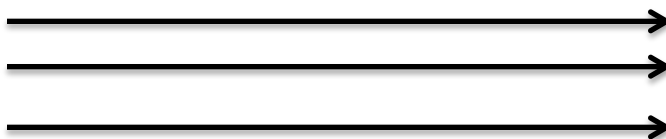
**FORBIDDEN**

## Lexical Units:

*act.n*

*Code.n*

*Law.n*



# Jur-FrameNet.Brasil

Law

## Legal Event:

Law is a written principle, generally **REQUIRED**, within a **JURISDICTION**, dictating what states are **FORBIDDEN**.

## Frame elements:

**LAW**

**JURISDICTION**

**REQUIRED**

**FORBIDDEN**

## Lexical Units:

*Ato normativo.n*

*Código.n*

*Lei.n*

1<sup>st</sup> the more complex the event described by a frame is, the more difficult it is to reuse FrameNet frames.

2<sup>nd</sup> non-complex frames, like Law and Legality, are more reusable.

# Futures Directions:

- Expand the number of legal frames, creating a lexical database.
- Connect legal frames to other frame-based linguistic resources, such as the Brazilian FrameNet.
- Apply frames and FE for legal information retrieval.
- Annotate legal documents of the Brazilian courts databases.
- Describe the roles of the participants of the predication and make the mapping between syntax and semantics.



Thank you for your kind attention!