

Verb Concatenation in Asian Linguistics

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Summary

Across a large part of Asia are found a variety of verb–verb collocations, a prominent subset of which involves collocations typically displaying completive or resultative semantics. Such collocations are found in Indo-Aryan and Dravidian languages of South Asia, Turkic and Iranian languages of Central Asia, and in Chinese languages.

In South and Central Asian languages, verb–verb collocations usually involve some added aspectual/Aktionsart element of meaning, frequently (though not exclusively) indicating completion of an event and sometimes involving speaker evaluation of the event (e.g. surprise, regret). Thus Hindi *Rām-ne kitāb parh diyā*, literally “John read-gave the book”, with the sense “John read the book out”. In Chinese languages, many verb–verb collocations involve a resultative sense, similar to English “Kim ran herself/her shoes ragged”. However, earlier Chinese verb–verb collocations were agent-oriented, e.g. *She-sha Ling Gong* “(Someone) shot and killed Duke Ling”, where *she* is “shoot” and *sha* is “kill”.

In Indo-Aryan, Dravidian, and Central Asian languages, we find verb–verb collocations which evolve from idiomaticisation and grammaticalisation of constructions involving converbs, e.g. a collocation meaning “he, having eaten food, left” acquires the meaning “he ate food (completely)”. Similarly, the Chinese verb–verb resultatives derive from earlier verb–verb “co-ordinate” constructions (originally with an overt morpheme *er*: *ji er sha zhi* “struck and killed him”) which functionally is similar to the role of converbs in South and Central Asian languages.

While these Asian verb-verb collocations are strikingly similar in broad strokes, there are significant differences in the lexical, semantic, and morphosyntactic properties of these constructions in different languages. This is true even in closely related languages in the same language family, such as in Hindi and Nepali.

The historical relation between verb-verb collocations in different Asian languages is unclear. Even in geographically proximate language families such as Indo-Aryan and Dravidian, there is evidence of independent development of verb-verb collocations, with possible later convergence. Central Asian verb-verb collocations being very similar in morphosyntactic structure to South Asian verb-verb collocations, it is tempting to suppose that for these there is some contact-based cause, particularly since such collocations are much less prominent in Turkic and Iranian languages outside of Central Asia. The relation between South and Central Asian verb-verb collocations and Chinese verb-verb collocations is even more opaque, and there are greater linguistic differences here. In this connection, further study of verb-verb collocations in Asian languages geographically intermediate to Central and South Asia, including Thai, Vietnamese, and Burmese, is required.

Keywords: verb collocations, South Asian languages, Indo-Aryan, Dravidian, Chinese, Central Asian languages, grammaticalisation, light verbs

I Asian Verb-Verb Collocations

Verb-verb [V-V] collocations with special grammatical functions are prominent in a number of the languages of Asia, from the Indian subcontinent to Central Asia to China. While the details of these constructions vary from language family to language family, and even in some cases between closely-related languages, there is a shared tendency for the semantics of such collocations to include a sense of completedness of action, in some cases including some result of the action – though this is far from the only function expressed by V-V collocations. The V-V constructions examined here originate from serialising constructions of various types, and we find a crosslinguistic tendency for V-V collocations to be able to give rise to further grammaticalised auxiliary-type elements.

1.1 Indo-Aryan V-V collocations

In Hindi and other Indo-Aryan languages, as well as in neighbouring Dravidian languages, a prominent grammaticalised verb-verb collocation structure (often referred to as “explicator compound verbs” by South Asianists) involves a regular main verb in a bare stem or other invariant form¹ collocated with a member of a closed-class of semantically-bleached light verbs (usually but not always homophonous with an existing full verb counterpart in the language).²

Compare the simplex (1-a) with the compound verb counterpart in (1-b):

- (1) a. Us-ne khānā (nahīm) khāy-ā.
he/she.SG-AGT food.SG.MSC (NEG) eat-PERF_PTCP.SG.MSC
“He/she (didn’t eat) ate the food.” [Hindi]
- b. Us-ne khānā khā liy-ā.
he/she.SG-AGT food.SG.MSC eat.ABS take-PERF_PTCP.SG.MSC
“He ate up the food.” [Hindi]

In Indo-Aryan generally, and very prominently in Hindi in particular, V-V collocations of the type shown in (1-b) encode completedness of the event, and, in idiomatic speech, are very frequent in utterances referring to events which reach completion.³

Even between closely related Indo-Aryan languages, the precise semantic and pragmatic details of the use of such V-V collocations varies significantly.⁴ Thus, while many other Indo-Aryan languages like Nepali often use simplex verbs for complete eventualities, in idiomatic Hindi such constructions are less common, except where negated (see (1-a)).⁵ Compare also (2) where no V-V option is available in Nepali, whereas in Hindi in non-

¹Usually indicated herein as absolute (ABS) when its use is clearly that of a V_I in a V-V collocation, or when its use is ambiguous. When such a form functions as a converb/conjunctive participle, it is glossed as CONV.

²For a broader overview of V-V verbs in South Asian languages, see, inter alia, Hook (1974), Kachru & Pandharipande (1980), Singh et al. (1986), Slade (2013, 2016, to appear), Hock (2016).

³See, inter alia, Hook (1974, 1991b, 1993).

⁴See Hook (1974), Abbi & Gopalakrishnan (1991), and Poornima (2012), inter alia, for discussions of the semantics of V-V collocations in Hindi and other languages.

⁵See Hook (1974, 1993) and Slade (2013) for further discussion.

negative utterances it is nearly obligatory from a pragmatic standpoint:

- (2) a. U maryo.
 he/she die.PAST.3SG
 “He/she died.” [Nepali]
- b. Vah mar gayā.
 he/she die.ABS go.PAST_PTCP.MASC.SG
 “He died.” [Hindi]

Table 2 perhaps still does not fully convey the amount of variation found between different Indo-Aryan V-V systems because even the semantics of the light verb uses of verbs which bear similar full verb semantics (and even cognate verbs) varies somewhat between languages, which Table 1 gives a small sampling of. Thus, sometimes the same light verb function is expressed using verbs with the same full verb meaning, e.g. Hindi *dāl-* and Nepali *hāl*. Sometimes the forms are even cognates, as is the case for Hindi *de-* and Nepali *di-*. But sometimes light verb functions are expressed using verbs with distinct full verb senses, e.g. Hindi *baiṭh-* and Nepali *paṭhau-*, and in some cases a light verb sense is expressible in some languages but not in others, e.g. Nepali lacks an equivalent to the light verb function of Hindi *le-*.

HINDI STEM	HINDI FULL VERB MEANING	LIGHT VERB SENSE	NEPALI FULL VERB MEANING	NEPALI STEM
<i>dāl</i>	throw	immediacy	throw	<i>hāl</i>
<i>de</i>	give	other-directed	give	<i>di</i>
<i>le</i>	take	self-directed		—
<i>cuk</i>	be used up	completive	complete / be able to	<i>sak</i>
<i>baiṭh</i>	sit	regret	send	<i>paṭhāu</i>

Table 1: Selected Hindi and Nepali light verbs compared [adapted from Slade (2013)]

However, in addition to being used to indicate event-completedness, light “explicator” verbs in V-V collocations often bear other meanings, including directedness of action (benefiting the agent or someone else), conscious choice (see Hook 1974, Bashir 1993, Butt 1993), or speaker evaluation of the action (e.g. regret or dismay).

(3) Directedness of action

- a. Rām-ne kām kar diyā.
Ram-AGT work do.ABS give.PAST.MASC.SG
“Ram did the work (for someone else’s benefit).” [Hindi]
- b. Rām-ne kām kar liyā.
Ram-AGT work do.ABS take.PAST.MASC.SG
“Ram did the work (for his own benefit).” [Hindi]

(4) Consciousness of choice 1

- a. Kalambas-ne Amrīkā kī khoj kī /
Columbus-AGT America of discovery.FEM do.PAST_PTCP.FEM.SG /
*kar dī / *kar lī.
*do.ABS give.PAST_PTCP.FEM.SG / *do.ABS take.PAST_PTCP.FEM.SG
“Columbus discovered America.” [Hindi] (Hook 1974: 240)

(5) Consciousness of choice 2 (Butt 1993: 35)

- a. Vah cīkhā.
he/she scream.PAST_PTCP.MSC.SG
“He screamed (despite himself).” [Hindi]
- b. Us-ne cīkhā.
he/she-AGT scream.PAST_PTCP.MSC.SG
“He/she screamed (on purpose).” [Hindi]
- c. Vah cīkh parā.
he/she scream.ABS fall.PAST_PTCP.MSC.SG
“He began screaming suddenly (despite himself).” [Hindi]
- d. Us-ne cīkh dālā.
he/she-AGT scream.ABS put.PAST_PTCP.MSC.SG
“He/she screamed violently (on purpose).” [Hindi]

(6) Speaker-evaluation of action

- a. Maim̥ kyā kar baiṭh-ā?
I.NOM what do.ABS sit.PERF_PTCP-MSC.SG
“Oh what have I done?” [Hindi]
- b. Mai-le ke gar-i- paṭhā-em?
I-AGT what do-ABS- send.PERF_PTCP-ISG
“Oh what have I done?” [Nepali]

The full-verb meanings of the light verbs across Indo-Aryan languages there show some variation, while the meanings GIVE, GO, COME, FALL, SIT, TAKE, and KEEP are common, not even these are all found universally; see Table 2 (cf. Masica 1976: 146–147).

	Bengali	Hindi	Marathi	Nepali	Oriya	Kohistani ⁶ Shina	Old Sinhala	Modern Sinhala
GIVE	deo-	de-	de-	di-	de-	doón		denəwa
GO	jāo-	jā-	jā-	jā-	jā-	bójoón	ya	yanəwa
COME	āsi-	ā-	ye-	āu-	ās-			enəwa
FALL	par-	par-	pad-		par-	dijoón		—
SIT	bas-	baiṭh-	bas-		bas-	byoón		—
TAKE	ne-	le-	ghe-	—	ne-	—	gan	gannəwa
KEEP	rak-	rakh-		rākh-	rakh-			—
THROW	phel-	ḍāl-	ṭāk-	hāl-				—
RISE	oṭh-	uṭh-	uṭh-		uṭh-			—
MOVE	cal-	cal-	cal-		cāl-			—
DIE		mar-			mar-			—
KILL		mār-			mār-			—
SEND				paṭhāu-				—
PLACE							la	
SHOW							pa	
OPEN								arinəwa, ærenəwa
LEAVE						phátoon		—
RELEASE						mojoón		—

Table 2: Light verbs that occur in V-Vs from selected Indo-Aryan languages [adapted and expanded from Slade (to appear)]

In terms of morphosyntax, V-V collocations also vary rather widely in Indo-Aryan. While in Hindi, a variety of other linguistic material can intervene between the main verb and

⁶The Shina varieties in Gilgit and Skardu do not appear to exhibit use of V-Vs (Peter Hook, p.c.).

the “explicator” light verb, as in (7), this is not true in Nepali, where not even particles may intervene, as shown by the ungrammaticality of (8).⁷

- (7) Mai-ne khānā khā to liy-ā, lekin phir ultī bhī
 I-AGT food eat.ABS EMPH take.PAST.PTCP-SG.MSC but then vomit also
 ā-ī.
 come.PAST.PTCP-SG.FEM
 “I did eat food, but then I also vomited.” [Hindi]

- (8) *Mai-le bhāt khā-i- ta sak-em, ...
 I-AGT food eat-ABS- EMPH finish-PAST.SG.MSC
 “I did eat food, ...” [Nepali]

Likewise, while Hindi allows for only one light verb per main verb, as shown in (9), in other Indo-Aryan languages, V-V collocations can involve two distinct “explicator” light verbs associating with a single main verb, as in the Nepali (10) and the Sinhala (11).

- (9) a. Us-ne kican sāf kar dī.
 he/she-AGT kitchen clean do.ABS give.PAST.PTCP.SG.FEM
 “He/she cleaned the kitchen for me.” [Hindi]
- b. Us-ne kican sāf kar dāl-ī.
 he/she-AGT kitchen clean do.ABS put.PAST.PTCP-SG.FEM
 “He/she cleaned the kitchen straightaway.” [Hindi]
- c. *Us-ne kican sāf kar de dāl-ī.
 he/she-AGT kitchen clean do.ABS give.ABS put.PAST.PTCP-SG.FEM
 “He/she cleaned the kitchen for me straightaway.” [Hindi]

⁷Further discussion of the specific properties of Nepali V-Vs is found in Pokharel (1991), (Peterson 2002), and Slade (2013).

For other dimensions of variation in the morphosyntactic properties of “explicator” V-V constructions in Indo-Aryan, see Slade (2013, 2016, to appear). Neighbouring Dravidian languages, as discussed in the next section, also employ V-Vs, and in very similar ways to Indo-Aryan languages.

1.2 Dravidian and other Indian languages

Dravidian languages, like Indo-Aryan languages, use a V-V construction in which a light verb collocates with a non-finite form of the main verb. In Dravidian, this non-finite form may be a converb (as in Indo-Aryan). Like in Indo-Aryan these V-V collocations sometimes signal completedness of an event (12-a), but can other encode other Aktionsart-like meaning components, like (direction of) benefaction (12-b), speaker evaluation of an event (12-c), (12-d), etc.

- (12) Dravidian V-Vs with converbs/conjunctive participles

 - a. *Aval ōtippōy viṭṭāl.*
she.NOM run-away.ABS leave.PAST.3SG.FEM
“She’s run away (from home).” [Tamil] (Steever 2005: 157)
 - b. *Atai uṭaittu-k koṭu.*
it.ACC break-ABS give.IMP
“Get that broken up/ground for us.” [Tamil] (Steever 2005: 231)
 - c. *Avan̄ oru nāvalai ezuti-t tallinān̄.*
he.NOM one novel.ACC write-ABS push.PAST.3SG.MASC
“He dashed off a novel.” [Tamil] (Steever 2005: 114)

- d. Contakkāraṇ̄ **vantu tolaintān̄**.
 relative.NOM come.ABS lose.PAST.3SG.MASC
 “My relative arrived, damn it!” [Tamil] (Stever 2005: 7)

(13) Dravidian V-Vs with infinitives

- a. Avan kārai ōt̄-a vaittān̄.
 he car.ACC run-INF place.PAST.3SG.MASC
 “He made the car run.” [Tamil] (Annamalai 2016: 549)
- b. Makan̄ aruk-a varu-v-ān̄.
 son.NOM near-INF come-FUT-3SG.MASC
 “His son will approach.” [Tamil] (Stever 2005: 77)

As for Indo-Aryan, the inventory of light verbs found in such constructions shows some similarity – at least in terms of the full-verb meanings of the light verbs – across Dravidian languages, but there are still substantial differences. Likewise, some of the Dravidian light verbs have similar meanings when they occur as full verbs to the light verbs of Indo-Aryan V-V constructions. See Table 4 below.

Likewise, in South Asian languages from other families, we see the presence of V-V collocations, including Munda (Austro-Asiatic), on which see Hook (1991a); and a number of Tibeto-Burman languages, including Tibetan (Tournadre & Jiatso 2001). See Hock (2016) for a recent overview.

1.3 Central Asian languages

Central Asian languages, including Turkic Uighur, Uzbek, and Kazakh, as well as Iranian Tajik, have V-V collocations that are remarkably similar to South Asian V-V constructions, including even the appearance of the main verb in a form identical to or deriving from a converb/conjunctive participle (see further below in Section 2.2).

The meanings of V-V collocations in Central Asian too resembles those found in South Asian V-V collocation, including aspectual senses (14) and other Aktionsart senses like benefaction (15), (16-b).

	Uighur	Uzbek	Kazakh	Tajik
PUT, PUT DOWN	<i>qoy-</i>	<i>qøy-</i>	<i>qoy-</i>	
STAY, STAND/GET UP, LIVE	<i>tur-</i>	<i>tur-</i>	<i>tur-</i>	<i>istodan</i>
WALK, MOVE, TURN	<i>yür-</i>	<i>yür-</i>	<i>cür-</i>	<i>gashtan</i>
GET/TAKE	<i>al-</i>	<i>ol-</i>	<i>al-</i>	<i>giriftan</i>
LIE (DOWN)	<i>yat-</i>	<i>yøt-</i>	<i>cat-</i>	
GIVE	<i>bär-</i>	<i>ber-</i>	<i>ber-</i>	<i>dodan</i>
SIT	<i>otltur-</i>	<i>ütir-</i>	<i>otir-</i>	<i>nishastan</i>
GO OUT, GO UP	<i>čiq-</i>	<i>čiq-</i>	<i>siq-</i>	
COME	<i>käl-</i>	<i>kel-</i>	<i>kel-</i>	<i>omadan</i>
PASS (THROUGH)	<i>öt-</i>	<i>üt-</i>		<i>guzashtan</i>
GO, REACH	<i>bar-</i>	<i>bør-</i>	<i>bar-</i>	<i>raftan</i>
REACH	<i>yät-</i>	<i>yet-</i>		
LEAVE	<i>kät-</i>	<i>ket-</i>	<i>ket-</i>	
PUT INTO	<i>sal-</i>	<i>sɔl-</i>	<i>sal-</i>	
SEND (OFF)	<i>(ä)wät-</i>	<i>yubør-</i>	<i>ciber-</i>	<i>firistodan</i>
SEE	<i>kör-</i>	<i>kür-</i>	<i>kör-</i>	<i>didan</i>
THROW	<i>tašla-</i>	<i>tašla-</i>	<i>tasta-</i>	<i>partoftan</i>
LOOK AT/AFTER	<i>baq-</i>	<i>baq-</i>		
REMAIN	<i>qal-</i>	<i>qɔl-</i>	<i>qal-</i>	<i>mondan</i>
BE, BECOME	<i>bol-</i>	<i>bül-</i>		
LOOK AT	—	<i>qara-</i>		
BE FINISHED	—	<i>bit-</i>		
KNOW	—	<i>bil-</i>	<i>bil-</i>	
LOSE	—	<i>yɔz-</i>		
COME DOWN	—	<i>tuš-</i>	<i>tüs-</i>	
DIE	—	<i>ü̯l-</i>		
WRITE	—	—	<i>caz(da)-</i>	
COME OUT				<i>baromadan</i>
CARRY, TAKE AWAY				<i>burdan</i>
BRING				<i>ovardan</i>

Table 3: Light verbs that occur in V-Vs from selected Central Asian languages

(14) Completive senses

- a. 54 ming yuwanlik quyun setilmay, bharya kälgändä hämmisi ses-ip
rot-ABS

kätti.

left

“Not having been sold, all of the honey melons worth 54 thousand yuan

completely rotted when spring came.” [Uighur] (Ibrahim 1995: 78)

- b. Men sizga hali **ayt-ib** qūydim
tell-ABS put

“I have already told you.” [Uzbek] (Ibrahim 1995: 185)

(15) Benefactive senses

- a. Sizgä xat yez-ip bäräm aýiniňizya özäm **ogu-p** bäräm bolidu.
letter write-ABS give read-ABS give
“If I write a letter (for you), I have to read it myself to your friend.”
[Uighur] (Ibrahim 1995: 116)
- b. Gulnaraxon ašula **ayt-ib** bersa, čal-ib beraman.
Gulanaraxon song sing-ABS give, play.music-ABS give
“If Gulnaraxon sings a song (for us), I will play the music (for you or for her).” [Uzbek] (Ibrahim 1995: 194)

(16) a. Mujhe kuch acchi khabar kah **dijiye.**
me some good news tell.ABS give.POL.IMPV
“Tell me some good news.” (Hindi)

- b. Siz mağan minaday waqıغانıñ qalay bolğanı turalı **ayt-ip** benijiz.
tell-ABS give.IMPV
“Tell me how such an incident happened.” (Kazakh; Demirci (2003: 124))

The inventories of light verbs of Central Asian languages (see Table 3) have some similarities, in terms of the full-verb meanings of the light verbs, with those of South Asian languages. We find closer similarities in the light verbs inventories of the Turkic Uighur, Uzbek, and Kazakh than we do between the inventories of Indo-Aryan or Dravidian languages. Tajik seems to have acquired V-V constructions through contact with Turkic languages: “these are a salient feature of Tajik, especially in the literary language and the Northern dialects, where they seem to have originated as calques on Uzbek usage. The category may still be evolving and expanding” (Perry 2005: 467).

1.4 Chinese

Modern Mandarin Chinese prominently employs a number of V-V constructions, which generally have the form “V₂ occurs as a result of V₁”, not unlike English constructions of the sort *Charles talked himself hoarse, James ran his shoes ragged*. As shown in (17), the result can be something that applies to the subject or an object.

- (17) Mandarin V-V resultative constructions (from Liu 2019: 2)

- a. John **tui-kai-le** men.
John push-open-PERF door
“John pushed the door open.” [object-oriented]
- b. John **chi-bao-le**.
John EAT-be.full-PERF
“John got full from eating” [subject-oriented]

- (18) Mandarin parallel V-V constructions (from Liu 2019: 13)

- a. John hen **xiang-nian** jiaren.
John very think.about-miss family
“John missed his family very much.”

Setting aside the parallel “stir-fry” V-V type of (18), the resultative V-V type shown in (17) are reminiscent of the South Asian and Central Asian V-V collocations, however these are rather different from the South Asian or Central Asian V-V collocations in not being directly about completion of an eventuality or contributing Aktionsart-type information, nor in involving a small, closed-class of light verbs. Further, where the semantic contribution of the light verb in the South Asian and Central Asian V-V collocations, where it is not purely aspectual, tends to be more uniformly subject- or agent-oriented.

However, in examining the origins of the Chinese construction (see Section 2.3 below), as well as in some of the historical developments of auxiliaries from resultative V-V constructions, we will find a number of parallels with the South Asian or Central Asian type of V-V constructions.⁸

⁸See Masica (1976), Liang & Hook (2007), and Hook et al. (2012) for further comparison of South Asian and Chinese V-V constructions.

1.5 V-V collocations in other Asian languages

Like in Chinese, resultative V-V also appear in Vietnamese (Masica 1976: 152). Thai and Burmese display something apparently closer to the South Asian system, with verbs in these languages using the addition of a V₂ to make the result non-inchoative (Masica 1976: 152–153). Japanese, Korean, and Mongolian also employ V-V structures very similar to what are found in South Asian and Central Asian languages: V-V collocations where the V₁ appears in what formally is a conjunctive participle (=converb) form, with the V₂ being drawn from a set of light verbs whose full verb counterpart bear meanings at least partially similar to those found for South Asian languages (Masica 1976: 154–155).

In the next section is given an overview of the historical development of V-V collocations in South Asian (Indo-Aryan and Dravidian), Central Asian, and Chinese languages.

2 Origins and developments of Asian V-V constructions, and their connection with converbs

In South Asian and Central Asian languages, light verb V-V constructions clearly derive from converb constructions (of the form “N having X-ed, Y-ed”). In Chinese, there are no converb-constructions as such, but the later resultative V-V constructions derive from an earlier construction which involved an overt verb/clause connective particle *er*.

2.1 Development of South Asian V-V constructions

Historically, the morphological form of the main or polar verb of the Indo-Aryan light verb V-V construction is an absolutive, a fixed, indeclinable form also used in earlier converb constructions, which also survive in to the modern IA languages, sometimes (as in Hindi) with in extended forms distinguishing them from the absolutive used in CVs, compare (i) with (19), where the latter show the sequential ordering of events use of the converb in (19-a) or the co-eventual (Raina 2011) use of the converb in (19-b).

- (19) a. Vah khānā khā-ke ghar gayā.
he/she-NOM food.SG.MSC eat-CONV home go.PERF_PTCP-SG.MSC
“(After) having eaten food, he went home.” [Hindi]

- b. Vah haṁs-ke bol-ī ‘hām’.
 he.she **laugh**-CONV say.PERF_PTCP-SG.FEM ‘yes’
 “Laughing(ly) she said ‘yes.’” [Hindi]

Such constructions are prominent in Sanskrit:⁹

- (20) Sītā mad-vacanāt vācyā samāśvāsyā prasādyā ca.
 Sita.FEM.SG.NOM my-command.ABL speak.GDV **console.GER** calm.GER and
 a. #“By my command Sita is to be spoken to, having consoled and calmed
 (her).” (past-tense converb reading)
 b. “By my command Sita is to be spoken to consolingly and calmly.”
 (non-past converb reading)
(Mahābhārata 3.264,56, cited in Tikkanen 1987: 123)
- (21) Vikramārko nītim ullaṅghya rāyjam na karoti.
 Vikramārka.NOM rules-of-ethics.ACC **transgress.GER** rule.ACC not do.PRES.3SG
 a. #“Vikramarka, having transgressed the rules of ethics, does not rule (his
 kingdom).” (past-tense converb reading)
 b. “Vikramarka does not rule (his kingdom), transgressing the rules of eth-
 ics.” (non-past converb reading)
(Vikramacarita 18.0, cited in Tikkanen 1987: 124)

And likewise in Pali:

- (22) ... atha so ... bhatim **katvā** jīvati.
 ... thus he.NOM ... wages.ACC **do.GER** live.PRES.3SG
 a. #“... and so he, having worked as a day-labourer, lives.” (past-tense converb
 reading)
 b. “... and so he lives by working as a day-labourer.” (non-past converb
 reading)
(Jātaka 41, cited Tikkanen 1987: 125)

And these are found throughout later Indo-Aryan, including in the pre-modern period:

⁹For more discussion of ‘non-past’ readings of Sanskrit gerunds, see Hock (1992).

- (23) Mahamet-himiyā abu Nāl himiyabuyun ga liyu me gī.
 Lord Mahamet.GEN wife Nāl Lady sing.CONV written this song
 “This song was sung and written down by Lady Nāl, wife of Lord Mahamet.”
 [Sigiri Graffito 543; 800–900 c.e.] [Old Sinhala]

The morphological form of the main or polar verb in many modern Indo-Aryan V-V constructions generally derives from the Old Indo-Aryan (OIA) past gerund of prefixed verbs in -(t)ya/(t)yā (Chatterjee 1926; Hendriksen 1944; Tikkanen 1987), an element which has the “virtual value of an indeclinable participle” (Whitney 1879/1889: §989), which in general functions as a converb, meaning something like “having X-ed”. Modern Indo-Aryan V-V compounding ultimately derives from a reanalysis of structures involving this absolute, in its converb/gerund-sense, combined with another verb. Thus the Sanskrit example in (24) can be seen as the formal precursor of Hindi (25).¹⁰

- (24) Annam sam-khād-ya gataḥ asti.
 food.ACC together-eat-GER go.TA_PTCP.NOM.SG be.PRES.3SG
 “He ate up the food and left” (Lit., “Having eaten up the food, (he) left.”)
 [Sanskrit]
- (25) Vah khānā khā gay-ā.
 he/she food.MSC.SG eat.ABS go.PERF_PTCP-SG.MSC
 “He gobbled up the food.” [Hindi]

The change from (24) to the V-V construction of the type exemplified by (25) took place via the reanalysis of gerund + V₂ as a single predicate, in which the semantic contribution of the gerund was taken to be primary, and the V₂ as a modifying element (i.e. a vector or light verb). This only happened with a subset of verbs occupying the V₂ position, specifically with verbs with broad semantic values, e.g. verbs meaning “go”, “give”, “take”, etc. Further, converb constructions did not disappear from modern IA; rather a sort of morphosyntactic split took place, with some gerund + V₂ constructions being reinterpretable/reinterpreted as V-Vs. (See Slade (2013) for more details.)

¹⁰Example (24) and all subsequent examples from Sanskrit are shown in unsandhi form.

(26) Hindi

- a. Maim yah bāt bilkul bhūl cukā
I this matter completely forget.ABS used.up.PERF_PTCP.MSC.SG
thā.
PAST.MSC.SG
“I had completely forgotten about this thing.”
- b. Gusse mem̥ us-ne merā redyo tor
anger in he/she.OBLQ-AGT my.MSC.SG radio break.ABS
dālā.
throw.PERF_PTCP.MSC.SG
“In anger, he broke my radio.”

(27) Nepali

- a. Āṭh baj-i-sakyo.
eight strike.ABS-finish.PAST.3SG
“It’s already eight o’clock!”
- b. Anju-le bibek-lāi gupta kurā bhan-i-hālyo.
Anju-AGT Bibek-OBLQ secret thing speak-ABS-throw.PAST.3SG
“Anju blurted out the secret to Bibek.”

(28) Sinhala

- a. Gunəpālə kāmak hadāⁱⁱ gatta.
Gunapala meal.INDEF make.ØABS take.PAST
“Gunapala made a meal (for himself)” (Paolillo 1989) [Modern Colloquial Sinhala]
- b. Gunəpālə mahatteaṭə kāmak hadə.la dunna.
Gunapala gentleman.DAT meal.INDEF make.ABS give.PAST
“Gunapala made a meal for the boss.” (*Ibid.*) [Modern Colloquial Sinhala]
- c. Gewal pol atu-wəliŋ hewili kərə-la ē uḍətə
houses coconut branches.PL.INSTR roofing do.ABS that above.DAT
piduru ihirō-la arinəwa.
straw sprinkle.ABS open(vol).PAST_PTCP
“Having roofed the houses with coconut branches, on top of that (they) cover it (up) with straw [i.e. sprinkle it completely with straw].” (*Ibid.*)

[Modern Colloquial Sinhala]

Definitive examples of V-V constructions of the modern IA type in (25), (26), (27), (28) do not appear until the modern period (see Masica 1991: 325 and Slade 2013), with the exception of Sinhala (discussed below around example (31)).¹² Below are given early definitive examples of V-V constructions in Hindi, Nepali, and (occurring significantly earlier) Sinhala:

(29) Early V-Vs in Hindi

- a. Bhayabhīta hvai-kari samudra kau mathivau na **cchād-i**
without fear be-CONV ocean of churning not **leave-ABS**
dayau.
give.PERF_PTCP.MSC.SG
(i) “Having become fearless, (he) did not leave off the churning of the ocean.” (complex predicate reading)
(ii) #“Having become fearless, (he), having not left the churning of the ocean, gave.” (literal converb reading)
(ca. 1600 C.E., Indrajit of Orchā’s commentary on the *Nītiśataka* of Bharṭṛhari, f.17a; McGregor 1968: 54)

(30) Early V-Vs in Nepali

- a. 2 ālā motipur-kā 2 ālā vaks-i
2 field.MSC.PL Motipur.GEN 2 field.MSC.PL **bestow.ABS**
diyām chaum.
give.PERF_PTCP.MSC.PL **be.PRES.IPL**
“We have given two fields of Motipur.” [Old Shah Nepali, 1529 C.E.; Wallace 1982: 164]
- b. Tahāṁ kājikana vujhāi samjhāi nāhā
there Kazi.INSTR understanding understand.CAUS.CONV here
paṭhā-i- **dinu** havas.
send-ABS- **give.IMPV**

¹¹Curiously, V-Vs with *gannəwa*, unlike the others, use the (fossilised) old Sinhala absolutive form without *la* for the main/polar verb, glossed here and below as ØABS.

¹²See Delbrück (1888: 406–7) and Tikkannen (1987) for examples of idiomatic V-V combinations in Sanskrit, but see Slade (2013) for discussion of such putative early examples in Sanskrit and Pali and their differences from the modern type of V-V collocation.

- (i) “Persuade the Kazi there, and send him here.” (complex predicate reading)
- (ii) #“Persuade the Kazi there, and having sent him here, give (him).”
(literal converb reading)
(Old Shah Nepali, 1755/6 C.E. ~ 1812 V.S., Prithvinarayan Shah, letter to Pañdit Rājīvalocana; Pokharel B.S. 2020 [=1963C.E.]: 196)
- c. Pachillā ciṭhi-ko javāph hāmi-le les-i-
last.OBLQ letter.GEN.MSC.SG answer we.AGT **write.ABS**
rākhyā-thyaum.
place.PERF_PTCP.MSC.PL-be.PAST.IPL
“We wrote our answer to the last letter.” [Old Shah Nepali, 1792 C.E.; Wallace 1982: 191]
- d. Unai-ki maiyā hāmī-le lyā-i pal-i
she.EMPH-GEN.FEM daughter we.AGT bring.CONV **nurture.ABS**
rāsyāki chan.
place.PERF_PTCP.FEM.SG be.3PL.H
“We took her daughter in and raised her.” (? Or, “We took her daughter in and kept nurturing her.”) [Old Shah Nepali, 1800 C.E.; Wallace 1982: 193]

It is notable that, as shown by Table 2, the set of light verbs in Old Sinhala and modern Sinhala are rather different, sharing only two items in common.

(31) Early V-Vs in Sinhala

- a. Suka topa vi divi giya.
Happiness.NOM your.GEN become.PAST.3SG run.ABS go.PAST
“Your pleasure vanished.” (Lit. “Your pleasure having run went.”) [*Sigiri Graffito* 498; 750–800 C.E.] [Old Sinhala]
- b. Næga gan Sihigiri.
rise.ABS take.IMPV Sihigiri
“Ascend Sihigiri!” (Lit. “Having risen take Sihigiri!”) [*Sigiri Graffito* 169; 850–900 C.E.] [Old Sinhala]
- c. Hela-divi a Jabu-duvu datimi pataka
Ceylon come.PAST,PTCP Indian know.PAST.ISG letter.ACC.SG.INDEF
di kese lami.
give.ABS how place.PRES.ISG
“To Sri Lanka has come an Indian; I know how to give (him) a letter.”
(Lit. “...I knew how to, having given a letter (to him), place (it).”) [*Sigiri Graffito* 293; 700–800 C.E.] [Old Sinhala]

In Dravidian too, most of the V-V collocations involve converbs (=nonfinite conjunctive participles). As in Indo-Aryan, these conjunctive participles still exist in their converb uses:

(32) Rattiri pō-y pakal vantatu.
Night depart-CONV daylight come.PAST.3SG.NEU
“Night having departed, daylight came.” [Tamil]

In Tamil, as in Sinhala, there has been significant change in terms of the inventory of light verbs that appear in V-V collocations. Only two of the light verbs found in Old Tamil show up in modern Tamil (which also shows the development of a number of additional light verbs not found in Old Tamil), as shown by Table 4. An example of an early Tamil V-V collocation is shown in (33).

(33) Nemīti konṭu ...
scoop.ABS hold.CONV ...
“While (someone) was scooping up (something) ...” [Old Tamil] (Steever 2005: 38)

	Old Tamil	Tamil	Malayalam	Betta Kurumba	Kannada	Telugu
GO		<i>pō</i>	<i>pō</i>	<i>pōg</i>	<i>bōgu</i>	<i>pō</i>
SEE		<i>par</i>	<i>kāñ, nōkku</i>	<i>nōd</i>	<i>nōdu</i>	<i>cūs</i>
GIVE		<i>koṭu</i>	<i>koṭu, tar</i>	<i>kod, tār</i>	<i>kođu</i>	
RELEASE/CAST/LEAVE		<i>vītu</i>	<i>kalay</i>	<i>kāl</i>	<i>biđu</i>	
PLACE/PUT		<i>vai</i>	<i>vay</i>		<i>hāku</i>	<i>wēs</i>
HOLD/CONTAIN	<i>kolla</i>	<i>koł</i>	<i>koł</i>			
BE	<i>irukka</i>	<i>iru</i>		<i>ir</i>		
TAKE		<i>eṭu</i>	<i>eṭu</i>			
BEFALL	<i>pata</i>					
COME	<i>vara</i>					
GRACE	<i>arūla</i>					
STRIKE	<i>iṭa</i>					
PURGE	<i>oziya</i>					
BECOME		<i>āku</i>				
DROP		<i>pōṭu</i>				
SHOW		<i>kāṭṭu</i>				
LOSE		<i>tolai</i>				
TEAR-UP		<i>kizi</i>				
PUSH		<i>tallu</i>				
DESTROY			<i>tulay</i>			
STAND			<i>nil</i>			
SIT			<i>iri</i>			
ACT SUITABLY			<i>aruļ</i>			
BE-FINISHED			<i>kazi</i>			
JOIN			<i>ēku</i>			
PLAY					<i>ādu</i>	
KEEP						<i>petṭ</i>
BUY						<i>kon</i>
FALL						<i>pad</i>
DIE						<i>caw</i>

Table 4: Light verbs that occur in V-Vs from selected Dravidian languages [adapted and expanded from Slade (to appear)]

A similar pattern of development of V-V collocations is found in Central Asian languages, described in the next section.

2.2 Development of Central Asian V-V constructions

The Central Asian V-V collocations likewise derive from constructions involving converbs. Uighur, Uzbek, and Kazakh form converbs with the affixes -(V)p and -a:

- (34) a. Yürt čonliri arqisiya **burulu-p** qaridi.
turn.around-CONV looked
“The elders of the people turned around and looked [at him].” (Uighur; Ibrahim (1995: 9))
- b. Kumušbibi Ḫatabekning qülidan ušla-b, qüyida **yɔzip** qüyilgan
Kumushbibi Otabek.GEN hand take-CONV,
dasturxon yɔniga bɔsladi.
- “Kumushbibi took Otabek’s hand, and led him to the dasturon where food had been spread out.” (Uzbek; Ibrahim (1995: 9))
- c. Ulpan sarı cez samavırındı **köter-ip**, dalağ şigip ketti.
samovar lift-CONV,
“Ulan, lifting his yellow samovar, went to the field.” (Kazakh; Demirci (2003: 49))

Thus we can find converb constructions in Central Asian languages which are very similar to those found in South Asian languages, as shown in (35).

- (35) a. Rām kitāb **le-kar** āyā.
Ram book take-CONV come.PAST.PTCP.MASC.SG
“Ram brought the book.” (Lit. “Ram, having taken the book, came.”) (Hindi)
- b. Ali kitabı **al-ip** geldi.
Ali book take-CONV come.PAST
“Ali brought the book.” (Lit. “Ali, taking the book, came.”) (Kazakh; Demirci (2003: 50))

V-V collocations in Chinese, on the hand, while differing in significant respects from South Asian or Central Asian V-Vs both in terms of their semantics and morphosyntax, are in their earliest stages more similar in certain respects.

2.3 Development of Chinese V-V resultatives

In Old Chinese – while we find no exact morphological counterparts of the South Asian or Central Asian converbs – we do find an overt particle *er* which “co-ordinates” verb phrases or clauses (it cannot co-ordinate nouns or other types of phrases) which appears functionally very similar to the converb constructions of South Asian and Central Asian languages:

(36) *Er* as a verb connective

- a. Feng xing er zhuo yu tu.
wind move *er* attach to soil
“Wind moves and attaches to soil.” (Old Chinese, *Zuo zhuan*, *Zhuanggong* 550BC, Shi (2002: 142))
- b. Bao zi hou ji er sha zhi.
leopard from back strike *er* kill he
“A leopard struck and killed him from the back.” (Old Chinese, *Zuo zhuan*, *Ranggong ershi san* 475BC, Shi (2002: 53))

(37) *Er* as a clausal connective

- a. Qi zi qu er wang shi zhi.
his son ran *er* go see them
“His son ran to the field and saw them.” (Old Chinese, *Mengzi* 400BC, Shi (2002: 157))
- b. Min qi miao zhibu zhang er ya zhi.
worry his seedlings NOM. not growth *er* pull-up they
“He worried about the slow growth of his seedlings and pulled them up.”
(Old Chinese, *Mengzi* 400BC, Shi (2002: 157))
- c. Shi he yi-yu ci ren er sha zhi?
this how different-from stab people *er* kill he
“How is it different from the fact that (you) stab the people and kill him?”
(Old Chinese, *Mengzi* 375BC, Shi (2002: 55))
- d. Meng wei yu er mo/mei yu yuan.
dream become fish *er* sink into abyss
“(He) became a fish in his dream and sank into an abyss.” (Old Chinese, *Huainanzi*, *Zhenxun* 125BC, Shi (2002: 199))

These constructions with *er* are the predecessors of the Chinese resultative constructions. And in fact, early proto-resultative constructions can still be found containing *er*, as in (38).

- (38) Proto-resultative structures still containing *er*
- a. Qiu wu yu chu er bu de.
request material and fodder *er* not get
“Requested materials and fodder but did not get.” (Old Chinese, *Mengzi* 375BC, Shi (2002: 56))
 - b. Zhi Guan Zhong Yan Zi er yi yi.
know Guan Zhong Yan Zi *er* complete PRT
“(They) just knew Guan Zhong and Yan Zi. That’s it.” (Old Chinese, *Mengzi* 375BC, *Ibid.*)

Not only the *er* “converb”-type constructions, but also these early proto-resultatives are agent-oriented like the South Asian and Central Asian converb constructions (and the later V-V constructions).

Thus in Old Chinese we find numerous constructions of the sort V-sha “V-kill”:

- (39) She sha Ling Gong.
shoot kill Ling Duke
“(Someone) shot and killed Duke Ling.” (*Shi ji, Chen Qi shijia*, 100 B.C., Shi (2002: 55))
- (40) An beng, jin ya-sha wo-zhe.
Bank collapse, entirely **press-kill** sleeper
“The collapsing of the bank crushed and killed all the sleeping people” (*Shi ji, Xiang Yu benji* 100 B.C., Shi (2002: 45))

We find other, similarly agent-oriented V2 instances in Old Chinese with other V2s:

- (41) a. Nai shou yang zhi.
then adopt raise it
“Then adopted and raised it.” (Old Chinese, *Lunheng, Jiyan pian* 100BC, Shi (2002: 55))

- b. Gong Zheng bai zhi.
 attack Zheng defeat it
 “(They) attacked Zheng country and defeated it.” (Old Chinese, *Shi ji*,
Zhao shijia 100BC, Shi (2002: 55))

By Middle Chinese, these agent-oriented V-V resultatives disappear, replaced with the subject-/object-oriented V-V type familiar from modern Chinese, and thus V-*sha* “V-kill” is replaced by V-*si* “V-die”:

- (42) Bai yu ren tan beng jin ya-si.
 Hundred more people charcoal burst entirely **press-die**
 “Because the charcoal burst, more than a hundred people were crushed and all died.” (Middle Chinese, *Lunheng*, *Mingyi* 15AD, Shi (2002: 45))
- (43) Ni ba wo laozi **yao-si** le.
 you BA I father **poison-die** PERF
 “You poisoned my father and killed him.” (Early Modern Chinese, *Du E yaun*, A.D. 1325, Shi (2002: 219))

Developments involving *further* grammaticalisations of light verbs occurring in V-V collocations are found in all three of these linguistic areas (South Asia, Central Asia, China), and, here again, display a number of interesting analogues to one another.

3 Further evolution of V-V collocations

In South Asian languages, Central Asian languages, and Chinese, we find that certain light verb V-V constructions have undergone further grammaticalisation, taking on more clearly auxiliary-type functions.

3.1 Further grammaticalisation of light verbs in South Asian languages

Nepali, Hindi, and Sinhala all present evidence of the grammaticalisation of certain V-V constructions. This article focusses on developments in Indo-Aryan, but see Coelho (2018) for similar observations of change in the V-V system of the South Dravidian language Betta

Kurumba.

3.1.1 Nepali honorifics

The Nepali light verb *baksinu* provides an example of change affecting a light verb independently of its full verb counterpart. Nepali *baksinu* is a light verb employed in V-V constructions as an honorific when referring to Nepali royalty and other persons due great respect, e.g.:

- (44) Mausuph-le yo kuro ghosanā **gar-i-** **baksi-yo.**
His Majesty-AGT this thing proclamation **do-ABS-** **bestow.PAST.PTCP-3SG**
“His Majesty made this proclamation.” (Sharma 1980: 131) [Nepali]

Both *baksinu* as well a phonologically-reduced form are also employed in upper-class Kathmandu families (e.g. by children to parents, wife to husband etc.), as discussed in Sharma (1980: 130–2). An example of the reduced form of *baksinu* is given in example (45).

- (45) Buwā-le bhujā **khā-i-** **s-yo.**
dad-AGT rice **eat-ABS-** HON-3SG
“Dad ate rice.” (Sharma 1980: 132) [Nepali]

While *baksinu* is employed as a main verb (46), *-s-* is not (47).

- (46) Mahārāni-le ma-lāi takmā **baksi-yo.**
queen-AGT I-OBLQ medal **bestow-PAST.3SG**
“The queen bestowed a medal upon me.” (*Ibid.*) [Nepali]

- (47) *Mahārāni-le ma-lāi takmā **s-yo.**
queen-AGT I-OBLQ medal **hon-PAST.3SG**
[Nepali]

Thus while *baksinu* as a light verb can occur in both a reduced and an unreduced phonological form, the full verb form can occur only in unreduced form.¹³ The next section

¹³Nepali *baksinu* is ultimately a loanword from Persian *bakhš* “to give”, and obviously was borrowed as a full verb, not as a light verb, since, as shown by example (46), it can still be used as a full verb.

investigates the partial grammaticalisation of a different Nepali V2 as an aspectual auxiliary.

3.1.2 Nepali *rahanu*: light verb > aspectual auxiliary

Nepali *rahanu* “remain, stay” behaves morphologically like other light verbs with respect to other properties of V-V constructions in Nepali, including selecting for an absolute participle in *-i*.

However, unlike other Nepali V-V constructions, V-Vs involving *rahanu* (or *rākhnu* “keep”) never require agentive-marking on the subject, regardless of the transitivity of the main verb. In this, the construction including *rahanu* in its light verb function appears to be a periphrastic counterpart of the Nepali synthetic imperfect construction, verb-stem + *dai* + inflected form of BE. Thus *rahanu* as a light verb, (48) with respect to agentive case-marking assignment patterns with the synthetic imperfect in *-dai*, (49), not with other V-Vs (such as the light verb *di-* as shown in (50)).

(48) Nepali

- a. Ma mandir-mā ga-i- rah-eko chu.
I temple-LOC go-ABS- remain-PERF_PTCP.MSC.SG be.IP.PRES
“I am going to the temple.” / “I have been going to the temple.”
- b. Ma yo kām gar-i- rah-eko chu.
I this work do-ABS- remain-PERF_PTCP.MSC.SG be.IP.PRES
“I am doing this work.” / “I have been doing this work.”

(49) Nepali

- a. Ma mandir-mā jām-dai chu.
I temple-LOC go-IMPF_PTCP be.IP.PRES
“I am going to the temple.”
- b. Ma yo kām gar-dai chu.
I this work do-IMPF_PTCP be.IP.PRES
“I am doing this work.”

- (50) Nepali

 - a. Ma mandir-mā ga-i- di-eko chu.
I temple-LOC go-ABS- give-PERF_PTCP.MSC.SG be.IP.PRES
“I have gone to the temple (for someone).”
 - b. Mai-le yo kām gar-i- di-eko chu.
I-AGT this work do-ABS- give-PERF_PTCP.MSC.SG be.IP.PRES
“I have done this work (for someone).”

In contrast to typical V-V constructions (like those in (50)), constructions in which *rahanu* functions as a light verb do not require agentive marking on the subject (even when the main verb is transitive); see (48). In this, the V-V construction with *rahanu* closely resembles the synthetic imperfect construction, as in (49).

The Nepali light verb *rahanu* appears thus to be in the process of becoming an auxiliary like Hindi *rahnā*. Both *rahanu* and *rākhnu* are further interesting in that sometimes they maintain a more contentful light verb sense¹⁴ – e.g. as in (51) and (52), respectively – another indication of their intermediate status in present-day Nepali.

- (51) Bas na-āe-samma ma yahīm **basi-rahan-chu**.
bus not-came-until I here sit.ABS-remain-be.ISG
“I’ll keep sitting here until the bus comes.” (Matthews 1998: 236) [Nepali]

(52) Dākṭar-le ma-lāī auṣadhi **khā-i-rākhnu** bhanekā
doctor-AGT I-OBLQ medicine eat-ABS-keep.INF say.PERF_PTCP.PL
thie.
be.PAST.MSC.PL.H
“The doctor had told me to keep taking the medicine.” (*Ibid.*) [Nepali]

The next section shows that the Hindi auxiliary *rabnā* has progressed even further along the path of grammaticalisation than has Nepali *rahanu*.

¹⁴See also above Old Shah Nepali examples of *rākh-* as a light verb in (30-c)–(30-d).

3.1.3 The development of the Hindi auxiliary *rahnā*

The Hindi continuative auxiliary use of *rahnā* also originated as a light verb before being further grammaticalised as part of the core grammar of aspect in Hindi.¹⁵

Though in Modern Hindi, the simple present and the present continuous are clearly distinguished, as shown in (53).

(53) Present-Day Hindi

- a. Maim̥ skūl jātā hūm̥.
I school go.IMPF_PTCP.MSC.SG be.PRES.ISG
“I (habitually) go to school.”
- b. Maim̥ skūl jā rahā hūm̥.
I school go.ABS remain.PERF_PTCP.MSC.SG be.PRES.ISG
“I am going to school (just now).”

However, Kellogg (1893: §404) cites forms like *maiṁ jātā hūm̥* as meaning either “I go” or “I am going”.¹⁶ Further, he categorises *rahnā* as a light verb (Kellogg 1893: §428) rather than an auxiliary, suggesting that—as in the case of Modern Nepali *rahanu*—the use of *rahnā* as indicating continuous action in 19th c. Hindi was more peripheral and not yet integrated as part of the core grammar as a clear aspectual auxiliary; see (54) and (55), taken from Kellogg (1893: §404), retaining his translations.

(54) 19th-century Hindi

- a. Donom̥ laṛke khelte the.
both boy.PL play.IMPF_PTCP.MSC.PL be.PAST.3PL
“The two children were playing.”
- b. Donom̥ laṛke khel rahe the.
both boy.PL play.ABS remain.PERF_PTCP.MSC.PL be.PAST.3PL
“The two children were engaged in play.”

¹⁵See further Bloch (1920), Hock (2008), and Slade (2013).

¹⁶A situation which persists marginally in modern Hindi, in much the same way as the modern English simple present can be employed with a progressive sense in certain contexts, e.g. “I am attaching a document to this email...” vs. “I attach a document to this email...”.

(55) 19th-century Hindi

- a. Vah suntā hai.
he hear.IMPF_PTCP.MSC.SG be.3SG
“He hears.” / “He is hearing.”
- b. Vah sun rahā hai.
he hear.ABS remain.PERF_PTCP.MSC.PL be.3SG
“He is occupied in hearing.”

The later auxiliary nature of Hindi *rabnā* represents a reanalysis which is part of larger reconstructing of the Hindi verbal system (see further Slade 2013: §5.3).

In Central Asian languages too, we find further grammaticalisation of certain V2s as aspectual auxiliaries, as shown in the next section.

3.2 Development of imperfective in Central Asian languages

A number of light verbs involved in V-V constructions in Kazakh, including *otır* “sit”, *tur-* “stay”, *cür-* “walk”, have been grammaticalised to mark the present progressive tense in Kazakh (Demirci 2003).

(56) Kərim şay iş-ip otır.

Karim tea drink-ABS sit

“Karim is drinking tea.” (Kazakh; Demirci (2003: 176))

(57) Bala dalada oyna-p cür.

Child in-field play-ABS walk

“The child is playing in the field” (Kazakh; Demirci (2003: 177))

Certain V2s from Chinese resultative V-V constructions have also been grammaticalised as aspectual markers; the next section provides an overview of the grammaticalisation of *liao* > the perfective particle *le*.

3.3 Development of aspectual auxiliaries in Chinese

In modern Chinese, the particle *le* marks perfective aspect:

- (58) Wo xie-le yi-ben shu.
 I write-*le* one-CLSF book
 “I wrote a book.” [modern Mandarin] (Sybesma 1997: 215)

Prior to the 10th-century AD, *liao* (>*le*) was used as a main verb as well as in resultative construction; after the 10th-century it became purely an aspect marker attached to the main verb, indicating perfective aspect.¹⁷

Liao as an independent clause:

- (59) Wu jiu yu zhu, shang wei liao.
 I long want annotate still not complete
 “I wanted to annotate it a long time ago, but it still is not complete.” (late Old Chinese, *Shi shuo xin yu* 450AD, Shi (2002: 62))

As modifying the preceding clause:

- (60) Dashi shuo jie yi liao.
 master explain Buddhist-verse already complete
 “The master already explained the Buddhist verse completely.” (Middle Chinese, *You xianku* 700AD, Shi (2002: 63))
- (61) Wei shuo shi ji shi, shuo liao shi ji bu shi.
 not speak time then be say complete time then not be
 “When it is not said, then it is so; when it is completely said, then it is not so.”
 (Middle Chinese, *Liu zu tan jing* 800AD, *Ibid.*)

Around the 11th-century, from *liao* emerges the modern aspectual marker *le*:

- (62) Xiao Xi yi shou le di-san ci sheng-zhi.
 Xiao Xi already receive PERF third CLSF imperial-edict
 “Xiao Xi has already received the third imperial edict.” (Middle Chinese, *Yimao ruguo zouqing* 1077AD, Shi (2002: 63))

¹⁷See Shi (2002: 59–67) for discussion of the development of a number of modern Chinese auxiliaries out of the V2s of earlier resultatives, including *liao>le*.

The use of *le* as a perfective aspectual marker is reminiscent of the completive functions of South Asian V-V collocations (and their general tendency to occur with perfective aspect).

4 Connections between Asian V-V collocations

The wide-spread use of V-V collocations across much of Asia raises questions of anterior origins. It is tempting to imagine that V-V collocations arose in one language or language family and spread via contact to the other languages. However, the evidence available suggests that instead it may be the result of independent developments of similar constructions which may have been subsequently developed further as the result of convergence.

It is interesting, as noted by Masica (1976), that while V-V collocations are found in Tajik Persian, these are not prominent in Iranian Persian (Masica 1976: 155); and while V-V collocations appear in the Turkic languages Uighur, Uzbek, and Kazakh, they are not well-developed in Anatolian Turkish (*Ibid.*). This also speaks against a clear and direct transmission of V-V collocations via a contiguous linguistic path from India to Central Asia or vice-versa, despite the obvious similarity of the morphosyntactic structure of V-V collocations of languages in these two areas.¹⁸

Even the developments within South Asia are quite possibly the result of independent developments within Indo-Aryan and Dravidian, with subsequent convergence.

The larger “Asian” pattern is even less clear. It may be that language contact has played some role here: for example, the existence of V-V collocations in both South Asian and Chinese languages may be the result of mediated contact via Southeast Asian languages like Burmese, Thai, Vietnamese. But it is also possible that these are fully unrelated developments. Or, perhaps most likely, that V-V collocations developed independently with later convergence due to language contact.

¹⁸Though it perhaps tempting to speculate about the possibility of V-V collocations arriving in South Asia carried by the Central Asian Mughals. However, as discussed above, there are clear V-V collocations in South Asia well before the arrival of the Mughals.

Further Reading

- Abbi, Anvita & Devi Gopalakrishnan. 1991. Semantics of explicator compound verbs in South Asian languages. *Language Sciences* 13(2). 161–180.
- R. Amritavalli. Morphosyntax of Dravidian Languages. *Oxford Research Encyclopedia*
- Frellesvig, Bjarke. Old and Middle Japanese. *Oxford Research Encyclopedia*
- Göksel, Aslı. Morphology in Altaic Languages. *Oxford Research Encyclopedia*
- Hock, Hans Henrich. 2016. Complex verbs: introduction. In Hans Henrich Hock & Elena Bashir (eds.), *The languages and linguistics of South Asia: A comprehensive guide* (The World of Linguistics 7), 549–550BC. Berlin: Walter de Gruyter.
- Hook, Peter. 1974. *The compound verb in Hindi*. Ann Arbor: Center for South and Southeast Asian Studies, University of Michigan.
- Kageyama, Taro. Compound and Complex Predicates in Japanese. *Oxford Research Encyclopedia*
- Masica, Colin. 1976. *Defining a linguistic area: South Asia*. Chicago: University of Chicago Press.
- Shi, Yuzhi. 2002. *The establishment of Modern Chinese grammar: The formation of the resultative construction and its effects*. Amsterdam: John Benjamins.
- Slade, Benjamin. 2016. Compound verbs in Indo-Aryan. In Hans Henrich Hock & Elena Bashir (eds.), *The languages and linguistics of South Asia: A comprehensive guide* (The World of Linguistics 7), 559–567. Berlin: Walter de Gruyter.
- Slade, Benjamin. to appear. Verb-verb combinations in Indo-Aryan. In Taro Kageyama, Peter Hook & Prashant Pardeshi (eds.), *Verb-verb complexes in Asian languages*, Oxford: Oxford University Press.
- Stump, Gregory. Inflectional Morphology. *Oxford Research Encyclopedia*

References

- Abbi, Anvita & Devi Gopalakrishnan. 1991. Semantics of explicator compound verbs in South Asian languages. *Language Sciences* 13(2). 161–180.
- Annamalai, E. 2016. Expanded verbs in Dravidian. In Hans Henrich Hock & Elena Bashir (eds.), *The languages and linguistics of South Asia: A comprehensive guide* (The World of Linguistics 7), 550–559. Berlin: Walter de Gruyter.
- Bashir, Elena. 1993. Causal chains and compound verbs. In Manindra K. Verma (ed.), *Complex predicates in South Asian languages*, 1–30. New Delhi: Manohar.
- Bloch, Jules. 1920. *La formation de la langue marathe*. Paris: Honoré Champion.
- Butt, Miriam. 1993. Conscious choice and some light verbs in Urdu. In Manindra K. Verma (ed.), *Complex predicates in South Asian languages*, 31–45. New Delhi: Manohar.
- Chatterjee, Suniti Kumar. 1926. *The origin and development of the Bengali language*. Calcutta: Calcutta University Press. [Revised, 1971; reprinted, New Delhi: Rupa, 1985].
- Coelho, Gail. 2018. Complex predicates in Betta Kurumba. *Journal of South Asian Languages and Linguistics* 5(1). 23–77. doi:<https://doi.org/10.1515/jsall-2018-0007>.
- Delbrück, Berthold. 1888. *Altindische Syntax*. Halle, Germany: Verlag der Buchhandlung des Waisenhauses.
- Demirci, Kerim. 2003. *Descriptive verbs in Kazakh*. Madison: University of Wisconsin-Madison dissertation.
- Hendriksen, Hans. 1944. *Syntax of the infinite verb forms of Pāli*. Copenhagen: Einar Munksgaard.
- Herring, Susan C. 1993. Aspectogenesis in South Dravidian: On the origin of the ‘compound continuative’ *KONTIRU*. In Henk Aertsen & Robert J. Jeffers (eds.), *Historical linguistics 1989: Papers from the 9th International Conference on Historical Linguistics. Rutgers University, August 14–18, 1989*, 167–185. Amsterdam: John Benjamins.
- Hock, Hans Henrich. 1992. Review of Tikkanen (1987): The Sanskrit gerund: a synchronic, diachronic, and typological analysis. *Kratylos* 37. 62–68.

- Hock, Hans Henrich. 2008. Dravidian syntactic typology: A reply to Steever. In Rajendra Singh (ed.), *Annual Review of South Asian Languages and Linguistics*, 164–198. Berlin: Mouton de Gruyter.
- Hock, Hans Henrich. 2016. Complex verbs: introduction. In Hans Henrich Hock & Elena Bashir (eds.), *The languages and linguistics of South Asia: A comprehensive guide* (The World of Linguistics 7), 549–550. Berlin: Walter de Gruyter.
- Hook, Peter Edwin. 1974. *The compound verb in Hindi*. Ann Arbor: Center for South and Southeast Asian Studies, University of Michigan.
- Hook, Peter Edwin. 1991a. The compound verb in Munda: An areal and typological overview. *Language Sciences* 13(2). 181–195.
- Hook, Peter Edwin. 1991b. The emergence of perfective aspect in Indo-Aryan languages. In Elizabeth Traugott & Bernd Heine (eds.), *Approaches to grammaticalization, volume 1*, 59–89. Amsterdam: John Benjamins.
- Hook, Peter Edwin. 1993. Aspectogenesis and the compound verb in Indo-Aryan. In Manindra K. Verma (ed.), *Complex predicates in South Asian languages*, 97–114. New Delhi: Manohar.
- Hook, Peter Edwin, Prashant Pardeshi & Hsin-hsin Liang. 2012. Semantic neutrality in complex predicates: Evidence from East and South Asia. *Linguistics* 50(3). 605–632.
- Ibrahim, Ablahat. 1995. *Meaning and usage of compound verbs in modern Uighur and Uzbek*. Seattle: University of Washington dissertation.
- Kachru, Yamuna & Rajeshwari Pandharipande. 1980. Toward a typology of compound verbs in South Asian languages. *Studies in the Linguistic Sciences* 10(1). 113–124.
- Kellogg, S.H. 1893. *A grammar of the Hindi language, in which are treated the High Hindi, Braj, and the Eastern Hindi of the Ramayana of Tulsidas, also the colloquial, dialects of Rajputana, Kumaon, Avadh, Riwa, Bhojpur, Magadha, Maithila, etc.* London: Paul, Trench, Trubner & Co. (Reprinted 1990, Delhi: Munshiram Manoharlal).

- Liang, Hsin-hsin & Peter E. Hook. 2007. The compound verb in Chinese and Hindi-Urdu and the plausibility of the Indo-Turanian linguistic area. In Colin P. Masica (ed.), *Old and new perspectives on South Asian languages*, 109–143. Delhi: Motilal Banarsi Dass.
- Liu, Jianxun. 2019. *The syntax of V-V resultatives in Mandarin Chinese*. Victoria, British Columbia: University of Victoria dissertation.
- Masica, Colin P. 1976. *Defining a linguistic area: South Asia*. Chicago: University of Chicago Press.
- Masica, Colin P. 1991. *The Indo-Aryan languages*. Cambridge: Cambridge University Press.
- Matthews, David. 1998. *A course in Nepali*. London: Curzon.
- McGregor, R.S. 1968. *The language of Indrajit of Orchā: A study of early Braj Bhāṣā prose*. Cambridge: Cambridge University Press.
- Paolillo, John C. 1989. Deictic and dynamic interactions in Sinhala verb-verb compounds. Ms., Stanford University.
- Perry, John R. 2005. *A Tajik Persian reference grammar*. Leiden: Brill.
- Peterson, John. 2002. The Nepali converbs: A holistic approach. In Rajendra Singh (ed.), *Yearbook of South Asian languages and linguistics*, 93–133. New Delhi, Thousand Oaks & London: Sage Publications.
- Pokharel, Balkrishna. B.S. 2020 [=1963C.E.]. *pañc śaya varṣa*. Kathmandu: Sajha Prakashan.
- Pokharel, Madhav P. 1991. Compound verbs in Nepali. *Contributions to Nepalese Studies* 18(2). 149–173. (Reprinted in *Topics in Nepalese Linguistics*, Yogendra P. Yadava & Warren W. Grovers (eds.), 1999, 185–208. Kathmandu: Royal Nepal Academy).
- Poornima, Shakthi. 2012. *Hindi aspectual complex predicates at the syntax-semantics interface*. Buffalo: University at Buffalo, State University of New York dissertation.
- Raina, Achla M. 2011. The co-eventual verb in Hindi. In Omkar N. Koul (ed.), *Indo-Aryan linguistics*, 135–152. Mysore: Central Institute of Indian Languages.

- Sharma, Tara Nath. 1980. *The auxiliary in Nepali*. Madison, WI: University of Wisconsin at Madison dissertation.
- Shi, Yuzhi. 2002. *The establishment of Modern Chinese grammar: The formation of the resultative construction and its effects*. Amsterdam: John Benjamins.
- Singh, Udaya Narayana, Karumuri Venkata Subbarao & S.K. Bandyopadhyay. 1986. Classification of polar verbs in selected South Asian languages. In Bhadriraju Krishnamurti (ed.), *South Asian languages: Structure, convergence and diglossia*, 244–269. Delhi: Motilal Banarsi Dass.
- Slade, Benjamin. 2013. The diachrony of light and auxiliary verbs in Indo-Aryan. *Diachronica* 30(4). 531–578.
- Slade, Benjamin. 2016. Compound verbs in Indo-Aryan. In Hans Henrich Hock & Elena Bashir (eds.), *The languages and linguistics of South Asia: A comprehensive guide* (The World of Linguistics 7), 559–567. Berlin: Walter de Gruyter.
- Slade, Benjamin. to appear. Verb-verb combinations in Indo-Aryan. In Taro Kageyama, Peter Hook & Prashant Pardeshi (eds.), *Verb-verb complexes in Asian languages*, Oxford: Oxford University Press.
- Steever, Sanford B. 2005. *The Tamil auxiliary verb system*. London: Routledge.
- Sybesma, Rint. 1997. Why Chinese verb-*le* is a resultative predicate. *Journal of East Asian Linguistics* 6(3). 215–261.
- Tikkanen, Bertil. 1987. *The Sanskrit gerund: a synchronic, diachronic and typological analysis*. Helsinki: Finnish Oriental Society.
- Tournadre, Nicholas & Konchok Jiatso. 2001. Final auxiliary verbs in Literary Tibetan and in the dialects. *Linguistics of the Tibeto-Burman Area* 24(1). 49–111.
- Wallace, William D. 1982. The evolution of ergative syntax in Nepali. *Studies in the Linguistic Sciences* 12(2). 147–211.
- Whitney, William Dwight. 1879/1889. *Sanskrit grammar, including both the classical language and the older dialects of Veda and Brahmana*. Leipzig: Breitkopf and Härtel 1st/2nd edn. [reprinted, Delhi: DK Publications, 1995].