Acknowledgements  ii
Key to Transliteration  iii
Contents  iv

Chapter 1 : Introduction and Scope of the Work
Construction of a system, purpose and scope of the present work, stem-suffix analysis, self-contained grammar, generative grammar, paradigm for theory construction, Pāṇini and Kaṇāda, source of ideas, generative device, prominence of vivakṣa, modern formal systems, technical language, lāghava not the sole criterion, elimination of redundancy, interdependence of rules, thorough system, parallels in modern linguistics.

Chapter 2 : Grammatical Theory Construction - 1
Aspects of Pāṇini's Rule Construction and Rule Ordering
Substitution rules, crucial role of anuvṛtti, demarcation of rules, lack of consistency, anuvṛtti and metalanguage, ad hoc procedures of commentators, mention of ca, ambiguous boundaries, co-referentiality, mutual co-referentiality, defect of maṇḍūkapluti, apparent redundancy, sāmarthya argument, metalinguistic items, subject and process items, optionality items, reinforcing term, nityāṃ, single or
two rules 37, negative rule 38, qualifiers 38, lexical items 39, categorical semantic terms 40, adhikāras 41, adhikāras and continuation 42, domain of adhikāra 43, interpretation and application of vidhi rules 43, style of phrasing 44, revision as disturbing 45, interpolations 46, splitting of rules 47, grammatical number 48, change of case from locative to nominative 48, genitive to nominative 50, vibhakti pariṇāma 50, phrasing of a separate rule 50, dvandvas of equal number of elements 51, incorrectly united rules 52, repetition of item 53, repeated item in different case ending 54, rule introducing new process 55, anyatarasyaṁ 55, ca not immediately followed 56, negative particle 57, genitive tatpuruṣa 57, dvandva compound 58, anuvṛtti implicit 59, modelling of grammatical knowledge 61, Pāṇini's synthetic and semantic approaches 62, generation of new forms 63, abstraction as scientific and not philosophic 64, grammatical terms by relational function enumeration 65, algebraic notation 66, order and force of application 67, accent 68, kernel sentence model 70, division of rules 70, resistant to interpolation 71, one indivisible statement, arrangement of technical rules 76, Śiva sūtras grouping 77, signalling a group 78, group by enumeration 80, by common denominator, transparency of symbols 81, items in apposition 82, characteristics of definitional rule 83, classification
application rule 84, ordering of rules 85, feeding and bleeding 87, non-linear ordering of rules 88, nitya principle 89, unmarked ordering 92, siddha in symbols 93, antaranga role 95, internal processes 97, simultaneous application 98, asiddhavat 99, tripādi overcoming undesired consequences 101, blocking relation 102, deletion roles 105, lopa deletion 106, context-sensitive rules 108, inadequacy 109, with anuvṛtti 110, listing element 113, metalinguistic element 114, linguistic formulae 116, knowledge representation paradigm 123, grammar as computing machine 124, computer science application 125, sūtra as complex programme 126, logical representation of sūtra 128, case relation 128, formulaic representation 129, disjunction and conjunction 132, mutual relation 134, blocking 135, head modifier 136, anubandha 137, exceptional rule as powerful 137, free movement 138, sequential operation 139, distance between grammar 139, lexicon as part of grammar 141, Pāṇini's basis purposes of sūtras 142, derivational system 144, abstract item 146, grammatical tools 147, correlations of classes 147, affixes 148, non-linguistic items 149, non-self referring items 150, metarules 150, headings 151, markers attached to verbs 151, two principles 152.
Chapter 3: Grammatical Theory Construction - 2

Aspects of Pāṇini’s Grammatical Methodology

Structural and historical viewpoints 159

terms outside grammar 162, object and metalanguage 166, modelling usage 170, binary division 171, conditions for affixes 172, transformation into strings 174, active and passive as independent 175, finite state machine 176, pre-supposition 178, freezing Sanskrit 179, syntax in words 180, disinterest in historical stages 181, varṇa anga and padavidhi 182, sāhacarya 183, Pāṇini’s strategy 185, parts of speech 187, meaning to sentence 188, active and passive as alternative 189, network of entities 190, lexical entry demarcation 191, translating proposition into sentence 192, most competitive theory 194, complex structure 196, fundamental premitives 198, own system 202, theoretical terms 204, borrowed terms 205, separating theoretical and primitive terms 206, self-contained treatise 207, saṃjñā as unifying terminology 209, delimiting 209, śiṣya and śāstrīya terms 211, semantics as primitive 211, vedic terms as primitive, metalinguistic term as primitive 212, form and application terms as primitive 212, distinguishing phonetics and phonology 213, sounds and features 214, type and token 215, ordering as governing principle 216, zero for symmetry 218, linguistic and mathematical
zeros 219, anuvṛtti zero 221, problems of sūtra style 221 sentential features 222, non-demarcation of morphology and syntax 223, algebraic form of sentence 223 form-building paradigm 225, abstraction of mental reality 226, linguistic performance viewpoint 227, overcoming Chomskyan deficiency 228, non-requirement of transformational rules 229, observational and descriptive adequacy 230, case-form and case-meaning 231 binary parts of speech 232, antedating logicians in negation 234, semantic notions 235, semantics as primitives 236, semantically similar and syntactically dissimilar sentences 237, finite verb 239, meaning in grouping stems 240, words and compounds 241, implied meaning and mode 241, falsification criteria, puzzling systematic 246, non-canonical in Kātyāyana’s times 248, later canonical legitimacy 248, not organised for vedic structure 248, principles behind grammar 251, attestation 251, Mahābhāṣya 252, philological and historical approach 252, criteria for critical edition, usage and outcome of rules 255, problems of oral transmission 257, conjunctive and disjunctive link, ca marking boundary between rules 258, predictability of ordering 259, para-principle 261, recent trends 262, attestation as criterion 262, binding of lexical items 263, components of meaning 264, semantic and formal parts of speech 267, formal and semantic aspects 267, set-theoretic approach 268, distinction between words and complex forms 270, kāraka and samartha condition 271,
two authors 271, inconsistencies 273, differing with predecessors 274, countering operations 276, target structures 277, affixation and augmentation rules, proximate and remote conditions 278, resolution of conflicts 279, asiddhatva 279, rule abbreviation 280, affixation as derivation process 281, sentences as the minimum free-form 281, verb-root classification 282, nominal sentences 282, limitations of formal systems 283, atmanepada and parasmaipada 286, verb-roots 287, grammatical number 288.

Chapter 4: Grammatical Theory Construction - 3:

Aspects of Pāṇini's Syntactical System

Kāraka bridging proposition and utterance 291, genitive case 291, surface case 293, derivation from meaning 295, kāraka function not permitting transformation 296, kāraka as keystone of syntax 297, modern linguistic view of active and passive 292, Pāṇini's solution as alternative realisations 292, interfacing semantics and morphology 293, no kāraka to be expressed by morphology more than once 293, lat expressing three choices of grammatical relations and morphological expressions 295, express' as a meta-grammatical notion 299, nominals and sentences 312, mapping of meanings into kārakas and vice versa 312, exclusion of sentences with two goals or two instruments 315, control of non-finite sentential component 315, infinitive of purpose 317, circumventing the notion of subject 318, overcoming
necessity of transformation 320, alternative options and syntax 322, absence of syntactic deletions 324, agreement rules 325, unexpressed goal and impossibility of goal 327, free deletion process 329, subordinate verbs 330, grammaticality criterion 334, symbolic representation of posited strings 335, meaning taken from the outset 336, grammar and phonology treated from posited strings 337, relations among types of sentences as outside grammar 338, kārakas as Fregean functions 338, passivization 339, agent treated as object 341.

Chapter 5: Conclusion 343

References and Notes 355

Bibliography 360