Pāṇinian Sūtras of the Type अन्येभ्योऽपि दृश्यते

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1. The[1] Mahābhāṣya on Aṣṭādhyāyī 6.3.109 (पृषोदरादीनि यथोपदिष्टम्) has a well known discussion concerning model Sanskrit speakers, referred to as शिष्टा:. The question is posed : If the śiṣṭas are the authority with respect to correct speech forms, what purpose does the Aṣṭādhyāyī serve ? The answer is : The Aṣṭādhyāyī serves to make one know the śiṣṭas, as follows. Someone who is studying the Aṣṭādhyāyī observes that someone else, although he is not studying this grammar, uses the correct forms that are provided for therein. The student then reasons : Due to the grace of fate that is his or to his nature, this person uses the correct forms provided for in the Aṣṭādhyāyī without studying it. I reason that he knows other correct forms too[2]. According to Patañjali, then, a śiṣṭa is not only a model for the correct speech forms explicitly provided for (विहिता: शब्दा:) through operations stated in sūtras of the Aṣṭādhyāyī but he also knows other correct speech forms (अन्यानपि जानाति), which are not explicitly provided for in this manner. In this way, the Aṣṭādhyāyī serves not only to account directly for correct speech forms but also to account indirectly for such forms, by referring to the usage of accepted model speakers. As Hari puts it[3]: the grammar serves as a means for conveying the correctness of items of the type पृषोदर by virtue of their being śiṣṭa usage, because one knows who the śiṣṭas are.

What Pāṇinīyas say concerning Aṣṭādhyāyī 6. 3. 109 thus has important implications for the concept of what a grammar is supposed to accomplish. To begin with, a grammar is a means of explaining (अन्वाख्यानम्) through derivation the accepted usage that is the object of description. In addition, it is taken for granted that this usage includes open sets of items the grammar does not account for directly through description[4], so that Pāṇini recognizes a living native language that is developing. The distinction in question is

comparable to the one between ordered sets of elements—gaṇas—exhaustively listed with respect to certain operations and groups of elements—referred to as आकृतिगण—which only represent a part of an open set of items with some common characteristic(s). The question remains whether the view Patañjali espouses in the Mahābhāṣya on 6. 3. 109 can be considered to reflect Pāṇini's approach.

2. Consider now a group of sūtras which have two features in common : they refer to something as 'seen' and speak of other elements, using अन्य or इतर.

2.1. ६। ३। १३७ अन्येषामपि दृश्यते (दीर्घः [१११]) ।

2.1.1. 6. 3. 137 comes after a series of rules that provide for long-vowel substitution. For example, ६। ३। ११५ कर्णे लक्षणस्याविष्टाष्टपञ्च-मणिभित्रच्छिलाच्छिद्रसुवस्वस्तिकस्य । ६। ३। ११६ नहिवृतिवृषिव्यधिरुचिसहितनिषु क्वौ । ६। ३। १२२ उपसर्गस्य घञ्यमनुष्ये बहुलम् ।

According to 6. 3. 115, before कर्ण 'ear' in a compound, the final vowel of a term denoting a mark used as a brand (लक्षणस्य) is replaced by a long vowel, except for the vowels of विष्ट, अष्टन् 'eight', पञ्चन् 'five', मणि 'jewel', भित्र 'broken', छिन्न 'cut', छिद्र 'a cut', सुव 'sruva spoon', स्वस्तिक, e.g., दात्राकर्ण (←दात्रकर्ण) 'an animal with a sickle symbol as a brand on its ear' but अष्टकर्ण 'an animal with eight stripes on its ear'. By 6. 3. 116 long-vowel replacement applies to a final vowel of a prior term in a compound if this is followed by a derivate in क्वि from one of the following verbs : नह् 'gird, put on', वृत् 'turn, occur', वृष् 'rain', व्यध् 'pierce', रुच् 'shine, please', सह् 'bear', तन् 'stretch'; e.g., उपानह् (←उपनह्) 'sandal', नीवृत् (←निवृत्) 'a district', प्रावृष् (←प्रवृष्) 'rain season'. 6. 3. 122 provides that the final vowel of a preverb is replaced by a long vowel before a derivate in घञ् except in derivates that refer to a human (अमनुष्ये); in addition, the sūtra provides that this replacement applies variously (बहुलम्). For example : वीक्लेद (-विक्लेद) 'wetting particularly', अपामार्ग (←अपमार्ग) 'wiping away', with lengthening, and प्रसार prasāra 'spreading, expansion' without lengthening. निषाद 'a Niṣāda', which refers to a particular human being, also does not show lengthening.

None of the rules from 6. 1. 115 to 6. 1. 136 provides for the long vowels of केशा- in केशाकेशि 'fighting in which opponents grab each other by the hair', कचा- in कचाकचि 'fighting in which opponents grab each other by

the hair of the head', दण्डा- in दण्डादण्डि 'fighting in which opponents hit each other with sticks', मुष्टी- in मुष्टीमुष्टि 'fighting in which opponents hit each other with their fists'. Moreover, Pāṇini explicitly provides for such derivates[5]. 6.3. 137 allows for the required long-vowel replacement. The rule does not, however, specify any domain of application in the way that preceding sūtras do. It simply says that the replacement applies also to others (अन्येषामपि). In other words, this rule lets long-vowel substitution apply to elements for which this operation has not been provided for, terms which occur with long vowels in actual usage. This is said explicitly in the Kāśikā, which also notes that this accords with the usage of śiṣṭas[6].

I think there can be no doubt whatever concerning two points. First, what the Kāśikā says agrees with what Patañjali and Bhartṛhari said about śiṣṭa usage. Second, this is the only reasonable way to account for Pāṇini's formulation. The Aṣṭādhyāyī has a series of sūtras providing explicitly for long-vowel replacement as illustrated. This substitution applies in specified domains. In addition, in some domains it applies variously. That is not to say that the replacement takes effect optionally, for this would mean the optional substitution would apply in every instance of the specified domain. Instead, the replacement applies obligatorily in some instances, not at all in others, and optionally in still others (see note 26). The replacement by a long vowel applies also to elements for which this operation has not been provided explicitly. Moreover, the rule stating this does not specify a domain : Pāṇini says simply अन्येषामपि 'also of others'.

2.2. ३। २। १०१ अन्येष्वपि दृश्यते ।

2.2.1. 3.2.101 is connected with the following sūtras : ३। २। ६७ सप्तम्याञ्जनेर्डः । ३। २। ६८ पञ्चम्यामजातौ । ३। २। ९९ उपसर्गे च सञ्ज्ञायाम् । ३। २। १०० अनौ कर्मणि ।

All these rules serve to introduce the suffix ड after जन् 'be born, arise, come into being' construed with certain items, as follows :

3.2.97 : जन् construed with a term containing a seventh-triplet nominal ending; e.g., सरसिज: 'born in a lake' and मन्दुरज: 'born in a stable', equivalent to सरसि जात: and मन्दुरायाज्ञात:.

3.2.98 : जन् construed with a term containing a fifth-triplet nominal ending, provided the nominal term in question does not designate a generic class of substances (अजातौ); e.g., बुद्धिज: 'arisen from the intellect' and दु:खज:

'resulting from suffering', equivalent to बुद्धेर्जातः and दुःखाज्जातः, but no comparable formation corresponding to अश्वाज्जातः 'born from a horse'.

3.2.99 : जन् construed with a preverb, provided the derivate formed is a term referring to a particular thing (सञ्ज्ञायाम्) and not to just anything born; e.g., प्रजा 'living creature'.

3.2.100 : जन् used with the preverb अनु (अनु जन् 'be born after, follow…in succession') and construed with a term signifying an object (कर्मणि); e.g., पुमनुजः 'born after a male', equivalent to पुमांसमनुजातः.

3.2.101 then provides that ड follows जन् construed also with coöccurring terms other than those specified in the preceding rules (अन्येष्वपि). 3. 2. 97 specifies a term with a seventh-triplet ending, but there are derivates like अज 'not born', such that जन् is construed with a term that contains a first-triplet ending : नञ्. 3. 2. 98 requires a term that does not refer to a class of individual substances characterized by a generic property, but there are derivates such as ब्राह्मणज 'which has arisen from Brāhmaṇas'. 3. 2. 101 requires not only a complex अनु जन् but also a coöccurring item signifying an object. On the other hand, there are derivates such as अनुज 'one born later, younger sibling', not construed with an object-signifying term. All such cases are taken care of by 3. 2. 101[7].

Once more, a sūtra provides for an operation with a domain that is simply additional to the particular domains stated in related rules but not specified any more. Consequently, one must observe usage to know just what is allowed and what is not

2.3. ३।२।१७८ अन्येभ्योऽपि दृश्यते ।

2.3.1. This sūtra is related to ३।२।१७७ भ्राजभासधुर्विद्युतोर्जिपृजुग्रावस्तुवः क्विप् । which introduces the affix क्विप् after भ्राज् 'shine', भास् 'shine, appear', धुर्व् 'harm', द्युत् 'flash', ऊर्ज् 'be strong', पृ 'fill', जु 'speed', and स्तु 'praise' construed with ग्रावन् 'stone'. The derivates refer to agents which perform the acts in question habitually, as part of their nature, or well[8]. For example, विद्युत् 'lightning'. 3. 2. 178 states that क्विप् is seen to occur also after other verb bases under the same conditions, thus accounting for derivates like छिद् '…which cuts…'[9]

2.4. ५।३।१४ इतराभ्योऽपि दृश्यन्ते । concerns taddhita affixes optionally introduced after padas formed from बहु 'much, many' and pronominals

other than those of the subset beginning with द्वि but including the interrogative किम्[10].

2.4.1. This sūtra is related to the following : ५।३।७ पञ्चम्यास्तसिल् । ५।३।८ तसेश्च । ५।३।९ पर्य्यभिभ्याञ्च । ५।३।१० सप्तम्यास्त्रल् । ५।३।११ इदमो ह: । ५।३।१२ किमोऽत् । ५।३।१३ वा ह चछन्दसि ।

5.3.7-9 provide that a pada with a fifth-triplet ending is followed by तसिल्, which also replaces तसि[11] and follows padas with परि, अभि; e.g., ततस् (←तद्-अस्-तस्) 'from that', यतस् 'from which', परितस् 'round about in all directions', अभितस् 'from both sides'. 5.3.10-13 introduce affixes after padas with a seventh-triplet ending. In general, त्रल् follows any such pada formed with a base of the group stated in 5. 3. 2 (see **2.4** with note 10), but ह follows such padas containing इदम्. A pada with किम् takes the suffix अत्. In Vedic usage, moreover, ह optionally follows such a pada. For example : तत्र (←तद्-इ-त्र) 'in that, there', यत्र 'in which, where', इह (←इदम्-इ-ह) 'in this, here', क्व (←किम्-इ-अ) 'in which, where ?', कुह 'in which, where ?'. According to 5. 3. 14, the affixes introduced by preceding rules also are seen to occur after padas with other vibhaktis (इतराभ्य:). That is, तसिल् and त्रल् can follow padas with endings of triplets other than the fifth and seventh. One can say, for example, तत्रभवान् and तत्रभवन्तम्, where तत्र is coreferential with a nominative and an accusative, so that it is derived with त्रल् after padas with endings of the first and second triplets.

Moreover, one must appeal to usage in order to know what particular nominal bases enter into such formations. From what is said in the Mahābhāṣya, it is clear that, at Patañjali's time, the affixation provided by 5. 3. 14 applied for padas with the bases भवतु 'you', दीर्घायुस् 'long lived', देवानाम्प्रिय 'beloved of the gods', and आयुष्मत् 'long lived', all used as equivalents of a second person pronoun[12]. It is also clear from the way Pāṇini formulates 5. 3. 14 that at his time the domain of the affixation was not definite.

2.5. ३।३।१३० अन्येभ्योऽपि दृश्यते ।

2.5.1. This sūtra is related to ३।३।१२८ आतो युच् (ईषद्:सुषु कृच्छ्राकृच्छ्रार्थेषु [१२६]) । ३। ३। १२९ छन्दसि गत्यर्थेभ्य: ।

According 3. 3. 128, युच् (←अन) is affixed to verbs in -ā construed with ईषद्, दुस् and सु to form derivates meaning 'easy to...' and 'difficult to...'; e.g., ईषत्पान 'easy to drink', दुर्दान 'hard to give', सुदान 'easy to give'. By 3. 3. 129, युच्

follows verbs of movement (गत्यर्थेभ्य:) to form comparable derivates in Vedic (छन्दसि). For example : सुतरण 'easy to cross' (e.g., ṚV 4. 19. 6d : सुतरणाँ अकृणोरिन्द्र सिन्धून् ॥ 'Indra, you made the rivers easy to cross...'), दुश्च्यवन 'hard to shake' (e.g., ṚV 10. 103. 2bc : युत्कारेण दुश्च्यवनेन धृष्णुना । तदिन्द्रेण जयत तत्सहध्वम् 'Win, prevail...with Indra who does battle, is hard to shake, is daring.'); see also Debrunner 188 (section **83**). According to 3. 3. 130, युच् is seen to occur in Vedic usage also after other verbs, under the same conditions. For example, सुवेदन 'easy to find', as in ṚV 10. 112. 8d : सुवेदनामकृणोर्ब्रह्मणे गाम् ॥ 'You made the cow easy to find...'

From what Pāṇini says, then, in the Vedic traditions known to him, such derivates with युच् were generally formed from verbs of motion and occurred also with other verbs, but he could not determine any definite distribution as to the semantics or formal properties of the other bases in question.

2.6. ३।२।७४ आतो मनिन्क्वनिब्वनिपश्च (विच् छन्दसि [७३]) । ३।२।७५ अन्येभ्योऽपि दृश्यन्ते । ३।२।७६ क्विप्च ।

2.6.1. 3. 2. 74 allows विच् and also मनिन्, क्वनिप् and वनिप् to follow verb bases that end in -ā, provided these verbs are used in construction with a coöccurring item terminating in a nominal ending. The derivates formed, moreover, occur in Vedic. For example : सुदामन् (nom. sg. सुदामा) 'one who gives well' (←दा-मन् : मनिन्), सुधीवन् (सुधीवा) 'one who places, makes well' (←धा-वन् : क्वनिप्), भूरिदावन् (भूरिदावा) 'one who gives much' (←दा-वन् : वनिप्), कीलालपा (कीलालपाः) 'one who drinks kīlāla' (←पा-: विच्). 3. 2. 75 states that these affixes occur (दृश्यन्ते 'are seen') after other verbal bases also (अन्येभ्योऽपि); for example, सुशर्मन् (सुशर्मा) 'one who destroys well' (←शृ-मनिन्), प्रातरित्वन् (प्रातरित्वा) 'one who goes in the morning' (←इ-वन् : क्वनिप्), विजावन् (विजावा) 'one who is born, one who procreates' (←जन्-वन् : वनिप्), रेष् (रेट्) 'one who suffers harm[13]' (रिष्-विच्). 3. 2. 76 then allows क्विप् also to follow any verbal base; e.g., उखास्रस् (उखास्रत्) '...which falls from the ukha pot' (←स्रन्स-क्विप्).

2.6.2. 3. 2. 76 is related to two other sūtras : ३।२।६१ सत्सूद्विषद्रुहदुहयुज-विदभिदच्छिदजिनीराजामुपसर्गेऽपि क्विप् । ३। २। ८७ ब्रह्मभ्रूणवृत्रेषु क्विप् (कर्मणि हन: [८६]भूते [८४]) ।

According to 3. 2. 61, क्विप् is introduced after certain verbal bases if these are used in construction with a coöccurring item terminating in

a nominal ending, which can also be a preverb (उपसर्गेऽपि). The bases are : सद् 'sit', सू 'give birth to', द्विष् 'hate', दुह् 'wish ill to someone', दुह् 'milk', युज् 'join, yoke', विद् 'know', 'be', भिद् 'break', छिद् 'cut', जि 'conquer, win, be victorious', नी 'lead', राज् 'shine, rule'; e.g., शुचिसद् 'one who sits in a pure place', शतसू 'one who gives birth to a hundred', प्रद्विष् 'one who hates exceedingly', मित्रद्रुह् 'one who wishes ill to, deceives a friend', गोदुह् 'cow milker', अश्वयुज् 'horse yoker', वेदविद् 'one who knows the Veda', काष्ठभिद् 'one who breaks a piece of wood', रज्जुछिद् 'one who cuts a rope', शत्रुजित् 'conqueror of an enemy', सेनानी 'leader of an army'. 3. 2. 87 introduces क्विप् after हन् 'kill' if this is construed with any of the terms ब्रह्मन् 'Brāhmaṇa', भ्रूण 'foetus', वृत्र 'Vṛtra' signifying an object of killing, provided also that the act is referred to the past : ब्रह्महन् (nom. sg. ब्रह्महा) 'one who has killed a Brāhmaṇa', भ्रूणहन्, वृत्रहन्. This sūtra provides a two-fold restriction with respect to 3. 2. 76. There is a restriction regarding the base हन् used with reference to past killing, such that this takes क्विप् only if it occurs with one of the terms given in 3. 2. 87; thus, to refer to a person who has killed a man, one uses हतवत् (nom. sg. masc. हतवान्), as in पुरुषं हतवान्. Moreover, there is a restriction regarding past time reference, such that only क्विप् is allowed to occur after हन् used with reference to past killing and construed with the terms ब्रह्मन् and so on; this accounts for the use of a derivate like पितृव्यघातिन्: पितृव्यघाती 'one who has killed his paternal uncle'[14] but not ब्रह्मघातिन्.[15] 3. 2. 87 thus restricts the scope of 3. 2. 76 so that हन् cannot take क्विप् without limitation. 3. 2. 61 applies to introduce क्विप् only to bases construed with a coöccurring nominal (उपपद), which may be a preverb, but 3. 2. 76 does not have this limitation[16].

2.6.3. As Kātyāyana and Patañjali go on to remark[17], if one considers 3. 2. 87 to apply in the manner described, then the formulation of the next sūtra, 3. 2. 88 : बहुलञ्छन्दसि ।, serves a purpose. This sūtra provides for Vedic usage (छन्दसि), wherein हन् takes क्विप् variously (बहुलम्). Thus, -हन् occurs with upapadas other than those specified in 3.2.87, as in यो मातृहा पितृहा भ्रातृहा 'who has killed his mother, his father, his brother[18]'; and अमित्रघात: 'slayer of enemies[19]', contains –घात–, derived with the suffix अण्[20].

2.6.4. Now, consider ३।२।७१ मन्त्रे श्वेतवहोक्थशस्पुरोडाशो ण्विन् । ३।२।७२ अवे यज: । ३।२।७३ विजुपे छन्दसि । According to 3. 2. 71-72, in usage found in mantras ण्विन् follows श्वेतवह्, उक्थशस्, and पुरोडाश as well as यज् used with the preverb अव. 3. 2. 73 introduces विच् after यज् used with उप to form derivates found in general Vedic usage.

3.2.74-76 apply as shown in **2. 6. 1.** It is reasonable, I think, to accept what the Kāśikā says about 3. 2. 75. The Kāśikā remarks that 3. 2. 75 uses दृश्यते in order that usage be followed (प्रयोगानुसरणार्थम्)[21]. This accords with what Patañjali said much earlier (*see* **1** with note 2), since the accepted usage is that of model speakers. That is, the Vedic usage known to Pāṇini was such that he could determine particular domains in which ष्विन् and विच् occurred. Moreover, verbs in -*ā* could form derivates with मनिन् and so on (3. 2. 74 [2.6.1]) in compounds. In both Vedic and the spoken language Pāṇini describes, the same suffixes occur with verbs in -*ā* and also other verbs, as could क्विप्, too, both in compounds and independently. In other words, for Vedic मनिन् and so on had a restricted domain of usage, which could be described formally. In Pāṇini's bhāṣā, on the other hand, the domain of these affixes had spread, but the development was still at a stage where Pāṇini could not formally describe this with precision. In fact, these affixes were being generalized fully. He therefore provides that these affixes, and क्विप्, are seen to occur elsewhere also. The exact extent of their usage, then, is still in flux within the community of model speakers.

2.6.5. One final point has to be taken into account, concerning 3. 2. 1 (see note 20). This is formulated as a very general rule, whereby अण् could occur with any verb whatever. Accordingly, the sūtra allows derivates such as आदित्यदर्श 'one who looks at the sun'. The discussion of this sūtra in the Bhāṣya ends with Kātyāyana's statement that such derivates are not used to signify the meanings in question, so that the grammar does not have to state an exhaustive listing of possible derivates in order to preclude these and some others[22]. That is, formally derivates like आदित्यदर्श are comparable to derivates like कुम्भकार 'pot maker', yet in the spoken language of Kātyāyana's time and place they were not used to express what one expressed using a phrase आदित्यम्पश्यति. Pāṇini recognizes the fact that derivates with अण् have a very general domain. He therefore formulates a general rule. In effect, he understands that अण् can indeed be used with any verb construed with an object. The resulting derivate might not immediately appear the best usage to a native speaker, but such a speaker has to admit its grammatical correctness and acceptibility. It is as though a modern speaker of English used a derivate like *axer* referring to someone who wields an axe. This is not the best of usage, but one has to admit it is grammatically well formed and acceptable.

The difference between 3. 2. 1 and 3. 2. 75, then, is that मनिन् and so on, used after verbs construed with upapadas, did indeed have a restricted specifiable domain at one stage of the language and were being generalized, so that one has to observe the usage of model speakers to determine grammatically appropriate usage.

2.7. ३।३।१ उणादयो बहुलम् (वर्तमाने [3.2.123] सञ्ज्ञायाम् [3.2.85]) । ३। ३। २ भूतेऽपि दृश्यन्ते । ३। ३। ३ भविष्यति गम्यादयः ।

2.7.1. 3.3.1 states that the affixes of the set beginning with उण् occur variously (बहुलम्) when an action signified by verbal bases to which they are introduced is referred to current time (वर्तमाने). For example : कारु 'artisan', वायु 'wind', पायु 'anus', जायु 'medicinal herb, physician', मायु 'bile', स्वादु 'sweet', साधु 'noble person, sādhu', आशु 'fact'[23]. 3.3.2 then provides that the same affixes also are seen to occur when an action is referred to the past. For example, वर्त्मन् *vartman* 'path' refers to something that has been gone on (वृत्तम्)[24]. Further, 3.3.3 states that the derivates गमिन् and so on refer to the future : गमिन् 'one who will go, a traveller', आगामिन् 'one who will come', प्रस्थायिन् 'one who will depart', प्रतिरोधिन् 'one who will oppose', प्रतिबोधिन् 'one who will awaken', प्रतियोधिन् 'one who will oppose', प्रतियोगिन् 'one that will be contrary to', प्रतियायिन् 'one who will come back', आयायिन् 'one who will come', भाविन् 'which will be[25]'

2.7.2. A ślokavārttika on 3.3.1 gives reasons why Pāṇini formulates this sūtra with बहुलम् instead of simply saying उणादयः, thereby providing that derivates with the affixes of the set beginning with उण् are acceptable correct usage. The property of applying variously (बाहुलकम्) is taken into account because the affixes उण् and so on appear, in derivations actually provided for, after a small number of the possible bases, not all the bases after which such affixes could occur, and because only most of the actually possible affixes are actually introduced in derivations provided, not all of the possible affixes. In addition, there is a residue of operations that is not taken care of in the derivations as actually provided[26]. The Kāśikā captures the major emphasis of this by noting that the affixes in question appear also with bases other than those after which they are explicitly provided for and some, though they are not explicitly provided for, are inferred from usage[27].

2.7.3. In 3.3.2, Pāṇini uses दृश्यन्ते, and the Kāśikā remarks that this is meant in order that one follow usage in determining which particular

affixes of the उणादि set are used when an action is referred to the past[28]. Although, according to the Kāśikā, both Aṣṭādhyāyī 3.3.1 and 3.3.2 thus involve a necessary recourse to usage for determining what the rules are to allow, there is nevertheless a difference between the two, which justifies their different formulations. Now, if instead of 3.3.1 as formulated, Pāṇini had stated उणादयो वा, thereby providing that unādi affixes occur optionally (वा), this sūtra would provide that all unādi affixes apply optionally under conditions stated. As shown in 2.7.2, this is clearly different from what 3.3.1, with बहुलम् allows[29]. Moreover, even given the very broad variation that 3.3.1 thus allows for, it does not obviate the need for a separate rule 3.3.2. The former provides for unādi affixes under a single condition of time reference : an action is referred to current time (वर्तमाने). 3.3.2, on the other hand, allows for some unādi affixes when an action is referred to the past. In addition, 3.3.1 applies in general (प्रायेण 'for the most part'), but 3.3.2 applies with respect to only a subgroup of unādi affixes : some of these also are used with past-time reference[30]. In addition, there is an enumerable subgroup of items used with future reference, covered by 3.3.3.

2.8. ६।४।७३ ७।३।७६ छन्दस्यपि दृश्यते । provide that certain operations are seen to apply also in Vedic.

2.8.1. 6.4.73 has to do with augments added to verbal stems followed by endings that replace the L-affixes लुङ् लङ् लृङ्. By ६। ४। ७१ लुङ्लङ्लृङ्क्ष्वडुदात्तः । such stems receive high-pitched अट् as an initial augment. अट् occurs only with consonant-initial bases, however, since this general rule has an exception : ६।४।७२ आडजादीनाम् । provides that high-pitched आट् is added as an initial augment to vowel-initial stems. In addition, 6.4.73 states that आट् is also seen to occur in Vedic usage. Now, 6.4.71-72 do not specify that the augments in question are added in the currently spoken language alone, so that it would make no sense to say that 6.4.73 simply provides for the use of आट् also in Vedic. This sūtra must, on the contrary, provide for a broader use of this augment than is the norm in the currently spoken language. That is, the rule provides that आट् occurs also with stems other than those for which specific provision is made in 6.4.72[31], thus accounting for the fact that in Vedic आट् occurs with consonant-initial as well as vowel-initial stems. For example : आयुनक् / अयुनक्'yoked'.

2.8.2. According to ७।१।७५ अस्थिदधिसक्थ्यक्ष्णामनङुदात्तः (तृतीयादिषु [७४] अचि [७३]), अनङ् substitutes for the final -इ of अस्थि 'bone', दधि 'curds', सक्थि 'thigh' and अक्षि 'eye' before a vowel-initial ending of triplets starting from the third; e.g., अस्थि-आ (instr. sg. : third-triplet ending टा) → अस्थन्-आ → अस्थ्ना[32], दधि-आ →...दध्ना, सक्थि-आ →... सक्थ्ना, अक्षि-आ→...अक्ष्णा, but अस्थिभ्याम् (instr.-dat.-abl.du), दधिभ्याम्, सक्थिभ्याम्, अक्षिभ्याम्, with the endings भ्याम् of the third, fourth, and fifth triplets. In addition, ७।१।७६ छन्दस्यपि दृश्यते । states that अनङ् is also seen to occur as a replacement for the -इ of these stems in Vedic usage. The situation here is comparable to that of 6.4.73 (**2.8.1**) : Since 7.1.75 does not apply specifically in the spoken language alone, thus excluding Vedic usage, 7.1.76 cannot be meant to provide for Vedic usage involving the same endings as covered by the preceding sūtra. On the contrary, 7.1.76 has to allow the replacement in places where this is not provided for by the preceding rule : before consonant-initial endings, before endings other than those of the triplets starting with the third, and before elements other than endings[33]. For example : अस्थिभिः, अक्षिभिः (instr. pl.); अस्थानि (acc. pl.); अक्षण्वता (instr. sg.) 'which has eyes', अस्थन्वन्तम् (acc.sg.) 'corporeal', with अक्षन् and अस्थन्- before the suffix वत्, which is not a vibhakti.

3. The evidence considered here is best accounted for on the thesis that Pāṇini[34] has described a living spoken language of his time[35], a language that exhibits traits found in any living language. In particular, Pāṇini has to take into account that there are relations among variants which can be described in a determinate fashion and others which cannot. Thus, there are instances where elements or operations A and B are complementary, each occurring in a specifiable domain. There are also instances where A and B vary within a stateable domain. In addition, there are instances such that, in a determined domain, there is indeterminate variation. This is the situation for which Pāṇini says that certain operations apply variously (बहुलम्) in a stated domain. Conversely, there are instances where the operations are determined but the domains in question remain partly indeterminate. This is the situation for which Pāṇini states that given operations are seen to occur under conditions other than those already stated. To reiterate the first example considered : Pāṇini can indeed specify certain places where long-vowel replacement applies in prior members of compounds (**2.1.1**). He must also accept, however, that this substitution applies to vowels of items which he cannot specify. Accordingly, he says

(6.3.137 [2.1]) that such long-vowel substitution is seen to apply to items other than those he has previously specified. Similarly, having gone as far as possible in stating the domains of certain affixes, he has to admit that they are seen to occur under additional, indeterminate, conditions.

Clearly, Pāṇini does not consider it his task to put a strait-jacket on some state of a language to have it go on as a frozen fossil. On the contrary, he describes a living language used by native speakers who were carrying out innovations and generalizations. Moreover, Pāṇini's rules recognize, as should any grammar, that the final results of developments which have started cannot be predicted. Hence, the Aṣṭādhyāyī appropriately includes what I call 'escape rules', statements which, I think, testify to the acumen and insight of Pāṇini[36].

Annotations :

1. A short version of this paper was presented at the Xth World Sanskrit Conference in Bangalore (January 3-9, 1997), and an abstract under the title 'Escape rules in Pāṇini : sūtras of the type *"anyebhyo' pi dṛśyate"* ' was published in the proceedings of this conference : *Xth World Sanskrit Conference...English Abstracts* (New Delhi : Rashtriya Sanskrit Sansthan, 1997), pp. 412-413. I have used the following abbreviations : RV : Ṛgveda, Kāś. : Kāśikāvṛtti : Aryendra Sharma, Khanderao Deshpande, D. G. Padhye 1969-70, PM : Padamañjarī : Dwarikadas Shastri and Kalika Prasad Shukla 1965-1967, Paddhati : Vṛsabhadeva's Paddhati : K. A. Subramania Iyer 1963a, Pr. : Padīpa : Vedavrata 1962-63, Bh. : Mahābhāṣya : Abhyankar 1962-72, LSS : Laghuśabdenduśekhara with Bhairava's Candrakalā (edited by Narahari Śāstrī Peṇḍse, reēdited by Gopāla Śāstrī Nene, Varanasi : Chaukhambha Sanskrit Sansthan, 1987), Vās : Vārarucasaṅgraha with Nārāyaṇa's Dīpaprabhā (edited by D. N. Pandey, Varanasi : Chaukhambha Sanskrit Sansthan, 1986), vt. : vārttika, VPVṛ. : Vṛtti on the Vākyapadīya : K. A. Subramania Iyer 1963a, VS : Vājasaneyisaṃhitā, SK : Siddhāntakaumudī : Giridhara Śarmā Caturveda and Parameśvarānanda Śarmā Bhāskara. For full bibliographic references, see *Pāṇini, A Survey of Research* (The Hague : Mouton, 1976, Delhi : Motilal Banarsidass, 1980 [reprinted 1997]). In addition, 'Debrunner' refers to Albert Debrunner, *Altindische Grammatik von Jakob Wackernagel, Band II, 2 : Die Nominalsuffixe* (Göttingen : Vandenhoek & Ruprecht, 1954) and 'Cardona 1997' refers to *Pāṇini, his Work and its Traditions, Volume I : Background and Introduction,* 2nd edition, revised and enlarged (Delhi : Motilal Banarsidass).

2. Bh. III.174.10-15 : यदि तर्हि शिष्टाः शब्देषु प्रमाणं किमष्टाध्याय्या क्रियते । शिष्टज्ञानार्थाष्टाध्यायी । कथं पुनरष्टाध्याय्या शिष्टाः शक्या विज्ञातुम् । अष्टाध्यायीमधीयानोऽन्यं पश्यत्यनधीयानं ये चात्र विहिताः शब्दास्तान्प्रयुञ्जानम् । स पश्यति नूनमस्य दैवानुग्रहः स्वभावो वा योऽयं न चाष्टाध्यायीमधीते ये चास्यां विहिताः शब्दास्ताँश्च प्रयुङ्क्ते । नूनमन्यानपि जानाति । एवमेषा शिष्टज्ञानार्थाष्टाध्यायी । The Bhāṣya on 6.3.109 has been discussed often; see most recently Cardona 1997 : 551-553 **(834)**.

3. VPVṛ 1.12 (43.8-9) : शिष्टज्ञानाच्च पृषोदरप्रकाराणां शिष्टप्रयोगत्वात्साधुत्वप्रतिपादने निमित्तं व्याकरणम् ।

4. Vṛṣabhadeva refers to the two types as अन्वाख्यात and अनन्वाख्यात : Paddhati 1.12 (43.22, 24-26) : एवं तदन्वाख्यातानां व्याकरणमुपायः । अनन्वाख्यातानामपीति दर्शयति... शिष्टज्ञानाच्च इति । तैर्य उपदिष्ट लक्षणेन नान्वाख्याताः पृषोदरप्रकारास्ते तत्प्रयुक्तत्वात्साधव इति ज्ञायन्ते । एवं पारम्पर्यात्तेषां व्याकरणं साधुत्वप्रतिपत्तौ लघुरुपायः ।

5. Bahuvrīhi compound by 2.2.27 : तत्र तेनेदमिति सरूपे । Samāsānta इच् by 5.4.127 : इच्कर्मव्यतिहारे ।

6. Kāś 6.3.137 : अन्येषामपि दीर्घो दृश्यते । स शिष्टप्रयोगादनुगन्तव्यः । यस्य दीर्घत्वं न विहितं दृश्यते च प्रयोगे तदनेन कर्तव्यम् ।

7. The Kāśikā includes all these and more. In particular, it considers that Pāṇini's use of अपि is intended to allow all the conditions given in previous rules to be superseded, so that, for example, a derivate with ड can refer to a kāraka other than an agent, as in परिखा 'moat', which is derived from खन् 'dig' and refers to something that has been dug : अन्येष्वप्युपपदेषु कारकेषु जनेर्डप्रत्ययो दृश्यते । सप्तम्यामित्युक्तम् असप्तम्यामपि दृश्यते । न जायते इत्यज । द्विर्जाता द्विजाः । पञ्चम्यामजातावित्युक्तम् जातावपि दृश्यते । ब्राह्मणो धर्मः । क्षत्रियजं युद्धम् । उपसर्गे च सञ्ज्ञायामित्युक्तम् । असञ्ज्ञायामपि दृश्यते । अभिजाः परिजाः केशाः । अनौ कर्मणीत्युक्तम् । अकर्मण्यपि दृश्यते । अनु जातः अनुजः । अपिशब्दः सर्वोपाधिव्यभिचारार्थः । तेन धात्वन्तरादपि भवति कारकान्तरेऽपि । परितः खाता परिखा आखा । Other Pāṇiniyas interpret अपि similarly, e.g., **SK** 3011 (IV.83).

8. 3.2.134 : आ क्वेस्तच्छीलतद्धर्मतत्साधुकारिषु । is a heading valid through 3.2.177, providing that the affixes introduced by rules of this section are introduced to signify agents thus qualified. आ 'up to and including' is used, so that क्विप् by 3.2.177 is introduced under these conditions, as is also the same affix introduced by 3.2.178.

9. Kāś 3.2.178 अन्येभ्योऽपि धातुभ्यस्तच्छीलिकेषु क्विप् प्रत्ययो दृश्यते । युक् भित् । I cannot take up here the reasons—given in the Bhāṣya on 3.2.178 and elsewhere—for stating this sūtra.

10. 5.3.14 is part of the section of rules headed by 5.3.2 : किंसर्वनामबहुभ्योऽद्व्यादिभ्यः ।

11. ५.४.४४-४९ : प्रतियोगे पञ्चम्यास्तसिः । अपादाने चाहीयरुहोः । अतिग्रहाव्यथनक्षेपेष्वकर्तरि तृतीयायाः । हीयमानपापयोगाच्च । षष्ठ्या व्याश्रये । रोगाच्चापनयने ।

12. Bh. II.405. 14-15 : इह कस्मात्र भवति स: तौ ते । भवादिभिर्योग इति वक्तव्यम् । के पुनर्भवादय: । भवान्
    दीर्घायु: देवानाम्प्रिय: आयुष्मानिति । Later Pāṇinīyas consider that दृश्यते in the sūtra has
    the effect of so delimiting its application; e.g., Kāś. 5.3.14 : दृशिग्रहणं प्रायिकविध्यर्थम् ।
    तेन भवादिभिर्योग एवैतद्विधानम् ।

13. VS 6.18 : रेडस्त्वग्निनष्ट्वा श्रीणातु... '(Fat,) you are harmed; may the fire cook you...'

14. With the affix णिनि by 3.2.86 : कर्मणि हन: (णिनि: [७८]).

15. In his first vārttika on 3.1.87, Kātyāyana says this sūtra serves to formulate
    a restriction : ब्रह्मादिषु हन्ते: क्विब्वचनं नियमार्थम् ॥ In the Bhāṣya, Patañjali notes that the
    restriction is two-fold, with respect to verbal base (धातुनियम) and the time reference
    (कालनियम) : Bh. II. 112.9-12 : नियमार्थोऽयमारम्भ: । ब्रह्मादिष्वेव हन्ते: क्विब्यथास्यात् ।
    किमविशेषेण । नेत्याह। उपपदविशेष एतर्स्मिश्च विशेषे। अथ ब्रह्मादिषु हन्तेर्णिनिना भवितव्यम् । न भवितव्यम् ।
    किं कारणम्। उभयतो नियमात्। उभयतो नियमोऽयम्। ब्रह्मादिष्वेव हन्तेर्भूते क्विब्म्भवति क्विबेव च ब्रह्मादिष्वति ।
    As Kaiyaṭa points out in his Pradīpa on this passage, Patañjali accepts only these
    two restrictions, not the four-fold restriction — such that the upapada and affix
    are also restricted — which others accept. Kaiyaṭa also remarks that this four-fold
    restriction is not to be granted acceptance, since it conflicts with the Bhāṣya : Pr.
    III. 255 : एतदेव नियमद्वयं भाष्यकारेणाश्रितम् ब्रह्मादिषु हन्तेरेव भूते क्विब्भवति ब्रह्मादिषु हन्ते: क्विब्भूत
    एवेत्येतत्तु नियमद्वयं नाभ्युपगतम्। अन्यैस्त्वाहोपुरुषिकया चतुर्विधो नियमो व्याख्यात:। स भाष्यविरोधान्नादरणीय: ।
    The source Kaiyaṭa ridicules here is the Kāśikā, which, in its commentary on
    3.1.87, does indeed say the rule involves four restrictions. Additional details need
    not be discussed here, since they do not affect my main topic.

16. Here too there is a difference of opinion. The Kāśikā interprets 3.2.76 as introducing
    क्विप् after all verbs, whether or not they are construed with an upapada, and to form
    derivates used both in Vedic and in the spoken bhāṣā of Pāṇini's time : सर्वधातुभ्य:
    सोपसर्गेभ्यो निरुपसर्गेभ्यश्च छन्दसि भाषायां च क्विप्प्रत्ययो भवति । The Dīpaprabhā on VāS 23 (p. 58),
    on the other hand, says 3.2.76 introduced the affix only to bases construed with an
    upapada : क्विप्चेति सोपपदेभ्य: सर्वधातुभ्य: सामान्येन विहित: क्विप् । If a derivate like गिर् (nom.
    sg. गी:) 'speech' is derived with क्विप् by 3.2.76 — thus, e.g., SK 2983 (=3.2.76 [IV.70])
    — then obviously the sūtra does not require a verb to be used with an upapada. On the
    other hand, if the ākṛtigaṇa सम्पदादि along with vārttika 9 on 3.3.108 (सम्पदादिभ्य:
    क्विप्) is invoked to account for derivates like गिर् (thus Bhānuji on Amarakośa 1.6.1),
    then one can adopt the alternative view. The consequence of this is that such derivates
    as गिर्, which must have been known to Pāṇini, since they were used from earliest
    Vedic on, have to be accounted for by an addition to the grammar. I therefore consider
    the Kāśikā's interpretation preferable.

17. 3.2.87 vt. 2 : तथा चोत्तरस्य वचनार्थः ॥ Bh. II. 112.14-15 : एवञ्च कृत्वोत्तरस्य योगस्य वचनार्थ उपपन्नो भवति बहुलं छन्दसीति । यो मातृहा पितृहा भ्रातृहा । न च भवति अमित्रघातः ।

18. The Paippalāda Atharvaveda has (19.46.14) : यो मातृहा पितृहा स्वसृहा, with स्वसृहा 'one who has killed his sister'.

19. Atharvaveda Paippalāda 2.88.lab : शास इत्था महाँ अस्यमित्रघातो अद्भुतः । The Śaunakīya Atharvaveda (1.20. 4ab) has शास इत्था महाँ अस्यमित्रसाहो अस्तुतः । and the Ṛgveda (10.152.1ab) has शास इत्था महाँ अस्यमित्रखादो अद्भुतः ।

20. 3.2.1. कर्मण्यण् । See **2.6.5.**

21. Kāś 3.2.75 : छन्दसीति निवृत्तम् । अन्येभ्योऽपिधातुभ्योऽनाकारान्तेभ्यो मनिन् क्वनिप् वनिप् इत्येते प्रत्यया दृश्यन्ते विच्च । सुशर्मा । क्वनिप् प्रातरित्वा प्रातरित्वानौ । वनिप् विजावा अग्रेगावा । विच् खल्वपि रेडसि पर्ण न वेः । अपिशब्दः सर्वोपाधिव्यभिचारार्थः । निरुपपदादपि भवति धीवा पीवा । दृशिग्रहणं प्रयोगानुसरणार्थम् ।

22. 3.2.1 vt. 4-5 : अपरिगणनं वा ॥ अनभिधानात् ॥

23. These are derivates with the affix उण् by Uṇādisūtra 1.1 : कृवापाजिमिस्वदिसाध्यशूभ्य उण् । Note that स्वादु has a general reference, to anything that is sweet to the taste (स्वद्यते), but that कारु refers specifically to an artisan (शिल्पिन्), not just anyone who does something (करोति). Pāṇinīyas are therefore doubtless correct when they say that सञ्ज्ञायाम् is understood in 3.3.1. Accordingly, the sūtra provides that the affixes in question are introduced to form derivates with specific referents and this variously, so that some of the derivates can have general referents.

24. This is a derivate with मनिन् by Uṇādisūtra 4.144 : सर्वधातुभ्यो मनिन् ।, which allows this affix to follow all verbal bases. वर्त्मन् is the first example given in the Kāśikā on 3.3.2, which also gives the examples चर्मन् 'skin' and भस्मन् 'ashes', derived from चर् 'go about' and भस् 'shine'. In his comments on Uṇādisūtra 4.144, Ujjvaladatta also gives these derivates and refers to Aṣṭādhyāyī 3.3.2.

25. These are the derivates given in the Kāśikā, which treats the set *gamyādi* as an exhaustive listing (परिगणनम्). Of these, only गमिन्, आगामिन्, भाविन्, and प्रस्थायिन् are directly derivable by known Uṇādisūtras : 4.6-9 : गमेरिनिः । आङि णित् । भुवश्च । प्रे स्थः । The Padamañjarī on Kāśikā 3.3.3 refers to these — but with variants आङि णिच्च and प्रात्स्थ: for Uṇādisūtra 4.7, 9 — and notes alternative ways of accounting for the other examples : प्रतियोधिन्, प्रतिबोधिन्, प्रतियोधिन् and प्रतियायिन् are derived with णिनि by Aṣṭādhyāyī 3.1.134 : नन्दिग्रहिपचादिभ्यो ल्युणिन्यचः ।; प्रतियोगिन् is derived with घिनुण् by Aṣṭādhyāyī 3.2.142 : सम्पृच° ; others say some of the derivates are formed with णिनि by Aṣṭādhyāyī 3.2.78 : सुप्यजातौ णिनिस्ताच्छील्ये ।; and still others say that these derivates are simply given as ready-made in the list accompanying Aṣṭādhyāyī 3.3.3. PM

III.7 : गमी आगामीति । गमेरिनि: आङि णिच्चेतीनि: । भावी प्रस्थायीति । अस्मिन्नेवाधिकारे भुवश्च प्रात्स्थ इतीनि: । णित्त्वाद् वृद्धिर्युक्च । रुधिबुधियुधियातिभ्य: प्रतिपूर्वेभ्यो ग्रहादिनिनि: । अस्मादेव निपातनादित्यन्ये । सुप्यजातावित्यन्ये । प्रतियोगीति । सम्मृचादिसूत्रेण घिनुणि चजो: कु घिण्ण्यतोरिति कुत्वम् । निनिप्रत्यय एव न्यङ्क्वादिपाठादस्मादेव निपातनाद्वा कुत्वमित्यन्ये ।

26. 3.3.1 vt. 1 : बाहुलकं प्रकृतेस्तनुद्छ्ठे: प्रायसमुच्चयनादपि तेषाम् । कार्यसंशेषविधिधेश्च तदुक्तम्... This ślokavārttika and Patañjali's comments on it appear to assume, as later Pāṇiniyas explicitly state, that the derivations are according to sūtras of another grammar, the Uṇādisūtras. I do not enter into this question here, except to remark that, in the Indian context, a mere list of affixes without rules introducing them to bases, would indeed be anomalous. Jinendrabuddhi (Nyāsa III. I) cites a traditional verse stating on what basis the property of applying variously is attributed to operations : because an operation sometimes applies, sometimes does not apply, sometimes applies optionally, and because sometimes some other operation applies : क्वचित्प्रवृत्ति: क्वचिदप्रवृत्ति: क्वचिद्विभाषा क्वचिदन्यदेव । विधेर्विधानं बहुधा समीक्ष्य चतुर्विधं बाहुलकं वदन्ति ॥ This verse is well known, cited elsewhere in full (e.g., Anantabhaṭṭa on Vājasaneyiprātiśākhya 3.18, Hemacandra on Siddhahemaśabdānuśāsana 8.1.2) or in part (e.g., PM III.I) as well as simply alluded to indirectly (e.g., Uvaṭa on Vājasaneyiprātiśākhya 3.18).

27. Kāś 3.3.1 : उणादय: प्रत्यया वर्तमानेऽर्थे सञ्ज्ञायां विषये बहुलं भवन्ति । यतो विहितास्ततोऽन्यत्रापि भवन्ति । केचिदविहिता एव प्रयोगत उन्नीयन्ते ।

28. Kāś 3.3.2 : पूर्वत्र वर्तमानाधिकाराद् भूतार्थमिदं वचनम् । भूते काल उणादय: प्रत्यया दृश्यन्ते । वृत्तमिदं वर्त्म । चरितमिदमिदि चर्म । भसितं तदिति भस्म । दृशिग्रहणं प्रयोगानुसारार्थम् ।

29. This is brought out in the Bālamanoramā on Siddhāntakaumudī 3169 (= ३.३.१ [IV.307] explaining Bhaṭṭoji's statement that some affixes not explicitly provided for are to be inferred (केचिदविहिता अप्यूह्या:) उणादयो वेत्यनुक्त्वा बहुलग्रहणस्य प्रयोजनमाह केचिदविहिता अप्यूह्या इति ।

30. Siddhāntakaumudītattvabodhinī IV.308 : नन्वेवं वर्तमानग्रहणं च उणादयो बहुलमित्यत्र नानुवर्त्यताम् । एतच्चोत्तरसूत्रं च त्यज्यताम् । अविशेषेण कालत्रयेऽपि प्रत्ययलाभादिति चेदत्राहु: । बाहुल्येन वर्तमाने भवन्ति भूतभविष्यतोस्तु क्वचिदेवेति विवेकदर्शनार्थमिति । Candrakalā on Laghuśabdenduśekhara 3.3.1 (II.816) : न च वर्तमाने इति सूत्राद्वर्तमान इति नानुवर्तनीयम् । एवञ्च भूतादौ सिद्धिर्भविष्यत्येवेति भूतेऽपीत्यादि न कार्यमिति वाच्यम् । प्रायेण वर्तमान एव क्वचिदेव तु भविष्यति वेति व्युत्पादनाय पुन: सूत्रारम्भात् । Similarly, Nyāsa and Padamañjari on Kāśikā 3.3.2 (III.6).

31. Kāś. 6.4.73 : यतो हि विहितस्ततोऽन्यत्रापि दृश्यते ।

32. 6.4.134 : अल्लोपोऽन: ।