After Pāṇini the next school of Sanskrit grammar is the Kātantra of Sarvavarman. The dhātup, that has traditionally come down as belonging to the Kt. school is not really the work of Sarvavarman, the founder of the Kt. school. It is Durga who prepared it for that school on the basis of the Cāndra dhātup. We shall study it at its proper chronological place. Sarvavarman, as we shall later see, did not, in all probability, write any dhātup. Liebich, however, has published as Anhang II to his ed. of the Kṣīrataraṅgiṇī a dhātup. called Kalāpadhātu-sūtra, reproduced from Tibetan sources which he believes to be the original dhātup. composed by Sarvavarman himself.²⁹

This dhātup, gives roots with the meanings in Tibetan translation³⁰ (in Roman transcription) which are the same as those given by Bhīmasena. There are the same ten classes with the same sequence.

Coming to the individual classes, classes I and X show considerable difference with those in the P.Dh. Thus in the class I there are only 214^{31} roots as against 1050 of P. A strange feature of the arrangement of roots in this class is the complete absence of any order in it. All sorts of roots, set and anit, vocalics and consonantals and roots conjugated in different voices have been thrown together. The Anubandhas \hat{n} and \tilde{n} appear, indicating respectively the ātmanepadin and the ubhayapadin roots ending in vowels, but there is no indication whatsoever as to the voice in which a root ending in a consonant is conjugated as, apart from the absence of Anubandhas, the usual statements (viz. such and such roots are parasmaipadins....etc.) also are conspicuous by their absence. Ten roots³² appear twice, and one, viz. $bh\bar{u}$ even thrice (1, 17, 148). On the other hand it is very curious that out of the 74 roots in the ghat- sub-class only one, viz. the first root ghat appears here. Then the antarganas are not given separately though a few roots forming these are read here.

Similarly in the X class, yuj and katha sub-classes consist of 9 and 26 roots respectively as against 46 and 86 respectively of P.

In classes II—IX certain points are worth noticing. Some roots which have been read by P in the $bh\bar{u}$ - class follow optionally, necessarily, or under certain circumstances, different conjugation. Such roots have been removed to their proper classes. Thus the roots $\dot{s}ru$, $ak\dot{s}$ and $tak\dot{s}$ (also $tvak\dot{s}$) ³³ have been read in the fifth or the su- class; roots dhinv and krnv (also inv and jinv) ³³ are read in the eighth or the tan-class; the sautra roots stambh, stambh, skambh and skumbh are read in the ninth or the $kr\bar{t}$ -class; and lastly the $s\bar{u}tra$ ' $v\bar{u}$ $bhr\bar{u}\dot{s}a$ - $bhl\bar{u}\dot{s}a$ -c etc. which enumerates the roots belonging to the div- class optionally, and which is read in the $s\bar{u}tra$ - $p\bar{u}tha$ by other schools is read here in the Dhātupāṭha, and that too twice (IV, 9-15; 147-154).

Another important point to note is that the vikaranas as mentioned here at the end of each class, correspond, not to those given by Sarvavarman in the sūtrapāṭha (yan, nu, an etc.), but to those which are found in the Pāṇinian system (\$yan, \$nu, \$a etc.).

There are some minor mistakes committed by the Tibetan translator. He has made a confusion between 'asana' and 'asana'. Twice, he has mis-

^{28.} Liebich, Einführung III, 65.

^{29.} In this respect modern scholars generally follow Liebich, Belvalkar, Systems, p. 90; Winternitz, Geschichte, Vol. III, p. 398; Keith, A History of Sanskrit Literature, p. 431; Yudhisthira Mimansaka, Itihāsa I, p. 407.

^{30.} The name of the translator is given as Manjughosa-Khadga,

^{31.} And even this figure includes double occurrences of some roots.

^{32.} glai (28.29), vad (35.147), path (37.144), hath (57.143), bhramá (76.121.), dhvams (77.122), srambh (78.123), damá (79.124), sañj (80.125), and srp (105.141).

^{33.} Unlike P.

taken meanings for roots; thus, rujā which is a part of the meaning rujāviśarana-gatyavasādanesu assigned to the root sat is torn off and given as a separate root along with sat (Sa. Dh. I, 173), the meaning visarana-going with both.34 Further, as though this were not enough, avasādana 'dishearten', is split into avasa 'not living' and adana 'eating'! Similarly vrana gatracurnane is given as vrana gatra curnane (X. 262). On the other hand the sūtra basta gandha ardane (P. Dh. X, 144.145) is read as basta gandhādane (X, 122) (i.e. gandha is taken as a part of the meaning). In the X class he reads yūj (215) and bicch (203) along-side yuj and bicch. A peculiar addition is that of an atmanepadin root ker (32) in the IV class, whereas ksi is only a passive or reflexive stem from the root ksi.

Roots peculiar to the Veda are not read in this dhātup, except \sqrt{r} (III. 14).

An Examination of the so-called Sarvavarman's Dhātupātha

Now let us examine the above dhatup, and see how far the claim that it represents the original Dhātup. of Sarvavarman is tenable. At the outset we note that Sarvayarman is nowhere specifically mentioned as the author of this work. The work is only styled as 'Kalāpadhātusūtra'.35 So all that this may mean is that this dhatup, was believed by some as belonging to the Kātantra or the Kalāpa system at some stage in its history. It does not follow that this is the original dhatup. of the system.

Secondly, the set of vikaranas of the ten classes as given at the end of each class strongly militates against the claim of this dhatup, having come from the pen of the originator of the Kātantra system. The vikaranas are all (with the sole exception of that of the first class, which is a doubtful case and to which we shall shortly return) the same as belonging to the Pāninian system, and not those as are stated by Sarvavarman in the Kātantra Sūtrapātha. Thus śyan, śnu, śa, śna and śnā- vikaranas of classes IV-VII and IX—are furnished with the Anubandha s. But what purpose does it serve here? In the Pāṇinian system it has a definite purpose. A verbal

dhātupāthah krto yena kātantrasyārthasiddhyaye/ tasmai svasty astu viduse satatam sarvavarmane//

How far such statements are to be relied upon is a different thing. Of the 3 Mss. I have used, only the Devanagari Ms. of the BORI reads the stanza. The two Bengali Mss. of the India Office Library do not read it.

suffix which is śit-which has a ś affixed to it-gets the nomenclature sārvadhātuka through P 3, 4, 113. A sārvadhātuka affix, further, when it is not pit—when it has no p affixed to it—becomes as good as a nit (weak) affix (P 1,2,4) and thus prevents the guna of the radical syllable. That is how in the Pāṇinian system provision is made to account for the absence of guņa of the radical vowel in forms like nṛtyati, sunoti, tudati, ruṇaddhi or krīnāti, although a guṇa is expected here by the general rule sārvadhātukārdhadhātukayoh (P 7, 3, 84).

Does the furnishing of the vikarana with the anubandha s serve any such purpose in the Kātantra system? No, because the technique of Sarvavarman in this matter is quite different. His general rule nāmyantayor dhātuvikaraṇayor guṇah (3.5.1) laying down a guṇa when an ending follows is restricted in the case of the vikaranas to an by Sa. 3.5.3. So we have the above forms like nrtyati etc. without guna.36 To prevent further the guna taking place in forms like tudati where also the vikarana is an, Sa. frames a special rule tudader ani (3.5.25). With these provisions in the Sūtrap to prevent guna in the undesirable places, the furnishing of the anubandha ś for the same purpose becomes superfluous and consequently could not have originated from Sarvavarman. (On the other hand, the same vikaranas are given in the traditional dhatup., which was evidently so arranged as to agree with the ancient sūtrap., as yan, nu. aguna an, na-śabda and nā-śabdai.e. without a s and agreeing thus with those in the sūtrapātha).

The same is the case of the vikarana of the third or the hu-class, which is given as slu i.e. the same as in the Paninian system. Now in the latter school it is meant to secure elision of the general vikarana śap (P 2.4.75) and also to provide for a reduplication of the root syllable (P 6.1.10). But in the Kātantra system it serves neither of these purposes. The reduplication of the radical syllable of the juhotyādi roots is laid down in \$a. 3.3.8 while the elision of the vikarana is secured by the rule adader luk vikaranasya (3.4.92) itself, because in the Kātantra system hu- class is not a separate one, but just a sub-class of the ad- class-adadyantargano iuhotuādih, as Durga says.37 The reading of a separate class hu and assigning the vikaran ślu to it, is therefore not from the pen of Sarvavarman. (In the traditional dhatup, on the other hand, hu-class is read within the adclass. The concluding remark there reads: vrt juhotyādih. iti lugvikaraņā

^{34.} Curiously enough, the same mistake is found in the Kāśakrtsna Dh. (I.87) also.

^{35.} As opposed to this the current dhatup, of the Katantra school is distinctly ascribed to Sarvavarman. Cf. the initial stanza:

^{36.} Cf. Durga under this rule: nāmina upadhāyā nāmyantasya ca any eva vikarane guno bhavati. rocate vartate bhavati nayati. any eva vikarane iti kim? nrtyati sunoti krināti pusāna.

^{37.} Under Sa. 3,4,92.

adādayo dhātavah samāptāh. adādau bhādi—rudādi—jakṣādi—juhotyādaya ete catvāro' ntargaṇāh).

At the end of the $bh\bar{u}$ - class in the Tibetan dhātup, the vikaraṇa is seen to be read as an— $anvikaraṇ\bar{a}(h)$ $bh\bar{u}v\bar{a}dayah$ $sam\bar{a}pt\bar{a}h$ —the only case where a vikaraṇa peculiar to Sa. is apparently found in the dhātup. But even this single agreement is more apparent than real, for an here is evidently an emended text of the editor, since the sources here read only $ny\bar{a}$ - and nya- which I think are corrupt readings for $ny\bar{a}yya$ - which, as is well known, means the general vikaraṇa.

There is one more point. In his rule śruvah śr ca (3.2.35) Śarvavarman lays down the vikaraṇa nu for $\sqrt{\acute{s}ru}$ and also enjoins the substitution of śr in its place when this nu is to follow. From this it is clear that Sa. also like P had retained $\sqrt{\acute{s}ru}$ in the I class and so along with the substitution of śr, he had also to teach the vikaraṇa nu—'ubhayam vidheyam bhauvādikatvāt' as Durga says. In the Tibetan dhātup., however, śru is read just in the V class. Had Sa. been the author of this Dh.P. he would have taught the substitution of śr only. So this fact also goes against Śarvavarman's authorship of this dhātup. (In the traditional dhātup, we find the root read in the I class in conformity with the Sūtrapātha).

There is only one point which seems to be in favour of the view that the dhatup, in question comes from Sa, himself. In the chapter (III, 2) on vikaranas Sa. simply gives the vikaranas of the different classes without stating roots which belong either optionally or under certain circumstances to different classes. Durga has made good this defficiency by way of his own Vārttikas under the different rules.38 Now, as said above, we find most of such roots actually read in the different classes in the present dhatup. and it may be argued from this that Sa. did not treat this subject in the Sūtrapātha simply because it was unnecessary, as he had already provided for this in the dhatup, itself by arranging his roots to that effect in the various classes and by reading the rule vā bhrāśa-bhlāśa etc. in the dhātup. itself. But this point can be explained in another way also. Sa. is not out to give a thorough grammar of Sanskrit. He does not mind omitting whole chapters-krdanta, for instance-and even when he handles a subject he thinks it sufficient to give only the most broad and general rules, dispensing with all the minor details. He disposes the whole subject of voice, for instance, in barely eight sutras, all the details being later supplied by Durga

in his Vārttikas, of which, to give only one instance, there are no less than sixty-six under one rule (3.2.42) alone. In the present case also it is just possible that Sa. gave only general rules about the vikaraṇas, and later on somebody filled in the details by making the necessary changes in the dhātup. much the same as Durga did it in his own way by framing Vārttikas supplementary to the sūtras.

Considering all these things, I am of opinion that the evidence does not warrant the claim that the dhātup. in question is the original dhātup. of Sarvavarman—on the contrary it definitely goes against it. How in Tanjur it came to be associated with the Kalāpa school, is difficult to say.

Cāndra Dhātupātha39

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A major innovation introduced by Candra is that for every root he gives, as a rule, only one meaning. Where a number of meanings had been assigned to a root before, usually the first of these is retained by Candra. In a very small number of cases we find two meanings given to a root either expressly 40 or by a ca added after a meaning, 41 probably through inadvertance.

Another important change is that Candra gives up the use of accents, both on the root and on the Anubandha syllable. The voice is indicated by the descriptive statements at the bottom of the sections, each section conaining only roots belonging to a particular pada. His terms tananin, $atanana^{42}$ and $vibhasita^{43}$ correspond to Pāṇini's ātmanepadin, parasmaipadin and ubhayapadin respectively. Similarly he frames special rules in the Sūtrap. (V, 4) to indicate the roots which take and those which do not take the union-vowel i before an ārdhadhātuka affix.

In the arrangement of roots in the first class, again, he differs from Pāṇini. I, 1-305 are all parasmaipadin roots (in the same order as Pāṇini, viz. dentals, gutturals etc.), 306-522 all ātmanepadins (again in the same order; with 496 begin the sub-classes).

^{38.} bhrāša-bhlāša-bhramu-kramu-trasi-truți-lași-yasi-samyasibhya
ś ca under 3.2.33, etc.

^{39.} Published by Liebich in his 'Candra-Vyakarana' (pp. 1-34), Leipzig, 1902.

^{40.} e.g. C.Dh. I, 589; 597.

^{41.} e.g. C.Dh. I, 348; 350.

^{42.} The terms tanānin and atanāna were evidently suggested to Candra by Pānini's rule tanānā ātmanepadam (P 1,4,100), Technique I, pp. 102-103.

^{43.} The term appears in the P.Dh. also in the sutra sake vibhāsito marsane (IV, 78), where it is interpreted variously by the commentators, one of the interpretations, being that the parasmaipada is made optional here.

In the other classes also C follows the principle of grouping together the roots taking the same pada. He also brings together in a sutra roots having the same meaning, thus effecting economy⁴⁴ (though this is not carried to the logical extent).

Candra's difference from P is most conspicuous in the X class. Firstly, as against about 395 roots of Pāṇini in this class, Candra has only about 114. He does not read what are apparently denominatives. He also does away with the sub-sections ākusmīya, āsvadīya, ādhṛṣīya (yujādi) and the kathādi (with the sub-section āgarvīya). The big group of bhāṣārtha (v. l. bhāṣārtha) is also naturally missing.

On the whole Candra's Dhātupātha does not differ much from Pāṇini's. He retains the sūtras like 'ghātādayo mitaḥ' etc., 'yanluk' and those at the end of the X class, which others (except Kk, Kt.) properly shift to the Sūtrapātha.

There is only one anubandha of P which is dropped by C viz. ñi.

Jainendra Dhātupāṭha⁴6

This dhātup. has a still different order in the first class. It reads all the ātmanepadin (' $\dot{n}aidit'^{47}$ in J's terminology) roots first, then parasmaipadin (called mavanta), and lastly the ubhayapadins ($\ddot{n}it$)—an order which Sākatāyana entirely follows. (By the way, J retains the root $bh\bar{u}$ at its wonted top place, though he reads the section of the ātmanepadin roots first whereas Sā, who follows the same order, goes one better and removes $bh\bar{u}$ to its proper place viz. parasmaipadin roots in \ddot{u}).

In the order of classes, the $h\bar{u}$ - class preceds the ad- class. In the case of others, the old order remains.

As regards the Anubandhas, J employs two Anubandhas not used by his predecessors, viz. ai (to denote the ātmanepada) and au (to denote an anit root, this au being later used for exactly the same purpose by Vopadeva also). A peculiarity as regards anubandhas in J is that he actually

reads the anubandhas s and o after all those roots which have them while P partly reads them and partly only declares, without actually adding them, certain roots as having those anubandhas. (Here $S\bar{a}$ follows him in the case of the anubandah s, but not in the case of o).

With regard to meaning, J sometimes modifies the traditional meanings so as to effect economy (using mukhaikadeśe for vadanaika° (\sqrt{gand}); guptau for rakṣane (\sqrt{gup}) etc.), or to give them in a proper form (daśane for dandaśūke (\sqrt{khard}); śankane for śankāyām (\sqrt{rag}) etc.) or to make them more clear (uccaih śabde for śabde tāre, etc.). He also seems fond of action nouns in -ti (thus he prefers dṛṣṭau to darśane, grhītau to ādāne, vilikhitau to vilekhane etc.). Lastly in a few cases, the meanings are altogether different (e.g. śaithilye against daurbalye (\sqrt{krpa} , śratha etc.), samkṣobhe against samcalane (\sqrt{ksubh}) etc.).

In the tenth class, J discontinues the practice of reading roots like $s\bar{u}tra$, $m\bar{u}tra$ etc. (i.e. roots ending in a conjunct) with a final a, since it serves no practical purpose. Here also $S\bar{a}$ follows him.

The tenth class is broadly divided into two sections, (1) roots which belong to the tenth class alone (1-312), and (2) roots which belong to this class only optionally (313-351). Each of these two groups is further divided into the usual 3 groups, parasmaipadins (1-263, and 313-342), ātmanepadins (264-311 and 343-348) and ubhayapadins (312 and 349-351).

J does not read roots restricted to the Vedic use.

The Jainendra grammar has come down in two recensions, a shorter one which is commented on by Abhayanandin, and a longer one with the commentary Sabdārņavacandrikā of Somadeva. The shorter version is quite insufficient, the deficiency being filled by Abhayanandin with his Vārttikas. The longer recension is a complete one and it is to this recension that the extant J. Dh. belongs. The dhatup. of the shorter recension, if there was one, has not apparently come down. The roots cited in Abhayanandin's commentary agree with those in the P.Dh. even including the same use of the accents to denote voice and the presence or absence of the union vowel i. This would show that the shorter version had no dhātup. of its own. The Sabdārņavacandrikā dhātup., however, abandons the use of accents, and uses throughout \tilde{n} to denote ubhayapada, and \dot{n} or ai to denote \bar{a} tmanepada while the absence of any of these signs denotes parasmaipada, roots belonging to this last category being called mabantāḥ in the dhātup. Whereas, on the one hand, it is impossible that a new system should not have its own dhatup. or that a Jain author belonging to a comparatively later age should resort to the use of accents for a technical purpose, on the other hand it is very

^{44.} e.g. II, 1; 12 etc.

^{45.} Like jal (jāla), pakṣ (pakṣā), rag (rāga) etc. He however reads denominatives like saṃgrāma (X, 71), mārga (X, 73) etc. Kṣīrasvāmin also has noticed this absence of number of roots in the tenth class. Vide his remarks under P.Dh. X,24.45.49.61.65, etc.

^{46.} Edited by Pandit Śrī Lāla Jain Sastrı as an appendix to the Śabdārṇavacandrikā, in the Sanātana Jain Grantha Mālā, Benaras, 1915.

^{47.} In J, the anubandha at is added to the roots in consonants to denote that they are ātmanepadin.

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likely that the present dhatup. has undergone a subsequent revision and has received a considerable addition. This is particularly so in view of the fact that it contains a number of roots which are a creation of a later age and are missing even in the Sākatāyana dhātup. (e.g. khurd, manth, etc.) which usually follows J.

Kāśakrtsna Dhātupātha48

This dhātupātha is a recent discovery. The students of Sanskrit grammar already know one Kāśakṛtsna,49 references to whom or to whose work are found occasionally in the Sanskrit grammatical literature.⁵⁰ A few quotations from his work are found scattered in different Sanskrit works.⁵¹ This is all that was so far known about Kāśakṛtsna. This is the first time that a whole work going by his name has been discovered.

48. Kāśakrtsna-Śabda-Kalāna Dhātunāthah of Cannavīrakavi, ed. by A. N. NARA-SIMHIA, pub. in the 'Sources of Indo-Aryan Lexicography' Series by Deccan College Post-Graduate and Research Institute, Poona, 1952. Cannavīrakavi is only the name of the authour of the Kannad commentary which is also printed along with the text. The edition is in the Kannad characters in which both the Mss. on which the ed. is based, were written.

49. MIMAMSAKA Itihāsa I, p. 79, has raised a subtle point by saying that the word Kāśakrtsna as the name of a system of grammar presupposes (by P 4,2,112) Kāśakṛtsni as the name of the author, and not Kāśakṛtsna which, by P 4,2,114, would give the form Kāśakṛtsnīya as the name of the grammar. But since Kāśakṛtsna also actually appears as the name of the grammarian, he concludes that the same author was sometimes referred by the name Kāśakṛtsna, and sometimes by Kāśakṛtsni. It seems, however, that it is not quite imperative to bring in Kāśakṛtsni. The form Kāśakṛtsna (grammar) can be derived from the base Kāśakrtsna (author) itself by resorting to abhedopacāra, just as Bhattoji does in the case of the word 'sarīrakam' (bhāṣyam) in the Kaumudī (under P IV. iii. 87). It is also worth considering whether, on the basis of the Vārttika vā nāmadheyasya vrddhasamjña vaktavyā, the word Kāśakṛtsna (author) could not optiotionally cease to be technically called vrddha,-in which case Kāsakrtsna becomes as legitimate as Kāśakṛsnīya as denoting the work of Kāśakṛtsna.

50. The Kāśakrtsna system of grammar is referred in the Bhāṣya (Vol. I. p. 12). From remarks like 'trikāh Kāsakṛtsnāh' (Cāndravṛtti 3,1,42) and 'trikam Kāsakṛtsnam' (Kāśikā to P 5,1,28) it appears that Kāśakrtsana's work consisted of three Adhyāvas. It also seems that he was the first to introduce the principle of brevity (laghava) in the construction of the grammatical rules, cf. the oft-quoted statement 'Kāśakrtsnam aurulāghavam' (Kāśikā to P 4.3.115; Comm. to SKBh. 4.3.246; Comm. to Sā. 3.1.182). In his comm, to Bhasya under P 2,1,50 and 5,1,50 Kaiyata cites two rules of Kasakrtsna. Ksīrasvāmin (quoted by Sāyaṇa in the M. Dh.) in his comm. to P. Dh. II. 60 savs that the followers of Kāśakṛtsna favour the form āśvasta. Vopadeva (Kkd. 2) mentions Kāśakṛtsna as one of the 'ādiśābdikas'.

51. For a good collection of these, see MIMAMSAKA, Itihasa I, p. 84.

It must, however, be stated at the outset that the present work cannot have come from this Kāśakṛtsna known so far—the ādiśābdika Kāśakṛtsna, to use Vopadeva's term. He is usually supposed to be anterior to Pāṇini, evidently owing to the association of his name with that of Apiśali in the grammatical literature. But unlike Apiśali he is not mentioned by Pāṇini in the Astādhyāyī and so some have disputed that claim.52 Anyway the work which we have now before us must be certainly a post-Pāṇinian work since it uses all the twenty-one Anubandhas of Pāṇini's dhātup. exactly in the same sense. It does not reject any of Pāṇini's Anubandhas nor does it add any. This single fact is enough to show that the author of the present dhatup, has drawn on Pāṇini and consequently he must have come after Pānnini. It cannot be argued that it is Pāṇini who borrowed from Kāśakrtsna since such a wholesale borrowing on the part of P is unthinkable. Besides, Patañjali (under P 7.1.18) expressly tells us that P does not make use of the Anubandas of his predecessors.53

Further, there are other circumstances which would show that our work belongs to a still later date. Thus the set of meanings assigned to the roots here is almost the same as given by Bhīmasena and so cannot be earlier than the begining of the Christian era, which is approximately the date of Bhīmasena.

Coming to the arrangement of roots, it has striking resemblance with the traditional Kātantra dhātup. Lastly, many of the roots in this dhātup. like dhundh (I, 191) dast (X, 50), sist (X, 48) etc. seem to be of a very late origin. In fact this is the most inflated of the Dhatupathas. All these things would tend to show that the present dhātupātha—at least in the form in which we have it now—is the product of a very late age and cannot have come from the pen of the ancient Kāśakrtsna who in any case was anterior to Patañjali. For all practical purposes the present dhatup, may be assigned to a period not earlier than 600 A.D.

It will be advisable to give here some aspects of the work in detail because, firstly, the work, which is a new discovery, has been printed for the first time and, secondly, the Kannada script is unfortunately retained in the printed edition.

^{52.} CHATTERJI, Technique I, p. 2.

^{53.} This statement of Patanjali is, of course, true only to a certain extent. There are many anubandhas in the Pāninian system which were used by his predecessors for the identical purposes, see particularly in this respect Mangala Deva Shastri, The relation of Pānini's technical devices to his predecessors, Proceedings of the 4th Oriental Conference, Vol. II, pp. 469-472.

The work is of the nature of a dhatuvrtti like that of Ksīrasvāmin or of Sāyaṇa; only it is on a very small scale. Out of the wealth of forms belonging to the verbal system in Sanskrit, here a single form, viz. 3 sing. Pres. ind. has been cited. The commentary also gives a few nominal derivatives for every root. Every form, verbal or nominal, as also the original Sanskrit meaning, is translated in Kannada. The sequence in each case is: root, its traditional Sanskrit meaning, the verbal and finally the nominal forms (all these elements except, of course, the root being immediately followed by their Kannada translation).

The beginning and the end are as follows:
The beginning:

śrī Yāgantiśarabhāya namah. Kāśakṛtsna—śabdakalāpa-dhātupāthah. bhvādih.

parasmaipadabhāṣā
 prakṛṭipratyayāngāya parasmāy ātmanepade/
namo Yāganṭiśarabhalingeśāya carantine//
dhātupāṭhaḥ kṛṭo yena bālavyutpattisiddhaye/
namas tasmai kāśakṛṭsnagurave śivarūpine//

These two introductory stanzas of the commentator are followed by an explanation in Kannada of the second stanza, after which come the remaining two stanzas of the introduction, each followed by its explanation in Kannada. They are:

nipātās copasargās ca dhātavas ca trayo'py amī/
anekārthāh smṛtāh sadbhih pāthas tesām nidarsanam//
sattāyām mangale vrddhau nivāse vyāpti sampadoh/
abhiprāye ca saktau ca prādurbhāve gatau ca bhūh//

After this the main work begins, where there is a repetition of the remarks bhvādih. 1. parasmaipadabhāsā and of the introductory stanzas No. two⁵⁴ and four. A curious feature of the initial portion is that the portion of the dhātupātha up to rutha, lutha upaghāte (comprising two hundred odd roots) is repeated; the dhātupātha alone appears in the first occurrence, while in the second it is followed by the commentary.

54. This stanza, which contains a salutation to Kāšakṛtsna, evidently belongs to the commentary, and not to the original text, i.e, the dhatup.

At the end of every Present class there is a colophon which gives minute details about the commentator. The final colophon runs thus:

iti śrīYāganţiśarabhalingaprasādinas
TittiraYajuḥśākhādhyayanasya Vāmadevamukhodbhūtasya
Gajakarnaputrasya Atrigotrasya Vīramāheśvaratantrasūtrasya
Sivalankamañcanapanditārādhyapravarasya Kokilākundapurasya mahāmathasya Sanganagurulinganandyambākumārasya Tumukūramahāmathakanthācāryapitrvya Nambyannagurukarajātasya SahyādrikatakaKeļadinagarasamīpasya ṣaḍdeśasya Kunṭikāpurasya
Kāśīkānḍa- Cannavīrakavikṛtau⁵⁵ Kāśakrtsna-śabdakalāpasya
dvādaśasahasradhātupāṭhasya Karnāṭaṭīkāyām in-vikaraṇaś
curādih. samāptam.

As said above, this dhatup, has striking affinities with the Daurga dhātup, of the Kātantra grammar. Thus, both treat hu-class as a sub-class of ad- class. In both the order of roots in all classes is the same. In both the wording of three dhātu-sūtras⁵⁶ in the ghaṭādi sub-class which differs from P and C is identical. Both agree in the matter of omission and inclusion of certain roots (e.g. both read \sqrt{i} after \sqrt{kat} ; both read roots like hvel, dhruva, vrt (for crt), ij which are not read by any other schools), in assigning meanings different from others (thus both assign only one meaning viz. pālana to \sqrt{av} against the nineteen meanings of all other schools; saukhye against sukhe to \bhand; asamsaye against samsaye to \car; jighāmsāyām against āskandane (or himsāyām, etc.). Sometimes this relationship extends even to minor things-and indeed even to discrepancies (thus both assign the meaning kathana against katthana of others to \sidesistabh; both read \square twice (Kk. I 227b and 262b; Kt. I, 163b and 196b), both read erroneously śaka mrsa ksamāyām ca (Kk. IV, 115; Kt. 118) instead of śaka ksamāyām. mrsa ca. or śaka mrsa ca ksamāyām).

The only difference which Kk. shows from the Kātantra dhātup, consists in reading about 500 roots of a rather odd character which have no

^{55.} This must be amended into **kaveh krtau; otherwise there arises the absurd position of all the previous adjectives in genitive, which are meant to qualify Cannavirakavi, going with -dhātupāṭhasya.

^{56.} jvala-hvala-hmala-namo'nupasargā vā and the following two. Whereas the compounds end in genitive in P and C, they end in nominative in Kk. and Kt.

parallel anywhere. Some of these roots are added by extending the present sūtras (i.e. new roots are added against an old meaning) while in the case of many others new sūtras (i.e. both roots and meanings) are framed. A good number of these are evidently meant to supply a verbal basis for certain derivatives which are supposed to be derived from them while a few are cases of error, pure and simple. The anubandhas, e.g. are erroneously taken as roots. Thus the root mim-r is separated into two roots mi and mr, the comm. giving the two forms mayati and marti(?). The root o-vai is read as u vai with the forms avati and $v\bar{a}y$ ati. Even the preverbs are mistaken for roots. Thus ati- is given as a root with the meaning krama-himsayoh whereas really speaking atikrama-himsayoh is the meaning of the root att (which is here given as adi); sūtra X, 175 reads as $bh\bar{u}$ klp ava avakalpane where the first ava is really an erroneous repetition of the preverb ava- (forming a part of the meaning) turned into a root.

If one ignores this mass of additional roots, then what remains is nothing but the Kt. Dh. There is a highly significant fact to be noted in this connection. The name of this dhātup. as it appears in the final colophon of the commentary is Kāśakṛtsna-śabda-Kalāpa. Now it will at once be recalled that Kalāpa is also another name of Kātantra. The commentator might have deliberately used this word to suggest that the dhātup. which he has commented upon is just a version of the Kalāpa or the Kātantra dhātup.

There is another aspect of this question. The commentary has quoted a number of sūtras, evidently from the Kāśakṛtsna grammar, in the course of its explanations. On an examination of these sūtras it is found that they betray a strong affinity with the Kātantra grammar. Indeed a number of the sūtras and technical terms are identical with those in Kātantra.⁵⁷ This shows that the whole system of the Kāśakṛtsna grammar is just another version of the Kātantra grammar.

57. See in this connection the present write's paper entitled 'A Glimpse into the Kāśakṛtsna School of Sanskrit Grammar' read before the 17th session of the All-India Oriental Conference at Ahmedabad, 1953. As this paper is not printed so far, I quote from it a few instances here. Some technical terms used by Kk. which do not appear in Pāṇini and are otherwise first seen in the Kāṭantra are: aghoṣa, anubandha, anuṣaṇga, asārvadhāṭuka, kavarga etc., caturtha, dhuṭ, nāmin, vikaraṇa, samdhyakṣara, samāṇa, svara. The common vikaraṇas are: an, ano luk, yan, nu, nā and in. The common sūtras are: pah pibah (Kk. p. 71 = Kt. 3.6.70), dhmo dhamah (Kk. 71 = Kt. 3.6.72), 'mno maṇah' and dāṇo yacchah (Kk. 71 = Kt. 3.6.74-75), dvayam abhyastam (Kk. 175 = Kt. 3.3.5), vṛddhir ādau sane (Kk. 300 = Kt. 2.6.49) etc.—Of course there are also a number of technical terms and sūtras which are not found in any other known school of Skt. grammar, including even the Kāṭantra.

There are one or two peculiarities of this dhātup. which may best be mentioned here. Unlike other systems, five roots, viz. $c\bar{u}s$, $t\bar{u}s$, $p\bar{u}s$, $m\bar{u}s$ and $s\bar{u}s$ are read with a short vowel, i.e. cus etc. and a special provision is made in the Sūtrapāṭha for their lengthening (' $cusader\ d\bar{u}rghah$.'). Similarly in the VI class roots pr, mr, dr and dhr are read as $pr\bar{\iota}$, $mr\bar{\iota}$, $dr\bar{\iota}$ and $dhr\bar{\iota}$ (the comm. gives only such forms as show -ri-, -priyate, priyah etc.; forms with -r- are not given).

The Kātantra dhātupātha⁵⁸

Modern scholars headed by Liebich believe that what passes as the dhātup. of the Kātantra school is really Cāndra dhātup. remodelled by Durga for the Kātantra school. As we have already seen, Liebich has published as an appendix to his ed. of the Kṣīratarangiṇī a dhātup., reproduced from Tibetan sources, which he believes is the original dhātup. composed by Sarvavarman himself. However, even accepting that the current dhātup. is not the original dhātup. of Sa., the one published by Liebich cannot, on account of its numerous and important differences from Sarvavarman's grammar proper (i.e. the sūtrap.), be that original one. This much I have already shown.

But did Sa. really write a dhātup.? We do not know whether Sarvavarman actually wrote a dhātup. for his grammar. Considering that his grammar was originally meant to be only an elementary one, and that consequently he ignored whole topics like the Samāsa, as also the kṛt and the taddhita suffixes, 60 it is not impossible that either he did not write any, or that if he did, it was incomplete. The various references to the roots or their anubandhas in the sūtrap. do not necessarily imply Sarvavarman's own dhātup, for they might have some other then current dhātup. in view, preferably Pāṇini's. Indeed there are some rules touching some aspects of the dhātup. which strengthen the suspicion that when Sarvavarman refers to the dhātup. it is to the Pāṇinian one. While discussing the topic of the pada, Sa. (3,2,42.45) says regarding the roots in consonants that the rucādi roots take the ātmanepada endings, and the yajādi roots take

^{58.} I have no knowledge of any publication of this dhâtup. so far. I have here used chiefly BORI'S devanāgarī Ms. No. 252 of 1884-86. Two Bengali Mss. of the India Office Library, viz., No. 773 and 774 were also constantly consulted.

^{59.} Liebich, NGGW, 1895, 316, also Kṣīrataraṅgiṇi, p. 213, footnote; Belwalkar, Systems, pp. 88, 90. Winternitz, Geschichte, Vol. III, p. 398, footnote 3.

^{60.} Though all these three sections appear in the current Kt. grammar, and are commented on by Durgasimha, they did not come from the pen of Sarvavarman, but are later additions, see Liebich, Einführung I, 7; Ks. p. 233.

both the sets of endings. Now what exactly do the expressions rucādi and uaiādi mean? Obviously they do not refer to the ganas or classes in the usual sense of the term. While the roots ruc and yaj belong to the first class ātmanepadin and ubhayapadin roots are scattered over all the ten classes, and so it is impossible to form ganas of such roots. Taking, therefore, the word adi in the sense of prakara 'similarity', Durga interprets the word rucadi to mean 'roots with an anudatta anubandha-vowel'; the term yajādi is similarly explained as meaning 'roots with a samāhāra (i.e. svarita) anubandha- vowel.61 Now are we to understand from this that Sa, had his own dhatup, and that in this dhatup, accents on the anubandha-vowels were actually used to indicate the pada of the roots? I hardly think so. Sa, has nowhere taught accents in the grammar and so it is inconceivable that he would employ these for technical purposes in the dhatup. Secondly, if he had actually used the accents in the dhātup., then in the sūtrap. he would have straightway said e.g., something like anudatta-nanubandhebhyah (3.2,42) instead of using the round-about expression rucādi°. I think that Sa. had no dhātup, of his own at all and that when occasion arose he referred to the P.Dh.

It is true that such an outright denial of any dhatup, originating from the founder of the Kātantra school might not be compatible with some features of the Kātantra grammar where it differs from the Pāninian school. For instance, there is no rule in the Kt. sūtrap, which teaches directly the dropping of the vikarana (an) in the case of roots belonging to the third i.e. hu class, Sa. 3, 4, 92 covering only the ad class. But in his commentary to this rule Durga cites, along with atti and hanti, also forms like juhoti and bibheti, remarking that hu- class is a sub-class of the ad- class (adadyantargano juhotyādir iti).62 From this one would naturally be led to believe that Sa. had his own dhatup, and that therein he had read hu- class as a sub-class of the ad-class, thus dispensing with a reference to it in the sutra 3, 4, 92. I feel, however, that the position can be explained otherwise. The omission of a statement in the sūtrap, declaring the hu-class to be a subclass of the ad- class might have been inadvertent and subsequently rectified in the oral vrtti until finally the hu-class came to be actually read within the ad-class in the traditional Kt. dhatup. There are many other similar cases of inconsistency or mistakes of omission in the Kt. Thus Sa. 3.6.1 speaks of roots with the anubandha i, but actually it is nowhere taught in the sūtrap.;63 similarly Śa. 3,2,28 teaches that the *dyutādi* roots, along with some others, form the Aorist stem in the Parasmaipada with *an* (corresponding to *an* of P), but there is no rule in the Kt. sūtrap. (corresponding to P 1,3,91) which teaches that the *dyutādi* roots, which are otherwise ātmanepadins, become also optionally parasmaipadins in the Aorist. I think the present case also can be similarly explained as due to inadvertence and that it need not necessarily point to a new dhātup. by Śa.

All things considered,—considering that the Kt. grammar was originally highly incomplete and was meant to be only a primary one dispensing more or less with the accessory works, which came to grow around it only in the course of time; that, with a few exception, there are hardly any material deviations from the P. Dh. of such a nature as would have required Sa. to put together an altogether new dhātup.; that the solitary pointers to the possibility of Sa. having composed a new dhātup. can be explained otherwise; and, lastly, that a reference to the use of accents for showing the voice of a root definitely points to the P. Dh.—I am of the opinion that Sa. most probably did not write any new dhātup. but depended on the Pāṇinian one.

If Sarvavarman is not the author of the traditional Kt. dhātup., then who is? In this respect the name of Durga at once comes to the mind. Besides being the earliest exponent of the Kt. grammar who wrote down the vṛtti on the sūtrap., Durga is also often mentioned in the grammatical literature as an authority on the dhātup. Comparing the views attributed to Durga in the Kṣīrataranginī and the Puruṣakāra with the current Kt. dhātup., I have found that in the majority of cases they tally with it. It is also interesting to note that though Ks., whose work is replete with citations from older works in the field, obviously quotes from the Kt. dhātup. scores of times, he never once mentions the name of Kt., but invariably gives the quotations under the name of Durga. All these things point to the conclusion that the authorship of the traditional Kt. dhātup. is to be assigned to Durga.

Citations from Durga's explanations of the traditional meanings of roots are sometimes met with.⁶⁵ As only a commentary is a proper place

^{61.} ruca ity anudāttānubandhopalakṣaṇam, under 3,2,42; samāhārānubandhā ye te yajādayah, under 3,2,45.

^{62.} The reduplication is taught in Sa. 3,3,8.

^{63.} On this Durga remarks: ata eva varjanād idanubandhānām no'stīti.—The corresponding rule in P is idito num dhātoh 7.1.58.

^{64.} Ks alone, e.g. mentions Durga 93 times, Daurgāh 23 times, and Daurgam sutram once. Pk. mentions Durga 20 times and Daurgāh 6 times.

^{65.} Cf. e.g. Ks. under I, 421: stubhu stambhe. stambhah kriyānirodhah, stobho dosavrddhyākhyārtha iti Durgah (p. 34); under I, 695: tvakṣa tvacane. tvacanam tvaco grahanam, samvaranam iti Durgah.

for explanations, it might be inferred from this that Durga had also written a commentary on his dhātup.

LIEBICH, followed by almost all the modern scholars, says that Durga's dhātup, is really just the revised and remodelled Candra dhātup, itself. It is not clear what direct evidence Liebich had on the strength of which his statement is based; 66 but there are certainly some points of resemblance between the two dhatupathas which suggest that Durga had Candra's dhatup, before him and that he adopted some of its features which had impressed him. The striking resemblance which the Kt. Dh. everywhere (except in the class X) bears with the C.Dh. (as against the P. Dh.) in the matter of arrangement of roots will be patent even to the most casual reader. Occasionally, though rarely, Durga prefers meanings in the C.Dh. to those in the P.Dh.⁶⁷ Also, Candra's peculiar term for the ubhayapadin, viz. vibhāsita is frequently met with in the Kt. dhātup, also. There is one point in the tenth class which bears the most eloquent testimony to the close affinity between these two dhatupathas. Along with many other roots the *uniādi* class of roots i.e. those belonging to the cur- class optionally, are not read by Candra. In his dhatup, Durga also first gives all the regular roots of this class at the end of which he remarks: kaiścic curādisu uujadayah pathyante.68 and then reads the yujadi roots. This shows that he generally regarded C.Dh. as the model, and therefore was not very enthusiastic about reading the *uniādi* roots in the tenth class.

Durga has taken proper care to see that the dhātup, which he wrote conformed to the Kt. sūtrap, and that there was no discrepancy. The agreement of vikaranas, inclusion of the juhotyādi class in the adādi class etc. fully demonstrate this.

The Kt. dhātup. however differs from the Cāndra Dh. in two important respects: firstly, the meanings given by Bhīmasena are, as a rule, retained, and not curtailed as in C;69 secondly, the tenth class is not curtailed but given fully. As regards anubandhas, ñi, the only anubandha which was rejected by Candra, is restored by Durga.

The order of roots (excepting the tenth class) is, as said above, the same as in Candra, though occasionally Durga changes the arrangement so as to effect economy or regularity. (Thus of the anit roots, tap, yam and nam are shifted to their proper place in the general block [the others however are retained]; similarly 7 roots ri, pi, etc. (C.Dh. VI, 101-106) have been removed and given their proper place in other parasmaipadin roots). Durga also differs from Candra in omitting certain roots (like tang, tvang, dhvanj, tej, gaj, sphat, vvan, bhvan etc.) and adding certain new ones (like dhvaj, jim, cucy, jinv, tans, nis etc.). He also reads some roots in different classes (e.g. \sqrt{dhinv} not in the I class but in V). The wording of three dhātusūtras in the $ghat\bar{a}di$ group is also slightly changed by him.

In the tenth class, Durga reads, as said above, all the roots known to him and also follows a different principle in their presentation. As mentioned above, he first reads all the roots which belong necessarily to this class (including the sub-classes), then gives certain rules governing the formations of certain denominatives, and only after this he introduces the roots belonging to this class optionally. This process of segregating the optionally $cur\bar{a}di$ roots and reading them at the end is also followed in the Jainendra dhātup. and the arrangement followed here is also the same as in that dhātup.

A peculiarity of this dhātup is that it avoids artificial technical terms and in their stead uses simple ones. Thus, $p\bar{a}nuband\bar{a}h$ (for sitah), $m\bar{a}nubandh\bar{a}h$ (for mitah) etc.

Vedic roots are, as in C, retained.

A fact to note about this dhātup is that it has greatly influenced the later development of the P. Dh. through Maitreyarakṣita. There are many roots (like khurd, manth, sphurch, met, mut, ruth, luth etc.) which must have crept from the Kt. Dh. into the P. Dh. through M, seeing that though they have been regularly read by M, Ks. did not find them in his version of the P. Dh. but added them on the express authority of Durga. And this is not to be wondered at, since M hails from Bengal which had been a stronghold of the Kt.

The close affinity between the Kk. and the Kt. dhātupāthas has been already noticed above. However, in the absence of the exact knowledge of the relative chronology of Kk. and Durga, it is difficult to say who is indebted to whom; is is, therefore, equally probable, that Kk. came after Durga. Under these circumstances, the priority given to Kk. here is to be regarded as purely provisional, and subject to revision in the light of future researches.

^{66.} The NGGW 1895, where LIEBICH has made the statement, was not available to me.
67. Cf. e.g., kleśa vyaktīyām vāci P, but kléśa bādhane C Kt, hatha pluti-śankuban-dhanavoh P, but hatha balatkare Ckt.

^{68.} This remark is found in the BORI Ms. but not in the IO Mss. Since, however, it also occurs in the closely allied Kk dhatup, there is no doubt regarding its genuineness.

^{69.} The case of the \sqrt{av} to which only one meaning viz. pālana is assigned as against the nineteen meanings in the P.Dh. is an exception,