CHAPTER IX

OBSERVATIONS AND TECHNICAL DEVICES
In addition to the matters dealt with in the earlier chapters, certain other observations are also being made by the author of MBh and the authors of K. These are dealt with in this chapter under the headings "Observations" and "Technical Devices".

Observations

In order to explain certain characteristic phonological and morphological features observed in the Sanskrit language, some special technical terms are made use of by the authors of MBh and K. Those terms which are concerned with such phonological and morphological observations are given below:

(1) vināma

This term occurs under the Pratyāhāra - Sūtra 4 ai au c. Vināma indicates the conversion of dental s and n to their corresponding cerebral sounds. Thus the substitution of s for s and n for n is vināma. It is explained by
Haradatta as sakāraṇa-kārāsthaṇikasya mūrdhanyasya vināma iti pūr vacāryaṇām saṃjña.¹

(2) samkrama

Under the sūtra kniti ca (1-1-5) there is a term called samkrama used by K. K uses this word in the Vt mrjerajādau samkrame vibhāṣā vṛddhiriśyate. K further explains samkramo nāma guṇavṛddhipratisedhaviśayah.² Thus the prohibition of guṇa and vṛddhi is indicated by K through the term samkrama. This Vt and the term samkrama are absent in MBh.

(3) yama

"The yamas are considered to be particular nasal sounds occurring in the group of plosive and nasal consonant, being due to partial nasal plosion of the plosive".³ The word yama literally means 'twin' as there are said to

¹ vinā me ṛkaragrahaṇam kartṛṇām
³ Vidhata Mishra, Sanskrit Phonetics, p.204.
Vide Allen, Phonetics in Ancient India, p.75.
be two stages in the articulation of plosive as in rukkmam, paddmam, svappnam etc. The first stage is the blockage of the air stream in the oral cavity for the plosive and in the second stage air stream begins to pass through the nasal cavity and thus nasalises the plosive. SK on 8-2-1 states that yama is a transitional sound intervening between a non-nasal and the following nasal as a counterpart of the non-nasal. There exists difference of opinion amongst the Prātiṣākhyas with regard to yama as to whether it belongs to the preceding or to the succeeding syllable. But all agree with its nasal nature. The yamas are mentioned in various works such as Paniniyasiksa, Tribhāṣya-ṛatna, Vaiṣ-ṛat and the Rk-tantra giving the number of yamas as four. They are voiced, voiceless, aspirate and non-aspirate. SK says that the pronunciation of yamas or

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4. SK see sutra 12.
Refer S. Venkitasubramonia Iyer, Difference between Bhaṭṭoja Dīkṣita and Narāyaṇabhaṭṭa with regard to certain phonetic observations, VIJ Vol.VIII, Pts.I and II.

5. Siddheshwar Varma, Critical studies in the Phonetic Observations of Indian Grammarians, p.79.
twin sounds is seen in Vedic recital only, as palikknih, kakhaghebhyah pare tatsadr'sa eva yamah. Yamas are mentioned by Ptj and Nagesa also. According to Ptj, yamas are the sounds which are produced both by the mouth and the nose. No mention of yamas is seen in K. But under the sutra 1-1-9 tulyasyaprayatnam savarnam Ny points out these yamas: tatra varga'nam prathamadvitiyam sahasavisarjaniyajivam-muliyopadhmamitya yamau ca prathamadvitiyau vivrtakantham svasanupradana aghosah and includes yamas under aghosas. Yamas are defined by Haradatta also.

6. vargeśvadyanam caturnam pancame pare madhye yamo nama pūrvasadrśo varṇah pratiśākhya prasiddhah
   SK on 8-2-1 (SK sūtra 12)
9. yamā nāma vargeśvāditaścaturnām pañcamesu paratah ta eva nāśikya bhavanti. tadyathā paliknīrin, cakhnauḥ, āgmnāyāḥ, jaghnauḥ, apnasvatīmityādi.
   Vide PM, ibid.
(4) anuṣāṅga

The term occurs under the sūtra 1-1-47

midacoṃtyātyatparah. Under this sūtra K reads the Vt
masjerantyātpūrṇam numamicchantyanuṣāṅgasamyogādilopārtham. Ptj also cites the term but it is Haradatta who explains the
term as nakārasyopadhāyāḥ 'anuṣāṅgaḥ' iti pūrvācāryaṇām
samjña i.e. anuṣāṅga is a term which is used by the ancient
grammarians for the penultimate 'n'. In Dātupātha
anuṣāṅga is taken to denote the nasals connected with certain
roots ending in consonants.

(5) prakrama

The term occurs in MBh under the sūtra 1-2-30

nīcairanudattah in the Vt siddham tu samānaṃprakramavacanāt. Prakrama is explained by Ptj as kah punah prakramah? urah
kaṇṭhah sira iti. Kaiyāṭa accepts the term as a sthāniya
and explains the term as follows: prakramyaṃte'sminvarṇā

iti prakramah sthānamucyate. tenāyamarthah - ekasmistā-
ḥvādike sthāne urdhvadharabhāgayukte urdhvabhāgenoccāryaṃaṇa
udāttaḥ adharabhāganispanno'nudāttah. evam coccairityanenor-
dhavbhago grhyate nīcairityadharabhāgah. abhyāsasamadhigamyas-
cāyam svaraviśeṣaḥ sajjādivadvijneyah.13 K had not mentioned
this term at all.

(6) hrāda

Under the sūtra 1-4-109 parah samnikarṣaḥ samhitā
Ptj uses a technical term hrāda and says that hrāda is a
voicing. The voice which continues between two sounds of
different prayatnas is hrāda. Kaiyāṭa defines hrāda as
"prayatnaviśeṣajanito varṇavirāme'pyanuraṇanarūpo varṇantaro-
ccāranepyanuraṇanarūpo varṇantaroccāranepyanuvartamāno ghoṣo
hrāda ucyate."14 No mention of hrāda is made by the authors
of K.

(7) upagraha

This term is used by the ancient grammarians in the
sense of Ātmanepadi and Parasmaipadi affixes. The word is not
found in P's Aṣṭ. The Vārtikākāra has used the word in the Vt upagrahapratisedhasca on 3-2-127 in the sense of pada affixes referring to Ātmanepadi.  

Kaiyāṭa also explains this as "upagrahasyeti. ātmanepadasamjñāyāmityarthāh".

The word upagraha occurs in the Sl.Vt suptinupagrahalinganaranām etc. quoted by Ptj in his MBh on 3-1-85 vyatyaYo bahulam. 

The authors of K on 6-2-134 have cited the reading curṇādīnya-prāṇyupagrahāt and make the remark "tātropagraha iti śaṣṭhyanta-meva pūrvacāryopacārena gṛhyate" which shows that the word upagraha has been taken in the sense of genitive case in K.

(8) avagraha

MBh explains this term as the splitting up of a compound word into its constituent parts and is used in the interpretation of the sutras 3-1-109 and 4-2-36. The statement under 3-1-109 reads "yadyevamavagrahah prāpnoti. na laksanena

16. Pradīpa on MBh, ibid.

K.A. Subramonia, The concept of upagrahas among Vaiyākaraṇas AIOC Vol.XVII.

See also the chapter on 'Meaning' of the present work.
padakāra anuvartyah, padakārairnāma laksanamanuvartyam. yathālaksanam padam kartavyam”. Under 4-2-36 the statement given in MBh is as follows: chandasyānañāvo'vagrahodṛṣyate. pitamaha iti. In recent times the word is used in the sign of (\( S \)) showing the coalescence of a short or long vowel with the preceding a or with the preceding e or o as in “śivoṛccyāh” etc. K points out that avagraha can also be used in the sense of the first constituent out of the two words or members which are compounded together.

From the study of the above observations, it becomes clear that certain grammatical terms are employed by the ancient Sanskrit grammarians to make an apt description of the Sanskrit grammar in general and the Sanskrit phonetics in particular with more ease and comprehensiveness. Some of such technical terms are used by K alone and some others by MBh only in addition to those which are used by both. The terms which are not used in K might have become obsolete during the days of K. However, they have an important place in the

21. 8-4-26 K Vol. VI, p. 635.
study of Sanskrit grammar and in the study of the development of the Sanskrit language.

Technical Devices used in MBh and in K

There are some devices other than the regular Nyāyas and Paribhāsas in MBh and K which the authors have used in the course of their discussions. The general and principal aim of these devices is to secure the right interpretation and proper application of P's rules. Para is such a device found in MBh.

'para' as meaning 'iṣṭa'

One of the important technical devices used by Ptj is "iṣṭavācī paraśabdah". In 1-4-2 P instructs, of the two conflicting rules the subsequent rule para in the order of Ast shall take effect in preference to the preceding rule. Kty on various occasions shows that P's rule is not universally applicable and through the Vts he points out a number of instances in which the preceding rule must take effect in preference to the subsequent rule. But Ptj states that
these special rules given by Kty are unnecessary. He continues – para amongst other things also means "desired - ista" and what P really instructs is that, of the conflicting rules it is the desired rule that should take effect.

Para in the sense of ista is used a number of times in MBh. Para in this sense is not found in K. But Candra under 1-1-16 vipratiśedhe states paraśabdascaśayam istavaci.22

The following are instances of sūtras in the interpretation of which Ptj deliberately uses para in the sense of ista:

1. 1-1-3 iko guṇavrddhi23
2. 1-2-5 asamyogallit kit24
3. 1-4-2 vipratiśedhe param kāryam25
4. 2-1-69 varṇo varṇena26
5. 4-1-85 dityadityadityapatyuttarapadānnyah27
6. 4-2-39 gotroksestrorabhrarājarājanyarājaputra-vatsamanuşyajādvun28
7. 5-1-2 ugaśādibhyo yat29

27. MBh Vol.III, p.549.
29. MBh Vol.IV, p.7.
In K also we find such technical devices. The two important devices utilized in K are (1) 'ca' in the sense of anuktasamuccaya and (2) vyavasthitavibhaṣā.

(a) 'ca' in the sense of 'anuktasamuccaya'

In order to expand the scope of the Pañini sūtras, K interpret the constituent ca of the sūtras in sixteen instances in the sense of anuktasamuccaya. By considering ca in this sense, the enlargement of the scope of the sūtras relating to their form or sense is achieved. Wherever the ca of the sūtras is interpreted in this sense, K makes an explicit statement to this effect. ca in the sense of anuktasamuccaya is found in the following sūtras:

30. MBh Vol.IV, p.320.
32. MBh Vol.IV, p.725.
The sūtra states that the gender of an avyayībhāva compound also is neuter. Under this sūtra there is a statement in K as "anuktasamuccayārthāścakāraḥ" by which it means that ca is used in the sense of anuktasamuccaya to include cases not mentioned already. 34

This sūtra means that the affix nyat occurs after the verbs asu, yu, vap, rap, lap, trap and cam. By considering ca in the sense of anuktasamuccaya, K incorporates the verb dabh also thus forming dabh + nyat = dābhyaṃ. 35

This sūtra of P states that the forms phalegrahīḥ and atmambhariḥ are irregularly formed. K by taking ca in the sense of anuktasamuccaya adds the forms kuksimbhariḥ and udarambhariḥ also under the list. 36

34. purvapadārthapradhānasāyālingaścakāraḥ, anapadārthapradhānasāyābhidheśa, atidamucyate anuktasamuccayārthāścakāraḥ, K Vol.II, p.263.
The statement anuktasamuccayarthas'cakarah in K indicates that the affix khas is employed when in composition with verbs dhma and dhe in words like nadindhamah, mustindhamah, nadinHDyah and mustindhayah. Through this, K extends the scope of the sūtra to the above said forms. 37

Here also K through stating cakaro'nuktasamuccayarthah incorporates the form bhrajisnu also under the purview of the sūtra. 38 Thus ca indicates the existence of other verbs also which are not included in the sūtras 3-2-136 and 3-2-137.

The sūtra ordains that the affix kta is employed in the sense of present tense after roots denoting mati, buddhih, pujā etc. Under the heading anuktasamuccayarthah in the sūtra K gives a śloka which runs as "sīlito rakṣitah kṣanta ākruṣṭo juṣṭa ityapi ruṣṭascā rupitaścobhāvabhīvyāhrta ityapi"

hrṣṭatuṣṭau tathā kāntastathobhau sāmyatodyatau kaṣṭam
bhaviṣyatītyāhuramṛtah pūrvavatsamṛtah. 39 It indicates
that ca is used here to include other verbs also which are
not included in the sūtra. Thus the participles sīlitah,
raksitah, kṣāntah, ākruṣtah, juṣṭah, ruṣṭah, rupitah,
abhivyāhṛtah, hrṣṭah, tuṣṭah, kānta, sāmyataḥ, kaṣṭah and
amṛtah possess a present signification.

(7) gocarasamcaravahavrajavyajāpananigamaśca 3-3-119

In addition to the forms gocara, saṃcara, vaha,
vraja, vyaja, āpana and nigama given in the sūtra K by taking
cā in the sense of anuktasamuccaya includes the forms kāṣah
and nikaṣah also under the purview of the sūtra. 40

(8) adhyāyanyāyodyāvasamhārādhārāvavyāśca 3-3-122

Here also ca is used in the sense of anuktasamuccaya
in order to include avahāraḥ also under the sūtra in addition
to the forms adhyāya, nyāya, udyāva, samhāra, ādhāra and
āvāya overtly mentioned in the sūtra. 41

(9) *avatyācca*  4-1-75

The *ca* in this sūtra is taken in the sense of *anuktasamuccaya* in *K* is evident from its statement under 4-1-74 "*uttarasūtre cakaro’nuktasamuccayārthah. tena vā bhavisyati*". 42

(10) *bāhvādibhyasya*  4-1-96

Under the sūtra, since *ca* has been treated in the sense of *anuktasamuccaya*, the authors of *K* include the words *jāmbih, aindrasamih, ājadhenavīh, ājabandhavih* and *audulomih* also under the list of *ākṛtiganas*. 43

(11) *subhrādibhyasya*  4-1-123

Here also, the inclusion of the forms *gangeyah* and *pandaveyah* under the list of *subhrādiganas* in *K* was made possible due to its interpretation of *ca* in the sense of *anuktasamuccaya*. 44

(12) *varanādibhyasca*  4-2-82

In this sūtra according to *K* the use of the particle *ca* in the sense of *anuktasamuccaya* implies that the rule applies

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even to words other than those which are given in the list of varanādīgāṇas as katukabadari (a city near to bitter badari tree). 45

(13) kumudanādavetasebhyo ċmatup 4-2-87

Under this sūtra there is a statement in Ny which reads as tatredam vyākhyānam - pūrvaspūtrāccakaro'nuvartate, sa cā'nuktasamuccayarthah, tena mahiṣasabdādapi bhaviṣyatīti which means that cā in the sūtra 4-2-86 madhvādibhyāsca is used in the meaning of anuktasamuccaya in K. 46

(14) parimukham ca 4-4-29

For the authors of K the particle ca in the sūtra implies that the affix ṭhak applies to other words also which are not mentioned in the sūtra as pāripārvikaḥ. 47 Thus K extends the scope of the sūtra to the form pāripārvikaḥ also.

(15) khalayavāmaśātītivṛṣabhrāmaṇāsca 5-1-7

Here also K takes ca in the sense of anuktasamuccaya so as to include the form rathयā also as taking the affix yat

in addition to the forms khala, yava, māṣa, tila, vṛṣa and brahman under the purview of the sūtra. 48

(16) agrāntasuddhasubhavrṣavarāhebhyaśca 5-4-145

The sūtra states that the substitution of dat for danta is optional in a bahuvrīhi compound when it is preceded by a word ending in agra, suddha, subhra, vṛṣa, and varāha. Here also K considers ca in the sense of anuktasamuccaya and thus ca in this sūtra indicates that the substitution optionally takes place in other cases also as ahidantah, or ahidan muṣikadantah or muṣikadan, garḍabhadantah or gardabhadan and sikharamdantah or sikharaman. 49

The meanings of ca given by Ptj are (1) the sense of eva and (2) the sense of iti. 50 Also in case a Kty Vt is to be refuted, Ptj utilizes the particle ca for that purpose. 51

But ca in the sense of an anuktasamuccaya is not noticed by


50. In the sense of eva - 2-1-17, 2-1-48 and 2-1-72 see MBh Vol.II, pp.576, 606, 654.

      In the sense of iti - 2-2-14, MBh Vol.II, p.686.

51. See MBh 2-4-9 and 6-1-90.
Ptj and ascribing this sense to ca and thus to make it a technical device for grammatical analysis might have been done by the authors of K.

(b) vyavasthitavibhāṣā

This interpretation of P's rule is dependent on and regulated by the actual usage of the language. When P teaches that an operation takes place optionally, we naturally understand him to mean that such operation may or may not take effect in every individual instance which may fall under the rule. But K uses the device vyavasthitavibhāṣā. It actually means that an optional rule need not be optional in every case but may be taken to teach that an operation in some particular instances must necessarily take place while in others it is not allowed to take place. The vyavasthitavibhāṣā is made applicable to the following sutras by the authors of K:

(1) udupadhādbhāvādikarmanoranyatarasyām 1-2-21

In this sūtra P teaches that in certain forms, roots with penultimate a optionally takes guṇa, thus dyut forming dyutita and dyotita. According to K these instances afford
examples of vyavasthitavibhāṣā by which the operation taught by it optionally takes place in roots of the first class while in the case of other roots it does not take place at all. This optional form of past participle is restricted in its scope to those verbs which take the vikaraṇa sap i.e. the verbs of bhū class. gudh 'to wrap up' belongs to divādi class and therefore does not come under the purview of this sūtra. 52

(2) liyāḥ sammānanaśālīnīkaraṇayosca 1-3-70

The sūtra vibhāṣā līyateḥ 6-1-51 declares that the i of lī is optionally changed to a before the same verb, makes the sūtra 1-3-70 optional by supplying to it anyatarasyām from 1-4-44. 53

(3) manyakarmanyaṇadare vibhāṣā'prāṇiṣu 2-3-17

In denoting the indirect object (which is not an animal) of the verb manya, the dative case is optionally


employed, and that too is vyavasthitavibhāṣā says K, when contempt is to be shown. 54

(4) dvitiyā brāhmaṇe 2-3-60

In the Vedic literature the simple verb div takes the accusative case instead of genitive says K. And with the upasargas the vibhāṣā used is vyavasthitavibhāṣā. 55

(5) kartuḥ kyaṁ salopasca 3-1-11

Under this sūtra K states that in the words ojayate and apsarayate the final s is invariably elided when forming the denominative verb but not so in the case of payas where the elision is vibhāṣā and that too vyavasthitavibhāṣā as payayate or payasyate. 56


(6) kuṣirajoh praśam śyanparasmaipadam ca 3-1-90

The sutra ordains that the affix śyan comes after the roots kuṣ and rañj in the reflexive voice, according to the opinion of the Eastern Grammarians, and these verbs take the affixes of the Parasmaipadi. K states, the phrase in the opinion of the Eastern Grammarians shows that it is an optional rule and attributes this option to the type of vyavasthitavibhāsā, so that we have also the forms kuṣyate and rajyate. 57

(7) vibhāsā grahah 3-1-143

By this sutra grah forms either graha or grāha; but the rule being a vyavasthitavibhāsā, grah is in the sense of a planet and grāha is in the sense of a shark. Here the affix na is optionally employed after the verb grah and this option means the affix na is always used when the word to be formed means a neuter animal such as a crocodile, shark etc.

57. praśamgraḥanam vikalpartham. kuṣyate rajyate

and in that sense the word is graha but not so when heavenly bodies are meant. 58

(8) lrtah sadvā 3-3-14

Here also the technique of vyavasthitavibhāṣā is applied. The affixes satr and sanac replace lṛt under the conditions in which they replace sat by 3-2-124. These affixes will replace lṛt when agreeing with those which do not end with the nominative case affix. 59

(9) loto lanvat 3-4-85

The vā of the sūtra 3-4-83 vido lato vā is to be understood in this sūtra also, so that the analogy between lat and lan is a limited one and does not make all the rules which are applicable to lan equally applicable to lot also. 60


Under this sūtra there is a Vt in K which means that prohibition must be stated in the case of affixes hi and ni of lot. In the case of these two affixes the i is not changed to u, either because they have been so taught in the sūtras, or because the va of the sūtra 3-4-83 vida laṭo va is understood here also and makes this an optional rule of a limited scope as in the last sūtra, thus giving pacatu and pacantu.

In this sūtra the word purva shows that it is a vyavasthitavibhāṣa and hence there is no option allowed when abhi and ava are in the middle as samabhīṣyānam and samavaśyānam. PM points out that the vibhāṣa used here is vyavasthitavibhāṣa. SK also holds the same opinion.

63. vibhāṣāgahanam vyavasthitavibhāṣārthamāśrayanīyavimityarthah Vide PM on K, K Vol.IV, p.481.
64. SK see sūtra 3023.
(12) sṛtām pāke 6-1-27

The word vibhāṣa is understood in this sūtra also and that too vyavasthitāvibhāṣa, thus forming śrāṇā yavāgūḥ, śrapitā yavāgūḥ. 65

(13) pyāyaḥ pī 6-1-28

K says that in this case also the option allowed is of the type of vyavasthitavibhāṣa. Hence the substitution takes place invariably when the root is without upasarga as in apyānaschandramaḥ and never when it is preceded by an upasarga as in prapyanāḥ. 66

Thus the adoption of these varying technical devices in MBh and K clearly reveals the fact that some changes had come about in the language during the period between MBh and K which necessitated the authors of K to invent new technical devices for the description of the Sanskrit language of their time.
