

Towards an Italian Legal FrameNet

The work presented here aims at building an Italian FrameNet-like resource specialized for the legal domain, extending and refining the general FrameNet.

To the author's knowledge, little research has been done on the use of Fillmore's *Frame Semantics* towards domain-specific Knowledge Management applications. A noteworthy exception is [1], who successfully developed a BioFrameNet, through creating new Semantic Frames relevant to the domain of molecular biology and linking them to domain-specific Biomedical Ontologies. Within the Artificial Intelligence and Law community, the Van Kralingen's idea of defining a *norm* and a *legal act* in terms of their participating elements (e.g. Promulgation, Circumstances, Temporal aspects, etc.) was the only attempt made towards the use of a *frame language* as a plausible method for the conceptual representation of legal knowledge [2].

Applying *Frame Semantics* theory to the legal domain seems appropriate in order to i) identify domain-specific syntactic realizations of frame-evoking lexical units and ii) provide a *frame-based* representation of the events and situations depicted in legal texts.

The value of laying out particular grammatical constructions particular to legal language is made fundamental by considering that the technical language used in the legal domain is closely intertwined with common language. According to linguistic studies, legal language, still differing from ordinary language, is in fact not dramatically independent from every-day speech; it is rather an "extension" of it. An example of such phenomenon is the use of the bare infinitive in the pronominal form. Differently from the ordinary language usage, within the Italian legal texts it tends to occur in subordinative phrases not uniquely in conjunction with verbs of perception.

By providing schematic script-like organization of knowledge, a FrameNet-like lexical resource for the legal domain meets the legal experts' needs to access the inner structure of events expressed by laws and norms. Since the existing lexical resources that support legal knowledge representation have been developed following a WordNet-like design (e.g. the JurWordNet Italian database [3]), legal experts claim that they are not completely adequate and satisfactory in order to represent the knowledge of syntagmatic relationships and constraints between words.

Thus, the author, in joint efforts with a pool of legal experts, is currently producing a FrameNet Italian extension and specialization for the legal domain. Interestingly, a number of challenging issues has been met during the initial design stage. As pointed out in [2], a key issue encountered while dealing with domain-specific texts is whether the creation of a new Frame is warranted. The specific relationship between the ordinary and legal language implies that it is no longer simply an issue of keeping existing Frames or creating new ones from scratch to convey domain-specific semantics. Accordingly, the specialization phase is currently concerning the choice of when a Frame may be re-used and customized for domain-specific purposes. In this case, possible annotation strategies include i) the splitting with a new Frame, ii) the introduction of one or more new Frame Elements within an existing Frame or iii) the exploitation of domain-specific Semantic Types which classify Frame Elements from the general FrameNet repository. For ontological typing purposes, the link to domain-specific Legal Ontologies has also been envisaged.

References

- [1] Dolbey A, Ellsworth M, Scheffczyk J. (2006), *BioFrameNet: A Domain--Specific FrameNet Extension with Links to Biomedical Ontologies*, O. Bodenreider (ed.), Proceedings of KR-MED, 87-94.
- [2] Kralingen R.W. van (1995), *Frame-based conceptual models of statute law*, Kluwer Law International, The Hague.

[3] Sagri M-T., Tiscornia D., Bertagna F., *Jur-WordNet*, (2004), in Proceedings of the Second Global WordNet Conference, pp. 305-310, Brno, Czech Republic, January 20-23.