Legal Frames: Applying Frame Semantics to specialized languages

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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.
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
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

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**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

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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*

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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.\text{n}
- Code.\text{n}
- Law.\text{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.\text{n}
- Código.\text{n}
- Lei.\text{n}

1\text{st} the more complex the event described by a frame is, the more difficult it is to reuse FrameNet frames.

2\text{nd} 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!