

GAF: A Grounded Annotation Framework for Events



Antske Fokkens, Marieke van Erp, Piek Vossen, Sara Tonelli, Willem Robert van Hage, Luciano Serafini, Rachele Sprugnoli and Jesper Hoeksema

<http://groundedannotationframework.org>

GAF is a framework to represent event approximations in a formal context. It enables the representation of information from both textual and extra-textual sources, bridging the gap between text and semantics. GAF makes a clear distinction between **mentions** of events in text and their formal representation as assumed **instances** in a semantic layer. The semantic layer can integrate any linguistic information and is compatible with previous event representations in NLP. Instances are represented by RDF compliant URIs that are shared across different research disciplines allowing us to complete textual information with external sources and reason over the information. By uncoupling instances from mentions, we can easily store and reason with different, even contradicting perspectives on the same event. At every step, the provenance of the information is recorded.

- The volume of news archives is huge and ever expanding
- Different sources reporting on the same event may provide various and sometimes contradicting perspectives
- Different sources may provide complementary information
- Often articles about new events refer back to past events, possibly changing the interpretation
- To link current to previous information, an annotation framework needs to be able to interconnect different ways of describing and registering events, including non-linguistic sources
- To allow reasoning, the framework needs to be able to capture domain knowledge
- To provide different perspectives on the same news story, the framework needs to keep track of the source a piece of information came from

