RELATIVE CLAUSES IN SINHALA

BENJAMIN R. WALKER

Rice University

1. INTRODUCTION. Relative clauses are clauses which modify a noun. These clauses add information about the modified noun, called the head noun, which cannot be conveyed with a single adjective. Instead, relative clauses use an entire clause to capture the quality to be imparted to the head noun. Relative clauses contain a relativized noun phrase, NPrel, which is coreferential with the head noun. Also relative clauses are marked by some sort of relativizer, whether a verb suffix, particle, or pronoun (Payne 1997:326). Sinhala constructs its relative clauses using the 'gap' strategy and non-finite verb forms in clauses placed before the head noun.

2. DATA. During the academic year of 2004-2005, Nissanka Sirimevan Wickremasinghe, a native speaker of Sinhala from Sri Lanka, provided elicited examples and seven texts in Sinhala. From this database 100 relative clauses were recovered, 9 from the texts and the rest from elicitation sessions.

3. CONSTRUCTION OF RELATIVE CLAUSES IN SINHALA. In the collected data, Sinhala demonstrated a predominantly SOV word order. In accordance with Greenberg's word-order correlates, we find relative clauses preceding the head noun they modify.

(1) laməya [ohu ændəpu]   redi   heduwa
    child 3SG wear-PST-REL clothes wash-PST
    'The child washed the clothes that he wore.'[1]

In example (1) above, the basic structure of relative clauses in Sinhala can clearly be seen. The basic clause *laməya redi heduwa*, 'the boy washed the clothes', demonstrates the predominate word order of declarative clauses in Sinhala. The verbal element *heduwa,* 'wash,' comes at the end of the clause. The subject, *laməya*, 'child,' and then the object, *redi*, 'clothes,' precede the verb. In accordance with the word order correlates, the relative clause *ohu ændəpu*, 'which he washed,' precedes the noun that it modifies, *redi*. It should also be noted that the declarative word order is maintained within the relative clause. In (1), *ohu*, 'he,' the subject of the relative clause precedes the verb element, *ændəpu*, 'wash,' and the object, Nprel, coreferential with the clothes in this case, is omitted.

Sinhala relative clauses are formed with a 'gap,' covered later in the paper, and a non-finite verb form. The verb forms used in relative clauses are labeled 'nonfinite,' because they do not have the same inflection as main verbs in independent, declarative clauses and cannot stand alone as the main verb of such a clause. The verbs found in relative clauses have one non-past form and two past forms.

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[1] Relative clauses will be bracketed for easier recognition throughout this paper.

PRES	NONPAST-REL	PAST-REL 1	PAST-REL 2
kərənəwa 'do'	*kərənə*	*kərəpu*	*keruwə*
hodənəwa 'wash'	*hodənə*	*hodəpu*	*heduwə*
dakinəwa 'see'	*dakkina*	*dǽkkəpu*	*dǽkkə*

TABLE 1. Verb forms for Independent and Relative Clauses

(2) NONPAST Form

    mamə [mage   wǽḍə   kərənə]   laməyaṭə   pain gæhuwa

    1SG   1SG-GEN work do-NPST-REL child-DAT kick-PST

    'I kicked the boy who does my work.'

Example (2) demonstrates the nonpast, non-finite verb form used in relative clauses. The verb *kərənə,* 'do,' is the nonpast relative verb form of *kərənəwa.* The relative clause precedes the head noun, *laməyaṭə,* 'child,' which is in the dative case as required by this particular main verb, *pain gæhuwa,* 'kick.'

(3) PAST 1 Form

    lamǝya [ohu   epa   kərəpu]   redi   heduwa

    child   3M.SG hate do-PST-REL clothes wash-PST

    'The boy washed the clothes which he hated.'

Example (3) uses the more common of the past relative forms, those ending in the *-pu* suffix. Again, the relative clause precedes the head noun, *redi,* 'clothes,' which is the object of the main verb, *heduwa,* 'wash.'

(4) PAST 2 Form

    miniha [nammə amətəkə keruwə]   lamǝyaṭə kata kərənəwa

    man   name   forget do-PST-REL child-DAT speak-PRES

    'The man speaks to the boy whose name he forgot.'

Example (4) uses the less common form of the past relative verb, built upon the dative object required by the main verb of the sentence, *kata kərənəwa,* 'speak.'

Two elicited examples suggested a variation between the Past 1 and Past 2 forms listed above based on the grammatical relation of NPrel. In example (5) below, the Past 2 form corresponds with NPrel acting as a subject of the relative clause, while in example (6), the Past 1 form is used with NPrel acting as an object of the relative clause.

(5) NPrel as Subject

    miniha [[tamanwə hæpuwə] balla aiti]   lamǝyaṭə kata kərənəwa

    man   self-ACC bite-PST-REL dog own-PRES-REL child-DAT speak-PRES

    'The man speaks to the child whose dog bit him.'

Example (5) contains both a relative clause and an additional relative clause embedded within the first, as indicated by the brackets. This construction is common for expressions of

explicit ownership and will be discussed in further detail later in this paper. It is important to note for the current discussion only the grammatical relations of the NPrel in comparison with the form of the past relative used. In this example, *hæpuwə*, 'bite,' a Past 2 form, coincides with NPrel as its subject.

(6) NPrel as Object

miniha	[[taman	hapəpu]	ballage	aitikaarə]	laməyaţə	kata kərənəwa
man	self	bite-PST-REL	dog-GEN	owner	child-DAT	speak-PRES

'The man speaks to the child whose dog he bit.'

Example (6) also contains an embedded relative clause. Again, it is important only to note that the Past 1 relative form *hapəpu*, 'bite,' co-occurs with NPrel as its object.

However, this distinction does not hold true in all cases. In example (7) below, a Past 1 form occurs with NPrel as its subject, not its object as in example (6).

(7) NPrel as Subject

[pussawə	hapəpu]	ballaţə	Mamə	kæməti
cat-ACC-ANIM	bite-PST-REL	dog-DAT	1SG	like

'I like the dog that bit the cat.'

In this example, despite the use of a Past 1 form, NPrel is its subject. NPrel is coreferential with *ballaţə*, 'dog,' which does the biting in the relative clause. Further data will need to be collected in order to make a more informed attempt at explaining the variation between these two past verb forms.

A few verbs show an unusual past relative form. For instance, the past relative forms for 'fall', 'become', and 'die' are respectively, *wæţiccə*, *mæriccə*, and *weccə*. It is uncertain with which past relative form these forms correspond as additional past relative forms for these verbs have not been elicited.

4. THE GAP STRATEGY. Sinhala expresses NPrel, the element in the relative clause that is coreferential with the head noun, by leaving it out altogether, or 'gapping' it. The omitted word along with the verb form marks the clause as a relative clause, not an independent one. The grammatical relation of the omitted or 'gapped' word, NPrel, can then either be retrieved through context or through suffixes on the expressed argument.

(8) NPrel as Subject

mamə	[-----	mage	wæḍə	kərənə]	laməyaţə	pain gæhuwa
1SG	GAP	1SG-GEN	work	do-NPST-REL	child-DAT	kick-PST

'I kicked the boy who does my work.'

Example (8) illustrates a typical relative clause where NPrel is the subject of the clause. Putting aside the main clause, *mamə laməyaţə pain gæhuwa*, 'I kicked the child,' leaves the incomplete fragment, *mage wæḍə kərənə*, 'who does my work.' The verb form and the missing argument mark this as a dependent, relative clause, built on the dative object, *laməyaţə*, 'child.' Because of the verb-final word order, it is ambiguous at first whether the expressed argument is the subject or object of the transitive, relative verb, *kərənə*, 'do.' However, this argument is

not typically agentive enough to be the subject of this verb. Therefore, this clause lacks a subject, and NPrel, being coreferential with the highly agentive noun, *lamǝya*, 'child', fits logically into this 'gap.'

(9) NPrel as Object
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[ohu    ------   kǝrǝpu]    wæɖǝ   apahasui
3M.SG   GAP      do-PST-REL work   difficult
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'The work he did was hard.'

In example (9) NPrel is the object of the relative clause. Once again, removing the main clause, *wæɖǝ apahasui*, 'the work is hard,' the fragment that is left is incomplete. In Sinhala animate objects are marked with a suffix, *-wǝ*. The lack of this suffix on the pronoun in the relative clause, *ohu*, 'he,' indicates that it is in the nominative case and therefore the subject of *kǝrǝpu*, 'do.' This verb, which is typically transitive, thus lacks an object. NPrel is coreferential with *wæɖǝ*, 'work,' in this sentence, a prototypical object, especially for this particular verb. Therefore NPrel is the object of the relative clause.

However, case recovery is not always so clear, especially when there are no case markings present, as in the case of inanimates acting on one another, or when a sentence has two possible agents and one object.

(10) Ambiguous Relative Clause
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?[kolla  [tæægǝ  dunnǝ]       kellǝʈǝ    pain gæhuwa
boy      gift    give-PST-REL girl-DAT   kick-PST
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'The boy kicked the girl to whom he gave the gift.' or 'The boy kicked the girl who gave him the gift.'

Example (10)'s ditranstive structure makes the case of NPrel ambiguous. As indicated above, NPrel could be construed as either the subject or the indirect object of the relative clause. The interpretation depends on whether *kolla*, 'boy,' is read as the subject of the main clause or as the subject of the relative clause, with the subject of the main clause then being implied. If *kolla* is the subject of the main clause, then the relative clause lacks an agentive subject to fit its verb. NPrel fills preferentially the subject role, more often leaving the direct object or in this case, the indirect object, to be supplied by context. Therefore, a Sinhala speaker would assume the subject of the relative clause, NPrel, to be the same as the head noun, *kellǝʈǝ*, 'girl,' a typical agent. *Kolla,* would then be the implied indirect object of the relative clause as the only remaining noun that would logically fit this role. Under this assumption, the girl would be the subject of the relative clause, the one giving the gift. However, if *kolla* is the subject of the relative clause, then only the indirect object of *dunnǝ*, 'give,' is missing from the clause, and therefore NPrel, coreferential with *kellǝʈǝ*, must be the missing indirect object. In this interpretation, the boy would be the subject of the relative clause, the one giving the gift.

(11) Unambiguous
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[tæægǝ  dunnǝ]       kellǝʈǝ    kolla   pain gæhuwa
gift    give-PST-REL girl-DAT   boy     kick-PST
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'The boy kicked the girl who gave him the gift.'

Example (11) changes the word order of example (10) from SOV to OSV, eliminating the possibility of interpreting *kolla* as the subject of the relative clause. Therefore, the relative clause lacks a subject, and NPrel must assume this role. Again, *kolla* becomes the implied indirect object of *dunnə*.

(12) Unambiguous
    kolla [taman   tæægə   dunnə]   kellətə   pain gæhuwa
    boy   self   gift   give-PST-REL girl-DAT kick-PST
    'The boy kicked the girl to whom he gave the gift.'

Example (12) adds the pronoun *taman,* 'self,' to the relative clause. *Taman* is a reflexive pronoun and can only refer to an explicitly stated antecedent. This pronoun clearly refers to the subject of the main clause, because NPrel is always gapped. Therefore, with *kolla,* 'boy,' accounted for as the subject of the relative clause, and *tæægə,* 'gift,' as the direct object, only *kellətə,* 'girl,' is left as a logical indirect object.

In cases with two animates acting on one another, the accusative case suffix, *-wə,* clears away ambiguity. Animate direct objects in Sinhala are marked with this suffix, clearly distinguishing them from subjects. Therefore, with two animate objects acting on one another, this suffix clears away any ambiguity by its presence or absence on the overt argument.

(13) NPrel as Subject
    [pussawə hapəpu]   ballətə   mamə   kæməti
    cat-ACC   bite-PST-REL dog-DAT 1SG   like
    'I like the dog that bit the cat.'

In example (13) the accusative object of the relative clause, *pussa,* 'cat,' is marked with the suffix *-wə.* With the direct object accounted for, NPrel must be the subject of this relative clause in order to complete it.

(14) NPrel as Object
    [pussa   hapəpu]   ballətə   mamə   kæməti
    cat   bite-PST-REL dog-DAT 1SG   like
    'I like the dog that was bitten by the cat.'

In example (14) *pussa,* 'cat,' is not marked with the accusative suffix. However, since *pussa* is animate and lacks the accusative suffix, or any other suffix marking it as one of the other cases, it must be in the unmarked, nominative case. Therefore NPrel must be the accusative object of the relative clause.

Clauses involving two inanimate objects acting on one another also create ambiguity that cannot be resolved with the use of the animate accusative suffix. However, there is a inanimate agentive suffix, *-yen,* that may sometimes be used to make the meaning clear.

(15) NPrel as Subject

    mamə [meeseyə saməṭəla kərəpu]   peṭṭiyə issuwa
    1SG   table   flat   do-PST-REL box   lift-PST
    'I picked up the box that flattened the table.'

In example (15) there is only one explicitly stated argument, *meeseyə*, 'table,' in the relative clause. As mentioned previously, NPrel appears to fill the subject role preferentially. Therefore, with NPrel as the subject, *meeseyə* must be the direct object of the transitive verb, *saməṭəla kərəpu*, 'flatten.'

(16) NPrel as Object

    [meeseyen saməṭəla kərəpu]   peṭṭiyə mamə issuwa
    table-AGENT flat   do-PST-REL box   1SG   lift-PST
    'I picked up the box that the table flattened.'

In example (16) the overt argument *meeseyə*, 'table,' carries the suffix *-yen*. This suffix marks the argument as the subject of this relative clause, leaving NPrel to be the object of the clause.

This agentive suffix appears to be similar to the instrumental suffix, as in *polisiyen*, 'police,' in the instrumental case. It also resembles the locative suffix meaning 'from', as in *ambə gediyen,* 'from the mango.' However, it should be noted that this construction was difficult for the consultant to use. For instance, he was unable to produce the same paradigm around the objects *rupəwahiniyə,* 'TV', and *potə,* 'book'.

5. KEENAN'S AND COMRIE'S RELATIVIZATION HIERARCHY. Keenan and Comrie constructed a hierarchy of argument types on which languages form relative clauses. They found an order of elements that if a language can form a relative clause on one argument type, then it can form relative clauses on all of the types to the left on the hierarchy.

SUBJ>DIRECT OBJ>INDIRECT OBJ>OBLQ>POSSESSOR

(Keenan and Comrie 1979:333-351).
Sinhala can form relative clauses on all of the elements with some trouble with the last argument type, possessors.

(17) Relativized Subject

    arə [mawə dækkəpu] miniha
    DEM 1SG-ACC see-PST-REL man
    'That is the man who saw me.'

(18) Relativized Direct Object

lamǝya [ohu ændǝpu] redi heduwa
child 3M.SG wear-PST-REL clothes wash-PST
'The boy washed the clothes that he wore.'

(19) Relativized Indirect Object

miniha [taman tæægi dennǝ] lamǝyaṭǝ kata kǝrǝnawa
man self gift-PL give-NPST-REL child-DAT speak-PRES
'The man speaks to the boy to whom he gives gifts.'

(20) Relativized Oblique

mee [laŋgǝ tibunǝ] hooṭǝle ekǝ mage muǝl dawǝsǝ gaṭṭǝkeruwa
HES close.by exist-PST-REL hotel one 1SG-GEN first day spend-PST
'Um, I spent my first day at a hotel that was close by.'

In addition to canonical subjects, Sinhala can also form relative clauses using dative subjects. However, the case of NPrel does not affect the head noun in any way, nor is it expressed explicitly.

(21) Dative Subject

lamǝyaṭǝ gedǝrǝ wæḍǝ matak una
child-DAT home work remember-PST
'The boy remembered the home work.'

(22) NPrel as Dative Subject

[gedǝrǝ wæḍǝ matak wecca] lamǝyawǝ mamǝ dannǝwa
home work remember-PST-REL child-ACC 1SG know
'I know the boy who remembered the homework.'

In example (22), *lamǝya,* 'child,' takes the accusative suffix *-wǝ* required by the main clause, leaving no trace of the dative case of NPrel.

Sinhala only creates relative clause on possessors when the possession is either inherent or explicit ownership.

(23) Head Noun as Inherent Possessor

kolla [bottam kædunǝ] kamisǝ heduwa
boy button-PL break-PST-REL shirt wash-PST
'The boy washed the shirt whose buttons were broken.'

In example (23) NPrel refers to the shirt, *kamisǝ*, but its ownership of the buttons must be inferred based on the relationship of the part to the whole.

(24) Head Noun as Inherent Possessor

kolla [balla Mæriccǝ kellǝṭǝ kata keruwa
boy dog die-PST-REL girl-DAT speak-PST
'The boy spoke to the girl whose dog was dead.'

In example (24) the relationship between NPrel, *kelləṭə*, 'girl,' and the subject of the relative clause, *balla*, 'dog,' is more subtle. However, since the verb in the relative clause is intransitive, and the ownership of dogs as pets by children is so salient, NPrel as a possessor is the most reasonable interpretation.

(25) Head Noun as Inherent Possessor
    [nyanəwəntə putta innə]   miniha   welendek
    intelligent   son   exist-PRES-REL man   merchant
    'The man whose son is intelligent is a merchant.'

In example (25) the highly salient relationship of kinship between father and son is implied.

Other relative clauses built on possessors can be formed when the relationship between owner and property is overtly expressed.

(26) Declarative Clause Expressing Ownership
    balla   kollaṭə   aiti
    dog   boy-DAT   own
    'The boy owns the dog.'

(27) miniha [balla aiti]   laməyaṭə kata keruwa
      man   dog   own-PRES-REL child-DAT speak-PST
      'The man spoke to the boy who owns the dog.'

Example (27) is a typical relative clause where NPrel is the subject and the ownership is explicitly stated in the verb *aiti*, 'own.'

(28) [[hayiyen duhənə]   balla aiti]   miniha   welendek
      fast   run-PRES-REL dog   own-PRES-REL man   merchant
      'The man who owns the dog that runs fast is a merchant.'

In example (28) there are two relative clauses, one within the other, or 'embedded.' Read without the second relative clause, *balla aiti miniha welendek*, the sentence reads 'the man who owns the dog is a merchant.' The relative clause explicitly expresses the ownership of the dog by the man. With the addition of the second relative clause built on the object of the first relative clause, an approximation of a relativized possessor is formed. In idiomatic English, this sentence would read, 'The man whose dog runs fast is a merchant.' However, Sinhala lacks the possessive relative pronoun, 'whose,' to express the concept of ownership in a relative clause without resorting to embedded relative clauses using the verb *aiti*, 'own,' or implied ownership.

5. HEADLESS RELATIVE CLAUSES. In addition to the normal prenominal relative clauses, a few headless clauses were elicited.

(29) [redi   hodənə]   (kena) Nuwanwə taraha æwisuwə
      clothes wash-PRES-REL one   N.-ACC   anger   induce-PST
      'The one washing the clothes made Nuwan angry.'

(30) [balləṭə   pain gahanə] (puḍgəleya) [mamə dækkəpu]   minihai
      dog-DAT   kick-PRES-REL   person   1SG   see-PST-REL   man-FOC
      'The person kicking the dog was the man I saw.'

In both numbers 29 and 30, the sentences were judged grammatical by the consultant with the head nouns in parentheses omitted.

6. CONCLUSION.   As a SOV language and in accordance with Greenberg's word-order correlates, Sinhala uses relative clauses that precede the head noun being modified. Sinhala creates prenominal relative clauses using the 'gap' strategy and non-finite verb forms. Ambiguity in the relative clause due to the SOV word order is avoided through the use of case suffixes. Despite the lack of relative pronouns, Sinhala still relativizes on possessors using embedded relative clauses or context. Through a combination of these strategies, Sinhala proves its versatility, allowing speakers the freedom to relativize and thus modify all types of arguments.

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Rice University
Department of Linguistics, MS 23
6100 Main Street
Houston, TX 77005-1892
zeb@rice.edu