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**Abstract**

In this presentation, we collected all the examples of the relative clauses in the *Buddhacarita*, and discussed the distinction between the correlative relative clauses and the non-correlative ones. The result shows that, in Sanskrit, correlative relative clauses tend to be internally headed and left-adjoined, while non-correlative relative clauses tend to be externally headed and occur to the right of the main clause. We argue that this almost complementary distribution arose from the topic function of the correlative relative clause and the weak amalgamation between the subordinate clause and the main clause.

**1. Introduction**

Sanskrit is one of the oldest Indo-European languages with complicated subordinate clause system. The Sanskrit relative clause is often described as the correlative type (Davison 2009: 271), i.e. in addition to a relative pronoun, a correlative demonstrative pronoun is necessary: [correlative clause... relative phrase...] [main clause... correlate phrase...] (Lipták 2009:2). However, there are also many examples of non-correlative relative clauses in Sanskrit, where the correlative demonstrative pronoun is absent. In this presentation, we will show that we cannot regard non-correlative clauses as a mere ellipsis of the correlating demonstrative pronoun, and discuss whether there is any distinction between correlative relative clauses and non-correlative ones in Sanskrit.

**2. Previous Research on Correlative Relative Clause**

The correlative construction is widely found in Indo-Aryan languages, including modern languages like Hindi. Comparing the position of the head cross-linguistically, Lehmann (1986: 3) argued that ‘the correlative construction is a very common variety of the adjoined relative construction, where relative and/or demonstrative pronouns in the relative and main clauses mark the anaphoric relationship.’ Other major works on the correlative relative construction include Srivastav (1991), Bhatt (2003) and Lipták (2009, 2012), which are all based on modern languages like Hindi and Hungarian.

**3. Previous Research on Sanskrit Relative Clause**

Many grammatical changes occurred during the long history of the Sanskrit language. As for the relative clauses in Classical Sanskrit, Speijer noted that ‘the relative clauses have in common the property of referring to some demonstratives, but sometimes it is understood. Meanwhile, Sanskrit likes to put the relative sentence first, but sometimes the relative sentence follows after the principal one. In this case, the demonstrative is often omitted (Speijer 1886: 348-350).’ With respect to the relative clause in Vedic Sanskrit, there are such previous works as Delbrück (1888) and Hettrich (1988).

Moreover, there are also studies on the Sanskrit correlative relative clause in general, e.g. Hock (1989) and

Davison (2008, 2009). Hock (1989) argued that the Sanskrit correlative construction is a conjoined relative correlative, and Davison (2008) compared the Sanskrit correlative construction with the Hindi equivalent, and argued that the Sanskrit correlative is a ‘weak’ correlative, while the Hindi correlative is a ‘strong’ correlative.

However, Davison disregarded the possibility of a grammatical change. Since Sanskrit was used as a literary language for more than two millennia, it cannot be regarded as having a uniform grammar. In this presentation, we will focus on the second century Classical Sanskrit text *Buddhacarita*<sup>1</sup>, written by the Buddhist poet Aśvaghōṣa, and try to clarify the characteristics of the classical Sanskrit relative clause.

#### 4. The survey

We collected all the examples of the relative clauses in the *Buddhacarita*<sup>1</sup>, and categorized them according to three criteria: (1) whether there is a head, and if there is, whether it is external or internal, (2) whether it is correlative or non-correlative, (3) and on which side of the main clause the relative clause is, left or right. The result is as follows.

Table 1: The types and the position of the relative clauses

	Externally headed correlative	Externally headed non-correlative	Internally headed correlative	Internally headed non-correlative	Headless correlative	Headless non-correlative	Double headed correlative	Double headed non-correlative
Left	14	2	18	0	32	5	1	0
Right	6	36	1	0	5	3	0	1

##### 4.1. Position of the Relative Clause

The relationship between the position of the relative clause and whether the clause is correlative or non-correlative is shown in Table 2.

Table 2: The position of the relative clause

	Left	Right
Non-correlative	7	40
Correlative	65	13

According to Table 2, 40 out of the 47 instances of the non-correlative clause occur to the right of the main clause. As for the correlative structure, 65 out of the 78 instances of the correlative relative clause are left-adjoined. Therefore, we can conclude that in the *Buddhacarita*, non-correlative relative clauses tend to be put on the right side of the main clause, and the correlative relative clause tends to occur to the left of the main clause.

<sup>1</sup> The text used in the survey is based on the edition by Johnston (1935).

## 4.2. The Head of the Relative Clause

The relationship between the head and whether the relative clause is correlative or not is shown in Table 3.

Table 3: The head of the relative clause

	Externally headed	Internally headed	Headless	Double headed
Non-correlative	38	0	8	1
Correlative	20	19	37	1

The data indicates that internally-headed relative clauses only occur in correlative construction, while externally-headed ones are mostly non-correlative. Internally headed non-correlative relative clauses do not occur in the *Buddhacarita*. In addition, the correlative structure tends to be used when the head is absent.

Therefore, from the data in Tables 2 and 3, we can draw a conclusion that Sanskrit correlative relative clauses tend to be internally headed and left-adjoined as in example (1), whereas non-correlative relative clauses tend to be externally headed and occur to the right of the main clause as in example (2), just like in Hindi. Srivastav (1999: 637) claims that Hindi has only two types of relative clauses: (i) left-adjoined structures and (ii) right-adjoined and embedded structures. Srivastav (1999: 647) argued that one important difference between the left-adjoined and right-adjoined/embedded relatives is that the left-adjoined relative clause can include the head noun, but right-adjoined and embedded structures do not allow the relative clause to contain the head. According to Table 1, there are 18 instances of the left-adjoined correlative construction in the *Buddhacarita*, whereas there is only one instance of the internally headed correlative construction where the relative clause occurs to the right of the main clause (1). In other words, Sanskrit has the same tendency as Hindi with only one exception.

- (1) [**yac** ca **dvijatvaṃ** (HEAD) kuśiko na  
REL.PRON.ACC.SG. and Brahmanhood-ACC.SG. Kuśika-NOM.SG. NEG.  
lebhe] **tad** gādhinaḥ sūnur  
attain-Ā.PERF.3.SG. DEM.PRON.ACC.SG. Gādhin-GEN.SG. son-NOM.SG.  
avāpa rājan (*Buddhacarita* 1.44).  
get-PERF.3.SG. king-VOC.SG.

‘And the Brahmanhood which Kuśika did not win was obtained by the son of Gādhin, O king (Johntson and Litt 1936: 150).’

- (2) **velāṃ** (HEAD) samudre sagaraś ca dadhre  
limit-ACC.SG. ocean-LOC.SG. Sagara-NOM.SG. and fix-Ā.PERF.3.SG.  
[nekṣvākavo **yāṃ** prathamam  
NEG-descendants of Ikṣvāku-NOM.PL. REL.PRON.ACC.SG. previously  
babandhuḥ] (*Buddhacarita* 1.44).  
bind-PERF.3.PL.

‘And Sagara set a limit for the ocean which the previous descendants of Ikṣvāku had not fixed (Johntson and

Litt 1936: 150).’

- (3) suhṛttayā                      cāryatayā                      ca                      rājan                      khalv  
friendship-INS.SG.                      and-honourable behavior-INS.SG.                      and                      king-VOC.SG.                      indeed  
**eṣa**                      [yo                      māṃ                      prati  
DEM.PRON.NOM.SG.                      REL.PRON.NOM.SG.                      1.PER.PRON.ACC.SG                      toward  
**nīścayas (HEAD)**                      te]. (*Buddhacarita* 11. 6.)  
resolution-NOM.SG.                      2.PER.PRON.GEN.SG.  
‘Certainly this resolution of yours regarding me, O king, proceeds friendship and nobility of heart (Johntson and Litt 1936: 150).’

#### 4.3. Multi-relative

The availability of the multi-relative is considered to be one of the properties of the correlative relative constructions (Lipták 2009: 2, Bhatt 2003: 491-492). Bhatt (2003: 491–492) defined multi-head correlatives as ‘there is more than one relative pronoun, and for each relative pronoun, there must be an associated demonstrative pronoun in the main clause,’ and gave the following Marathi sentence as an example.

- (4) [jya                      mula-ne                      jya                      muli-la                      pahila],  
REL.                      boy-ERG.                      REL.                      girl-ACC.                      saw  
[tya                      mula-ne                      tyā                      muli-la                      pasant                      kela]  
DEM.                      boy-ERG.                      DEM.                      girl-ACC.                      like                      did

For boy x, saw girl y, x liked y. (Lit. '[Which boy saw which girl], [that boy liked that girl]')

The same kind of instances can also be found in the *Buddhacarita*, as in (5).

- (5) [yad                                           eva                      yas                      tasya  
REL.PRON.NOM.SG.                      just                      REL.PRON.NOM.SG.                      DEM.PRON.GEN.SG.  
dadarśa                      tatra                      tad                      eva                      tasyātha  
see-PERF.3.SG.                      there                      DEM.PRON.NOM.SG.                      just                      DEM.PRON.GEN.SG.-certainly  
babandha                      cakṣuḥ. (*Buddhacarita* 10. 8)  
fix-PERF.3.SG.                      eye-NOM.SG.

‘Whatever part of him anyone looked at, to that part his eyes were riveted (Johntson and Litt 1936: 142).’

#### 4.4. The Properties of the Relative Clause in the Sanskrit Text *Buddhacarita*

From the instances in the *Buddhacarita*, we have found out that some of the characteristics of the Sanskrit relative clauses do not agree with the general properties of the correlative relative construction noted by Lipták (2009: 2).<sup>2</sup> Therefore, it is not appropriate to summarize that ‘Sanskrit has only one dependent clause type, the

<sup>2</sup> The characteristic properties of correlatives stated by Lipták are as follows.

correlative construction (Davison 2009: 271).’ The main properties of the relative clauses in the *Buddhacarita* are as follows:

(a) Types: The three most common types are the externally headed non-correlative which occur to the right of the main clause, left-adjoined internally headed correlative, and left-adjoined headless correlative.

(b) Position: The correlative relative clauses tend to come to the left of the main clause, while the non-correlative relative clauses tend to occur to the right of the main clause.

(c) Head: The head noun can appear in both relative and main clauses. However, all the instances of the internally headed clauses have a correlative pronoun. On the contrary, most of the instances of the externally headed ones are of the non-correlative type which occur to the right of the main clause. Moreover, as in the case of the externally headed clauses, most of the headless relative clauses are left-adjoined correlatives. Although the sample size is small, double headed relative clauses are also found.

(d) Multiple relative: A multiple relative structure is also found in the *Buddhacarita*.

## 5. Analysis

In this section, we will discuss two questions: (i) why do correlative clauses tend to occur to the left of the main clause? (ii) why are all the internally-headed clauses correlative? As for question (i), we propose that the information structure may affect the position of the relative clauses. And as for question (ii), we claim that it may be attributed to the degree of amalgamation between the subordinate clause and the main clause, a criterion proposed by Tsubomoto (2011: 2).

### (i) Why does the correlative clause tend to be left-adjoined to the main clause?

Hock (1989: 114-118) argued that Sanskrit correlative relative clauses introduce the topic or the focus of the sentence. This claim seems to be justified by the examples from the *Buddhacarita*.<sup>3</sup> As shown in examples (1) and (2), the relative clause in the correlative structure always marks the topic, whereas the relative clause in the non-correlative structure does not do so; the possible interpretations are non-restriction relative clause, etc. And since the relative clause in the correlative structure has the function of topicalization and the topic is usually placed to the left part of the sentence, it is not surprising for a correlative relative clause to be placed to the left of the main clause.

### (ii) Why do the internally-headed clauses all have the correlative construction?

Many have observed that finite clauses in Sanskrit are linked in a loose paratactic way, without syntactic encoding of subordination (Davison 2009: 275). In this presentation, we argue that the weakness of the amalgamation between the correlative relative clause and the main clause is the reason why Sanskrit only has the correlative construction when the clause is internally headed. Amalgamation is a concept proposed by Tsubomoto (2011). According to Tsubomoto (2011), based on iconicity, there is a hierarchy of amalgamation between complements and adverbial clauses like the following.

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- i. a peripheral position of the relative clause;
  - ii. the possibility of spelling out the nominal head both in the relative clause and in the correlate;
  - iii. demonstrative requirement on the correlate;
  - iv. the availability of multiple relative phrases (Lipták 2009: 2).

<sup>3</sup> This claim also finds support in Hungarian (Lipták 2012: 282).

a.	[boukan-ga	osoikakatte-kita].	[keisatu-ha	sore-wo	kumihuse-ta]	↑ weak amalgamation ↓ strong
	a thug-NOM	attack-come-PAST	police-TOP	that-ACC	hold down-PAST	
b.	[boukan-ga	osoikakatte-kita-no]wo	keisatu-ha	sore-wo	kumihuse-ta.	
	a thug-NOM	attack-come-PAST-NMLZ]ACC	police-TOP	that-ACC	hold down-PAST	
c.	keisatu-ha	[boukan-ga	osoikakatte-kita-no]wo	sore-wo	kumihuse-ta	
	police-TOP	a thug-NOM	attack-come-PAST-NMLZ]ACC	that-ACC	hold down-PAST	
d.	keisatu-ha	[boukan-ga	osoikakatte-kita-no]wo	[pro]	kumihuse-ta	
	police-TOP	a thug-NOM	attack-come-PAST-NMLZ]ACC	[pro]	hold down-PAST	
e.	keisatu-ha	[boukan-ga	osoikakatte-kita-no]wo	kumihuse-ta		
	police-TOP	a thug-NOM	attack-come-PAST-NMLZ]ACC	hold down-PAST		

The sentences in *a* are two independent sentences. And *b* is a sentence where the two sentences in *a* are united by the accusative marker *-wo* and the demonstrative pronoun *sore*. Kuroda (1999: 39) argued that in sentence *c*, the verb *kumihuseru* is the predicate of the sentence, and the internally-headed relative clause *boukan-ga osoikakatte-kita-no wo* is the object. Meanwhile, Kuroda argued that the clause *boukan-ga osoikakatte-kita-no wo* can also be considered an adverbial clause, which he called the Tsubomoto phenomenon. Just like *c*, sentence *b* can also have an adverbial interpretation. However, in sentences *d* and *e*, the adverbial interpretation is impossible. Therefore, we claim that weak amalgamation is the reason why *b* and *c* can be interpreted as either an adverbial clause or a relative clause.

It seems that the internally-headed correlative construction in Sanskrit is *b* according to the instances of amalgamation in *a* to *e*. The relative pronoun *yad* introduces not only the relative clauses, but also adverbial clauses with the correlative construction. Therefore, as far as the amalgamation of subordinate clauses with main clauses is concerned, the amalgamation of internally-headed correlative clauses with main clauses is weak, and highly amalgamated internally-headed relative clauses, like the Japanese example *e*, does not exist in Sanskrit.<sup>4</sup>

## 6. Conclusion and Future Task

In this presentation, we conclude that in Sanskrit, there is a tendency that correlative relative clauses are internally headed and left-adjoined, while non-correlative relative clauses are externally-headed and occur to the right of the main clause, which is different from Davison's argument that 'Sanskrit has only one dependent clause type, the correlative construction, which corresponds to three kinds of subordinate clauses in Hindi-Urdu: correlative clauses, complement clauses, and conditional/adverbial clauses (Davison 2009: 271).' We tried to explain the tendency that correlative relative clauses always left-adjoin to the main clause, and argued that the reason for that tendency is that the correlative clause is the topic of the sentence in Sanskrit and the topic of the sentence usually occurs to the left of the sentence. Meanwhile, the reason why there is no internally headed relative clause is that highly amalgamated internally headed relative clauses are not allowed in Sanskrit, and all the internally headed

<sup>4</sup> It is to be noted that, in Hindi, if the requirement of syntactic adjacency is not weakened, right-adjoined and embedded structures will be the only structures in which noun modification can take place (Srivastav 1991: 653). Further research is necessary to see if this holds true in Sanskrit.

relative clauses are correlative. Therefore, as there is a systematic difference between the conditions under which correlative and non-correlative relative clauses appear, non-correlative ones cannot be regarded as a mere omission of the correlating demonstrative pronoun, as mentioned by Speijer (1886: 350).

We have not analyzed the relative clause from the viewpoint of restrictive and non-restrictive relative clauses in this presentation, and we will try to do so in our future work. In addition, this presentation barely touched on the headless relative clause and the double relative clause, which we leave as future tasks.

### Abbreviation

1: first person; 2: second person; 3: third person; Ā: Ātomanepada (middle voice); ACC: accusative case; DEM: demonstrative; ERG: ergative; GEN: genitive case; INS: instrumental case; NEG: negative; NMLZ: nominalizer; NOM: nominative case; PAST: past tense; PER: personal; PERF: perfect; PL: plural number; PRON: pronoun; PRS: present; REL: relative; SG: single; TOP: topic; VOC: vocative case.

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