# Veredas: Frame Semantics and Its Technological Applications Vol. 17, nº 1, 2013

# **FOREWORD**

This special issue of Veredas on Frame Semantics and its technological applications aims to fulfill three different purposes: (i) that of approaching the ambitions for FrameNet; (ii) that of presenting the current developments of the research in the field, and (iii) that of paying homage to the work of Charles J. Fillmore, who started both the field of Frame Semantics and its first technological application: FrameNet.

The invited essay by Miriam R. L. Petruck, senior researcher at the International Computer Sciences Institute – the home of Berkeley FrameNet – opens this volume by presenting the ambitions for the project in the near future. The essay is derived from Fillmore's interventions and comments during the presentations in the International FrameNet Workshop, held in April 2013, at Berkeley. Petruck brings to reader the possibility of engaging in the dialogue between Fillmore and those – such as Hanks and Busse – who, along time, have posed questions about FN's coverage, methods and outcomes. Petruck enhances the dialogue, by discussing how the papers in the first part of this issue contribute to the achievement of some of Fillmore's ambitions to the project he initiated in 1997. Additionally, the invited essay reports on a more recent communication by Fillmore, in which he proposes a set of recommendations on how FN should work on the concept of TIME.

As for the second purpose of this publication, a total of nine papers, divided in two parts, present a parcel of the current research on Frame Semantics and FrameNet. Part one, Expanding FrameNet, brings contributions from researchers who are responsible for the extension of FrameNet both to other languages and to purposes other than lexicographic description.

Ohara's work reports on the challenges imposed by expanding FrameNet to a language completely unrelated to English: Japanese. The author focuses her discussion on three key aspects: the adaptations implemented to the annotation tool so as to cope with issues such as the differences in the writing system of Japanese, difficulties in establishing word boundaries, and postpositions; the differences and similarities in the frames and constructions in English and Japanese; and the implications of building FrameNets in other languages to the theories of Frame Semantics and Construction Grammar.

The second paper, by Borin, Forsberg and Lyngfelt, discusses the questions arisen from the close encounter of the demands of Natural Language Processing – complete accountability, formalization – and the bases of linguistic theory – proposition of valid generalizations based on specific methodological traditions. The authors present the Swedish FrameNet++ and the Swedish Construction initiatives, which, despite the focus on language technology, are also grounded in theoretical linguistics.

The paper by Torrent and Ellsworth follows a path similar to that of Ohara, discussing the criteria used in defining analytical categories suited for the annotation of corpora in Brazilian Portuguese. The authors discuss key topics of FrameNet analysis, such as locality, for example, and demonstrate how they provide the structure found behind the grammatical function and phrase type labels used in FrameNet Brasil.

Ruppenhofer's work closes the first part of this issue, reporting on the extension of FrameNet for sentiment analysis. The paper points to the need of enriching shallow sentiment analysis with deep semantic information provided by language resources such as FN. By proposing SentiFrameNet, the author revises some of the bases of FN, leading to the association of inherently evaluative lexical units to an Opinion frame as well as to the creation of more fine-grained frames.

The second part of this issue – Applying FrameNet – is concerned with the applications of FrameNet-like descriptions and analyses to various purposes and fields. The paper by Boas and Dux presents the German Frame-Based Online Lexicon (G-FOL), an application of FN to foreign language education. The authors demonstrate the advantage of a frame-based approach to vocabulary acquisition by comparing the results achieved by students using the G-FOL to those by students without access to it.

Chishman, Souza and Padilha's paper focuses on the experience of annotating a corpus of soccer language. The authors compare their experience with the methods proposed by Schmidt in the Kicktionary project, showing that the occurrence of several frames in one sentence, support-verbs and metaphors point to the need of revising the original methodology proposed by Schmidt.

Two papers focus on the application of FrameNet to the legal domain. In the first of them, Bertoldi and Chishman, based on the comparison of the criminal process as defined by the legal systems of the United States and Brazil, discuss the lexical equivalence and conceptual correspondence of the English and Portuguese terms evoking frames in this domain. The authors show that, although some of those terms may be seen as equivalents, they are not conceptually correspondent to each other. In a related effort, Minghelli and Chishman present the description of two subframes of Hearing in the Brazilian Civil Law system, showing how those frames manifest in legal texts.

The last paper, by Moreira, Salomão and Oliveria, applies bayesian networks and ontological types for evaluating the possibility of a given sentence being an instance of a given frame. By annotating the valents of the verb *viajar* 'travel' and of the name *viagem* 'trip' with ontological types, the authors were able to show that bayesian networks were able to infer which of the sentences in the corpus used were examples of the prototypical Travel frame.

Last but not least, the third purpose of this issue of Veredas in paying homage to the work of Charles J. Fillmore. Among the many ways through which one can recognize the immensurable value of someone else's contribution to a given field, we chose this special issue. The motivation behind our choice relies on our belief that a collection of papers written by such a diverse group of researchers, reporting on so many different initiatives, is the best form to evoke our gratitude to this outstanding linguist. Becuase the meaning of this collection of papers, as the meaning of anything else, goes beyond the research presented by each one of them. The meaning of these papers is relativized to a scene in which the work by Fillmore is the core element providing the foundation needed for the development of all of them and of many more to come.

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