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THE ROLE OF MEANINGS IN PĀṆINI'S GRAMMAR*

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ABSTRACT: In this paper an attempt is made to show that meanings play an essential role in Pāṇini's grammar. This role is then found to consist in their being the input of the grammar. This, when accepted, seems to have as consequence that Pāṇini's grammar cannot, as a rule, generate single words. The smallest utterance that can be produced is, in general, the sentence. This last statement must be qualified on account of the *kāraka* device used by Pāṇini.

1.1. Pāṇini's *Aṣṭādhyāyī* contains about four thousand sūtras. In more than one thousand of them there is a reference to the meaning of the grammatical elements introduced or discussed (Pandit, 1974: 181). Moreover, the *Aṣṭādhyāyī* is accompanied by a list of verbal roots, the Dhātupāṭha, the meanings of which are given throughout. In another paper (Bronkhorst, 1981) I have argued that there are reasons to think that those meaning indicating words were there from the beginning. And if they were not there, they were understood. In the same paper I have also argued that in the list of nominal stems and other grammatical elements known as "Gaṇapāṭha", meaning indicating words, though not expressed, are understood.

What role do those meanings play in the grammar? Three answers are conceivable: **a.** They play no, or almost no role in it. **b.** They are part of the output of the grammar; i.e. the grammar produces utterances together with an indication as to their meaning. **c.** They are the input of the grammar; i.e., on the basis of a meaning that is to be expressed, the grammar produces an appropriate utterance.

All the three possible answers are represented in the literature. As a rule they are presented as dogmatic assertions. The first view, that meanings play no, or virtually no, role in Pāṇini's grammar, is accepted by Roodbergen (1974: Introduction, p. ii), and also by Misra (1966: 110-1; see also 1966: 17-8). Thieme (1932: 236-7 [524-5]) may be counted among those who assign a very subordinate role to meanings.

The second view, that the meanings of the utterances produced by the grammar are themselves part of the output, is most sparsely met with in the literature. It is found in Joshi (1969: 16-7), where he says about the rules on [147]

syntax that they "utilize the words produced by the wordproducing rules and offer… semantic interpretation of the sentence". It may be noted that this statement is not about Pāṇini's grammar as a whole, but about the rules on syntax in the same.

The third view, that meanings are the input of Pāṇini's grammar, is clearly adopted by Buiskool (1939: 16) where he states that "the task Pāṇini imposes upon himself, is to give as completely as possible a record of the language he intends to describe, in fixing accurately the sound-symbols that correspond to a (sic) particular psychological contents." Unfortunately, Buiskool specifies those psychological contents in a way that is incompatible with Pāṇini's grammar. The same point of view, but now restricted to certain parts of the grammar, is represented by Kiparsky and Staal (1969: 84) and van Nooten (1969: 244).

All the authors mentioned above, with only one exception, merely posit their view regarding the role of meanings in the *Aṣṭādhyāyī*. The exception is van Nooten, to whose arguments we shall pay attention in subsection 1.3, where more evidence from Pāṇini's grammar will be produced to show that possibility **c** is to be preferred to **b**. In 1.2 it will be shown that possibility **a** can be discarded. §2, finally, will deal with an important consequence of the outcome of §1.

1.2. It seems clear that interpretations of the *Aṣṭādhyāyī* that give meanings their share are to be preferred to interpretations that do not. I shall none the less mention two more reasons why we must accept that meanings play a very important role in Pāṇini's grammar. In both cases I shall be brief, referring the reader to the relevant literature for further details.

Joshi and Roodbergen (1973: Introduction, pp. ii-iv) point out that P. 2.2.1-5 are superfluous in the sense that the forms derived with their help can also be obtained without them. The two authors conclude that the rules P. 2.2.1-5 are in all probability later interpolations. Cardona (1977) objects to this conclusion, rightly I think. He shows that the forms for the formation of which P. 2.2.1-3, 5 are used can be obtained without these rules, it is true, **but they will then not express the same meanings.** The choice is therefore between dropping rules from the *Aṣṭādhyāyī* and accepting the importance of meanings. Obviously our preference must go to the second alternative. (See also Cardona, 1976: 159-60.)

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Renou (1955: 111-2) mentions a number of *nipātana-sūtras* which introduce ready-made forms that, Renou thinks, could very easily have been introduced analytically. One such ready-made form is *ugraṃpaśya* (P. 3.2.37). The immediately preceding rule introduces *asūryaṃpaśya*, but analytically (P. 3.2.36: *asūryalalāṭayor dṛśitapoḥ*). What Renou does not seem to notice is this. P. 3.2.36 prescribes the affix *khaś* (*anuvṛtti* from rule 28) in the sense *kartṛ* (P. 3.4.67) to [148] the root *dṛś* when the *upapada* is *asūrya* and expresses the *karman* (*anuvṛtti* of *karmaṇi* from rule 22). In this way *asūryaṃpaśya* comes to mean "who sees not the sun" (*sūryaṃ na paśyanti*, as the *Kāśikā* has it; not "one not seen by the sun", as Chattopadhyay (1967: 536) tells us. A similar derivation would ascribe to *ugraṃpaśya* the meaning "who sees (something) fierce", instead of "fierce-looking" which it really means. (This is the meaning Monier-Williams ascribes to *ugrapaśya*. See also the *Nyāsa* on this rule (part II, p. 566): *ugrampaśyeti/ karmaṇy aṇ iti prāpte dṛśeḥ khaś nipātyate/* and the *Padamañjarī* on the same (part II, p. 566): *ugraṃ paśyatīti/ kriyāviśeṣaṇam etat.*) An analytic description of *ugraṃpaśya* would therefore require adjustment of meaning-conditions. Pāṇini saved himself that trouble by introducing *ugraṃpaśya* as a *nipātana*.

Renou further mentions *bhuja* and *nyubja* (P. 7.3.61), and *prayāja* and *anuyāja* (P. 7.3.62). The fact that these words are given ready-made can again be explained by the circumstance that the special meanings of these terms could not be easily arrived at analytically. (Renou seems to admit this in the case of *prayāja* and *anuyāja* when he says: "cités comme mots techniques, sans doute".) Further examples are discussed by Bhattacharya (1966: 107-8; 110-2). Bhattacharya (1966: 103) also quotes a verse (without mentioning its source), in which it is stated that the purpose of certain *nipātanas* is to specify meaning. It reads: *aprāpteḥ prāpaṇaṃ cāpi prāpter vāraṇam eva ca/ adhikārthavivakṣā ca trayam etan nipātanāt//.*

This much suffices to show that meanings play an essential role in Pāṇini's grammar. We therefore discard possibility **a**.

1.3. We are now faced with the remaining two possibilities. Either meanings are the input of Pāṇini's grammar, or they are part of its output. In a way the two alternatives are diametrically opposed to each other. At the same time both do full justice to the meanings in the *Aṣṭādhyāyī* and its appendices. It is therefore hard to see how one could choose between them.

Van Nooten (1969: 244) made an attempt to prove that "meaning statements are on the whole not of the type: 'element a means x', but rather: 'to express the

notion x, use element a'." Van Nooten's procedure is to show that rules which introduce suffixes are arranged according to meaning, rather than according to the suffixes involved.

Van Nooten's attempt cannot but be deemed laudable. That the nature of the evidence he adduces does not make his arguments as compelling as one might wish, does not detract from this. Cardona's (1976: 186) comment, which says that "what van Nooten has tried to prove was well known before…", is therefore extremely unfair. The question is not what scholars think, or think they know, but on what grounds they hold their beliefs. Before van Nooten they had no grounds whatever for the opinions they had regarding the role of meanings in the *Aṣṭādhyāyī* (or at any rate they never showed they had any); van Nooten tried to give them some.

[149] There is a better reason than van Nooten's to accept that meanings are the input of Pāṇini's grammar. It is based on the existence in the *Aṣṭādhyāyī* of the so-called "one name section". This section covers the rules P. 1.4.1 to 2.2.38 and begins in the following fashion:

P. 1.4.1 *ā kaḍarād ekā saṃjñā* "Up to (the rule) P. 2.2.38 (only) one name (is to be assigned)." P. 1.4.2 *vipratiṣedhe paraṃ kāryam* "In case of conflict (the rule) which follows (in the order in which the rules occur in this book) must be made (to take effect)." It is not our concern to determine whether P. 1.4.2 exerts its influence in the whole of the *Aṣṭādhyāyī* or in the section specified in P. 1.4.1 only. Certain is that it exerts its influence in the "one name section".

I shall now discuss an example of the working of P. 1.4.2, hereby following Cardona (1970: 43-4). Take the sentence *dhanuṣā vidhyati* "He pierces with (arrows shot from) a bow." Here a bow is the instrument (*karaṇa*) of the action of piercing, if only indirectly, through the arrows. It is also the point from which (*apādāna*) arrows are shot. The names "instrument" (*karaṇa*) and "point from which" (*apādāna*) are given to the bow by P. 1.4.42 (*sādhakatamaṃ karaṇam*) and P. 1.4.24 (*dhruvam apāye 'pādānam*) respectively. Both these rules lie in the "one name section". As a result of P. 1.4.1 only one of the two names can be given to the bow. P. 1.4.2 takes care that the bow is called only "instrument" (*karaṇa*), not "point from which" (*apādāna*). Consequently only the sentence *dhanuṣā vidhyati* is produced (with the help of P. 2.3.18) and not the incorrect sentence **dhanuṣo vidhyati* (by P. 2.3.28).

This example illustrates the working of P. 1.4.2. But this illustration presupposes that meanings are the input of Pāṇini's grammar. For suppose that the opposite is true, that meanings are part of the output of the grammar,

accompanying the utterances produced by the same. In that case the sentence *dhanuṣā vidhyati* might be produced at one time or another, together with the information that the bow is the means par excellence (*sādhakatama*) of piercing. But the information that this same bow is also a "point from which" would not in any way be conveyed. What is more, P. 1.4.2 would not have any role to play in this derivation. The rules P. 1.4.24 and P. 1.4.42 cannot come in conflict as long as it is not known that our bow is to be both instrument and point from which, i.e. as long as we do not know what meanings are to be conveyed. Until then, indeed as long as we are waiting for those rules to supply us with this information, the rules apply in turn, producing both *dhanuṣā vidhyati* and the undesired **dhanuṣo vidhyati*. Generalizing a bit, it can be said that the presence of rules which assign *kāraka* names in the "one name section" cannot be explained, when we think that meanings are part of the output in Pāṇini's grammar.

If, on the other hand, we assume that meanings are the input of Pāṇini's grammar, the above example is not problematic in any way. In that case both the meanings "point from which" and "means par excellence" are part of [150] the input. As a result there is conflict between P. 1.4.24 and P. 1.4.42. The former of these two rules would assign the name *apādāna*, the latter the name *karaṇa*. P. 1.4.2 brings it about that P. 1.4.42 wins. We note that the undesired sentence **dhanuṣo vidhyati* is not produced, quite simply because no semantic input occurs in which the bow is merely the point from which, and not simultaneously means par excellence. The same circumstance, incidentally, prevents the grammar from producing sentences like *vahninā siñcati* "he sprinkles with fire".

More examples of the role of P. 1.4.2 in the realm of the *kārakas* have been given by Cardona (1974: 234-6). They all support the conclusion of this first section: **Pāṇini's grammar turns meanings into utterances.**

2.1. The conclusion of §1 seems to have the following consequence: Pāṇini's grammar does not, as a rule, produce single words; it produces, as a rule, larger utterances. The reason is that, as a rule, no meanings can be found which, by means of Pāṇini's grammar, give rise to single words. The remainder of this section will support and specify these statements.

In what follows, I shall call "semantic elements" the meanings which are foun, or understood, in the *Aṣṭādhyāyī* and its appendices. They will be printed between hooks (<>) where they occur. Our first task is to find out what semantic elements underlie the utterances which we are going to study. I write down the

derivations in a way which is self-explanatory, and which shows which semantic elements play a role, and where.

First *bhūyate*, 3rd Sing. Pres. Pass. of the root *bhū* "be":

1. bhū	Dhp. I.1 <sattā>
2. bhū-lAṬ	3.4.69 <bhāva>; 3.2.123 <vartamāna>
3. bhū-ta	3.4.78; 1.4.22 <eka>
4. bhū-yaK-ta	3.1.67
5. bhū-ya-te	3.4.79

The semantic elements which play a role in this derivation are <sattā>, <bhāva>, <vartamāna> and <eka>. These semantic elements and *bhūyate* therefore belong together, the latter giving expression to the former. Nothing more than this set of semantic elements is required to obtain the word *bhūyate*.

In passing we observe that one set of semantic elements may give rise to several utterances. A concrete instance is the set {<sattā>, <bhāva>, <āśis>, <eka>} which can give rise to three utterances: *bhaviṣīṣṭa*, *bhāviṣīṣṭa* and *bhūyatām*. For reasons of space we cannot enter into the details of the derivations. We note that these same utterances could have [151] been arrived at on the basis of the set {<bhū>, <bhāva>, <eka>, <āśis>}. Generalizing we can say that one utterance can be the expression of more than one set of semantic elements.

Until now we could assign sets of semantic elements to single words. This changes in the next example, *tvaṃ bhavasi*.

1. yuṣmad	<yuṣmad>
2. yuṣmad-bhū	Dhp. I.1 <sattā>
3. yuṣmad-bhū-lAṬ	3.4.69; 1.4.54 <svatantra>; 3.2.123 <vartamāna>
4. yuṣmad-bhū-siP	3.4.78; 1.3.78; 1.4.22 <eka>
5. yuṣmad-sU-bhū-si	4.1.2; 1.4.22 <eka>
etc.	

This derivation shows that the utterance *tvaṃ bhavasi* gives expression to the set {<yuṣmad>, <sattā>, <svatantra>, <vartamāna>, <eka>}. The question is now: what semantic elements underlie the separate words *tvam* and *bhavasi*?

This question can easily be answered for the word *tvam*. It gives expression to <yuṣmad> and <eka>. Be it noted that in deriving *tvam* use must be made of P. 2.3.46: *prātipadikārthaliṅgaparimāṇavacanamātre prathamā*. The sūtra is here not interpreted in accordance with the tradition, but following Speyer (1886: 26, note 1): "The first case serves only to signify the gender and number of the thing

designated by the word's rude form or *prātipadika*." See also Thieme, 1956: 1-10 (= 1971: 573-82).

What semantic elements underlie *bhavasi*? Perhaps what remains after subtracting <yuṣmad> and <eka> from the set underlying *tvaṃ bhavasi*? Neither these three semantic elements, nor indeed any other set of semantic elements can generate the single word *bhavasi*. The reason is that in order to generate *bhavasi* we not only need semantic elements, but we must also know that *yuṣmad* is *upapada*, and that *yuṣmad* and the verbal ending refer to the same thing. The rule which contains these requirements is P. 1.4.105: *yuṣmady upapade samānādhikaraṇe sthāniny api madhyamaḥ* "When *yuṣmad* is the attendant word (*upapada*), also when only understood, [and when this word *yuṣmad*] refers to the same thing (*samānādhikaraṇa*), [the endings called] *madhyama* [are employed]." We conclude that without *tvam* the word *bhavasi* cannot be generated. In this we agree with Hari Dīkṣita, who wrote in his *Bṛhacchabdaratna* (p. 113): *na hi padāntaranirapekṣam eva padam iha śāstre saṃskāryam iti niyamaḥ/ yuṣmady upapade ityāder asaṅgatiprasaṅgāt/.*

Our conclusion is in need of some specification. The single word *bhavasi* can be generated in case the word *tvam* is understood but not expressed. The words *sthāniny api* "also when merely understood" in P. 1.4.105 provide [152] for this. But this circumstance merely emphasizes that the single word *bhavasi* as it occurs in *tvaṃ bhavasi* cannot be generated.

The above arguments, which show quite generally that finite verbs with endings of the 2nd person cannot be produced in isolation by Pāṇini's grammar, apply virtually unchanged to finite verbs with endings of the 1st person. (See P. 1.4.107.) Are they also valid for the 3rd person?

I think they are valid for certain finite verbs with 3rd person endings. P. 1.4.108 reads: *śeṣe prathamaḥ* "In the remaining cases the endings of the 3rd person." The remaining cases are those cases where neither *yuṣmad* nor *asmad* are the attendant words, that is to say, 1 where a word other than *yuṣmad* and *asmad* is the attendant word, and 2 where there is no attendant word. We have met a case where there is no attendant word (that refers to the same thing) in *bhūyate*. A word other than *yuṣmad* or *asmad* is the attendant word of finite verbs like *bhavati*. We know that words like *bhūyate* can be produced in isolation. Clearly words like *bhavati* cannot.

2.2. It is not possible to get a clear picture of how large groups of words are produced by Pāṇini's grammar without paying attention to the *kāraka* device. I

shall therefore first give a short, indeed sketchy, characterization of this device. My characterization is closest to Cardona's description of the same, if I have understood his expositions correctly. See esp. Cardona, 1967 and 1974; also Joshi, 1974.

Until now we have only met semantic elements which either directly gave rise to a grammatical element, or contributed to the production of such a grammatical element. (There are also semantic elements which do not in any way give rise to a grammatical element. An instance is <kṣepa> "abuse", in the derivation of *khaṭvārūḍha*. The semantic element <kṣepa> brings it about that *khaṭvām* is compounded with the following participle. See P. 2.1.26.) The difficulty with case-endings is this, that no seven meanings are so obliging as to correspond clearly to the seven groups of case-endings. Six of these groups of case-endings are as a rule expressive of a relationship with the verb, one, the genitive case-ending, is usually not. Further specification of meanings meets with difficulties.

What Pāṇini does to make the situation easier to handle is this. He introduces "pseudo-meanings" which do show the required correspondence with case-endings. It is obvious that no one-to-one relation can exist between these pseudo-meanings and the less accommodating "real" meanings. Indeed, at times totally different real meanings converge into one pseudo-meaning. So the real meanings *karmaṇā yam abhipraiti* (P. 1.4.32) and *priyamāṇaḥ* (P. 1.4.33), as well as *īpsitaḥ* (P. 1.4.36) and others, are bundled together in the one pseudo-meaning *sampradāna*. Or one real meaning can turn into several pseudo-meanings, depending on the context. For example, the real meaning *yaṃ prati kopaḥ* can become *sampradāna* (P. 1.4.37) as well as *karman* (P. 1.4.38).
[153] Even after introducing pseudo-meanings some irregularities remain. They are of three kinds:

1. Sometimes two different case-endings can be used to express exactly the same thing in the same context. There is, for example, no difference in meaning between *stokena muktaḥ* and *stokān muktaḥ*; see P. 2.3.33. In such cases two case-endings correspond to one pseudo-meaning.

2. A normal passive-active transformation turns a nominative case into an accusative. The problem of how to make these two groups of case-endings correspond to the one pseudo-meaning *karman* has been elegantly solved in the *Aṣṭādhyāyī* with the help of P. 2.3.1: *anabhihite*. (Many examples illustrating the working of this rule can be found in Joshi, 1975: 22-4.) No such elegant solution has been found in the cases where the nominative does not become an accusative.

An instance is *mātā smaryate*, which has as its active counterpart *mātuḥ smarati*. See P. 2.3.52.

3. Combinations of these first two kinds of irregularities also occur. Thus the passive *pitā saṃjñāyate* corresponds to two active sentences. See P. 2.3.22.

The *kāraka* device does not only facilitate the transition from real meanings to case-endings. It also does good work in describing the meanings to be expressed by primary suffixes and compounds. See Singh 1974: 299-302. (Singh is of the opinion that also secondary suffixes represent *kārakas*. This is doubtful.) This does not, however, change the fact that the *kāraka* device was introduced with an eye to the case-endings. This is shown by the circumstance that each group of case-endings corresponds to one *kāraka* category. (The genitive case takes a special position and does not count here.)

Our short survey of the *kāraka* device can be summed up as follows. *Kāraka* names are pseudo-meanings which have been introduced to facilitate the transition from real meanings to case-endings. Such a device was needed, because no one-to-one correspondence between real meanings and groups of case-endings exists. This exceptional behaviour of the Sanskrit language (if we wish to call it thus) is the reason of existence of the *kāraka* device.

We note that, in view of the above, it is incorrect to think that, say, *karman* really means *kartur īpsitatamam* (see P. 1.4.49), while *yaṃ prati kopaḥ* gets the appellation *karman* due to the unfortunately exceptional behaviour of the Sanskrit language. This would be missing the point. Had the language been well-behaved, there would have been no need for a *kāraka* device, and the term *karman* would not be found in the grammar; *kartur īpsitatamam* would have sufficed.

The six pseudo-meanings will from now on go by the name "pseudo-elements". To distinguish them from real semantic elements, two pairs of [154] hooks (<< >>) will be used. The six pseudo-elements are: <<kartṛ>>, <<karman>>, <<karaṇa>>, <<sampradāna>>, <<apādāna>>, <<adhikaraṇa>>.

I conclude this subsection by contrasting the *kāraka* device with another buffer device in the *Aṣṭādhyāyī*, which exists in the so-called *lakāras*. The *lakāras* are used in the formation of verbal forms. A vital distinction is that *kārakas* are pseudo-*meanings*, whereas the *lakāras* are pseudo-*forms*. I can think of two reasons that may explain this difference in treatment: 1: The *lakāras*, unlike the *kārakas*, unite different meanings at one an the same time; e.g., in the formation of *bhavati* the two meanings *kartṛ* (by P. 3.4.69) and *vartamāna* (by P. 3.2.123) are jointly expressed by lAṬ. 2. The original meanings "shine through" the *lakāras*. E.g., in the formation of *bhūyate*, the meaning *bhāva* is still required to get the

vikaraṇa yaK (by P. 3.1.67). In the case of the *kārakas*, on the other hand, the pseudo-meanings "cover" the original meanings. That is to say, once the original meanings have been replaced by pseudo-meanings, those original meanings play no role any longer.

2.3. What bearing has the *kāraka* device on the question how large utterances are produced by Pāṇini's grammar? In order to arrive at an answer, we shall study some concrete derivations.

It can easily be verified that the semantic elements underlying *akṣān dīvyati puruṣaḥ* "the man plays dice" are: <krīḍā>, <puruṣa>, <eka>, <vartamāna>, <svatantra>, <akṣa>, <bahu> and <sādhakatama>. It is further clear that the three elements <akṣa>, <bahu> and <sādhakatama> correspond to the word *akṣān*, while <krīḍā>, <puruṣa>, <eka>, <vartamāna>, <svatantra> correspond to the two words *dīvyati puruṣaḥ*. For reasons similar to the ones we found in the case of *tvaṃ bhavasi*, the second group of semantic elements cannot again be split into two. As a result, the semantic elements underlying *akṣān dīvyati puruṣaḥ* fall automatically into two groups, as follows: {<krīḍā> <puruṣa> <eka> <vartamāna> svatantra>} {<akṣa> <bahu> <sādhakatama>}. At first sight, therefore, it seems that the derivations of *akṣān* and of *dīvyati puruṣaḥ* are independent of each other.

Unfortunately, this first impression is wrong. As long as we do not know that the meaning <sādhakatama> stands in the relation to the verbal root *div*, there is no chance of obtaining the desired accusative case-ending. Only when accompanied by that verbal root can this case-ending be realized, by P. 1.4.43. We must conclude that the group of semantic elements <akṣa>, <bahu>, <sādhakatama> in isolation cannot give rise to any utterance whatever. That is to say, in spite of the fact that in the above example all semantic elements fall of their own into two groups, this does not mean that those two groups are independent of each other. It seems indeed that Pāṇini's grammar as a rule derives whole *sentences*, and combinations of sentences.

[155] At this point we must take the *kāraka* device into account. If, in the above example, we replace semantic elements by pseudo-elements wherever possible, we get the following two groups: {<krīḍā> <puruṣa> <eka> <vartamāna> <<kartṛ>>} {<akṣa> <bahu> <<karman>>}.

The difference from our earlier two groups seems negligible. Instead of <svatantra> there, we have here <<kartṛ>>; and for <sādhakatama> there, here we find <<karman>>. But this small difference has an important effect. Whereas the

group {<akṣa> <bahu> <sādhakatama>} could not, on its own, give rise to an utterance, the new group {<akṣa> <bahu> <<karman>>} can. In other words, this group has gained independence. In order to derive *akṣān*, we need nothing beyond the group {<akṣa> <bahu> <<karman>>}. We do not even need to know the activity with respect to which dice, *akṣān*, are *karman*.

A second example may further clarify my point. The following two sentences derive from almost the same semantic elements:

1. *puruṣāya krudhyāmy aham*
2. *puruṣam abhikrudhyāmy aham*

Indeed, both these sentences can be translated "I am angry with the man". The semantic elements, arranged into groups, are respectively:

1. {<puruṣa> <yaṃ prati kopaḥ[1]> <eka>} {<kopa[2]> <asmad> <vartamāna> <eka> svatantra>}

[156]

2. {<puruṣa> <yaṃ prati kopaḥ[1]> <eka>} {<abhi> <kopa[2]> <asmad> <vartamāna> <eka> svatantra>}

Index numbers are used to indicate the elements of different groups which belong together.

As was the case in our earlier example, we are here again confronted with a group of semantic elements which, by itself, is not in a position to produce a Sanskrit utterance. Here the group is:

{<puruṣa> <yaṃ prati kopaḥ> <eka>}

Indeed, this single group must in one case give rise to *puruṣāya*, in another to *puruṣam*. Which of these two forms is to be chosen depends entirely on the context in which our group occurs. When the verbal root expressive of anger is *krudh* and is employed without a preposition, the dative must be used. When this same verbal root is employed together with a preposition, the accusative is correct. This we learn from P. 1.4.37-8.

Let us now use pseudo-meanings instead of real meanings wherever possible. The two sentences under discussion then appear to derive from:

1. {<puruṣa> <<sampradāna>> <eka>} {<kopa> <asmad> <vartamāna> <eka> <<kartṛ>>}
2. {<puruṣa> <<karman>> <eka>} {<abhi> <kopa> <asmad> <vartamāna> <eka> <<kartṛ>>}

These two sets of semantic elements no longer have a group in common, as they did when we used only real meanings. The groups are now different, and therefore give rise to different utterances (*puruṣāya* and *puruṣam* respectively).

Again the groups have gained independence, in the sense that no information from outside the group is required in order to be able to derive an utterance from it.

These few examples must suffice to show that Pāṇini's grammar primarily generates whole sentences (or even combinations of sentences), but that the *kāraka* device enables us to find sets of semantic elements (which now include pseudo-elements) that give rise to parts of whole sentences.

3. The outcome of our investigation can be summed up in two points. 1 Pāṇini's grammar turns meanings into utterances. 2 As a result we must assume that this grammar primarily generates sentences, or even groups of sentences.

I have nothing to add to the first point. I know of no grounds to doubt its validity. I am less certain about the second point. It is true that a simple and straightforward application of Pāṇini's grammar will as a rule produce sentences, not single words. But this fact may not fully settle the issue.

Imagine that Pāṇini wanted to write a grammar that would produce single words on the basis of a semantic input. What semantic elements would underlie, say, *bhavasi*? If one tries to answer this question, he will realize how much trouble Pāṇini saved himself by bringing the accompanying word *tvam* into the picture. Similarly, in assigning meanings to case-endings, one is bound to take the context into consideration.

I therefore propose the following. The evidence at our disposal strongly suggests that Pāṇini's grammar produces, as a rule, whole sentences (or groups of them). We stick to the conclusion that it indeed primarily produces whole sentences until and unless evidence to the contrary is procured.

One final remark. The presupposition that underlies Pāṇini's grammar as we have come to know it, is that the meaning of an utterance is equal to the sum of the meanings of its parts. A consequence of this would be that also preverbs are, by themselves, meaningful for Pāṇini. There is some independent evidence to support this. When Pāṇini informs us in P. 1.4.93 (*adhiparī anarthakau*) that *adhi* and *pari* are called *karmapravacanīya* provided they have no meaning, we conclude that *adhi* and *pari* do have meaning in other circumstances, i.e. when they are ordinary preverbs (*upasarga*). On the other hand, sometimes meanings are ascribed to roots which can only be expressed by those roots in combination with preverbs (Bronkhorst, 1981). This suggests that the preverbs somehow participate in the meanings of the [157] verbal roots. Since this question needs further study, I shall say no more about it.

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