The Semantics and Pragmatics of Verb Classifiers in Urdu-Hindi
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Introduction

Constructions involving verb serialization pose a cross-linguistically robust set of problems for the analysis of sentence meaning, as well as for the pragmatic evaluation of sentence-tokens in contextualized acts of utterance. On the semantic side, such constructions pose difficulties for the rule of thumb common in linguistic studies whereby a finite sentence is said to instantiate as many propositions as there are finite verbs in it (Foley and Olson 1985). On the pragmatic side, predicates consisting of a series of verbs appear to constitute indexical categories of diverse types, specifying the perspectival 'direction' of the action, the 'definiteness' of argument reference, epistemic and deontic modality, etc. For some languages, the lack of clarity about pragmatic categories is due partly, at least, to the lack of clarity about the correct semantico-syntactic analysis, and many writers are forced—apparently by this fact—to attempt notional approaches to 'function' which either do not distinguish semantico-syntactic considerations from pragmatic ones, or argue that only one matters, or operate at a great remove from both.

In the present paper, I discuss the semantic and pragmatic properties of the compound verb (hereafter, 'CV'; as opposed to 'SV', or simple verb) construction in Urdu-Hindi, arguing that both kinds of properties must be given their due if a clear analysis is to emerge. The construction at issue combines two distinct verb stems—I shall call these V_1 and V_2 —to yield a type of 'lexical union' (Noonan 1985) where the verbs share all arguments and permit only the insertability of negative and emphatic particles between them. The compound verb—a $[V_1\ V_2]_V$ constituent—takes a single set of inflectional endings. Semantically, only a single predication is understood: V_1 describes a predicated event, and is the head of the CV; V_2 is an adjunct or operator, contributing a number of semantic and pragmatic reflexes to the interpretation of this event[1].

Not all V_2 items combine freely with all possible V_1 types. This suggests that V_2 items selectively discriminate between semantic classes of V_1 verbs. In the last section of the paper, I argue that V_2 item exhibit both a formal selectivity and a functional specificity for V_1 items of the same lexico-semantic class, thus constituting a system of verb classifiers (Silverstein 1986) over the semantic domain of V_1 types in the language. In the intervening sections, I discuss the pragmatic properties of the CV construction. Generically, the CV construction constitutes an indexical category anchoring the sentence-proposition to the context of utterance. Since the construction is formed by means of a verbal operator—the V_2 item—the indexical category has scope over the proposition as a whole, yielding both a referential and a predicational interpretation. More specific types of categorial content are also identifiable with particular V_2 items, due to their inherent lexical properties, and these must be analyzed as additional, lexeme-specific overlays upon the generic meaning of the CV construction.

The scope of V_2 operators in the CV construction

The V_2 element influences the form and interpretation not only of the predicate, but of its arguments as well. Its influence on predicate form is obvious. The effect on argument form is clearest in the realm of case marking. Thus, in

perfective sentences, a transitive verb like khā-'eat' normally takes the ergative case on its agent argument, as in (1a)[2]. However, when it combines with an intransitive V_2 stem, such as ga- 'go' in (1b), the [V_1 V_2] compound behaves like an intransitive verb, requiring nominative agent, just like the intransitive SV bhāg- 'run' in (1c). However, if the same V_1 occurs with a (di)transitive V_2 (such as lī- 'take' in (1d)) the CV thus formed ([khā lī]- in (1d)), takes the usual ergative agent. Thus, (1d) has the same case marking as (1a). Conversely, the intransitive verb bhāg- 'run', which normally takes nominative agents (cf. (1c)), permits ergative agents when combined with a (di)transitive V_2, such as lī- 'take' in (1e).

The fact that the formal reflexes of the CV turn up not only in the predicate but also in the arguments suggests that the CV is an operator on the proposition as whole. If this supposition is correct, and if—as I suggest above—the CV constitutes an indexical category, then we would expect that the pragmatic reflexes of V_2 element would have consequences not only for the way in which the predication is understood in its pragmatic context, but also for the contextualized interpretation of argument reference.

(1)

Example sentence	*Semantic and pragmatic interpretaion*
(a) laṛke ne seb khā-y-ā boy-ERG apple-ABS eat-P-CR	'(A/the) boy ate (an/the) apple'
(b) laṛkā seb [khā ga]-y-ā boy-NOM apple-ACC eat go-P-CR	'The boy ate the apple' [abrupt, unexpected action]
(c) laṛkā [bhāg]-ø-ā boy-NOM run-P-CR	'(A/the) boy ran'
(d) laṛke ne seb [khā lī]-y-ā boy-ERG apple-ABS eat take-P-CR	'The boy {ate/was able to eat} the apple' [premeditated, self-interested act]
(e) laṛke ne [bhāg lī]-y-ā boy-ERG run take-P-CR	'The boy {ran/ was able to run}' [premeditated, self-interested act]
(f) laṛkā [bhāg ga]-y-ā boy-NOM run go -P-CR	'The boy ran (away)' [abrupt, unexpected action; motion 'away']

This is exactly what we find. The English glosses on the right hand side in (1) illustrate a number of differences of interpretation in the Urdu-Hindi sentences, emerging as the result of the SV: CV contrast. Let us consider argument reference first. Given the absence of any obligatory paradigm of NP determiners in Urdu-Hindi, SV sentences—such as (1a) and (1c)—may be translated into English either with definite or indefinite articles. However, the CV sentences of (1b, d-f) are better translated into English with a determiner which specifies the presupposition of existence of referents. This could be the English definite article—as shown in the examples—or the determiner 'some', or other equivalent. If all the NPs in the five Urdu-Hindi sentences were modified by the numeral ek 'one', the NPs in the SV sentences could be translated either with the English indefinite article, 'a', or with the numeral, 'one'; but the NPs in the CV sentences could only be translated with 'one'. This correspondence is due to the fact that the CV construction in Urdu-Hindi indexes the presupposition of existence of referents, as I argue below.

As far as the predication is concerned, the CV generically has a resultative meaning with several specific manifestations, depending on the lexical class of the V_1 and V_2 items, and the utterance context. In (1b) and (1f), the V_2 item ga-

'go' is understood as implying an 'unexpected result'. In (1f), its union with a motion verb as V_1, suggests that the boy is no longer present, that he has run 'away'. This suggestion is weaker without a motion verb, as in utterance (1b), which could also be accompanied by a pointing gesture, ostending the guilty, co-present individual. In (1d-e), the CV predicates, formed with the V_2 item le-/l̄i- 'take', imply that the action is the result of premeditated effort. Their quasi-modal interpretation (glossed as 'was able to') is an implicature of the fact that the premeditated action led to a successful result. Their 'self-interested' implication is a reflex of the V_2 item 'take' (cf. the V_2 de-/d̄i- 'give' which implies 'other benefaction', as discussed below).

Resultativity of predication

Some writers have attempted to characterize the predicative interpretation of the CV construction as involving perfective aspect (Pořízka 1967-69, Hook 1974), but there are several problems with this account[3]. Although there is surely an aspect-like meaning of 'completion' associated with the CV construction, such an aspectual characteristic is always accompanied by a pragmatic implicature of resultativity, as described below. Secondly, such interval-like specification is a reflex of the occurrence of a distinct verb stem, the V_2 item, not a reflex of a lexically empty form such as a bound affix; the lexicalized 'event'-related properties of the V_2 item, qua verb, is critical to the interpretation of the CV as such. However, although the V_2 item is a distinct verb stem, generally capable of occurring as an independent verb in the language, its occurrence as a V_2 item reduces or 'bleaches' the verb stem of any ability to denote an independent event: the sentence containing the CV denotes only the event which is the meaning of the V_1 item, and the V_2 item functions as an operator, modifying the interpretation of this event.

Thus, the V_2 item, although a distinct verb, does not denote a distinct event or state. Rather, it indexes an event or state—whether by presupposition or entailment—thereby invoking an event or state in relation to which the event or state denoted by the V_1 item is understood. The CV construction either indexically presupposes some event/state of which the denoted event/state is the contextualized result, or it indexically entails that the denoted event/state has some event/state as its contextual result. As with any indexical category, the specific meaning of the category cannot be understood without regard to the particular discourse context in which an utterance bearing the indexical category occurs, so that the way in which an indexed event/state is invoked by the CV construction depends radically on discourse context.

Let us first compare the two-sentence utterance exemplified in (2a) with the contrasting utterance, containing a CV in the second sentence, in (2b).

(2)
(a) use dar lag-ø-ā. vah bāhir ā-y-ā
he-DAT fear feel-P-CR he-NOM outside come-P-CR
'He felt afraid. He came outside'
(b) use dar lag-ø-ā. vah bāhir [ā ga]-y-a
he-DAT fear feel-P-CR he-NOM outside come go-P-CR
'He felt afraid. (So) he came outside'

Given the absence of any kind of grammatical linkage between the two sentences, no logically necessary connection is understood between the two events described

in either (2a) or (2b). Nonetheless, we are inclined to infer that the individual in each case experienced fear before he came outside because the sentence describing the former event occurs before the sentence describing the latter event, and none of the entailments of either sentence block this interpretation. But, from the point of view of discourse inference, there is an important difference between (2a) and (2b): (2b) suggests a surer connection between the experience of fear and the decision to come outside than (2a). In the case of (2a), if we knew independently from context, or from prior discourse, that the fear is of a type which can be alleviated by going outside, we might infer a connection between the two events as well. But this requires additional discourse presuppositions. In the case of (2b), the CV itself carries a contextualizing suggestion: it suggests that the event denoted by the CV sentence is related to some other event, understood as its relevant context; thus, in this rather minimal two-sentence discourse text, the event denoted by the CV sentence may straightforwardly be inferred to be the result of the event denoted by the preceding sentence, all other things being equal.

Of course, the event or state which is indexed by the occurrence of the CV need not be denoted by a separate sentence occurring in immediately prior discourse. It may simply be understood from discourse context. Thus, for example, given a context where a young boy keenly and impatiently awaits a letter of acceptance from his college of choice, the actual arrival of the expected letter would be described more felicitously by the CV construction of (3a) than by the SV sentence of (3a') (this is represented by the symbol '/>/' between the predicates), though both are grammatically possible. The CV is more felicitous in such a context becauses it indexes some event or state as relevant to the interpretation of the utterance in which it occurs, whereas the SV does not.

(3)
(a/a') merā xat { [ā ga]-y-ā />/ ā-y-ā }
I-GEN letter [come go]-P-CR / come-P-CR
'My letter has come'
(b/b') merā xat nahĩĩ {%% [ā ga]-y-ā / ā-y-ā }
I-GEN letter NEG [come go]-P-CR / come-P-CR
'My letter hasn't come'

If, on the other hand, the boy discovers upon examining his mailbox that the letter has not arrived, he can only describe this fact by a negated SV utterance, such as (3b'), not by the negated CV utterance of (3b). This is due to the fact that the non-occurrence of the predicated event pre-empts the question of its indexical relation to other events, a point to which I return below.

It is important to keep in mind that the event indexed by the V_2 element of a CV construction can be understood either as the indexical presupposition or as the indexical entailment of the event denoted by the V_1 element. This means that the CV is preferred to the SV both in contexts where the causes of the denoted event are being discussed, as in (4),

(4)
vah {[bhāg cuk]-ø-ā />/ % bhāg-ø-ā } thā. is liye ki nāxuš thā
he-NOM [run finish]-P-CR / run-P-CR PST this reason that unhappy PST
'He had run away. Because [he] was unhappy'

as well as in contexts where its consequences are being discussed, as in (5):

(5)
vah {[bhāg cuk]-ø-ā />/ % bhāg-ø-ā } thā. isī liye nahĩĩ mil-ø-ā
he-NOM [run finish]-P-CR / run-P-CR PST this reason not meet-P-CR
'He had run away. Hence [I] didn't meet [him]'

The CV is preferred in both contexts because its resultative indexicality is interpretable either as indexical presupposition or as indexical entailment. For this reason, it is preferred in discourse contexts where causes and/or consequences are at issue.

So far, I have been discussing examples of indexical presuppositions which are available either from co-occurring sentence-tokens, or from discourse context. However, in certain kinds of multi-clausal sentences, the indexically associated event may be available as the presupposition of a different clause in the same sentence. In the biclausal sentence in (6), the denotation of the nominalized 'inspite of' clause is factively presupposed as true in the evaluation of the meaning (and truth) of the second clause. The CV is preferred here because the event which it indexes is here understood as the proposition factively presupposed by the protasis—the 'inspite of' clause—and the congruence of presuppositions creates a greater coherence across the two clauses.

(6)
(b/b') rahne kī xwahiš ke bāvajūd vah { [bhāg ga]-y-ā />/ bhāg-ø-ā }
stay-INF GEN desire GEN inspite he-NOM run go-P-CR / run-P-CR
'Inspite of [his] desire to stay, he ran away'

The CV construction is preferred in the apodoses of result constructions, such as yah natījā hū-ø-ā ki 'it was the result [of...] that [...]', for the same reason:

(7)
(a/a') us ke mehnat karne kā yah natījā hū-ø-a
he GEN hard.work do-INF GEN this-NOM result be-P-CR
ki vah kāmyāb { [ho ga]-y-ā />/ hū-ø-ā }
that he-NOM successful-ACC [be go]-P-CR / be-P-CR
'As a result of his hard work, he was successful'
(b/b') mere paise māgne kā yah natījā hū-ø-ā
I-GEN money ask-INF GEN this-NOM result be-P-CR
ki us ne fauran { [de dī]-y-e />/ dī-y-e }
that he-ERG immediately [give give]-P-CR / give-P-CR
'As a result of my asking for money, he immediately gave [it] [to me]'

In biclausal sentences where the two clauses are linked by ki 'when', and where no relationship other than simultaneity is semantically specified, the CV is preferred only when a connection between the two denoted events is independently establishable from discourse context.

(8)
(a/a') vah jāne hī vālā thā ki xat { ā-y-ā / [ā ga]-y-ā }
he-NOM go-INF EMPH about.to PST that letter come-P-CR / [come go]-P-CR
'He was about to leave when (a/the) letter came'

In a context where the arrival of the letter is not expected, or has no bearing on the imminent departure, the SV utterance in (8a) is acceptable without infelicity (with

an indefinite article in the English gloss, 'a letter'). However, in a context, where the arrival of the letter is expected, or is of some consequence to the imminent departure, the CV of (8a') would be preferred (here, the English indefinite article would be inappropriate).

The CV is strongly preferred over the SVin the biclausal correlative time construction in Urdu-Hindi, [jab tak 'by the time when ...', tab tak 'by then ...']$_S$. Thus, given a protasis such as (9a), the CV constructions of (9b, c, d) are strongly preferred in the apodosis to the SV constructions of (9b', c', d').

(9)

(a) jab tak maĩ vahã pahũc-ø-ā.....
when till I-NOM there reach-P-CR
'By/till the time I got there....'

(b/b') ... tab tak vah { [bhāg cuk]-ø-ā /%% bhāg-ø-ā } thā
then till he-NOM [run finish]-P-CR/ run-P-CR PST
'...he had run away'

(c/c') ... tab tak vah { [so ga]-y-ā / %% so-y-ā } thā
then till he-NOM [sleep go]-P-CR / sleep-P-CR PST
'...he had gone to sleep'

(d/d') ... tab tak us ne { [khā lī]-y-ā /%% khā-y-ā } thā
then till he-ERG [eat take]-P-CR / eat-P-CR PST
'...he had eaten [it]'

In such constructions, the protasis (namely, the jab tak 'by the time when...' clause) provides the temporal ad quem in relation to which the event described by the apodosis is understood. The CV is preferred in this construction for exactly the same reason that it is preferred in constructions like (4-5): the proposition denoted by the protasis is factively presupposed as true in the evaluation of the meaning (and truth) of the apodosis; and the occurrence of the CV establishes a congruence of presuppositions across the two clauses. (Hence, with negated protases, the CV is not preferred in the apodosis). Inevitably, a pragmatic link is established between the two events. Thus, in all the acceptable biclausal utterances in (9), the coming of the speaker, as an event, is understood as having a pragmatic connection with the events described in the second clause, over and above the fact that speaker's coming is the temporal ad quem for these events. This connection may be understood from context (thus, presupposed) or suggested (thus, entailed) by the utterance: for example, in (9a+b), the speaker may have wanted to catch the person who ran away; in (9a+c), to speak with him; in (9a+d), to eat the food.

However, the preference for the CV in the apodosis is relaxed in cases where the jab tak clause is understood only as the temporal ad quem, without any other link between the two events, as in the utterance sequence (9a+10). Here, the CV occurs not in the apodosis clause, but in the following sentence. The pragmatic connection suggested here is not between the arrival and the act of jogging, but between the act of jogging and the exhaustion, construed to be its implied result.

(10) ... tab tak to vah bhāg-ø-ā . lekin bād mẽ thakan se [baiṭh ga]-y-ā
then till he-NOM run-P-CR but afterwards tiredness from [sit go]-P-CR
'...he jogged. But afterwards, [he] sat down from exhaustion'

Presupposition of existence

The CV construction indexes a presupposition of existence for the referents of the verb's arguments. Thus, with arguments with stipulatively non-existent referents—such as koī bhī nahī 'noone' and kuch bhī nahī 'nothing', and their inflected forms—the CV is unacceptable.

(11)
(a/a') kisī ne bhi nahī khānā {khā-y-ā / * [khā lī]-y-ā }
noone-ERG food-ABS eat-P-CR/[eat take]-P-CR
'Noone ate the food'
(b/b') larke ne kuch bhī nahī {khā-y-ā / * [khā lī]-y-ā }
boy-ERG nothing-ABS eat-P-CR [eat take]-P-CR
'The boy ate nothing'

In negated sentences, the CV construction is extremely odd. Thus, the SV sentence in (12a) is perfectly acceptable, whereas the CV sentence in (12a') is not.

(12)
(a/a') larke ne khānā nahī {khā-y-ā / %%[khā lī]-y-ā }
boy-ERG food-ABS NEG eat-P-CR/ [eat take]-P-CR
'The boy didn't eat the food'

The oddity of negated CV sentences, such as (12a'), is due to the fact that sentence negation is interpretable as implying the non-existence of arguments. However, in contexts where the existence of denotata is independently presupposable, negated CVs are perfectly acceptable. Thus, in the negated CV utterances (13a, b), just those arguments receive contrastive stress (represented by underlining) the existence of whose denotata is presupposed from discourse (i.e. as 'someone', 'somebody', etc.) but the identity of which is denied: (13a) is perfectly acceptable in a context where the equivalent of the proposition 'someone ate the food' (i.e. ∃x, eat(x,food)) is discursively presupposable; and (13b) is perfectly acceptable in a context where the equivalent of the proposition 'the boy ate something' (i.e., ∃y, eat(boy,y)) is discursively presupposable. The most common type of discourse situation in which such usage occurs is the situation where the utterance at issue is being used to deny something that has been asserted in immediately prior co-text. Thus, both (13a) and (13b) may be used to refute the prior utterance of (13c), since (13c) makes both the propositions noted above available as presuppositions for denial or refutation in subsequent discourse.

(13)
(a) larke ne phal nahī [khā lī]-y-ā, larkī ne khā-y-ā hai
boy ERG fruit-ABS NEG eat take-P-CR girl ERG eat-P-CR PRS
'The boy didn't eat the fruit, the girl did'
(b) larke ne phal nahī [khā lī]-y-ā, gošt khā-y-ā hai
fruit-ABS meat-ABS
'The boy didn't eat the fruit, [he] ate the meat'
(c) larke ne phal [khā lī]-y-ā
'The boy ate the fruit'

A negated CV utterance can be used to deny the statement in (13c) in another way as well. This is the case of predicate negation, where the existence of the denotata

of both arguments is preserved by presupposition, but the event denoted by the predicate is denied. The utterance of (14) in response to (13c) constitutes the relevant example.

(14) laṛke ne phal [khā nahĩ ĩi]-y-ā, [phēk di]-y-ā hai
throw give
'The boy didn't eat the fruit, he threw [it] away'

The optative constructions in (15a, a') are exactly parallel. The CV variant in (15a') has the presupposition that there is something which the boy might eat (i.e. ∃y, eat(boy,y)), a presupposition which (15a) lacks. (15a) might be uttered by a doctor who is generally concerned that the boy not eat anything for a while; (15a'), by someone who is interested in beating the boy to the food. Similarly, the imperative in (15b) may be interpreted either as an injunction against doing something for a particular boy, or as a general injunction against boy-like behavior; but the CV sentence in (15b') only permits the former interpretation.

(15)
(a/a') agar laṛkā {na khā-e /[khā na jā]-e }, to behtar hai
if boy NEG eat-OP/ [eat NEG go]-OP then better PRS
'Its better if the boy doesn't {eat/eat [it]}'
(b/b') laṛke kā kām {na kar-nā /[kar na de]-nā }
boy GEN work NEG do-IM / [do NEG give]-IM
'Don't do {(a, the)/ the} boy's work'

Modality

Out of the twenty or so V_2 elements in the language, two verbal items are distinct from all the others with respect to the tests we have so far considered. These are the V_2 items sak- 'can' and pā- 'manage'. These items are distinctive, first, because they occur only as V_2 items and are not associated with independent verbs in the language[4]. Secondly (although the V_2 le/lī- 'take' sometimes has a modal meaning, as in (1d-e)) sak- and pā- are the only V_2 items which always and only have a modal sense. Third, whereas other V_2 items do not occur in sentences with non-existent denotata (cf. (11)), the modal V_2s are perfectly acceptable in such sentences, as in (16a-b). Fourth, whereas other V_2s are anomalous with sentence negation or predicate negation except with special discourse presuppositions (cf. (12-15)), the modal V_2s appear to occur freely in such constructions, as in (16c-d).

However, the reason for these anomalies is again straightforward: every token of the sentences in (16) has at least the presupposition that 'somebody tried to eat something' (i.e. ∃ x∃y, try-to-eat(x,y)), whatever other presuppositions particular tokens in particular contexts may have.

(16)
(a) koī bhī nahĩ khānā [khā sak]-ø-ā
noone-NOM food-ACC [eat can-P-CR
'Noone was able to eat the food'
(b) laṛka kuch bhī nahĩ [khā sak]-ø-ā
boy-NOM nothing-ACC [eat can-P-CR
'The boy was able to eat nothing'

(c) laṛkā khānā nahī̃ [khā pā]-y-ā
boy-NOM food-ACC NEG [eat manage]-P-CR
'The boy was unable to eat the food'
(d) laṛkā khānā [khā nahī̃ pā]-y-ā
boy-NOM food-ACC [eat NEG manage]-P-CR
'The boy was unable to eat the food'

In general, all CV sentences formed with the two modal V_2s, sak- 'can' and pā- 'manage', have the presupposition: 'somebody tried to do something'. In fact, this presupposition is central to the meaning which is intensionalized as (and notionally felt to be) the meaning of 'modality' associated with these verbs. When these V_2s occur with agentive V_1s in [V_1 V_2] constructions, the sentence so formed has the presupposition 'someone tried to V_1' (specifically: for intransitive V_1s, $\exists x$, try-to-$V_1(x)$; for transitive V_1s, $\exists x \exists y$, try-to-$V_1(x,y)$; etc.). When these V_2s occur with agentless V_1s, the construction so fomed has the presupposition 'someone tried to V' ($\exists x$, try-to-V(x)), where V is the causative of V_1:

(17) kapṛe nahī̃ [sūkh sak]-ø-e
clothes-NOM NEG [be.dry can]-P-CR
'The clothes couldn't be dried'

sentence (17), for example, has the presupposition 'someone tried to dry the clothes'. Thus, the apparent exceptionality of the modal V_2s in occurring more freely than other V_2s in negated sentences is due to the distinctively lexicalized indexical presupposition of these verbs (i.e. the presupposition of a prior attempt), which counts as their modal meaning, not the absence of resultative indexicality.

Predication perspective

Within the paradigm of V_2 items, a number of verb stems differentiate contrasts of predication perspective. Such contrasts involve viewing the predication relative to some type of contextualized zero-point—or 'origo'—in utterance construal. The contrast is analogous to the contrast in English between paired exchange predicates—e.g. 'buy' vs. 'sell', 'take' vs. 'give'—where the same action may be viewed perspectivally as tending towards the actor as origo, or away from it. In Urdu-Hindi, the paradigm of V_2 items constitutes a rather more finely differentiated system, where the paired V_2s include jā- 'go' vs. ā- 'come'; de-/dī- 'give' vs. le-/lī- 'take'; dāl- 'put in/at' vs. nikāl- 'take out'; chor- 'leave (at/behind)' vs. rakh- 'keep'; and baith- 'sit down' vs. uth- 'rise, get up'.

Although the zero-point of such perspectival reckoning can vary considerably by the particular type of V_1 stem occurring in the CV construction, as well as by discourse context, it is nonetheless constrained by the lexicalized meanings of the V_2 items as well. CVs containing V_2s such as le-/lī- 'take', rakh- 'keep' (and, to a somewhat lesser extent, nikāl- 'take out') indicate an action as involving some type of actor self-interest. Here the predication perspective typically constitutes actor as origo. CVs containing receiver- or location-oriented V_2s, such as de-/dī- 'give', dāl- 'put in/at' (and, to a somewhat lesser extent, chor- 'leave (at/behind)') indicate other-directed action. In these cases, actor is never origo, and the action is viewed as involving some measure of actor-neutrality, involuntariness, or (particularly with de-/dī- 'give' as V_2) some type of other-benefaction. In CVs containing the V_2s jā/ga- 'go' and ā- 'come', the zero-point is often the speaker, or some associated location (e.g. the speaker's house, the

speech event, etc.), relative to which the action is viewed as 'tending away' or 'tending towards'. However, such construal is highly context dependent. Thus, in (1f), the origo is straightforwardly interpretable as the location of the speaker from which the boy moves away. But in (2b) and (3a), the same V_2 ga- 'go', indexing 'motion away', occurs in an utterance where the V_1 a- 'come' denotes motion towards the speaker's location. In such cases the speaker is not construable as any kind of zero-point from which the motion tends away. We might suppose that the 'motion away' reflex is nonetheless preserved in such cases if the zero-point or origo is taken to be the 'understood' cause of the movement (e.g. the fear in (2b), the sender of the letter in (3a)) from which the trajectory of motion (of the person in (2b), of the letter in (3a)) is reckoned. However, these are possibilities which can selectively become plausible only in contextualized usage. Even though the lexical structure of particular verbs tends to favor as origo such role categories as speaker, actor, receiver, understood-actant, etc., the only general statement that can in fact be made is that the origo or zero-point is always discursively determined through the interaction of a number of co-textual and contextual factors, of which the lexical content of V_2 is only one.

V_2 items as verb classifiers

In order to investigate the question of the combinability of V_1 and V_2 items in the language, about one hundred verbs were first tested with respect to their inherent lexical characteristics such as agentivity and aktionsart. A distinctive feature notation was used to classify verbs along these dimensions[5]. The test used for classifying a verb along the semantic dimension [+/-agentive] was the ability of the verb to occur in the imperative mood[6]. The aktionsart characteristics were classified by means of two separate features, [+/-durative] and [+/-punctate][7] (these are contracted to [+/-d] and [+/-p] in the table in (18)).

Relative to these semantic dimensions of classification, the sampe of one hundred verbs was divided into six classes, labelled A-F in the table in (18). Valence criteria were used to further subdivide these into sub-classes of monovalent verbs (e.g. A^1, D^1, E^1, etc.) and verbs with valence equal to two or greater (e.g. A^2, D^2, E^2, etc.), though certain classes were found to have only monovalent (e.g. B^1, C^1) or only non-monovalent (e.g. F^2) verbs in them.

Aside from the modals, whose class membership cannot be specified by such distributional tests (since they do not occur as independent verbs), the verbs which occur productively as V_2 items in the language were found to be inherently [+punctate] stems[8], belonging to classes B^1, E^1 or E^2 (see leftmost column in (18)). Thus, all CV constructions in this language residually carry a 'point-like' meaning which admits of more specific interpretations (e.g. completive, inchoative, inceptive, etc.).

The combinatoric possibilities of particular V_2 items with V_1 classes are listed in the table in (18)[9]. Since each verbal element simultaneously instantiates lexical properties across different categorial domains (agentivity, aktionsart, valence, etc.), the selectivity of V_2 items for V_1 classes is organized around several criterial dimensions of classification. Nonetheless, the co-occurrence restrictions are highly asymmetrically organized as the left-to-right and top-to-bottom distribution of the most productive combinations ('+++') shows: V_1 classes on the far right hand side have many more '+++' markers in their columns than V_1 classes on the far left; this just means that the V_1 types towards the right hand side of the table take more V_2 items in productive combination than those on

(18) Summary of V_2 distribution relative to V_1

Specific V_2 items	Semantic classes of V_1 verb: [-agentive] [+d, -p] A^1	[-agentive] [+d, -p] A^2	[-agentive] [-d, +p] B^1	[-agentive] [+d, +p] C^1	[+agentive] [+d, -p] D^1	[+agentive] [+d, -p] D^2	[+agentive] [-d, +p] E^1	[+agentive] [-d, +p] E^2	[+agentive] [+d, +p] F^2
(a) sak-'be able'	+++	+++	+++	+++	+++	+++	+++	+++	+++
(b) pā- 'manage'	+++	+++	+++	+++	+++	+++	+++	+++	+++
B^1									
(c) cuk- 'finish'	+++	+++	+++	+++	+++	+++	+++	+++	+++
(d) paṛ- 'fall'	x	++	x	+	x	x	x	—	—
E^1									
(e) jā-/ga- 'go'	+++	+++	+++	+++	+++	+++	+++	+++	+++
(f) ā- 'come'	—	—	—	+	+++	+++	+++	+++	+++
(g) baiṭh- 'sit'	x	+	x	+	+++	+++	+++	+++	+++
(h) uṭh- 'rise'	x	x	—	—	+++	++	x	+	—
(i) kharā ho-'stand	—	—	—	—	x	x	++	x	x
(j) cal- 'start out'	—	—	x	x	x	x	+	++	—
E^2									
(k) le-/lī- 'take'	+	—	+++	+++	+++	+++	+++	+++	+++
(l) de-/dī- 'give'	—	—	—	—	x	++	+++	+++	+++
(m) choṛ- 'leave'	—	—	—	—	+	++	x	+++	+++
(n) rakh- 'keep'	—	—	—	—	+	++	—	+++	+++
(o) ḍāl- 'put in/at'	—	—	—	—	+	++	—	+++	+++

Key

PRODUCTIVITY OF OCCURRENCE	high	'+++' = occurs freely with (virtually) all members	(95-100%)
		'++' = occurs with most members	(71-95%)
		'+' = occurs with some members	(36-70%)
		'x' = occurs with few members of the class	(1-35%)
	low	'—' = does not occur	(0%)

the left. In fact, the V_1 classes on the far right are inherently specific for all of the criterial dimensions of selectivity (i.e. V_1s of the E^2 and F^2 type are [+agentive, +punctate, V>1]) and, for this reason, a wider range of V_2 items are 'attracted' to them. Verbs in these classes yield a wider variety of CV constructions since they accept a wider range of V_2 items.

Let us turn now to the differences among the V_2 items. The fifteen V_2s[10] in table (18) fall into four 'sets', separated by blank rows. Members of the first set, the modals sak- and pā-, occur freely with virtually every V_1 in the language, though for some [-agentive] V_1s, they occur somewhat more freely in negative sentences (like (17)) than in positive sentences. Within each of the three remaining sets, (c-d), (e-j) and (k-o), one V_2 item is an 'expansive' member of the

set, since it occurs productively across a wider range of V_1 types than the others (i.e. (c) cuk- 'finish', (e) jā-/ga- 'go' and (k) le-/lī- 'take', respectively).

The other members of each set have a more restrictive distribution from the point of view of productive combinability. These V_2 items show a high degree of selectivity for V_1s of the same lexical type as themselves along each dimension of classification: the agentless V_2 (see row (d)) prefers agentless V_1 types to agentive ones (given identity of aspectual type, as in classes A^2 vs. D^2, C^1 vs. F^2); agentive V_2s (rows (f-j) and (l-o)) prefer agentive V_1 types; and the transitive V_2s (rows (l-o)), prefer transitive V_1 types. A selectivity of animate-subject V_2s for animate-subject V_1s was also observed in the less productive combinations (e.g. '+' and 'x'), though this dimension is not explicit in the table.

When the 'expansive' V_2s occur with V_1 items significantly different from themselves, interesting types of secondary notional reflexes emerge. The normally actor-origo transitive agentive V_2 le/lī- 'take' often has the sense of actor-reflexive agency (as discussed in the last section), particularly with agentive V_1s (cf. (1d-e)) and with animate subject non-agentives. However, with inanimate-subject non-agentive V_1s (e.g. tut- 'be broken', pak- 'get cooked', etc.) the construction approximates the 'understood cause' interpretation noted for the modal V_2s in (17) above. Such functional 'leakage' is, of course, a cross-linguistically robust property of all classifier systems. In the present case, however, where the density of semantic material recoverable from each V_2 item is quite high, it is precisely at these points of functional leakage that the classifier function of the CV construction merges to a degree with derivational class-changing functions.

Notes

1 This type of compound verb stem construction must be distinguished from two other types of verb concatenation in the language. The first is a type of clause subordination, involving two distinct clauses (and, semantically, two events), formed by means of the 'conjunctive participle', kar 'do', exemplified in (a).

(a) [laṛkā$_i$ [ø$_i$ khānā **khā kar**]$_S$ ā -y-ā hai]$_S$ 'The boy$_i$ has eaten food
boy-NOM food eat do come-P-CR PRS and (then) ø$_i$ come'

Distinct from this conjunctive participial construction is a true serial verb construction, illustrated in (b), where two fully inflected verbs (rather than bare verb stems) occur in serial combination, typically denoting two temporally overlapping but distinct events, one understood adverbially to the other.

(b) laṛkā **bhāg**-t-ā **ā**-y-ā hai 'The boy has come running'
boy-NOM run-I-C come-P-CR PRS

The construction with which I am concerned in this paper is a compound verb stem construction, formed by the lexical union of two distinct stems to yield a compound stem (denoting a single event) with single inflection, as in (c).

(c) laṛkā [**bhāg ā**] -y-ā hai 'The boy has run away (to this place)'
boy-NOM run come -P-CR PRS

The V_1 and V_2 elements may sometimes occur in reversed order, though the underlying order is recoverable by means of tests with negation (Hook 1974).

2 The following glossing conventions are used in the examples:
V verb stem CR cross-reference marker NOM nominative case

PRS	present tense	I	imperfective aspect	ACC	accusative case
PST	past tense	P	perfective aspect	DAT	dative case
NEG	negation	OP	optative mood	ERG	ergative case
YNQ	Yes/no quest.	IM	imperative mood		

3 The most comprehensive and widely known argument that the CV construction marks the perfective aspect has been made by Hook (op. cit.), based in part on a notional analogy with aspect marking in Slavic languages. There are several rather serious problems with this claim, discussed with great elegance and brevity in Masica (1991:326-30). Perhaps the most important problem is that the perfective aspect is already marked in this language by a post verb-stem suffix, -y/-ø, and the CV stem can occur both with the grammatical perfective as well as with the grammatical imperfective. As Masica notes, the CV construction is formally and functionally more akin to resultative verb compounds in East and Southeast Asian languages, also associated with 'definiteness' of argument reference, rather than to aspectual affixes in Slavic.

4 Although there is no independent verb sak- in the language, there does exist an independent verb in the language, pā- 'receive' which resembles the V_2 item pā- 'manage'. However, we cannot assume that the two items are related lexemes, since the functions of the V_2 item pā- 'manage' are not predictable by rule from the functions of pā- 'receive', and the resemblance is best considered a case of homonymy: pā- 'receive' is a lexically transitive verb, but the V_2 pā- 'manage' patterns with intransitive V_2s from the point of view of its effects on argument structure and case marking in the CV construction (cf. examples in (1)).

5 The use of distinctive features for separate dimensions of content yields a clearer interpretation of interval characteristics than the Vendler-Dowty classification in terms of states, activities, achievements & accomplishments. While the latter approach is admirable for its consistent use of distributional criteria as tests for inherent lexical content, and is to be preferred over any purely 'notional' classification for this reason, the main problem with that approach is that the four-way classification does not yield a set of semantic primes. For details concerning the present approach, such as the interpretation of feature clusters, the non-specificity of '-' features, etc., see Agha 1993, ch. 3.

6 If the verb occured freely in the imperative with a canonical 'command' interpretation, the verb was specified [+agentive]; if the verb did not easily occur in the imperative, or occurred only with a non-canonical interpretation (cf. English, 'have a nice day!'), the verb was considered [-agentive].

7 The test used for durativity was the compatibility of the verb with interval adverbs such ek ghante ke līye 'for an hour', ek hafte ke līye 'for a week', etc. The punctateness of the verb was evaluated from its interpretation in the progressive construction, V rahā 'be V-ing': if the verb in the progressive yielded a 'point-like' reflex in the overall interval characteristic (whether an endpoint, or a point of culmination or transition), the verb was considered [+punctate]; if the verb did not occur, or occured without a 'point-like' characteristic (i.e. with internally homogenous, or state-like interval, etc.) the verb was considered [-punctate].

[8] One other verb which occurs as a V_2 item, but is an exception to this rule, is the [-punctate, +durative] verb rah- 'remain, stay'. Such verbs commonly occur in resultative compounds in other languages (e.g. Chinese, Lhasa Tibetan, Worora, etc.), thus constituting a categorial distinction between 'resultative-completive' (formed from [+punctate] V_2s) and 'resultative-stative' (formed from [+durative] V_2s). In Urdu-Hindi, however, the [+durative] V_2 item rah- 'remain, stay' is a defective verb in the sense that it has less than the maximal distribution observed for V_2 items generally: it does not occur as a V_2 item in the perfective grammatical aspect, the future tense, nor in the optative and imperative moods (see Masica 1991: 329). Consequently, it may no longer properly be considered a regular V_2 item, though it probably functioned as such in an earlier state of the language.

[9] The values in the table reflect the judgements of three native speakers (all speakers of Karachi Urdu). Each speaker was asked to judge the acceptability of positive and negative sentences formed by combining about one hundred verbs in V_1 position with about twenty verbs in V_2 position. Those CVs which are interpretable as biclausal conjunctive participial constructions with kar omitted (cf. note 1 above, and Hook 1974) were grouped with the '—' values in the table.

[10] Five other items were tested as V_2, not shown in the table. These are rah- 'remain' (see note 8), mar- 'die' (class B^1), nikal 'emerge' (class E^1) and their causatives, mār- 'kill' and nikāl- 'take out' (both class E^2). The last four are not productive enough for native speaker judgements to be unequivocal.

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