

Here is an explicative Summary for my thesis. It can have little changes, but the subjects and relations are exactly what I am working on my research.

Summary:

Introduction

Pāṇini beyond Chomsky.

Pāṇini's grammar is not a Chomsky's generative grammar.

Aṣṭādhyāyī and formal grammars.

Chapter 1

What kind of formal grammar is Aṣṭādhyāyī?

Pāṇini's technique of grammar.

Sūtra as a way of formalization.

Translation and commentary of some sūtra(s) [examples].

Chapter 2

Indo-European Linguistics contributions to formal grammar.

Indo-European Laws and Aṣṭādhyāyī.

Aṣṭādhyāyī as a model of grammar for Indo-European languages.

Translation and commentary of some sūtra(s) [examples].

Chapter 3

Aṣṭādhyāyī as an example of Dependency Grammar.

Could Aṣṭādhyāyī works as a Universal Dependencies framework?

Pāṇini's technique of grammar and Model Theoretic Syntax (MTS).

Translation and commentary of some sūtra(s) [example].

Chapter 4

Pratyāhāra sūtra and speech analytics.

Pratyāhāra sūtra as a model for Phonetic Alphabets.

Pratyāhāra technique to other languages.

Translation and commentary of some sūtra(s) [example].

Chapter 5

Aṣṭādhyāyi's metalanguage as a system of notation (code).

Phonetics in Aṣṭādhyāyi, an analysis.

Morphology in Aṣṭādhyāyi, an analysis.

Syntax in Aṣṭādhyāyi, an analysis.

Morphosyntax in Aṣṭādhyāyi, an analysis.

Translation and commentary of some sūtra(s) [example].

Appendix 1

Toward a new theory of grammar based on Pāṇini's grammar.

Appendix 2

Aṣṭādhyāyi and a new approach to machine translation.

Appendix 3

Taking Universal Grammar seriously.

Conclusion