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Bilingual Complex Verbs: So what's new about them?[1]

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Introduction

In this paper I describe bilingual complex verb constructions in Bengali-English bilingual speech. Bilingual complex verbs have been shown to consist of two parts, the first element being either a verbal or nominal element from the non-native language of the bilingual speaker and the second element being a helping verb or dummy verb from the native language of the bilingual speaker. The verbal or nominal element from the non-native language provides semantics to the construction and the helping verb of the native language bears inflections of tense, person, number, aspect (Romaine 1986, Muysken 2000, Backus 1996, Annamalai 1971, 1989). I describe a type of Bengali-English bilingual complex verb which is different from the bilingual complex verbs that have been shown to occur in other codeswitched Indian varieties. I show that besides having a two-word complex verb, as has been shown in the literature so far, bilingual complex verbs of Bengali-English also have a three-part construction where the third element is a verb that adds to the meaning of these constructions and affects their aktionsart (aspectual properties). I further show that monolingual Bengali complex verbs directly contribute to the rise of these bilingual complex verbs. This paper is divided into three sections. The next section discusses relevant literature on monolingual and bilingual complex verbs in Indian languages and their bilingual varieties. The third section accounts for the verbal system of Bengali and the fourth section describes Bengali-English complex verbs.

Most of the new bilingual Bengali-English data in this paper come from a fieldwork-based corpus of 30 fluent bilingual speakers of Bengali-English (age range 20-45 years) residing in Kolkata, India. I recorded informal conversations between these speakers. In addition, a few of the examples mentioned in this paper are mine, as a native speaker of Bengali-English.

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2 Literature Review

Complex verbs occur frequently in Indian languages (Butt 2003, Abbi and Gopalakrishnan 1991). Butt (2003) talks about complex verbs of monolingual Indian languages such as Urdu, Hindi and Bengali. Monolingual complex verbs have an N+V structure or a V+V structure. In an N+V structure, the noun is followed by a light verb such as *do* which bears inflections and turns the N+V construction into a verb. For example, *bikri kɔra* 'sale do' is an N+*do* construction in Bengali, which means 'sell'. The V+V structure consists of two or more predicational elements, where the main verb provides the main semantic information to the construction and is followed by a light verb which provides subtle semantic modifications such as benefaction, suddenness, volitionality and affects the aktionsart of the joint predication. The choice of light verb lends a slightly different meaning to the construction. An example of this structure is *b*^{h}*ule gec*^{h}*i* 'forget go' meaning '(I/we) have forgotten'. Together these two verbs predicate as a single element. The light verbs that occur in a V+V construction are verbs such as *give, take, go, move, sit* etc. These light verbs do not predicate fully and are identical in form to a main verb in the language. Butt (2003) does not make a distinction between light verbs such as *do* and *be* (that occur in N+*do* constructions) and light verbs such as *give, take, go, sit, come* etc. that occur in V+V constructions. However, in this paper I show that there are some crucial distinctions between these two types of light verbs (see also Basu 2010, which deals with the semantics and event structure of compound V+V verbs in Bengali).

Bilingual complex verbs also occur frequently in codeswitching between Indian languages and English. Romaine (1986) reports the occurrence of these verbs in bilingual Punjabi-English speech. In her data, the complex verbs consist of either English nouns, verbs, verbal nouns (such as *lobbying*) or phrasal verbs (such as *pick up*) alongside Punjabi operators such as 'do' *karna* and 'be' *hona*. Operators *do* and *be* distinguish between the stativity of the constructions, in that *do* occurs in actional constructions and *be* in stative constructions. The operators modify the English nominal or verbal elements and bear inflections. Romaine uses the term *compound verb* to refer to these constructions and says that there is a tendency for English verbs to occur more frequently in such constructions.

Annamalai (1971) distinguishes between constructions such as *try pannu* 'try' (V+*do*) and *business pannu* 'business' (N+*do*) in Tamil-English bilingual speech. He states that bilingual Tamil-English V+*do* constructions are different from bilingual N+*do* constructions because accusative case can be optionally added to *business*, but not to *try*. This shows *business* is a noun and not a verb. In addition, dummy verb *do* is added mainly after a main verb as a carrier of inflection. In a later paper Annamalai (1989) claims that balanced bilinguals and imbalanced bilinguals (people who are stronger in Tamil than in English) can be distinguished on the basis of the types of mixed compounds they use. He states that imbalanced bilinguals during code-mixing conform to native Tamil N+*do*

constructions by using constructions like 'reservation do' and balanced bilinguals would use constructions such as 'reserve do' which are innovations in bilingual speech because in native Tamil, a V+*do* construction cannot occur. More research obviously needs to be done in this area.

Muysken (2000) distinguishes between bilingual N+*do* constructions from bilingual V+*do* constructions. He states that in bilingual V+*do* constructions, the foreign verb is adjoined to the helping verb of the native language, resulting in an alternational strategy which is different from noun incorporation, where the foreign noun occurs before a helping verb such as *do* because it is selected by it. For Muysken, the foreign verbs in complex verb constructions are not borrowings, because they are not phonologically adapted to the recipient language. He also states that bilingual complex verbs are productive, which is true for Bengali-English complex verbs with common English verbs such as *start, use, think* occurring in such constructions. However, Muysken (2000), Romaine (1986), and Annamalai (1971, 1989) do not mention anything about these verbs having a three-word structure.

Thompson (2010) briefly mentions verb borrowings in Bengali and says that any new verb created in Bengali will have an N+V structure. Bhattacharya (2001) states that when English verbs are borrowed into Bengali, they appear in complex verb structures along with Bengali operators such as *do* and *be* bearing inflection (see also Pillai 1968 for a brief description of Bengali verb borrowings).

In the next section I describe the verbal system of monolingual Bengali, and show later how bilingual complex verbs are based on Bengali structures.

3 The Verbal System of Bengali

The verbal system of Bengali can be divided into two types of verbs, simple verbs and complex verbs. As in other Indo-Aryan languages, complex verbs occur abundantly in this language. These complex verbs consist of several classes of constructions which are of the Noun/Adjective + *do* type (N/A+*do*), Noun/Adjective + *do* + Verb type (N/A+*do*+V) and Verb + Verb type (V+V). These properties of Bengali are outlined in table (1). N/A+*do* constructions have been called *conjunct verbs* and V+V constructions have been called *compound verbs* (Thompson 2010, Bhattacharya et al. 2006). The term *complex verb* is often used to refer to *conjunct* and *compound* verbs together as a class of verbs (Butt 2003). Although in the discussion on monolingual Bengali I will distinguish between *conjunct* and *compound* verbs, I will not make a strict distinction between these two constructions in the discussion of bilingual Bengali-English verbs. This is because *conjunct* constructions and *compound* constructions are not a source of confusion in monolingual Bengali. But the distinction between N+*do* and V+*do* in bilingual complex verbs is a matter of some debate and therefore will not be addressed in detail in this paper. This issue needs to be researched further.

Table 1: Verbal system of Bengali

Bengali Verbs	Sub types	Components of verbs	Examples of each type Examples	Gloss	Translation
Simple verbs		1 verb	lek^{h}a	'write'	to write
			pɔɽa	'read'	to read
Complex verbs	Conjunct verbs	N+ *do* N + *do* + V	bikri kɔra	'sale do'	to sell
			ɟiggeṣ kore newa	'question do take'	to ask for oneself
	Compound verbs	V + V	ṣue pɔɽa	'sleep fall'	to fall asleep
			k^{h}e newa	'eat take'	to eat for oneself

3.1 Conjunct Verb Constructions of Bengali (N+*do* / N+*do*+V)

In Conjunct verbs constructions, nouns or adjectives occur along side helping verbs such as *kɔra* 'do'. The nouns give the semantic content to the conjunct and the helping verbs turn the constituent N+V into a predicate. The helping verb also bears inflection. An example is *b^{h}ul kɔra* 'to mistake', formed by the noun *b^{h}ul* 'mistake' and the verb *kɔra* 'do'. Bengali has a limited number of simple verbs and so many events are expressed by these N+V combinations.

Some conjunct verbs also have a third element, occurring after the noun and the helping verb, forming a N+*do*+V structure. This third element is a verb that alters the aktionsart of the complex verb and provides meaning. This verb has been referred to as a *vector verb* (Dasgupta 1977, Ramchand 1990), or it has been treated as part of the class of *light verbs* (Butt 2003), including verbs such as *do* and *be*. However, in this paper I make a distinction between helping verbs and vector verbs in bilingual Bengali-English because often they perform different functions. I use the term *helping verb* to refer to verbs such as *do* and *be* that turn N+V constituents into verbal predicates. The term *vector verb* is used for verbs such as *go, come, throw, sit, give* and *take* that affect the aktionsart of the complex verb and provide semantic nuances such as benefaction, suddenness and volition. (1a) and (1b) illustrate the two-part and three-part constructions.

(1a) ami ok-e bæpar-ʈa **ɟiggeṣ kor-ec^{h}-i** **(N+*do*)**
1SG 3SG-ACC thing-DEF question do-PFV-1P
I have asked him/her about the thing.

(1b) ami ok-e o-ʈa **ɟiggeṣ kor-e ni-ec^{h}-i** **(N+*do*+V)**
1SG 3SG-ACC thing-DEF question do-PFV.PTCP take-PFV-1P
I have asked him/her about the thing for myself (completely).

In (1a), which has no vector verb, the helping verb *korec^{h}i* 'did' bears inflection of tense, person and aspect. In the absence of a vector verb it is not clear for whom the action of asking was performed and also if the action of asking was completed. The vector verb in (1b) *niec^{h}i* 'take' makes it clear that the subject asked about the thing for his or her own self and also indicates that the action of asking was complete by adding telicity to the predicate. In a two-part conjunct verb, the helping verb bears tense, person and aspect inflection. In a three-part conjunct this verb is in the perfective participle form, whereas the vector verb bears tense, person and aspect inflection. Not every noun adjacent to a verb forms a conjunct verb. In regular object noun-verb constructions, the nouns are merely arguments of the verbs (2), which do not form a complex verb construction (for relevant distinctions see Bhattacharya et. al. 2006:347-350).

(2) o ama-r ʈ^{h}eke **ʂahaȷȷo** **ni-ec^{h}-e** **(O V)**
3SG 1SG-GEN from help take-PFV-3P
He/She has taken help from me.

3.2 Compound Verb Constructions of Bengali (V+V)

In compound verbs two verbs are adjacent to each other and express a single event. The first or the main verb is in the non-finite perfective participle form and the second verb is a light verb that carries tense, aspect and person inflection (Dasgupta 1977, Ramchand 1990, Basu 2010, Paul 2003, Abbi and Gopalkrishnan 1991, Butt 2003). The first verb is often referred to as the *pole* and the second verb as the *vector verb* (cf. Dasgupta 1977, Ramchand 1990). The examples below illustrate the difference between a simple verb and a complex verb.

(3a) ami boi gulo **guc^{h}i-ec^{h}il-am** **(simple verb)**
3SG book PL arrange-PST.PFV-1P
I had arranged the books.

(3b) ami boi gulo **guc^{h}i-e** **ɖi-ec^{h}il-am** **(cplx verb: V+V)**
3SG book PL arrange-PFV.PTCP give-PST.PFV-1P
I had arranged the books (completely for someone else).

In (3a) the verb *guc^{h}iec^{h}ilam* 'arranged' carries inflection, while (3b) has a compound verb, in which the pole verb *guc^{h}ie* 'arranged' is in the perfective participle form, and the vector verb *ɖiec^{h}ilam* 'gave' carries inflection. Without the vector verb in (3a) it is not clear as to whether the books were arranged for the subject or for someone else and if the action of arranging was complete. In (3b) the vector verb loses its inherent meaning as *give* and instead specifies a benefactive role, by making it clear that the books were arranged for someone other than the subject (Paul 2003) and adds telicity to the predicate. In (3b)

perfective aspect is marked on both the pole and the vector, although the pole is always in perfective aspect irrespective of what aspect the vector has.

Example (4b) shows a vector that affects only the aktionsart of the construction. In (4a) the simple verb *poɽec^{h}e* 'fell' indicates that the event of falling has happened but does not indicate whether it reached its endpoint. The vector *gæc^{h}e* 'go' in 4(b) makes it is clear that the event of falling has reached its endpoint. The verb *gæc^{h}e* inherently means 'has gone' but when it occurs in the position of a vector it does not carry any meaning of *going*. It only alters the aspectual information of the construction. Therefore *gæc^{h}e* 'go' is slightly different from *ɖiec^{h}i* 'gave' because the latter adds an additional meaning to the construction which the former doesn't (see also Basu 2010).

(4a) ʂe gac^{h} ʈ^{h}eke **poɽ-ec^{h}-e** **(simple verb)**
3SG tree from fall-PFV-3P
He/She has fallen from the tree. (Thompson 2010)

(4b) ʂe gac^{h} ʈ^{h}eke **poɽ-e** **gæ-c^{h}-e** **(complex verb: V+V)**
3SG tree from fall-PFV.PTCP go-PFV-3P
He has fallen from the tree (completely). (Thompson 2010)

Different verbs can occur independently as simple verbs, pole verbs or vector verbs in Bengali. However, when they occur as vectors, they often lose their inherent meanings and add a slightly different meaning to the construction. For example, a vector such as *ɖiec^{h}e* 'give' indicates benefaction, *niec^{h}e* 'take' indicates doing something for oneself, *boʂec^{h}e* 'sit' adds suddenness, *p^{h}elec^{h}e* 'throw' indicates completion. There are about 12 to 16 vector verbs that can occur as vectors in Bengali (Thompson 2010, Basu 2010, Paul 2003) and all these verbs indicate change of state. The verbs that are commonly recognized as vector verbs are *go, throw, rise, lift, fall, sit, come, move, give,* and *take.*

There have been different claims about the status of the vectors in compound verbs. Hook (1974:94-97) and others claim that vector verbs of Indo-Aryan languages are semantically empty and have undergone a process of grammaticalization. I use the term grammaticalization to refer to the process by which lexical items such as nouns or verbs change into items that serve only a grammatical function in a language, often through semantic bleaching. Abbi and Gopalakrishnan (1991) argue that vector verbs are multi-functional and have functions such as *aspectual*, *adverbial* and *attitudinal*. For example, a vector such as *gæc^{h}e* 'go' has an aspectual function where it only affects aktionsart, whereas some vectors such as *boʂec^{h}e* 'sit' have an adverbial function that mark suddenness. Basu (2010:44) suggests that vector verbs undergo different stages of grammaticalization and that some vector verbs such as *gæc^{h}e* 'go' are more grammaticalized than other vector verbs such as *bæɽacc^{h}e* 'roam'.

Vector verbs of Bengali can be analyzed in terms of the mechanisms of grammaticalization proposed by Heine and Kuteva (2003). Firstly, vector verbs of Bengali only show signs of desemanticization (loss of meaning). For instance, when *gæc^{h}e* 'go' occurs as a vector verb (4b), it does not add any meaning of *going* to the compound verb. It only acts as a grammatical item that carries inflections and affects the aktionsart of the construction. Therefore, in that context, it has undergone a semantic loss. However, when it occurs as a pole or simple verb, it retains its full meaning. This is in line with factors that are typical of the process of grammaticalization (Hopper and Traugott 1993).

However, in terms of the other mechanisms of grammaticalization such as *decategorization* (loss of structural properties such as the ability to bear inflections, case etc.) and *erosion* (loss of phonetic material), the vectors verbs of Bengali do not show either type of loss. Vector verbs only show a semantic reduction (see also Heine and Kuteva 2007 for additional mechanisms of grammaticalization). Some vectors such as *gæc^{h}e* 'go' and *p^{h}elec^{h}e* 'throw' show a complete loss of semantic content, while most vectors such as *give, take, sit, rise, lift, move, come,* do not show a complete loss but a reduction of semantic content. Based on these properties, it can be said that vector verbs as a whole set are in a grammaticalization path but do not act like completely grammaticalized items (see also Basu 2010:44).

Poles and vectors also need to be semantically compatible with each other (Paul 2003:8). Vectors such as *give, take, sit, come, move, keep, rise, lift,* and *roam,* when they occur in a compound, add a distinct meaning to the compound verb. That is why they pair with only those poles with which they have some semantic compatibility. The verb *nece* 'dance' is a motion verb. So in (5a) it pairs with a vector whose meaning matches with it. The vector *bæɽacc^{h}e* means 'roaming'. Therefore *nece* and *bæɽacc^{h}e* are in some sense semantically compatible with each other, because they both involve motion. However, verb *ʂue* 'lie' is stative and therefore it's pairing with a vector verb of motion sounds odd.

(5a) me-ʈa ʂara d̪in **nec-e** **bæɽa-cc^{h}-e**
girl-DEF whole day dance-PFV.PTCP roam-PROG-3P
The girl is dancing around the whole day. (Paul 2003:8)

(5b) *me-ʈa ʂara d̪in **ʂu-e** **bæɽa-cc^{h}-e**
Girl-DEF whole day lie-PFV.PTCP roam-PROG-3P
The girl is lying around the whole day. (Paul 2003:8)

On the other hand, vectors such as *gæc^{h}e* 'go' and *p^{h}elec^{h}e* 'throw' do not have a semantic compatibility requirement, in that they do not add any distinct lexical meaning to the compound but only modify aspectual information (4b). I hypothesize that this is because they have become grammaticalized and therefore

do not require semantic compatibility with their pole. (Paul 2003: 8-9, Basu 2010: 44). An example of this is *more gæc^{h}e* 'has died', *more* is 'die' and *gæc^{h}e* is 'go'. Although *gæc^{h}e* 'go' is a motion verb, *more* 'die' is not, and in spite of that, this pairing is grammatical.

4. Bilingual Complex verbs of Bengali-English (N/V+*do*, N/V+*do*+V)

Bilingual Bengali-English complex verbs combine lexical nominal or verbal elements in the bare form from English with helping verbs from Bengali. English nouns (6a), verbs (7a), verbal nouns (6b) and phrasal verbs (6c) can occur in these constructions, although English verbs occur most frequently in my corpus. The term verbal noun refers to elements such as *shopping* and *skipping*, and phrasal verbs refer to elements such as *build up, work out, hang up,* following Romaine (1986). The elements from Bengali that occur in these constructions are the helping verbs *kɔra* 'do', in active constructions, and *hɔwa* 'be', in stative constructions, in line with Romaine's (1986) observation of Punjabi-English bilinguals. Each complex construction together expresses one single event, and the bare English nominal or verbal element provides lexical meaning and the helping verbs bear tense, person and aspect inflections. Although Muysken makes a distinction between (N+*do*) and (V+*do*) structures bilingually, I do not explore this distinction because my focus are three-part bilingual verbs. The sentences below illustrate some nominal and verbal elements that occur in bilingual Bengali-English complex verbs.

(6a) ʂei moment-e **operation kor-l-o** **(N+*do*)**
That moment-LOC operation do-PST-3P
In that moment, (he) did the operation.

(6b) ʈ̪ui o-r ʂɔŋge **shopping kor-b-i**? **(Verbal noun+*do*)**
2SG 3SG-GEN with shopping do-FUT-2P
You will do shopping with her?

(6c) cinema-ʈa ɟe b^{h}abe **build up kor-ec^{h}il-o** **(Phrasal V+*do*)**
cinema-DEF COMP type build up do-PST.PFV-3P
The way they had built up the movie.

4.1 Three-part Bilingual Complex Verbs (N/V+*do*+V)

The literature on bilingual complex verbs in Indian languages has reported the occurrence of only two verbs. However some verbs of Bengali-English have a three-part structure that consists of a bare English nominal or verbal element, a Bengali helping verb and a Bengali vector verb. This structure differs from two-

part complex verbs in important ways such as meaning and aspectual nuances. The examples below contrast a two-part (7a) and a three-part complex verb (7b).

(7a) o Ritayon-ra **shift kor-ec^{h}-e** **(V+*do*)**
Oh NAME-PL shift do-PFV.PTCP
Oh Ritayon and folks have shifted.

(7b) o Ritayon-ra **shift kor-e** **gæ-c^{h}-e** **(V+*do*+V)**
Oh NAME-PL shift do-PFV.PTCP go-PFV-3P
Oh Ritayon and folks have shifted (completely).

The three elements in the three-part complex verb together express a single event (7b). Examples (7a) and (7b) can be compared to examples (1a) and (1b) and (4a) and (4b) of monolingual Bengali, in the sense that the bilingual two-part verbs correspond to either simple verbs or to conjunct verbs (N+*do*) in Bengali and the bilingual three-part verbs correspond to either compound verbs (V+V) or three-part conjunct verbs (N+*do*+V) in Bengali.

In three-part complex verbs, the helping verbs are in perfective participle form and the vector verbs carry tense, person and aspect inflection, affect the construction's aktionsart and often provide additional semantic information. Vectors such as *gæc^{h}e* 'go' and *p^{h}elec^{h}e* 'throw' lose their lexical meanings completely, and only affect the construction's aktionsart. I hypothesize that this is because they have become grammaticalized and therefore perform only a grammatical function in the construction. For instance, in (7b) the vector *gæc^{h}e* 'go' does not add any extra meaning of going to the construction but affects the aktionsart by adding telicity to the predicate.[2] However, other vectors such as *give* and *take* partially lose their lexical meanings and add an additional meaning that is usually different from their own inherent meanings. For instance in (8) the vector *ḍiec^{h}e* 'gave' introduces a benefactive role. In itself, *ḍiec^{h}e* 'gave' indicates handing a concrete object to someone, but as a vector it adds a benefactive reading. In this respect, the vector *ḍiec^{h}e* 'gave' also affects the argument structure of the sentence since it implicitly introduces another argument to the predicate. In addition, it also affects the aktionsart of the construction by adding telicity to the predicate.

(8) ora park-ṭa **renovate kor-e** **ḍi-ec^{h}-e** **(V+*do*+V)**
3PL park-DEF renovate do-PFV.PTCP give-PFV-3P
They have renovated the park (completely for someone else).

[2] Other kinds of subtle aspectual distinctions also arise for progressive and habitual forms, which is in line with the aspectual subtleties provided by the perfective forms.

Helping verbs are in some ways similar to vector verbs because they can both carry inflections. However, they are also different because helping verbs turn N+*do* constructions into verbs, while vector verbs affect the aktionsart of the construction and often add semantic information. Helping verbs append to bare nouns and adjectives in monolingual Bengali and to bare nouns and verbs in bilingual Bengali-English. Also, helping verbs can append to both native and non-native elements while vectors append only to native verbs which are in perfective participle form. Only verbs such as *do* and *be* belong to the class of helping verbs while there are 12 to 16 verbs that occur as vector verbs. Table (2) summarizes the relevant similarities and differences.

Table 2: Similarities and differences between helping verbs and vector verbs

	Helping verbs	**Vector verbs**
Similarities	Carry inflection for tense, person and aspect	
Differences	Perform a verbalizing function	Alter the aspect and/or semantics of the construction
	Append to bare forms	Append to perfective forms
	Append to nouns, adjectives and verbs	Append only to verbs
	Class of 2, *do* and *be* [3]	Class of 12 to 16 verbs
	Append to both native and non-native elements; native elements are always nouns or adjectives	Append only to native verbs

4.2 Property of Semantic Compatibility

The principle of semantic compatibility that affects poles and vectors in monolingual Bengali also affects three-part bilingual complex verbs. There must be semantic compatibility between the Bengali vector verbs and the English nominal or verbal elements. On the one hand, with a Bengali vector verb such as *gæc^{h}e* 'go'(7b) and *p^{h}elec^{h}e* 'throw' (9), any English nominal or verbal element can occur. I hypothesize that this is because vectors such *gæc^{h}e* 'go' and *p^{h}elec^{h}e* 'throw' have lost their own inherent meanings and have become grammaticalized.

(9) O ʈui already **apply** **kor-e** **p^{h}el-ec^{h}i-ʂ**
Oh 2SG already apply do-PFV.PTCP throw-PFV-2P

[3] In monolingual Bengali, other helping verbs such as *take, cut, give* etc. occur (Thompson 2010). Pillai (1968) says that *give* can also occur as a helping verb in bilingual complex verbs. However, if *give* occurs as a helping verb in a bilingual complex verb, it is not clear if the construction is a complex verb or a regular object verb construction.

Oh, you have already applied (completely)?

On the other hand, with a Bengali vector such as *boṣec^{h}e* 'sit', the English nominal or verbal elements is more semantically restricted. This is because *boṣec^{h}e* 'sit' is a telic verb which means that it has a specific endpoint. As a vector, the verb *boṣec^{h}e* 'sit' means doing something suddenly. Therefore it cannot pair well with verbs such as *maintain* (10a) and *develop* that do not have definite endpoints, contrary to *delete* (10b).

(10a) *ami ama-r GPA **maintain kor-e** **boṣ-ec^{h}-i**
1SG 1SG-GEN GPA maintain do-PFV.PTCP sit-PFV-1P
I have suddenly maintained my GPA.

(10b) are Pritam gaan-ṭa **delete kor-e** **boṣ-ec^{h}-e**
So Pritam song-DEF delete do-PFV.PTCP sit-PFV-3P
Pritam has (unintentionally) and suddenly deleted the song.

4.3 Syntactic Tests on Bilingual Complex Verbs

Ramchand (1990) used some syntactic tests on Bengali compound verbs (V+V) to determine if the two verbs display syntactic unity. I have applied some of these tests to three-part complex verbs below, to show that the three parts form a constituent.

4.3.1 Adverb Intrusion Test

Insertion of adverbs in between the three elements of the bilingual complex verb results in ungrammaticality. In (11a), the adverb is placed before the complex verb. This is the position where adverbs should occur with respect to complex verbs. From this position, adverbs take scope over the entire complex verb and modify all the three verbs of the construction. However, if adverbs are placed between any of the three elements of the compound verb, the sentences become ungrammatical (11b).

(11a) Professor solution-ṭa **clearly explain kor-e** **ḍi-l-o**
Professor solution-DEF clearly explain do-PFV.PTCP give-PST-3P
The professor explained the solution clearly.

(11b) Professor solution **explain (*clearly) kor-e (*clearly)** **ḍi-l-o**
Professor solution explain do-PFV.PTCP give-PST-3P
The professor explained the solution clearly.

4.3.2 Negation Test

Negation occurs after the complex verb (12a), taking scope over the whole complex verb. If negation is placed in any other position the sentence becomes ungrammatical (12b). Therefore, it is not possible to negate only part of the complex verb.

(12a) Professor solution-ṭa **explain kor-e ḍi-l-o na**
Professor solution-DEF explain do-PFV.PTCP give-PST-3P NEG
The professor did not explain the solution.

(12b) Professor solution-ṭa (*__na__) **explain** (*__na__) **kor-e** (*__na__)
Professor solution-DEF NEG explain NEG do-PFV.PTCP NEG
ḍi-l-o
give-PST-3P
The professor did not explain the solution.

4.3.3 Coordination Test

If there are two English nominal or verbal elements in a sentence then each nominal or verbal element should have its own Bengali helping verb and vector verb. Two English nominal or verbal elements cannot be coordinated with only one Bengali helping verb and vector verb. Therefore, sentence (13b), which has two English elements combined with only one operator and vector verb is not a well-formed sentence. Sentence (13a) is well formed because both English verbs *simplify* and *explain* have their own Bengali operators and vector verbs.

(13a) Professor solution-ṭa **simplify kor-e ḍi-l-o**
Professor solution-DEF simplify do-PFV.PTCP give-PST-3P
ar **explain kor-e ḍi-l-o**
CONJ explain do-PFV.PTCP give-PST-3P
The professor simplified and explained the solution.

(13b) *Professor solution **simplify** ar **explain kor-e ḍi-l-o**
Professor solution CONJ do-PFV.PTCP give-PST-3P
The professor simplified and explained the solution.

4.3.4 Question and Answer Test

The question and answer test needs to be modified slightly in order to test bilingual complex verbs. This is because if a sentence containing a complex verb is turned into a question, then the entire complex verb or only the Bengali verbs can be used as the answer to that question (14b). However, using only the English element as the answer is not acceptable (14d). Therefore the test does not work exactly the same way for a bilingual complex verb as it does for a monolingual

compound verb. The test is still constrained in a way, because using only the English element is not allowed (14c).

(14a) Professor ki solution **explain** **kor-e** **ḍi-l-o**?
Professor Q solution explain do-PFV PTCP give-PST-3P
Did the professor explain the solution?

(14b) hæ (**explain)** **kor-e** **ḍi-l-o**
Yes explain do-PFV PTCP give-PST-3P
Yes (he) explained it.

(14c) *hæ **explain**
Yes explain
Yes explained.

These tests also apply successfully on two-part complex verbs thereby showing that two-part complex verbs also act as one syntactic unit. The table below (3) summarizes the similarities and differences between two-part and three-part complex verbs in bilingual Bengali-English.

Table 3: Similarities and differences between two-part and three-part structures

	Two-part complex verbs	**Three-part complex verbs**
Similarities	Express a single event and form a single syntactic unit	
Differences	No vector verb	Vector verb present
	Without the vector there is a difference in meaning from the three-part structure	Vector adds meaning and affects aktionsart
	Consist of two elements	Consist of three elements
	Helping verbs bear inflections of tense, person and aspect	Helping verbs in perfective participle form. Vector bears inflections.
	Semantic compatibility between English element and helping verb is unnecessary	Requires semantic compatibility between English element and vector verb

5 Conclusion

In this paper I described a different type of bilingual complex verb that occurs in Bengali-English bilingual speech which has not been reported so far in the literature on bilingual complex verbs in Indian languages. This complex verb has

a three-part structure where the third element is a verb that provides semantic information and affects the aktionsart of the construction. The three elements together express one single event and with the help of syntactic tests I showed that all three elements are part of the same constituent. I also showed in what ways the two-part complex verbs differ from their three-part counterparts and the differences between helping verbs and vector verbs in three-part complex verbs.

There are some new directions and outstanding questions that need to be explored in future research about this intriguing topic. First, the structural differences between bilingual N+*do* and bilingual V+*do* constructions need to be teased apart. It is also necessary to explore a theoretical framework that can account for bilingual V+*do* constructions as innovations in bilingual speech. The property of semantic compatibility that applies to bilingual three-part constructions needs to be more nuanced and further explored. Finally, although substantial research has been done on vector verbs, it would be relevant to investigate the vector verbs as a class and identify common properties among them.

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