

Appendix:

A 'Praxis' note on the Vedas:

[This note is provided only to set the context for the paper, and should not be construed as academic.]

The Vedas are the ancient Hindu Scriptures and are among the oldest religious books of the world. They are four in number the Rg, Yajur, Sama and Atharva Vedas, listed in order of antiquity. The first three are cognates and were chanted during rituals. The Rg Veda was the primary Veda and consists of 10 books and a few thousand verses. It was meant to be recited by the Hotar priests during the fire sacrifice. The Yajur was assigned to the Adhvaryu priests who conducted the sacrifices and the Sama Veda to the Udhgathi priests who "sang" the Sama verses during the preparation of the Holy Soma juice. The Yajur and Sama Vedas repeat a lot of Rg Vedic content, with special syllables being added in some cases. Each Veda could have several recensions. Our illustrative application is for the Sama Veda. Apart from Hindu theology, study of the Vedas becomes necessary to understand Ancient Indian History as well, as the Vedas are the closest we have to Historical texts of those times and are studied from a myriad of approaches: Philology, Etymology, Comparative Religion, Sanskritology, Indology etc.

The commonest version of the Sama Veda consists of 1875 verses, arranged in 4 parts, which are further divided into books and chapters. The chapters are then broken into decades. Each decade could consist of 10 verses. To each decade is assigned a God or a Collection of Gods to whom the verses are addressed, either as a salutation or as a prayer, such as Varuna, the Water God or to VisveDevA or All of the Gods. Most verses are addressed to Indra, the thunderbolt wielding Rain God, and King of the Gods and to Agni, the fire God, who is considered the conveyor of the sacrificial offerings to the Devas (the Gods). A number of the verses are naturally in praise of Soma. Decades also identify the metre in which they were composed and the Rshi or sage who composed them.

Study of the Vedas is quite interpretive, as words could have multiple meanings. Further Sanskrit has a number of compound words, which need to be split according to Sandhi and Samasa rules, and according to the correct number and case. Sandhis are rules for fusing words retaining the meanings of both the original words as in boatman. Samasas are rules for forming compound words when a new word is formed. So, Vedas are presented in Samhitha or native form and a padapatha or split up form which can be interpreted. Due to all these variations, a concordance study is valuable. We could profitably apply ontological and inferential techniques to analyze the Vedas. Further, most studies of the Vedas take place in Latin based fonts and few digitized texts are available. A validated and completely cross-linked browser, backed by a ontological server, organizing the concepts, providing the texts and translations in various fonts such as Sanskrit, Kyoto convention etc. becomes very useful as a research tool when combined with the above, allowing quick and easy searches and generation of new relations and

conclusions. The ontological server and LOGS architecture allow the construction of intelligent interfaces, easy machine processability, and swift dissemination of domain knowledge.