4

BANGLA VECTOR VERBS AND THEIR SELECTIVES

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INTRODUCTION

0 This decision to offer for publication a 1976 manuscript reflects the intuition that the first moves made in substantivist lexicology may still be of theoretical interest, and were not entirely superseded by versions that made it into print. For the sake of authenticity, the text has been left intact, which of course means that readers will have to take later work into account.

1 Earlier describers have noted that in Bangla (Bengali), an Indo-Aryan language spoken in India and Bangladesh, there occur verb plus verb constructions (*compound verbs)* in which one constituent (the *vector* or *vector verb*), chosen from a special set of verbs, indicates the orientation or manner of the action or process expressed by the other, freely selected constituent (I will call it the *pole* or *polar* verb) which as a rule immediately precedes it. Compound verbs are also found in non-Indo-European families such as Turkic, Tibeto-Burman, Japanese, and Dravidian. Their use in Indo-Aryan, widespread in New Indo-Aryan times, goes back to the earliest phase of Middle Indo-Aryan (600-200 B.C.) represented by Pali. This development compensated for the decline and eventual loss of the particle plus verb construction. It has been observed that verb plus particle constructions are often the best English renderings for Bangla compound verbs; thus, 'sit down', 'lie down' for *boSe pOR* "sit-plus fall"[1], *Sue pOR* "lie-plus fall".

[1] Double quotes indicate a more literal translation.

2 Tense-mode-aspect suffixes and personal endings get attached to the vector; the pole invariably ends in *e*[2] (underlyingly *ye*); *boSe pORo* 'sit down' (semi-intimate), *boSe pORa* 'to sit down'[3]. This gives rise to an identification problem because Verb Stem + *ye* + Word Boundary + Verb Stem + (Non) Finite Ending sequences are structurally ambiguous. The following pair shows the contrast between a compound verb (a pole plus vector construction) and a combination of two simple verbs (two poles).

(1) $chobi_1gulo_2$ $dekhe_3$ ne_4 '$take_4$ [a] $look_3$ [at] the_2 $picture_1s_2$'[4] formally, *dekhe* subordinated to *ne*; semantically, the other way round

(2) $chobi_1gulo_2$ $dekhe_3$ ne_4 '$take_4$ (accept) the_2 $picture_1s_2$ $seeingly_3$ (scrutinizingly)' both formally and semantically, *dekhe* modificatory of *ne*

3 How does one tell these types apart? Earlier describers have set forth certain criteria. The first part of the present paper seeks to refine and complete the traditional view so that it becomes possible to use the notions Vector and Compound Verb with confident precision.

4 The remainder of this paper presents the problem of selectional restrictions which was not raised in previous studies. If you keep pairing random poles with random vectors, only part of the output will be acceptable. What rules, if any, determine these specific compatibilities between poles and vectors? I will develop in detail one sort of answer to this question; roughly, that intransitive and transitive poles co-occur with intransitive and transitive vectors respectively. I will spend a lot of time bringing out the significance of that 'roughly' and some time outlining other ways of approaching the problem that must supplement this one.

SECTION I.A.

5 According to Suniti-Kumar Chatterji (*SOrol bhaSaprokaS baNla bEkoron*, Calcutta, 1968) and Rabindranath Tagore (quoted therein), the difference between (1) and (2) lies in the greater cohesiveness of the sequence *dekhe ne* in (1). The

[2] See Appendix 3 for a broader concept of Compound Verb in which the pole may also end in *te* (underlyingly *yte*) .

[3] See Appendix 1 for transcription and Appendix 2 for verb inflections.

[4] This gloss is not adequate but simply convenient – it contains the word *take* and isn't too long. A longer and better rendering would be 'first, look at the pictures and finish looking; other things can wait'.

compound verb has both unity of function, with the vector losing much of the full verbish force it would have if used as a pole, and unity of shape, because the pole plus vector sequence (unlike the sequence of two poles) may not be interrupted by any third element.

SECTION I.B. UNITY OF FUNCTION

6 The intuition is that the vector, being 'grammaticalized', may not act as a semantically autonomous predicator element (as a pole). A more or less homologous English example that brings out the issues involved is the pair (3)-(4), corresponding to (1)-(2).

(3) We have piled on this shelf every document he bequeathed to his heirs

(4) We have, piled on this shelf, every document he bequeathed to his heirs

The element *have* is 'lexical' (pole-like) in (4) and 'grammaticalized' (vector-like) in (3). In ordinary terminology *have* is a semantically independent Predicator in (4) whereas *piled* is the Predicator in (3); *have* in (3) is an Auxiliary and it doesn't mean 'possess' but shows the (perfective) Aspect of the Predicator. In (3) as in (1) it is the semantically subordinate Auxiliary element that formally comes to the fore (is the 'independent' constituent) because it carries the Personal, Modal, and Tense features – compare (5)-(6) with (1) and (7)-(8) with (3).

(5) chobigulo dekhe ni*k* 'let [him/her/it/them] take [a] look [at] the pictures'

(6) chobigulo dekhe ni*lo* '[(s)he/it/they] took [a] look [at] the pictures'

(7) She ha*s* piled on this shelf every document he bequeathed to his heirs

(8) We ha*d* piled on this shelf every document he bequeathed to his heirs

7 In view of these striking similarities, one can quite understand why Bangla vectors have been called Auxiliary Verbs by S.K. Chatterji (op.cit.) and Aspectives by Punya Sloka Ray (*Bengali Language Handbook*, 1966), who states that they are 'homonymous' with independent verbs – so that, for him, (1) and (2) do not constitute a structural minimal pair (same words, different constructions): the word *ne* in (1) is lexically different from the verb *ne* in (2).

8 The traditional view of the functional unity of Bangla compound verbs, then, is a three-point thesis.

(9)(i) The compound verb as a whole is a single verb, whereas a sequence such as

dekhe ne in (2) is not.

(ii) A vector, being nothing but an auxiliary of its pole, has a meaning quite distinct from that of the independent verb which is its homonym.

(iii) These auxiliaries may correctly be said to express Aspect in Bangla.

I reject (iii) and doubt (ii), but accept (i).

The Rejection (paragraph 9)

9 Verbs in Bangla may be unmarked for Aspect, e.g. *nEY* '[(s)he/it/they] take(s)', *nilo* '[(s)he/it/they] took', or marked – for the progressive Aspect (*nicche* 'is/are taking', *nicchilo* 'was/were taking') or the perfective (*nieche* 'has/have taken', *niechilo* 'had taken'), but not both. Likewise, verbs may have a vector added or not have any ; but a vector may be added to another (see examples in Appendix 3) and, being formally a verb, is itself liable to be marked for Aspect. The category that vectors manifest – call it Manner, or Orientation – is one area of verb grammar, and Aspect is another.

The Doubt (paragraphs 10-11)

10 The traditional thesis, especially Ray's formulation of it, makes it look like an accident that ALL vectors have 'homonyms' among the autonomous verbs, that these 'homonyms' are quite ordinary words and not special-register items like the English verb *will* (which is the autonomous counterpart of the only English modal that has one), that the autonomous 'homonyms' don't inflect any differently from the vectors – whereas *will-willed* contrasts with *will-would* (not to speak of *can-canned*!). This kind of specific cognateness also shows up in syntax. For example, in (10)

(10) tomake$_1$ ami$_2$ e$_3$ kaj$_4$Tuku$_5$ kore$_6$ debo$_7$

"I$_2$ will$_7$ do-plus$_6$ give$_7$ you$_1$ this$_3$ bit$_5$ [of] work$_4$"

'I will do this bit of work for you'

the use of no vector

(11) * tomake ami e kajTuku korbo

or another vector

(12) * tomake ami e kajTuku kore phelbo

would be ungrammatical because of the complement *tomake* 'you'. When this is changed, the sentences sound right.

(13) tomar$_1$ jonne$_2$ ami$_3$ e$_4$ kaj$_5$Tuku$_6$ korbo$_7$

'I$_3$ will-do$_7$ this$_4$ bit$_6$ [of] work$_5$ for$_2$ you$_1$'

(14) tomar$_1$ jonne$_2$ ami$_3$ e$_4$ kaj$_5$Tuku$_6$ kore$_7$ phelbo$_8$

'I$_3$ will-do[-and-finish]-off$_{7\text{-}8}$ this$_4$ bit$_6$ [of] work$_5$ for$_2$ you$_1$'

11 This shows that the vector *de* and the independent verb *de* 'give' share the syntactic property of co-occurring with an indirect object in *-ke* rather than an oblique complement in *-r jonne* 'for'. However, it is easy to make sure that what occurs in (10) is the vector. Had it been the independent *de*, (15) would structurally speaking have to a possible paraphrase. But, the meaning of (16) being what it is, (15) is anomalous.

(15) ? e$_1$ kaj$_2$Tuku$_3$ kore$_4$ ami$_5$ tomake$_6$ debo$_7$

'I$_5$'ll-do$_4$ this$_1$ bit$_3$ [of] work$_2$ and$_4$ give$_7$ [it to] you$_6$ [to do]'

(16) e kajTuku ami tomake debo

'I'll give you this bit of work (to do)'

What is being 'given' in (10) seems to be, not 'this bit of work', but rather 'my doing' of it. But some sort of giving IS involved. That is what makes me uneasy about the claim that the vector *de* and the independent *de* are 'homonyms', period. A more adequate description, it seems to me, would start out by assuming the vector and its polar counterpart to be the same beast, and would then qualify this assumption considerably. Qualification one would concern the semantic distance between, say, the vector *phEl* 'finish off', 'do (something unexpected/ embarrassing/ quick)' and the pole *phEl* 'drop'. Qualification two would note that although the vector *de does co-occur* (like the pole *de*) with an object in *-ke* ((10)), it is **f***ree* (unlike the pole *de*) to co-occur with a for-complement instead ((17)). And so forth.

(17) tomar jonne ami e kajTuku kore debo

The Acceptance (paragraph 12)

12 I seem to be contradicting myself. In half-rejecting (9ii) I have suggested that vector verbs don't give up their verbhood by being vectors. It should follow that a compound verb is two verbs. And yet I say I accept (9i), which entails counting *dekhe ne* in (1) as one verb, not two. The paradox will, I hope, seem less overpowering when the issue of The Doubt and The Acceptance comes up again (paragraph 21), after a discussion of formal structure which should provide enough local color for the issues to become quite tangible.

SECTION I.C. UNITY OF SHAPE OR STRUCTURE

13 Chatterji, following Tagore, states a unity-of-shape principle;

(18) A compound verb may not be broken up by introducing any material between its constituents.

He seems to consider this the most important difference between compound verbs and sequences like *dekhe ne* in (2). Unlike the former, the latter are interruptible:

(19) from (1); * $chobi_1gulo_2$ $dekhe_3$ $ekkhuni_4$ ne_5

ungrammatical in the sense

'$take_5$ [a] $look_3$ [at] the_2 $picture_1s_2$ $immediately_4$'

(19) from (2); $chobi_1gulo_2$ $dekhe_3$ $ekkhuni_4$ ne_5

grammatical in the sense

'$accept_5$ the_2 $picture_1s_2$ $scrutinizingly_3$ $right\text{-}now_4$'

(20) from (2); $chobi_1gulo_2$ $dekhe_3$ $kham_4$ $Suddhu_5$ ne_6

'$accept_6$ the_2 $picture_1s_2$ $scrutinizingly_3$ $with_5$ [their] envelope[s] $_4$ [as well]'

This generalization has two holes in it, one easier to ignore than the other. One is altogether a matter of focus. Nobody knows very much about focus anyway. The other is a bit more serious and makes reformulation ((31)) necessary.

14 The first defect is that, although (19) from (1) is out, (21) isn't. a vector may undergo fronting for the sake of focus.

(21) from (1); ne_1 $chobi_2gulo_3$ $dekhe_4$

'*take*$_1$ [a] $look_4$ [at] the_3 $picture_2s_3$'

Here *ne* has jumped over two words, allowing *chobigulo* to separate it from its partner. Thus compound verbs *are* interruptible after all. But that doesn't matter in the context of the inquiry. Chatterji was presumably looking for some means of distinguishing (1) from (2), and it seemed to turn out that if you chose an appropriate word you could insert it between the two verbs in (2), but never in (1). He was not interested in seeing what would happen if you brought the second verb to the front of the sentence, for the good reason that (1) and (2) respond in the same way to such treatment.

15 However, there are cases such as (22)-(26) where the pole and the vector, in that order, are interrupted by other material.

(22) *dekhe*$_1$ to$_2$ *ne*$_3$ Ekhon$_4$ 'take$_3$ [a] look$_1$ now$_4$'

(word 2 is a hard-to-gloss emphasizer which in this context makes the sentence mean 'take a look now, since you can at least do that ; later on, maybe, you might do something more than just look')

(23) *Sune*$_1$i$_2$ *ne*$_3$ o$_4$ ki$_5$ bolte$_6$ caY$_7$

'do$_2$ listen-and$_1$ "take$_3$ [in]" what$_5$ (s)he$_4$ wants$_7$ to-say$_6$'

(24) tuy$_1$ jodi$_2$ Ekhon$_3$ *dekhe*$_4$ na$_5$ *niS*$_6$ tahole$_7$ pOre$_8$ SomOY$_9$ thakbe$_{10}$ na$_{11}$

'if$_2$ you$_1$ don't$_5$ take$_6$ [a] look$_4$ now$_3$ then$_7$ [there] won't$_{11}$ be$_{10}$ time$_9$ later$_8$'

(25) kaj$_1$Ta$_2$ *kore*$_3$ tuy$_4$ *dibi*$_5$ ami$_6$ jani$_7$, kintu$_8$ kOddine$_9$?

'you$_4$ *will*$_5$ do$_3$ the$_2$ work$_1$ [for someone, probably me], I$_6$ know$_7$, but$_8$ how-long$_9$

[will it take you]?'

(26) SOb$_1$ kaj$_2$ *kore*$_3$ kew$_4$ *debe*$_5$ na$_6$

'no$_6$body$_4$ will$_5$ do$_3$ **all**$_1$ [your] work$_2$ [for you]'

These are, clearly, direct counterexamples against Chatterji's thesis, in the context of his inquiry. Knowledge of what causes these exceptions might help us find a better formulation for the underlying insight.

16 (22) and (27) are both possible, and they have roughly the same meaning.

(27) dekhe ne to Ekhon

In contrast, the position of *i* and *na* in (23) and (24) has to be before the vector. In (23) it has to be exactly where it is. In other environments, however – (28) and (26) -- *i* and *na* are (just as obligatorily) placed *after* the vector.

(28) *dekhe*$_1$ *nilo*$_2$i$_3$ ba$_4$ 'it-doesn't-matter-if$_{3,4}$ [(s)he/it/they] take(s)/took$_2$ [a] look$_1$'

17 There is a small set of particles, like *na* and *i*, which negate or intensify the compound verb as a whole, but whose surface placement varies (to the right, left, or center of the compound verb) in some sort of complementary distribution[5]. This variation in the placement of particles doesn't alter their scope; thus it is not the case that *i*, for example, intensifies the action (expressed by the pole) in (23) and the manner (shown by the vector) in (28). Even when free variation gets superimposed on complementary distribution, this remains true. For me, (24) and (29) are perfectly synonymous.

(29) tuy jodi Ekhon na dekhe niS tahole pOre SomOY thakbe na

18 But there seem to be other particles, such as *to*, for which this breaks down. (22) and (27) clearly have different emphases ; (22) stresses looking as such and (27) the whole concept of taking a look. When I first noticed this example I speculated as follows: 'Maybe particles whose placement varies quite freely – free from any complementary distribution – behave this way.' But that wasn't borne out by the facts; *kintu* 'but' is such a particle (cf. *aber* in German0, and its scope is always like that of *to* in (27), never that of *to* in (22), even when you place it before the vector. I don't understand the details of what is happening. It is clear, though, that all particles, if they have an effect on the compound verb at all, have this effect either on the pole or on the entire compound verb, never on the vector alone – whatever the placement of the particle.

19 The grammar of (25) and (26) is a bit different. In these sentences the pole gets fronted by the sort of rule – perhaps the selfsame rule – which yielded (21). But here, too, the issue of scope – pole only versus the whole compound verb – reappears when we compare (25) and (30).

(25) kajTa dibi tuy kore ami jani, kintu kOddine?

'that you *will do* the work this I know, but how long [will it take you]?'

[5] It seems quite plausible that most or all of them *follow* the compound verb in deep structure. I see no need here to insist on this point.

I feel that (30) shows something significant. It is easy to imagine a language that differs from Bangla in that it allows (30) to indicate emphasis on *dibi* as a vector. The effect would be to highlight the fact that the work will be done FOR someone. In real-life Bangla the only way to do this is by placing extra-heavy stress on the vector verb, and this makes sense only in a context with metalinguistic overtones, such as citation or antithesis ('did you say you would do it *for* (him)?' 'did you write it *down* (for yourself) or *up* (for someone else)?').

20 The upshot of the discussion is that (i) these exceptions to the nonseparability hypothesis ((18)) are due to the operation of focus fronting and of rules which govern the placement of negating and intensifying particles ; (ii) fronting emphasizes (and particles modify) only or also the pole, never just the vector. It follows that;

(31)(i) pole and vector ARE obligatorily adjacent and in that order in deep structure;

(ii) the vector of a compound verb doesn't enjoy the verbish privilege of being focalizable or modifiable on its own; even when it gets fronted all by itself, it shares focalness with its partner. This is the hypothesis of Unity of Structure – a reformulation of (18), 'Unity of Shape'. With this perspective I can now take up the themes of paragraphs 10-12 again, as I promised to.

SECTION I.D. UNITY OF STRUCTURE AND FUNCTION

21 The discussion of (15)-(17) in paragraph 11 lends itself to a summary very much like (31ii):

(32) The vector of a compound verb doesn't enjoy the verbish privilege of governing complements of its own ; even when its presence is essential for the sentence to contain a particular complement, it shares this complement with its partner – that is, the complement belongs to the compound verb as a whole. In these terms, my half-rejection of (9ii) was literally a half-rejection. I had implicitly translated (9ii) into two statements:

(9)(ii) (a) The presence of a vector in a sentence never makes the sort of qualitative difference that a verb does, in terms of the kinds of complements that may occur.

(b) The presence of a vector in a sentence never makes the sort of quantitative difference that a verb does, in terms of the quota of complements that may occur.

I reject (a). As (10) shows, the presence of the vector *de* 'give' makes the occurrence of *tomake* (rather than *tomar jonne*) possible. But I agree with (b). The 'verbish'

contribution that a vector might make to its sentence is limited to the area of selecting one complement rather than another. It is not the case that a vector verb may take complements or modifiers of its own in *addition* to those of the pole. Thus it cannot be negated separately, and therefore a compound verb cannot be negated twice.

(33) from (1): *chobi$_1$gulo$_2$ na$_3$ dekhe$_4$ niS$_5$ na$_6$

ungrammatical in the sense 'don't$_6$ take$_5$ [an] un$_3$look$_4$ [at] the$_2$ picture$_1$s$_2$'.

In contrast, a sequence such as *dekhe ne* in (2) **can** be negated twice, one for the *dekhe* and once for the *ne*.

(34) from (2): chobi$_1$gulo$_2$ na$_3$ dekhe$_4$ niS$_5$ na$_6$

'don't$_6$ accept$_5$ the$_2$ picture$_1$s$_2$ un$_3$scrutinizingly$_4$'

Bangla does not permit double negation of a single verb;

(35) *dOrja$_1$Ta$_2$ na$_3$ khuliS$_4$ na$_5$

'don't$_5$ not$_3$ open$_4$ the$_2$ door$_1$'

So the contrast between (33) and (34) reflects quite well the different statuses of (1) and (2). The Double Negation Tolerance test seems to me an effective method of finding out if something that seems to be a compound verb really is one: if it is, it won't tolerate double negation.

22 The paradox of the Acceptance (paragraph 12) can now be resolved quite explicitly. The term "single verb" in the question "is a compound verb a single verb" has two meaning, corresponding to the (a) and (b) readings of (9ii). The answer to the question is; in sense (a), no ; in sense (b), yes. And traditional discussion had been predicated on the tacit assumption that (b) was the only relevant interpretation. That is why the problem of (10) had never been raised.

23 Thus it turns out that the grammatical properties captured by the traditional theses of "Unity of Structure" and "Unity of Function" don't really need two headings. A slight extension of (31) will do;

(36)(i) pole and vector ARE obligatorily adjacent and in that order in deep structure; (ii) the vector of a compound verb doesn't enjoy the verbish privileges of being focalizable, modifiable or complementable on its own ; even when it gets fronted all by itself it shares focalness with its partner ; even when it determines the form of complements, it does so only by influencing the selectional properties of its partner.

This is the hypothesis of Unity of Structure and Function.

SECTION II.A.

24 Armed with this understanding of the external grammar of compound verbs – of what makes them Compound – we now ask what characterization, if any, can be given of their internal grammar. (None has been given, to my knowledge.) What kind of regularities are there? The only thing one knows in advance of investigation is that some pole-vector combinations are acceptable and some are not. For example:

(37) $boSe_1$ pOR_2 'sit_1 $down_2$' "sit-$plus_1$ $fall_2$"

(38) $likhe_1$ $phEl_2$ '$write_1$ $down_2$' "write-$plus_1$ $drop_2$"

(39) *boSe phEl

(40) *likhe pOR, ungrammatical on a compound-verb reading[6]

25 I have counted see how many different poles each vector allows and how many different vectors each pole allows. This procedure did not tell me anything I wanted to know. Interested readers may look at the material in Appendix 4.

SECTION II.B.

26 I begin by presenting the line of inquiry which I have found most fruitful. Various modifications are shown to be necessary. Section II.D sketches a program of research which will have to supplement the sort of work I am doing here.

27 Consider the intransitive verb stem *tat* 'become hot' and the transitive stem *tata* 'make (something) hot' derived from it by adding the causativizer *a* . They form a

[6] The relevant facts are that the pole *pOR* 'fall' which is also used as a vector has a homonym which means 'read, study' and is never used as a vector. The expression *likhe pOR* may be taken to mean 'read, taking notes' ; on this (non-compound-verb) reading it is grammatical, and so is its double negation *na likhe poRiS na* 'don't read without taking notes'. And, speaking as a grammarian, there is another non-compound-verb reading on which *likhe pOR* is okay and means 'write (something, somewhere) and then come hurtling down', its double negation being *na likhe poRiS na* 'don't fall without writing' – said to a precariously positioned rock-climber who has been instructed to write something on the cliff before he falls off it.

natural pair in a sense in which, say, the intransitive stem *rag* 'become angry' and the stem *tata* do not. Let us call such natural pairs I-T PAIRS (for 'Intransitive'-'Transitive'). The stem *rag* and its causativized version *raga* 'make (someone) angry' constitute an I-T pair. The T of such a pair is not necessarily of the form I + *a*. it may be homonymous to the I. there are a few Bangla P(olar) stems with variable transitivity; for example, *khol* 'open' is used in both 'it opened' and 'you opened it'; *phuro* means both 'exhaust, use up' and 'not remain, get used up, be(come) exhausted'. However, this never happens with P/V stems (stems used as poles and vectors; this paragraph deals only with usage in polar position, but it does squint to see if a particular stem *can(not)* occur in vector position). P/V stems, and many P stems, form I-T pairs of a third sort, with I and T formally unrelated. Thus the P/V stem *aS* 'come' has the P/V stem *an* 'bring' for its T. Other I-T pairs of P/V stems are *oTh* 'rise', *tol* 'raise'; *rO* 'stay', *rakh* 'keep'; *pOR* 'fall', *phEl* 'drop'; *mOr* 'die', *mar* 'kill/hit'. The stem *oTh* also participates in an I-T pair of the first kind mentioned above; *oTh* 'rise' and *oTha* 'make (someone) rise'. But *oTha* is not a P/V stem.

28 Consider next the question what poles and what vectors co-occur, in the light of I-T pairings. In a large number of cases, polar I-T pairs take I-T pairs as vectors, and tetrads (pairs of pairs) emerge – I Pole to I Vector, T Pole to T Vector.

(41)(a) *good compound stems* (b) *bad compound stems*

(i) IP, IV | uThe pOR | "rise-plus fall" IP, TV *uThe phEl "rise-plus drop"

TP, TV| tule phEl | "raise-plus drop" TP, IV *tule pOR "raise-plus fall"

(ii) IP, IV | tete oTh | "become-hot-plus rise" IP, TV *tete tol "become-hot-plus raise"

TP, TV| tatie tol | "make-hot-plus raise" TP, IV *tatie oTh "make-hot-plus rise"

(iii) IP, IV | eSe pOR | "come-plus fall" IP, TV *eSe phEl "come-plus drop"

TP, TV | ene phEl | "bring-plus drop" TP, IV *ene pOR "bring-plus fall"

_____

(iv) IP, IV| poRe rO | “fall-plus stay” IP, TV *poRe rakh “fall-plus keep”

TP, TV |phele rakh| “drop-plus keep” TP, IV *phele rO “drop-plus stay”

29 In some cases unfortunate lexical gaps prevent perfectly sound tetrads from showing up --

_____

(38’) IP, IV|[Tikhe] pOR | “[*bewrite]-plus fall”

(38)TP, TV |_likhe phEl__| “write-plus drop”

(40’)IP, TV *[Tikhe] phEl “[*bewrite]-plus drop”

(40) TP, IV *likhe pOR “write-plus fall”

-- where “*bewrite” ([*Tekh*]) is what words do when you write (*lekh*) them. There is no grammatical reason why Bangla should lack the stem *Tekh* (or why English should lack *bewrite*). So the ungrammatical status of (40) is the same as that of the TP, IV sequences in (41). (38) and (38’) constitute a valid virtual tetrad.

30 There are some apparent violations of the pattern, of the following sort:

_____

(42) (a) (i) IP, IV |uThe aS | “rise-plus come”

TP,TV |tule an__| “raise-plus bring”

_____

(ii) IP, IV | jole mOr | “be-irritated-plus die”

TP,TV |jalie mar__| “torment-plus kill”

(b) (i) IP, TV *uThe an “rise-plus bring”

TP, IV *tule aS* “raise-plus come”

(ii) IP, TV *jole mar "be-irritated-plus kill"

TP, IV *jalie mOr* "torment-plus die"

The italicized compound verb stems are grammatical, which they shouldn't be if the boxes in (a) enclose true tetrads and if the (a)-(b) pattern of (41) is truly typical. But these only seem to be exceptions. A close look at the examples in (42) shows that the IP, IV and TP, TV items describe the same event in different frames (as in (41a)), whereas TP, IV describes a different event.

31 Take *tule aS* (at (42bi)). It occurs in sentences like (43) and has nothing to do with the compound verbs in (44)-(46).

(43) Eddin$_1$ chobi$_2$ *tule*$_3$ *aS*chi$_4$ ey$_5$ kEmeraY$_6$; palTate$_7$ cay$_8$ na$_9$

I/we 'have-been$_4$ taking$_3$ pictures$_2$ with$_6$ this$_5$ camera$_6$ for-such-a-long-time$_1$; don't$_9$ want$_8$ to-change$_7$'

(44) nodi$_1$ theke$_2$ kumir$_3$ *uThe*$_4$ *aS*be$_5$

'crocodiles$_3$ will$_5$ rise$_4$ out$_5$ of$_2$ [the] river$_1$'

(45) bagan$_1$ theke$_2$ phul$_3$ *tule*$_4$ *an*$_5$

'pick$_4$ *upp$_5$ flowers$_3$ from$_2$ [the] garden$_1$' where *pick *upp* suggests 'pick and bring' rather than 'pick and take' which is what *pick up* suggests

(46) nodi theke kumir *tule an*

'pick *upp crocodiles from the river'

32 If the person(s) being addressed in (46) manage to comply with the unusual request, the event of (44) will come to pass, though not its action: the Agents will be humans rather than (as in (44)) crocodiles. The different vectors *aS* 'come' and *an* 'bring' here express the same Manner of the same event in different actional perspectives. Now, (43) can be tied up with (47) in a similar way.

(47) Eddin chobi *uThe aS*che ey kEmeraY

'for so long, pictures have been being taken with this camera'

But the Manner (M_1) of (43) and (47) is altogether different from that ($_2$) of (44) and (46). M_1 relates to time spread – it temps us to call it an Aspect (but we must resist –

see paragraph 9). M_2 is about goal orientation and alludes to the 'topography' or proximality structure of the event. M_1 is expressed by *aS* 'come' only, never by *an* 'bring'. The expression of M_2 varies. It is intransitive (*aS*) if the pole is, and transitive (*an*) if not.

33 To get back to (42b), *tule aS* is grammatical only on the M_1 reading of *aS*, not on the M_2 reading. For the specific purpose of testing for true tetrads, then, *tule aS* is indeed ungrammatical – *aS* has the wrong meaning.

34 The other case of apparently unexplained grammaticality, *jalie mOr*, is similar. Although *mOr* doesn't express two distinct manners, *jole mOr* and *jalie mar* refer to the same event in the sense of paragraph 32, while *jalie mOr* refers to another event. When I say

(48) ami jole morchi "I'm killing myself being irritated/ dying of irritation"

'I'm intensely irritated'

I can attribute responsibility by putting this differently:

(49) tuy amake jalie marchiS "you are killing me by irritating / irritating me to death"

'you're irritating me intensely'

But if I ask

(50) tuy lokke jalie morchiS kEno

"why are you killing yourself irritating people"

I mean that this activity is taking your energy away, whereas the problem in (48)-(49) only has to do with my loss of energy. With *jalie mOr*, both tormentor and tormentee suffer; with *jole mOr* and *jalie mar* only the tormentee is considered to be at a disadvantage. Here again, the TP, IV sequence in (42b) doesn't mean what it would have to mean for its grammaticalness to threaten the predictive power of the principles underlying (41).

35 Let us pursue *jalie mOr* a bit further. This *mOr* is an item in a tetrad, unlike the special *aS* in *tule aS*. Question: Is there an X such that (51) is a true tetrad? Or, should there be an X (so that (51) is a virtual tetrad as in paragraph 29)?

_____

(51) IP, IV |jalie mOr| X 'to make (someone) irritate (someone else)'

TP,TV | X-e mar|

36 The bureaucratic answer is "Whether X exists or not, (51) falls through, because the *jala* or *jalie* (underlyingly *jala-ye*), being transitive, can't be an I". Therefore let us modify the idea of a tetrad. Let us say that its pattern is not IP,IV-TP,TV, but rather L(esser)P,IV-G(reater)P,TV. A causative stem is always Greater than the stem it causativizes. What we are asking for in (51) is a causative derived from *jala*. Now *jala* itself is a causativization of *jOl* (with irregular vowel-change), and Bangla neither permits second causativization nor uses a causative form indifferently as a first or a second causative. So X doesn't exist. But (51) is a valid virtual tetrad, because X could have existed. Consider (52)-(56).

_____ _____

(52)(i)(A) LP,IV |jole mOr | (B) LP,IV |jalie mOr|

GP,TV|jalie mar | GP,TV | X-e mar |

_____

(ii)(A) LP,IV |bhije mOr| bhej 'get wet'

GP,TV |bhijie mar| bheja 'make wet'

_____

(B) LP,IV |reMdhe mOr | raMdh 'cook'

GP,TV|raMdhie mar | raMdha 'make (someone) cook'

(53) briSTite$_1$ bhije$_2$ morche$_3$ lok$_4$Ta$_5$

'the$_5$ man$_4$ is-soaking-himself-to-death$_{2,3}$ in-the-rain$_1$'

(54) lokTake bhijie marche ora

'they're drenching the man to death'

(55) maNSo reMdhe morche lokTa

'the man is killing himself cooking meat'

(56) lokTake die maNSo raMdhie marche ora

'they're making the man kill himself cooking meat'

As the examples show, (52ii) is a valid real pattern. So (52i), I would argue, is a valid virtual one. What prevents it from being real is the formal constraint blocking second causatives in the language. It is clear from (56) that a causativized "three-place-predicate" stem is derivable, but only from a "two-place" stem that isn't itself a causative.

37 Recall that the discussion of tetrads started out with the idea that IP and IV, TP and TV go together. Now we have LP-GP pairs (paragraph 36) rather than IP-TP pairs (paragraph 27). This is an internal reason for saying "ROUGHLY, I and T vectors go with I and T poles respectively". It has to do with tetrads 'quasi-interfering' as in (52). A transitive pole may take a transitive vector in (A) and it (or a very similar transitive pole) may take an intransitive vector in (B). This fact is internal to the tetrad system. We have also seen an external reason for saying "roughly". Some vectors fall outside the tetrad system. They work singly, like /aS/ always expressing M_1 (paragraph 32), rather than in pairs, like /aS/ expressing M_2 for L poles and /an/ doing the job for G poles. One might wish to say that there are two 'homonymous' P/V stems spelled /aS/, or one might have one lexical entry and concentrate on different grammatical statuses. Be that as it may, the /aS/-stem in (43) is a nontetradic vector. Its nonassociation with /an/ shows that the mere fact of a P/V stem I_i (or T_i) being a member of an I-T pair doesn't imply that, whenever it is used as a vector, I_i (or T_i) will always be the IV (or TV) of a tetrad. To avoid confusion, I will once again change the lettering of the tetrad.

(57) It was IP, IV

TP, TV paragraph 28

It became LP, IV

GP, TV paragraph 36

Now it becomes LP, LV 'Lesser Pole, Lesser Vector

GP, GV Greater Pole, Greater Vector'

Now I can quite unambiguously say that /aS/ is always the I of the I-T stem pair /aS/-/an/, which may function as an LP-GP pair ((41iii)) or as an LV-GV ((42i)); but this I, as a vector, may also function as a non-LV ((43)).

SECTION II.C.

38 I have cited /aS/-/an/ as an I-T pair whose I can function as a non-LV. The stem pair /ja/ 'go' - /de/ 'give' functions as an LV-GV pair but is not an I-T pair (though /ja/ is an I and /de/ is more or less a T).

(58) SeS_1 $hote_2$ $tinTe_3$ $beje_4$ $jabe_5$

'it will take up to three o'clock and more for it to be finished'

"to-be_2 $finished_1$ $three\text{-}o'clock_3$ $will_5$ $be\text{-}struck\text{-}plus_4$ go_5"

SeS_1 $korte_2$ $tinTe_3$ $bajie_4$ $debe_5$

'they will take up to three o'clock and more to finish it'

"to-$make_2$ $finished_1$ [they] $will_5$ $strike\text{-}plus_4$ $give_5$ $three\text{-}o'clock_3$"

*SeS hote tinTe beje debe

*SeS korte tinTe bajie jabe

_____

(59) |poRe ja | "fall-plus go"

|<u>phele de</u> | "drop-plus give"

_____

|uThe ja | "rise-plus go"

|<u>tule de</u> | "raise-plus give"

_____

|jene ja | "know-plus go"

|<u>janie de</u>| "inform/report-plus give"

Now, when we look at polar usage, /ja/ 'go' and /de/ 'give' do not form an I-T pair; ;but /ja/ and /paTha/ 'send' do, so /ja/ is an I; and /pa/ 'get' and /de/ form an LP-GP pair, so that /de/ is a transitive GP which would have been a T if /pa/ were intransitive.

(60) ora_1 $dilli_2$ $jabe_3$

'they$_1$ will-go$_3$ to Delhi$_2$'

ami$_1$ oder$_2$ dilli$_3$ paThabo$_4$

'I$_1$ will-send$_4$ them$_2$ to Delhi$_3$'

(61) unrelated to (60): ora$_1$ dilli$_2$ pabe$_3$

'they$_1$ will-get$_3$ Delhi$_2$' (as a gift)

ami$_1$ oder$_2$ dilli$_3$ debo$_4$

'I$_1$ will-give$_4$ them$_2$ Delhi$_3$' (as a gift)

39 Both /paTha/ and /pa/ are, rather half-heartedly, P/V stems: /pa/ occurs as a vector to the pole /bhab/ 'think' and no other; /paTha/ occurs with three poles denoting expressive action -- /bOl/ 'say', /lekh/ 'write', /Dak/ 'call'. One cannot honestly view /paTha/ as a GV, because these poles have no real LPs to match them. As for /bhab/, it does have a GP to match it -- /bhaba/ 'worry, cause to be concerned, cause to ponder' – but /bhebe pa/ happens not to have a GP, GV counterpart.

(62) er$_1$ karon$_2$ ki$_3$ hote$_4$ pare$_5$ bhebe$_6$ pacchi$_7$ na$_8$ ami$_9$

'I$_9$ can$_7$not$_8$ think$_6$ what$_3$ the cause$_2$ of-this$_1$ may$_5$ be$_4$'

(63) *er karon ki hote pare bhabiye [X]chiS na tuy amake

40 The /ja/-/de/ case illustrates a principle which shows up elsewhere. For the lack of a better term, let us call it the Lexical Specificness of LV-GV pairings in the tetrad system.

(64) Lexical Specificness: LV-GV pairings must be specified as such, for the following reason. Although an LF-GV pair is typically an I-T pair, (i) the set of I-T pairs does not contain the set of LV-GV pairs, and (ii) the set of LV-GV pairs does not contain the intersection of the set of I-T pairs with the set of pairs of I/V stems.

(64ii) shows up in /ja/-/paTha/, an I-T pair of P/V stems which isn't an LV-GV pair. A particularly strong example of (64i) is /de/ 'give' - /ne/ 'take'. These stems are both transitive and so cannot conceivably form an I-T. But that doesn't stop them from being a widely used LV-GV.

(65) = (10) tomake ami e kajTuku kore debo

'I'll do this bit of work for you'

(66) tumi amaY die e kajTuku korie nebe

'you'll get me to do this bit of work for you'

41 These examples have casually introduced something new into the discussion. The stem /de/ 'give' is GV for the LV /ja/ 'go' and LV for the GV /ne/ 'take'. In these two roles it expresses two different orientations which I will try to explicate in terms of ordinary polar meanings. As GV to the LV /ja/ 'go' – say, in

(67) pakhi$_1$Ta$_2$ uRe$_3$ jabe$_4$

'the$_2$ bird$_1$ will-fly$_3$ away$_4$' "fly-plus$_3$ will-go$_4$"

(68) tuy pakhiTake uRie dibi

'you will release the bird into the air' "fly(tr.)-plus will-give"

-- the stem /de/ 'give' means '"give" the completion (the "going" to perfection) of the verb-process to the object/ experiencer/ Patient'. When the same stem /de/ functions as LV to the GV /ne/ 'take', as in (65)-(66), it suggests ' "give" the consumption (the "taking" in fullness) of the verb-act to the recipient/ indirect object/ Patron'. These formulas, though clumsy, quite consistently provide appropriate descriptions of Manner in the examples I have considered.

42 The case of /phEl/ 'drop' is related and more intricate.

43 This vector stem teams up with two LVs – /pOR/ 'fall' and /ja/ 'go'. The LV /pOR/ indicates occurrence of a somewhat abrupt or unexpected change of state or position and implies that this unexpectedness has some special consequences for the Patron (surface or environment impinged upon) or for the Patient (state-changing person or object that does the impinging). Thus /otithi eSe poRlo/ 'guests happened to come' states that the happening befell the host, while /lokTa joRie poRlo/ 'the man got involved' concentrates on the fate of the involve. Correspondingly the GV /phEl/ has two shades of implication: /tuy amake joRie phelli/ 'you landed me into this soup' and /tuy aloconaY baje kOtha ene pheliS/ 'you bring up trivia in discussion' impute responsibility for hurting, not 'me' and 'trivia', but rather 'me' and '[serious discussants]'. But it seems to me to have only one MEANING here – holding the subject of the compound verb responsible for the consequences of unexpectedness, whatever they may be. When this subject is not present – that is, when /pOR/ rather than /phEl/ determines actional perspective, as in /otithi eSe poRlo/ -- there is a

suggestion that the Patient might be responsible; this disappears when /phEl/ is used and someone can be genuinely blamed.

44 Now, the other LV mentioned, /ja/ 'go', simply denotes attainment of the result or condition of action-end: /otithi eSe jabe, baje kOtha ese jabe, ami joRie jabo/ perfectivize (think of Slavic perfectives, not of the English *have + en*) the statements 'guests will arrive', 'trivial matters will come up', 'I'll become involved'. Since /ja/ per se neither suggests any specialness of consequences nor any half-responsibility for such as may ensue, its natural GV counterpart is, it would seem, /de/ 'give' as in (67)-(68), (69)-(70).

(69) ami SOb bhule jacchi 'I'm forgetting everything'

(70) hOtobhaga amake SOb bhulie dicche

'the son of a gun is making me forget everything'

(71) *bhule phEl, *bhulie phEl, *bhule pOR, *bhulie pOR

Notice that in these cases Patient and Patron coincide; 'the bird' is both the direct object of /uRie dibi/ (subject of /uRe jabe/) and its indirect object (recipient of the 'flight-giving' act); the forgetter both undergoes the action of /bhulie dicche/ and receives the gift of oblivion. Patient and Patron may be dissociated. When they are, an HEXAD emerges ((75), the only one I have found), not analyzable into interlocking tetrads.

(72) amar$_1$ bhat$_2$ *puRe$_3$ ja*cchilo$_4$ *LP, LV*

'my$_1$ rice$_2$ was-getting$_4$ burnt$_3$'

(73) ami$_1$ bhat$_2$ *puRie$_3$ phel*chilam$_4$ *M(iddle)P, MV*

'I$_1$ was-burning$_{3,4}$ [my] rice$_2$'

(74) tuy$_1$ amar$_2$ bhat$_3$ *puRie$_4$ di*cchili$_5$ *GP, GV*

'you$_1$ were-burning$_{4,5}$ my$_2$ rice$_3$ [for me]'

(75) *LP, ja – MP, phEl – GP, de*

(76) proSno$_1$ du$_2$To$_3$ *gulie$_4$ ja*cche$_5$ *LP, LV*

'the$_3$ two$_2$ questions$_1$ are-getting$_5$ confused$_4$'

(77) amra$_1$ proSno$_2$ du$_3$To$_4$ *gulie*$_5$ *phel*chi$_6$ *MP, MV*

'we$_1$ are$_6$ confusing$_5$ the$_4$ two$_3$ questions$_2$'

(78) kOthar$_1$ moddhe$_2$ eSe$_3$ poRe$_4$ tuy$_5$ proSno$_6$ *gulie*$_7$ *di*cchiS$_8$ *GP, GV*

'barging$_{3,4}$ into$_2$ [the] conversation$_1$ you$_5$ are$_8$ confusing$_7$ [the] questions$_6$ [for us]$_8$'

In this pattern, /phEl/ doesn't suggest any notion of "unexpectedness" or "consequences". It just assigns responsibility to the subject of its compound verb. This seems to me the core meaning of the vector /phEl/. It contracts the perfective nuances of /ja/, or the "consequence of unexpected action" coloring of /pOR/ depending on which one of them it is 'affiliating' to as its LV counterpart.

45 This elaborate discussion of the different roles that /de/ (paragraph 41) and /phEl/ (paragraphs 42-44) play in their different affiliations ties in with the M_1-M_2 talk of paragraph 32 which had to do with presence and absence of affiliation rather than plural affiliation. A second general statement (after Lexical Specificity) is in order:

The Active Influence of Lexical Affiliates: The meaning of a vector is considerably determined by its lexically specific affiliations. A vector with two affiliations, or one which may affiliate or not do so, will have different meanings corresponding to these different statuses.

46 Now I turn to the other major novelty in the evidence just presented – the hexad phenomenon. Although it clearly is not a case of interlocking tetrads like (52), I think I can still show it to be an epiphenomenon of tetradiana, albeit of a different sort. I propose to think this way: What would be the status of (73) and (77) if this /phEl/ were not felt as an MV belonging to a threesome team LV-MV-GV? It would be a GV in search of an LV. Now here is an important fact: its natural LV, /pOR/, does not occur with /poR/ 'burn' or /gulo/ 'confuse' (*/puRe pOR, *gulie pOR/). In all hexad instances I have found, the pole fails to tolerate the vector /pOR/, so that /phEl/ is left stranded, unaffiliable in a normal tetradic fashion. It seems as though the hexad were a way of making up for the loss of a natural tetrad: */gulie pOR/ had no business to be ungrammatical, but since it is, the tetrad /gulie ja – gulie de/ which is in some sense its neighbor adopts the residual /gulie phEl/ and creates a special MV role for /phEl/. This is confirmed by the fact that LP-MP-GP is formally speaking a pseudoseries: the MP-GP difference is not analogous to that between LP and MP; the former is a formally unmarked difference of 'diathesis' (action for self versus action for others) and the latter is a true transitivity contrast. However, I can see that one might want to defend the genuine-hexad reading of these facts and argue that the ungrammaticality of */puRe pOR/, */gulie pOR/ and the like arises from the hexad and not the other way round. I have, as yet, no way of dealing with this line of

objection, for reasons set forth in Section II.D. Therefore, I will stop short of stating a third principle constraining the form and functioning of affiliation fields in the lexicon. The case for such a principle would be much stronger if I could find a hexad involving other vectors.

46[sic] This concludes the substantive points I have to make about relations between vectors with special reference to their collusion with the interpolar affiliations which constitute the interesting general field of which our Specificities are a tractable subdomain. I would now like to make a short formal and theoretical comment.

47 In Section I, I argued that the difference in meaning between P/V stems in vector position and those in polar position is a function of their occurrence in different syntagmatic constructions. In Section II, I have argued that the differences in meaning between instances of the same vector that seem to occur in syntactically nondistinct environments are predictable on the basis of their affiliating themselves to different paradigmatic sets; and that these sets, although they do articulate in interesting ways with lexical pairings defined in terms of strict subcategorization features of lexical entries, have a quite specific organization not derivable from such syntagmatic constructs. Pretheoretically, it also seems to me that this organization is not amenable to insightful statement in terms of paradigmatic constructs such as features and markers seen as intrinsic to single lexical entries. But I can only state this as a vote for one sort of research program in word semantics. I am not aware of any studies of the Bangla lexicon to agree or disagree with on these matters.

SECTION II.D.

48 In paragraph 45 I was in effect treating the ungrammaticality of */puRe pOR/ etc. as magical. This way of doing things has pervaded the whole discussion to some degree. IF pole A goes with vector B, many things become predictable. But the ‘if’ remains a primitive given. There must be some intelligent way to ask what determines these givens. This paper has made that problem both more approachable and more difficult. Approachable: in seeking to account for (41), one will ask fewer questions because the answers to one-at-a-time questions are now known to be interlinked. Difficult: the inquiry has to be a structured one and its structure must be geared to some of the patterns discussed in this paper: how this is to be done is not at all obvious.

49 Quite conceivably, such an inquiry may tie in with a lexical research program that rejects the tentative suggestion of paragraph 47 – a program which, working with entry-intrinsic constructs, will seek to characterize relations entirely in terms of these relatables. Such assumptions pretty much hold the field at the present time. But whatever its design, only research of this sort would make it possible to argue one way or the other about the status of */puRe pOR/ being an effect or a cause, problematize our understanding of unaffiliated vectors, and in general clarify further the relation between individual semantic core values of items involved and enrichment provided by specific interactions between syntagmatic partners and between paradigmatic affiliates.

Appendix 1

I have used Punya Sloka Ray's standard transcription of Bangla in this paper. The symbols i e a o u k g t d n p b m r l s h have their usual values (t d are dental). N is a velar nasal. T D are retroflex stops. R is a retroflex flap. S is a palato-alveolar whereas c j are alveolo-palatals. Y W correspond to e o and y w to i u. E O are higher-low vowels. M indicates nasalization of what it follows.

Appendix 2

The Bangla verb has four nonfinite forms:

The Infinitive in /-Wa/ for monosyllabic stems (/jaWa/ 'to go'; /W/ is lot after a final consonant: /oTha/ 'to rise') and /-no/ for other stems, which all end in /a/ or /o/ (/phurono/ 'to use up/ get used up', /oThano/ 'to cause to rise').

The Conjunctive in /-ye/: the /y/ is invariably lost but changes the vowel of one or two preceding syllables: /uThe/ 'rising/ having risen', /uThie/ 'causing/ having caused to rise'.

The Confinitive in /-yte/: the /y/ is retained or lost and it causes or doesn't cause vowel change: /uThte/ 'to rise/ rising', /oThate/ 'to cause/ causing to rise', /gayte/ 'to sing/ singing' from /ga-/, /boyte/ 'to carry/ carrying' from /bO-/.

The Juxtapositive in /-yle/: /y/ behaves as in /-yte/: /uThle/ 'if X rises', /oThale/ 'if X causes Y to rise'.

Homologously, there are four finite Indicative bases. Thus the basic tenses are Present, Past, Conditional, and Future, with stems in /-0-, -yl-, -yt-, -yb-/ respectively. Personal endings depend on the stem:

Formal	Intimate (*2, 3*)		*3*-person (*2*)	*2*-person Casual	*1*-person Semi-intimate
Present	en/Yn	iS/yS	e/Y	o/W	i/y
Past	en	i	o	e	am
Future	en	i	e	e	o
Conditional	en	i	o	e	am

There is one non-Indicative Mode – the Imperative. It has present and future forms. Only the latter are used with the negative particle /na/. There are no *1*-person forms. The endings are:

Present	un/wn	o/W	uk/wk	0
Future	yb-en	yo	yb-e	iS/yS

The conditions of glide formation and dropping and vowel harmony are somewhat complex.

Forms of a defective verb stem, /(a)ch-) 'to be/ stay', or its suppletor /thak-/ 'to be/ stay', are affixed as Auxiliaries to the Conjunctive and Confinitive to form Aspects. (Notice that /(a)ch/ + what I am here calling /-yl-/ = /ch-il-/.) When the Auxiliary is /(a)ch-/, i.e. in the Indicative Present and Past, the Confinitive suffix loses its /e/ and

further contractions take place: /oTh+yt+che/ 'is rising' ends up as /uThche/, for example. There are two, mutually exclusive, Aspects – Perfective (Stem + Conjunctive suffix + Aux + Ending) and Progressive (Stem + Confinitive suffix + Aux + Ending).

The Auxiliary use of /(a)ch/ and /thak/ is in clear syntactic-semantic contrast with their use as vectors.

The labels given here are not very informative semantically, but his is no place for a monograph on the subject. I will only explain the coinage "Confinitive". The *conjunctive* is traditionally glossed with a 'having –en' form and has been said to indicate 'a succession of actions or events done by or with reference to the same subject'. But this is wrong. The traditional name "Conjunctive" suggests a better heuristic definition: the form indicates a *conjunction* of events which often are successive but may be simultaneous as in /ceMcie bOl/ 'say shoutingly' (not 'say, having shouted'). It is nonsuccessive conjunction that can be specially marked, by iteration: /likhe likhe pORa/ 'to read in a way that involves writing frequently'. As in this example, Conjunctive iteration may underscore an adverbial relation – instrumental (as in this case) or casual. Now, one way to avoid suggesting this, to state only the time-place relation, is to iterate the Confinitive: /likhte likhte pORa/ 'to read while writing'. Thus the function of this form is partly similar to that of the Conjunctive when both are iterated. But in simplex shape it is more akin to the Infinitive (hence the name). It is used when it and the subordinating verb have the same subject (which cannot be overtly manifested more than once in the 'clause', the subjacency-domain) while the Infinitive is used otherwise. Thus, /tor piano bajano$_3$ dekhte$_4$ amar bhal lage/ "I like (for me) to watch$_4$ for you to play$_3$ the piano" 'I like to watch you playing the piano'. This half-conjunctive, half-infinitive status of the form which also shows up in nonsimple verbs (Appendix 3), to my mind, makes it deserve the hybrid name that I am proposing for it.

Appendix 3

There are some things about compound verbs and their traditional description, not discussed in the body of the paper that I wish at least to note.

First, vectors can be used two at a time, e.g. /o SOkoler kaj kore die bERaY/ 'he goes around doing everybody's work (for them)'. This is a limited syntactic device. Its grammaticality constraints are severe, and as yet undescribed. Traditional scholarship never mentions the phenomenon. The important question of the internal hierarchical structure of such constructions I intend to take up in a paper I am writing now.

I turn now to boundary considerations. In his earlier work S.K. Chatterji (*The Origin and Development of the Bengali Language*, Calcutta University Press, 1926) made the term *compound verb* cover two more classes of nonsimple verbs – (i) what has been called the Conjunct Verb construction (not related to the Conjunctive), which his later work and that of describers of other Indic languages has assumed to be quite distinct from the Compound Verb; and (ii) what we might call the Confinite Verb, which Chatterji and Ray handle as a variant of the Compound Verb but is formally distinct in Bangla (though much less so in Hindi).

The Confinite Verb consists of a pole, with the Confinitive ending, followed by a 'vector' chosen from a special set. This construction even has another Compound-Verb-like feature: infrequently, under obscure conditions, double 'vectorization' is possible – compare /kore die bERaY/ (underlyingly /kOrye deye bERae/) with /dekhte$_1$ pete$_2$ caY$_3$/ 'wants$_3$ to get$_2$ to see$_1$' (underlyingly /dEkhyte payte cae/). But I would be prepared to call Confinite Verbs 'Compound', and use the term 'vector' without quotes in this context, only if Confinite Verbs could be shown to contrast systematically with homologous nonconfinite sequences of the form Pole + /te/ + Word Boundary + Pole + Ending, and if Confinites were non-tolerant of Double Negation. They fail both these tests. Furthermore this construction is more fragile than the true Compound Verb. It is okay to say /ekhane$_1$ ami$_2$ parbo$_3$ tinTe$_4$ jiniS$_5$ korte$_6$: khaTte$_7$, khete$_8$ ar$_9$ ghumote$_{10}$/ 'here$_1$ I$_2$'ll-be-able$_3$ to-do$_6$ three$_4$ things$_5$: to-work$_7$, to-eat$_8$, and to-sleep' but not */o nieche duTo jiniS kore: khee ar ghumie/ 'he's done two things: eaten and slept'. Even if, knowing all this, one seeks tetrads among Confinites, one is not rewarded in the least.

This does not destroy the integrity of the field of Confinites in itself. Nor would I deny that this field bears some nontrivial relation, not yet known, to Compound Verbs. But this relation is not what it is asserted to be.

Conjunct Verbs and their relation to Confinites would take us too far afield. I will just say this: Conjunct Verbs are a very heterogeneous lot. From the textbook 'passives' (/kOra hObe/ 'will be done') down to verbalized nominals (/SaMtar kaT/ 'swim' "cut a swim"), they probably do share some properties, though I doubt if these suffice to delimit a class. Verbalized (two-word) pole stems constitute the bulk of verb stems in many styles of the language. I have avoided them all through the paper to ensure perspicuity of examples: they behave exactly like one-word pole stems for all our purposes.

Appendix 4

Prior to the research that led to the results reported, I plotted 15 major vectors against 626 poles (nearly all the simplex poles in my vocabulary, excluding some marginal items for which grammaticality judgments were completely uncertain), assessed the grammaticality of the combinations with varying degrees of judgment reliability, and totted up the 'okay' entries (a) in each row and (b) in each column. The information of (a) – answers to the question schema "for each pole *P* how many (*n*) different vectors combine with *P* to yield an okay compound verb?" – was recorded by entering $P_{n=i}$, the number of *P*'s for which $n = i$, under $n = i$ for $0 \leq i \leq 15$. The answers in (b), to the question schema "for vector number *j*, with how many (*m*) different poles does it combine to yield an okay compound verb?", were directly entered under values of *j* ($1 \leq j \leq 15$). I learnt that some vectors had a high *m* and some were rarely used. I learnt that for most poles $3 \leq n \leq 9$. Given the nature of the data I could not expect it to answer more elaborate questions correctly.

COLOPHON

Old colophon, 1976: The research reported here was done in partial fulfillment of requirements for a Master's Degree at New York University. I would like to express my gratitude to Professor Lewis Levine for his guidance and to Ms Lyn Ohira and Dr James Gair for suggestive conversations about other languages. New colophon, 2009: Some of the reasoning presented here does not appear in the published texts based on this research, and the simplest way of making the methodological assumptions available to readers who may be interested is to publish this text; hence the decision to do so.