

Double control in Sanskrit: an LFG analysis

John Lowe
University of Oxford

1 Introduction

Lowe et al. (2021) presented an LFG-based analysis of Sanskrit constructions involving the verb *śak* ‘can’ with a complement infinitival clause.¹ In this paper I offer an alternative perspective on two of the analytical assumptions made by Lowe et al. (2021), and I present a revised and expanded LFG analysis which accounts not only for *śak* but also for all other Sanskrit verbs which govern infinitival complements.

Among the many important contributions by our honorands to LFG and to linguistics more broadly, one of the earliest is their application of LFG to, and indeed their development of the theory of LFG with reference to, modern South Asian languages (e.g. Butt & King 1991, 1996, 1998). In their linguistic work on Hindi/Urdu and other South Asian languages, they follow in the footsteps of the ancient grammarian Pāṇini, whose 5th–3rd century BC grammar of Sanskrit the *Aṣṭādhyāyī* – the first generative grammar of any language (Chomsky 1965: v) – remained the most sophisticated grammar of any language until the twentieth century. In this paper I continue my own work of applying LFG to the study of Sanskrit, a task which cannot but be influenced both by Pāṇini (on the Sanskrit side) and Miriam and Tracy (on the LFG side).

Since at least as early as Pāṇini, infinitival complement constructions in Sanskrit involving verbs like *śak* ‘can’ and *iṣ* ‘want’, as in (1a), have been a source of interest for linguistic analysis.² How such complement constructions interact with ergativity and with passivization provides important evidence for their underlying syntax, as we will see; (1b)–(1c) illustrate possible finite passive constructions.³

- (1) a. *rāmo rāvaṇaṃ hantuṃ śaknoti / icchati*
R.NOM R.ACC slay.INF can.3SG / want.3SG
‘Rāma can / wants to slay Rāvaṇa.’
- b. *rāmeṇa rāvaṇo hantuṃ śakyate / iṣyate*
R.INS R.NOM slay.INF can.PASS.3SG / want.PASS.3SG
‘Rāvaṇa can be slain by Rāma.’ / (Lit.) ‘Rāvaṇa is wanted to be slain by Rāma.’

¹Abbreviations used in this paper that are not in the Leipzig Glossing Conventions: EMPH ‘emphatic particle’, GDV ‘gerundive’, HON ‘honorific’, OPT ‘optative’.

²The focus in this paper is on the Classical Sanskrit language (c. 200 BC on). The phenomena illustrated in (1) are first fully attested in the latter stages of the earlier Vedic Sanskrit period (c. 1000–400 BC), and become common in Classical and Epic Sanskrit. The early Vedic language lacks the passive constructions discussed in this paper, and I do not consider this stage of the language further here. For a periodization of Sanskrit and early Indo-Aryan more generally, see Kulikov (2017: 214–217).

³In this paper I use constructed examples to clearly illustrate the relevant patterns. Although in some sense a corpus language, it is possible to construct grammatical sentences in Sanskrit on the basis of Pāṇini’s grammar (and, correspondingly, to rule out at least some ungrammatical sentences). Moreover, the Sanskrit corpus is vast, such that the problems of negative evidence are somewhat attenuated. All constructed examples reflect patterns attested in corpus data (parallel corpus examples are given in Lowe et al. forthcoming[a]), and (unless otherwise indicated) illustrate constructions which the native grammatical tradition present as grammatical Sanskrit.

- c. rāmeṇa rāvaṇaṃ hantum śakyate [not with *iṣ*]
 R.INS R.ACC slay.INF can.PASS.3SG
 ‘Rāvaṇa can be slain by Rāma.’

Ex. (1a) illustrates a simple complement structure, with a transitive infinitive and accusative object of that infinitive. In (1b), the logical object of the infinitive is realised in the passive as the nominative subject of the control verb. The verb agrees with the nominative argument, except in (1c), an alternative passive construction found with *śak* ‘can’ and some other verbs, but not with *iṣ*, where there is no nominative argument to agree with, leaving the verb to appear in a default 3sg. form.

The grammaticality claims made here, based on the corpus data presented in Lowe et al. (forthcoming[b]), differ from those claimed by Kiparsky (1982, 2009). According to Kiparsky, with *śak* only the type in (1b) is possible, and the type in (1c) ungrammatical, whereas with *iṣ*, the type in (1b) is ungrammatical, and only the equivalent of (1c), with object of the infinitive remaining in the accusative, is possible. In relation to *śak*, however, the corpus study shows that around 4% of instances show the pattern in (1c): not common, but not ungrammatical. In relation to *iṣ*, the corpus data shows the opposite of Kiparsky’s observations: only the type in (1b) is attested, while an equivalent to (1c) is unattested and, presumably, ungrammatical.

2 Control or raising?

In LFG, the traditional categories of ‘raising’ and ‘equi’/‘control’ are subsumed under the term ‘control’; see Lam (2023) for a recent in-depth treatment of control in LFG. There are, however, competing traditions: one approach formalizes both in terms of functional control (e.g. Bresnan 1982a, Asudeh 2005, Bresnan et al. 2016); the other formalizes raising in terms of functional control, but equi in terms of obligatory anaphoric control (e.g. Dalrymple 2001, Dalrymple et al. 2019). In this paper I follow the latter tradition. The main contrast between the two phenomena which both approaches agree on is that the subject of a raising predicate is non-thematic, whereas the subject of an equi predicate is thematic. Cross-theoretically this is the most widely agreed difference between raising and equi predicates (see e.g. the survey in Abeillé 2024: 489–497).

Lowe et al. (2021) provide an initial analysis of control constructions in Sanskrit, treating only the verb *śak* ‘can’, and assuming that *śak* is a raising verb. However, our ongoing work (Lowe et al. forthcoming[a]) led us to alter this assumption, and although clear syntactic evidence, such as use with expletive subjects, is absent, there is indirect evidence that *śak* is better treated as an equi predicate (and therefore here, following the assumptions stated in the previous paragraph, as an anaphoric control verb). In fact, this applies to all, or nearly all, verbs that control infinitival complements in Sanskrit.⁴

In contrast with *śak* ‘can’, the meaning of which is potentially ambiguous between raising and equi, the verb *iṣ* ‘want’ and synonyms (which show only subject control in Sanskrit) are unproblematic, since the meaning ‘want’ necessarily places selectional constraints on its highest argument (the ‘wanter’). The question is whether, or how, *śak* and *iṣ* differ as control verbs. Kiparsky (2009) and Lowe et al. (2021) assume significant syntactic differences in the complement constructions with the two verbs, based partly on the semantic facts (i.e. the potential compatibility of *śak* with raising), and partly on the authority of Pāṇini’s *Aṣṭādhyāyī*, which distinguishes verbs of wanting, like *iṣ*, from all other verbs which govern infinitival complements (including *śak* but also many other verbs), by placing certain additional constraints on verbs of wanting.

However, Pāṇini’s distinction of verbs of wanting from other control verbs cannot amount to a distinction between equi (for verbs of wanting) and raising (for other verbs), because while two of the most common verbs in the latter set, *śak* ‘can’ and *rabh* ‘begin’, have meanings which could be

⁴I will argue below that some Sanskrit constructions involve two control relations; the additional control relation is best treated as functional; assuming anaphoric control for the primary control relation has the added advantage, then, of making it easier to distinguish between them.

compatible with raising, many have meanings which clearly do involve selectional restrictions on their subject arguments, such as *jñā* ‘know’ and *dhṛṣ* ‘dare’, and so must be equi verbs.⁵

Moreover, even for *śak* there is no positive evidence for the non-thematic status of the subject. There are no unambiguously non-referential subjects, such as expletive or idiomatic subjects, in Sanskrit which could provide crucial evidence for the non-thematic status of the subject of *śak*. Nor are there, for example, ‘quirky case’ subjects, such as can be used in Icelandic to distinguish raising and equi (e.g. Zaenen et al. 1985, Andrews 1982, 1990). On the other hand, in the earlier stages of the language the meaning of *śak* is more clearly that of an equi verb, ‘have strength, be capable’, and while *śak* does appear to have undergone a degree of semantic bleaching through the history of the language, it need not necessarily be the case that that bleaching resulted in the loss of all selectional restrictions on the subject. The same point applies to perhaps the other best candidate for raising, *rabh* ‘begin’, which at an earlier period meant ‘seize, grasp’.

There are, as we will see, important syntactic differences between *śak* (and similar control verbs) and *iṣ* (and similar control verbs), but it cannot be maintained that the distinction Pāṇini draws between verbs of wanting and other control verbs reflects such differences. The distinction that Pāṇini draws is an additional restriction placed on verbs of wanting, that their highest argument, the *kartṛ* $\approx$ ‘agent’ (really, the arg_1 in Kibortian argument structure terms, see Lowe 2025) must be the controller; that is, that they are subject control verbs. In practice, this applies not only to *iṣ*, but to almost all complement control verbs; indeed Kiparsky (1982: 16–22) claims that it applies to all control verbs in Sanskrit (but see Section 7.1 below for evidence of object control constructions in Sanskrit). The reason why Pāṇini stated such a requirement specifically for verbs of wanting may have to do with his understanding of the desiderative: by making this statement Pāṇini drew an equivalence between complement control constructions with verbs of wanting, like *iṣ*, and the morphological category of desideratives, such that, for example, *kartum icchati* ‘he wants to do’ is treated in the grammar as functionally identical to the synonymous morphological desiderative *cikīṛṣati* ‘he wants to do’ (where *kartum* and *cikīṛṣati* are both based on the verbal root *kr* ‘do’). This would not then imply any fundamental syntactic difference between verbs of wanting and other control verbs.

Partly driven by the raising analysis they assume, Lowe et al. (2021) also assumed that the voice of the Sanskrit infinitive in *-tum* is variable: active by default, but passive when enforced by certain syntactic conditions, including a morphologically passive governing verb. So, for the example of *śak* in (1b), Lowe et al.’s analysis would be:

$$(2) \quad \left[\begin{array}{ll} \text{PRED} & \text{'CAN(XCOMP)SUBJ'} \\ \text{SUBJ} & \boxed{1} [\text{PRED 'RĀVAṆA'}] \\ & \left[\begin{array}{ll} \text{PRED} & \text{'SLAY(SUBJ,OBL}_\theta\text{'})'} \\ \text{VOICE} & \text{PASS} \\ \text{SUBJ} & \boxed{1} \\ \text{OBL}_\theta & [\text{PRED 'RĀMA'}] \end{array} \right] \\ \text{XCOMP} & \end{array} \right]$$

The morphological passive voice of the control verb is treated as applying within the embedded complement, and not to the control verb itself, which is theoretically less than ideal. The analysis presented in this paper permits a more consistent treatment of the Sanskrit infinitive, as being exclusively active.

This is preferable since in almost all contexts the Sanskrit infinitive is unambiguous in having only an active voice interpretation.⁶ That is, an infinitive like *hantum* can mean only ‘to slay’, not ‘to be slain’ (nor even middle ‘to slay oneself’), even if there is no object expressed, and even if a non-active reading

⁵Of the verb classes listed by Pāṇini, only verbs of ‘being’, e.g. *as* ‘be’, must be raising verbs. We have not come across corpus examples of such verbs with infinitival complements, however, so we exclude them from further consideration.

⁶I am considering only the Classical language, which has only the single infinitive, in *-tum*. In the earlier Vedic language, there are infinitives which can or must be interpreted passively, but these do not survive into the Classical language.

would be possible in the discourse context.⁷ It is only when the infinitival clause is an argument of a morphologically passive verb, as in (1b)–(1c), that the voice interpretation of the infinitive is superficially less clear. In English translation, as illustrated in (1b)–(1c), a passive infinitive must be used, and indeed the infinitive in such contexts is labeled ‘passive’ in standard grammars such as those of Speijer (1886: 303) and Whitney (1896: 355). But this is a fact about English, not Sanskrit. A passive infinitive must be used in the English translations of (1b)–(1c) because oblique arguments cannot be controllers in English, so the grammatical subject of the verb must be the controller. But as with most other syntactic phenomena in Sanskrit, control targets not the grammatical subject but the thematically highest argument; as I will show below, control is therefore best analysed in Sanskrit with respect to argument structure roles such as arg_1 , rather than grammatical functions.⁸

3 Double control

The formal analysis proposed in this paper builds on the unformalized analysis developed in Lowe et al. (forthcoming[a]). Using the more restrictive sense of the term ‘control’ as used in generative literature, Lowe et al. (forthcoming[a]) propose the term ‘control+raising’ for the constructions discussed here. In LFG terms, ‘control+raising’ means a construction involving two control relations; I maintain the distinction between the two by recourse to the distinction between anaphoric and functional control, as discussed in the previous section.

3.1 Double control in the ergative

I have argued that there is no syntactic difference between the verbs *śak* ‘can’ and *iṣ* ‘want’ in control terms: both are equi verbs, and thus can be analysed in LFG in terms of obligatory anaphoric control. However, there is one significant syntactic difference between these verbs: in the active *śak* is intransitive, while *iṣ* is transitive, as evidenced by agreement patterns in the ergative past participle forms of the verbs.⁹ They also differ, as we have seen, in terms of the passives they license (1). The analysis proposed here seeks to derive the differences in control in the passive from the difference in transitivity between the verbs.

For example, in the finite active there is no superficially obvious syntactic difference between *śak* ‘can’ and *iṣ* ‘want’:

- (3) *rāmo rāvaṇaṃ hantum śaknoti / icchati*
R.NOM.SG R.ACC.SG slay.INF can.3SG / want.3SG
‘Rāma can/wants to slay Rāvaṇa.’

But if the matrix predicate is a past participle, a formation which shows ergative-absolutive alignment, the agreement patterns are crucially different:

- (4) a. *rāmo rāvaṇaṃ hantum śaktaḥ*
R.NOM.SG R.ACC.SG slay.INF can.PST.PTCP.NOM.SG
‘Rāma could slay Rāvaṇa.’

⁷One or two counterexamples are attested where a non-active reading cannot be avoided, in texts of less standardized register; cf. Oberlies (2003: 276–278) for Epic Sanskrit.

⁸See Hock (1982, 1986, 1987, 1990, 1991a,b) for arguments that the major subjecthood tests in Sanskrit target the thematically highest argument rather than the grammatical subject. Control by the agent or highest argument corresponds to the understanding of the relation in the Indian grammatical tradition, discussed in detail by Deshpande (1980).

⁹Necessarily all subject control verbs must be at least bivalent, of course, since they select both a subject and an infinitival complement, but this does not mean that all subject control verbs in Sanskrit are transitive. I understand transitivity as involving selection for an object (OBJ) complement specifically; infinitival complements may or may not be object complements. On variation in types of complement clauses, see Dalrymple & Lødrup (2000) and Alsina et al. (2005).

- b. *rāmeṇa rāvaṇo hantum iṣṭaḥ*
 R.INS.SG R.NOM.SG slay.INF want.PST.PTCP.NOM.SG
 ‘Rāma wanted to slay Rāvaṇa.’

In (4a), the agreement shows that *śak* is an intransitive verb: the past participle agrees with the subject-like argument, *rāma*, which must here be understood as the S of an intransitive verb. The infinitival clause in (4a) must therefore be a non-object complement.¹⁰ There is, as we would expect, no direct relation between the object of the infinitive, *rāvaṇa*, and the matrix verb. Therefore, although *śak* is bivalent, it must be intransitive in the sense that it does not take an object complement.¹¹

The agreement pattern shown by the past participle of *iṣ* (4b) is different: *rāma* is marked with the instrumental case, that is, as the A argument of a transitive verb, and *rāvaṇa* appears in the nominative case, that is marked as the O argument. Thus *iṣ* must be transitive; and not only that, but its object argument is not the infinitival complement (which must be a second, non-object complement), but the object of the infinitival complement.

If *rāvaṇa* is an argument of the matrix predicate in (4b), we must be dealing with a second shared argument between matrix and predicate, since *rāvaṇa* remains the logical object of the infinitive. That is, (4b) shows that alongside the control relation between the subject positions of the matrix verb and the infinitive, we must also recognize a relation between the object of the matrix verb and the object position of the infinitive. Thus, there is a significant difference between the two superficially similar sentences in (3): with *śak*, the word *rāvaṇam* is only the object of the infinitive, and the control verb itself has no object; with *iṣ*, the same word is both the object of the infinitive and the object of the matrix verb.¹²

As the object of the matrix verb in (4b), *rāvaṇa* appears to be a non-thematic argument: Rāvaṇa himself is not something Rāma wanted. This suggests that the relation between the object position of *iṣ* and the object position in the infinitival complement is a raising relation, and consequently must involve functional control.¹³

Naturally, the agreement pattern seen in (4b), and the assumption of functional control of the embedded object, depends upon the infinitival complement having an object. When the infinitive is intransitive, the construction must be different; but the agreement in the past participle remains consistent with *iṣ* being transitive:

- (5) *rāmeṇa svapitum iṣṭam*
 R.INS.SG sleep.INF want.PST.PTCP.N.SG
 ‘Rāma wanted to sleep.’

As in (4b), here *rāma* appears in the instrumental, that is marked as the A argument, indicating a transitive phrase. The verb appears in the neuter singular, that is showing default/null agreement. Since the construction is transitive, there must be an object, and the only possible object is the infinitive which, being a clause, lacks agreement features. The past participle in (5) is therefore showing default agreement with its O argument, the infinitival clause.

¹⁰If the infinitival clause were an object, we would expect the past participle form of the matrix verb to appear in a default nt.sg. form, since infinitives lack agreement features. This is seen below with example (5).

¹¹There is a rare alternative past participle form *śakita*, which shows agreement consistent with a transitive verb, i.e. parallel to that seen in (4b). This (the form itself, and its argument alignment) appears to be a secondary creation based on the analogy of the finite passive (discussed below) and morphologically influenced by the causative paradigm; it is the only exception to the otherwise robust generalization that *śak* is fundamentally intransitive. The analysis of *śakita* will parallel that of *iṣṭa*.

¹²The claim that the same argument can serve as both the object of the matrix verb and the object of the complement infinitive can already be found in the indigenous grammatical tradition, at least with regard to verbs of wanting like *iṣ* (Deshpande 1980: 81–92).

¹³The only complication with the assumption of functional control is the mismatch in case assignment: in (4b) *rāvaṇa* shows nominative case, as assigned by the ergative matrix verb, whereas the infinitive would ordinarily assign accusative case to its object. Such a mismatch is used by Dalrymple & King (2000) to argue for anaphoric control in the case of English *tough* constructions. However, a hierarchical model of case in Sanskrit (where, for example, the ergative assigns CASE NOM +, the infinitive CASE ACC +, and only the nominative is compatible with the former) can easily account for such mismatches.

I assume, then, that *iṣ* is fundamentally transitive, that is, it obligatorily selects for a subject and object argument. This is true not only of constructions involving an infinitival complement, but also simple transitive uses of *iṣ*, e.g. *tad icchāmi* ‘I want that’. But *iṣ* also has an alternative trivalent argument structure, selecting for a subject, object and infinitival complement.

3.2 Double control in the passive

Double control is also found in passive constructions; here, it is found with both transitive verbs like *iṣ* and intransitive verbs like *śak*. As we saw in (1b)–(1c), *śak* and *iṣ* differ in the passives they license:

- (6) a. *rājabhī rāmo hantum iṣyate*
king.INS.PL R.NOM.SG slay.INF want.PASS.3SG
‘The kings want to slay Rāma.’ (Lit. ‘Rāma is wanted to be slain by the kings.’)
- b. *rājabhī rāmo hantum na śakyate*
king.INS.PL R.NOM.SG slay.INF NEG can.PASS.3SG
‘Rāma cannot be slain by the kings.’
- c. *rājabhī rāmaṃ hantum na śakyate*
king.INS.PL R.ACC.SG slay.INF NEG can.PASS.3SG
‘Rāma cannot be slain by the kings.’

The logical subject (i.e. the subject in the active) of the passive matrix verb in each example appears in the instrumental, the standard case for the passive agent in Sanskrit. In (6a) and (6b), the logical object of the infinitive appears in the nominative case and must therefore be the grammatical subject of the matrix verb. For (6a), this corresponds directly with what we saw in (1b): in the active there is raising of the object of the complement clause to the object position of the matrix, as attested by the agreement in the past participle, and correspondingly when the matrix verb is passive, the argument in question raises to the matrix subject position.

Of the two passive constructions with *śak*, it is (6c) that we would predict, given that *śak* is, as discussed above, an intransitive verb. Subjectless, or ‘impersonal’, passives formed to intransitive verbs are productive in Sanskrit; in such a passive, the verb appears with default/null 3sg. agreement, and the logical subject of the verb appears in the instrumental.¹⁴ This is likely what we see in (6c); the non-object complement clause remains as a non-object complement clause, unaffected by the passive alternation. Alternatively, it would be possible to assume (as does Deshpande 1980) that the infinitival clause itself is the subject in (6c); however, I see no positive evidence for this.

However we treat (6c), it is important to note that it is significantly less common than the passive in (6b), where the logical object of the infinitive appears in nominative case agreeing with the matrix verb as its subject.¹⁵ (6b) appears parallel, on the surface, to the passive of *iṣ* in (6a), but the underlying syntax must be different: we have seen that *śak* is intransitive in the active, and so has no object, and no object-to-object raising need or can be assumed. It appears rather problematic, then, that the logical object of the infinitive appears as the subject of the passive matrix verb in (6b). That is, the passive in (6a) falls out directly from the assumptions already made about the active, whereas the passive in (6b) cannot.

Lowe et al. (forthcoming[a]) propose a solution based on the evident preference for clauses to have subjects. Although, as discussed above, impersonal passives are productive in Sanskrit and therefore there is no ‘Subject Condition’ constraint ruling out subjectless clauses (or, dummy subjects are easily licensed), most Sanskrit clauses do still have subjects, and this tendency could be understood as a preference. In the case of an impersonal passive, there is simply no argument available to supply a SUBJ. But where the passive of an intransitive governs an infinitival complement with an object, there is such an argument. So,

¹⁴See Berman (1999) and Kibort (2006) for analyses of impersonal passives in LFG, and more widely Kiparsky (2013).

¹⁵In the corpus search reported in Lowe et al. (forthcoming[b]), 451 tokens of the type in (6b) were identified, compared with only 20 tokens of the type in (6c).

in sentences like (6b), Lowe et al. (forthcoming[a]) argue that the object of the infinitival complement is pressed into service as the matrix subject.

To account for this formally, here I assume that in the passive, and only in the passive, there is an alternative argument structure available to *śak* which parallels the passive of *iṣ* in licensing a non-thematic SUBJ argument identified with the embedded object.

4 Not complex predication

One obvious alternative to ‘double control’ would be that we are dealing rather with complex predication: a monoclausal structure, where the apparent sharing of arguments between main and embedded predicate would be unproblematic, since there would be no embedding. This is, in fact, the analysis put forward by Deshpande (1980) and Kiparsky (2009) for *śak* ‘can’. Kiparsky bases his analysis on *Aṣṭādhyāyī* 3.4.1, which specifies a relation of *dhātusambandha* ‘connection with (another) verbal root’ for infinitives used with predicates like *śak*; Kiparsky (2009: 60) interprets Pāṇini here as specifying a “verb union process” whereby combinations of *śak* and dependent infinitive “are treated exactly like a single predicate for purposes of the grammar’s licensing constraints”. Similarly, Deshpande (1980: 102) claims that *śak* and its dependent infinitive are “increasingly bracketed” together, “creating a sort of “compound verb” like *kar saknā* [‘able to do’] in Hindi”.

Aṣṭādhyāyī 3.4.1 in fact governs a wide range of relations between predicates, the vast majority of which cannot possibly involve any notion of ‘compounding’ or ‘verb union’. Nevertheless, the question is whether we should treat *śak*, and perhaps *iṣ* and other similar verbs, not as control verbs but as light verbs. The sharing of arguments between matrix and embedded clause does demonstrate a close syntactic relation between verbs like *śak* and *iṣ* and their infinitival complements. But there is crucial evidence for the syntactic independence of matrix and embedded verbs. As discussed by Butt (2010: 57–59; 2014: 171), tests for complex predicate-hood are crucially language-specific. So, while clitic climbing is a crucial test for complex predicates in Romance (Aissen & Perlmutter 1976), in Korean this test does not apply, but e.g. the use of NPIs can distinguish between monoclausal and biclausal structures (Choi 2005). For Sanskrit control structures, the best evidence against a complex predicate analysis comes from negation.

In the constructions under discussion, it is possible to negate both/either matrix verb and/or infinitive. Crucially, negation of the matrix verb alone is semantically distinct from negation of the infinitive alone; moreover, negation of both elements does not correspond with the restrictions on double negation in single clauses. The following examples, both from the clear Classical prose of Patañjali’s *Mahābhāṣya*, illustrate the semantic distinction between negation of main and embedded clause:¹⁶

- (7) *tasmān na evaṃ śakyam kartum*
 therefore NEG thus can.GDV.N.SG do.INF
 ‘Therefore it cannot be done thus.’
- (8) *adhātur iti śakyam a-kartum*
 ‘adhātuḥ’ QUOT can.GDV.N.SG NEG-do.INF
 ‘(The specification) *adhātuḥ* (‘not a verbal root’) does not need to be made.’

When non-finite verbs, including infinitives, are negated in Sanskrit, it is standard for the negative marker to appear compounded with the verb in the form *a(n)-*, rather than appearing as a separate word.

¹⁶As seen in (7) and (8), evidence for passive control constructions comes not only from the morphological (finite, tense-stem) passive, but also from gerundives. Gerundives are morphologically adjectival verb forms; they are most common as main clause predicates, and in this use show the same ‘passive’ argument alignment as finite passive verbs. That is, gerundives agree with the patient/object-like argument (O) if formed to a transitive verb, while the agent/subject-like argument (A), if explicit, appears in the instrumental; if formed to an intransitive verb, a gerundive appears in the default impersonal form (nt.sg., equivalent to the 3sg. finite impersonal passive), and the single subject-like argument (S), if explicit, appears in the instrumental (genitive marking of the agent is also possible when the gerundive is used adjectivally or as a substantive; Speijer 1886: 50). Jamison (1984) argues that the gerundive is a paradigmatic passive, specifically a suppletive passive optative, in Vedic Sanskrit.

5 Parallels

Perhaps the closest parallel in the existing literature to the double control proposed here is the analysis proposed by Arka (2014) for so-called ‘crossed control’ in Indonesian. The following Indonesian sentence (originally from Polinsky & Potsdam 2008: 1618) has two readings:

- (11) Anak itu mau/ingin [– di-cium oleh ibu]
 child that want PASS-kiss by mother
 EITHER ‘The child wanted to be kissed by mother.’
 OR ‘Mother wanted to kiss the child.’

The second reading is called the ‘crossed control’ reading, and shows a kind of backward control: ‘mother’ has a role in the main clause, equivalent to subject, but appears in the embedded clause, while ‘child’ is evidently also an argument of both predicates. A similar pattern is seen with other verbs (Arka 2014: 31):

- (12) Mobil mana yang di-coba di-curi (oleh) orang?
 car which REL PASS-try PASS-steal by person
 ‘Which car_i was tried (by e_j) e_i to be stolen by somebody_j?’

Polinsky & Potsdam (2008) discuss the ‘crossed control’ construction with verbs meaning ‘want’, offering an analysis which involves only a single raising relation (with the double sharing of arguments between main and embedded predicate effected only at the semantic level). A rather different analysis is proposed by Kroeger & Frazier (2019), who dispute some of the grammaticality judgments relied on by Polinsky & Potsdam (2008), and also disagree with their rejection of a complex predicate analysis.

The analysis of Arka (2014) differs from that of both Polinsky & Potsdam (2008) and Kroeger & Frazier (2019), involving the same kind of double control construction proposed here for Sanskrit. Arka rejects the complex predicate analysis, and proposes that we are dealing with simple control verbs which with certain types of embedded predicate, including passives, derive an alternative ‘pragmatically-induced’ argument structure which involves simultaneous control and raising. This results in a (backward) control relation between the agent of the matrix verb and the agent of the embedded passive predicate (‘mother’ in (11), and ‘person’ in (12)); at the same time, the subject / logical object of the embedded passive predicate raises to matrix subject position.

Beyond LFG literature, Ndayiragije (2012) presents a rather similar analysis of simultaneous control and raising in the Bantu language Kirundi. Both the Indonesian (under Arka’s analysis) and the Kirundi data involve one thematic, and one non-thematic, argument of the matrix predicate, both controlling argument positions in the embedded clause. This is precisely parallel to the analysis of the Sanskrit data advanced here.

A less precise parallel is offered by English *tough* constructions. Dalrymple & King (2000) distinguish *tough* constructions from *need x-ing* constructions in English. The latter they analyse as complex predicates, but the former as involving an anaphoric long-distance dependency, mediated by an embedded topic position. For example (Dalrymple & King 2000: 11–12):

- (13) Moths are tough to kill.
- $$\left[\begin{array}{l} \text{PRED} \text{ ‘TOUGH’} \langle \text{SUBJ}, \text{COMP} \rangle \\ \text{SUBJ} \left[\text{PRED} \text{ ‘MOTH’}_1 \right] \\ \text{COMP} \left[\begin{array}{l} \text{TOPIC} \left[\boxed{1} \left[\text{PRED} \text{ ‘PRO’}_1 \right] \right] \\ \text{PRED} \text{ ‘KILL’} \langle \text{SUBJ}, \text{OBJ} \rangle \\ \text{SUBJ} \left[\text{PRED} \text{ ‘PRO’}_{\text{ARB}} \right] \\ \text{OBJ} \left[\boxed{1} \right] \end{array} \right] \end{array} \right]$$

English *tough* constructions can also involve a *for*-phrase as the ‘overt controller’ of the complement subject. Although Dalrymple & King do not provide an explicit analysis, they presumably envisage a double anaphoric dependency such as:

- (14) This race is tough for me to finish.

$$\left[\begin{array}{l} \text{PRED} \quad \text{'TOUGH'⟨SUBJ, OBL}_{\theta}, \text{COMP}⟩ \\ \text{SUBJ} \quad \left[\begin{array}{l} \text{PRED} \quad \text{'RACE'}_I \\ \text{DEIXIS} \quad + \end{array} \right] \\ \text{OBL}_{for} \quad \left[\begin{array}{l} \text{PRED} \quad \text{'ME'}_J \end{array} \right] \\ \text{COMP} \quad \left[\begin{array}{l} \text{TOPIC} \quad \boxed{1} \quad \left[\text{PRED} \quad \text{'PRO'}_I \right] \\ \text{PRED} \quad \text{'FINISH'⟨SUBJ, OBJ⟩} \\ \text{SUBJ} \quad \left[\text{PRED} \quad \text{'PRO'}_J \right] \\ \text{OBJ} \quad \boxed{1} \end{array} \right] \end{array} \right]$$

The major difference from the analysis advanced in this paper is that both control relations in (14) are anaphoric, and (correspondingly) that both controlling arguments are thematic arguments of the matrix predicate. However, the proposal that the control relation between the subject and embedded object is mediated by a TOPIC position is an attractive one, since it brings the analysis in line with the “fundamental distributional property of control” (Landau 2015: 27), that the controlled *pro* must be either a subject or a topic.¹⁹ I therefore adopt this aspect of Dalrymple & King’s proposal into my analysis of the Sanskrit data (using DIS in place of TOPIC, following Dalrymple et al. 2019: 680–683).

6 Formal analysis

In this section I detail the formal analysis of the Sanskrit constructions introduced above.

6.1 Active

The active constructions are relatively unproblematic. In the case of *śak*, we are dealing with an intransitive verb, that is a verb that does not select for an object argument. The infinitive can therefore be assumed to head a COMP, with obligatory anaphoric control of the embedded subject:

- (15) rājāno rāmaṃ hantum na śaknuvanti
king.NOM.PL R.ACC slay.INF NEG can.3PL
‘The kings cannot slay Rāma.’

$$(16) \quad \left[\begin{array}{l} \text{PRED} \quad \text{'CAN'⟨SUBJ, COMP⟩} \\ \text{NEG} \quad + \\ \text{SUBJ} \quad \left[\text{PRED} \quad \text{'KINGS'}_I \right] \\ \text{COMP} \quad \left[\begin{array}{l} \text{PRED} \quad \text{'SLAY'⟨SUBJ, OBJ⟩} \\ \text{SUBJ} \quad \left[\text{PRED} \quad \text{'PRO'}_I \right] \\ \text{OBJ} \quad \left[\text{PRED} \quad \text{'RĀMA'} \right] \end{array} \right] \end{array} \right]$$

When we turn to transitive control verbs like *iṣ*, the analysis must be slightly different. As we saw above, there is evidence that an intransitive infinitival complement is an object with *iṣ*, since with the main verb in the past participle we see ergative agreement.

¹⁹See Landau (2015: 27ff.) for “the subjecthood of PRO” as the “fundamental distributional property of control”, and Landau (2015: ch. 5) for the loosening of this constraint to include topicalized (non-subject) PRO, which he admits to explain Actor control in Tagalog.

- (17) *rāmaḥ svapitum icchati*
 R.NOM sleep.INF want.3SG
 ‘Rāma wants to sleep.’
- (18) *rāmeṇa svapitum iṣṭam*
 R.INS.SG sleep.INF want.PST.PTCP.N.SG
 ‘Rāma wanted to sleep.’

- (19)
$$\left[\begin{array}{l} \text{PRED} \text{ ‘WANT(SUBJ,OBJ)’} \\ \text{SUBJ} \left[\text{PRED ‘RĀMA’}_1 \right] \\ \text{OBJ} \left[\begin{array}{l} \text{PRED ‘SLEEP(SUBJ)’} \\ \text{SUBJ} \left[\text{PRED ‘PRO’}_1 \right] \end{array} \right] \end{array} \right]$$

Although an OBJ argument, the complement does not become the SUBJ in the passive. This constraint will be effected in the argument structure, below.

In order to account for ergative agreement when the complement verb has an object (and also the passive of the same) we must assume a second argument structure for *iṣ* in the active:

- (20) *rājāno rāmaṃ hantum icchanti*
 king.NOM.PL R.ACC slay.INF want.3PL
 ‘The kings want to slay Rāma.’

- (21)
$$\left[\begin{array}{l} \text{PRED} \text{ ‘WANT(SUBJ,XCOMP)OBJ’} \\ \text{SUBJ} \left[\text{PRED ‘KINGS’}_1 \right] \\ \text{OBJ} \left[\boxed{1} \left[\text{PRED ‘RĀMA’} \right] \right] \\ \text{XCOMP} \left[\begin{array}{l} \text{DIS} \left[\boxed{1} \right] \\ \text{PRED ‘SLAY(SUBJ,OBJ)’} \\ \text{SUBJ} \left[\text{PRED ‘PRO’}_1 \right] \\ \text{OBJ} \left[\boxed{1} \right] \end{array} \right] \end{array} \right]$$

Here *iṣ* shows simultaneous anaphoric and functional control: anaphoric control of the embedded subject by the matrix subject, and functional control of the embedded object (via the DIS) by the matrix object.

6.2 Passive

For the most part, the passive falls out unproblematically given the active structures proposed above. Since *śak* is intransitive, it should form an impersonal passive, and the accusative passive construction can be unproblematically analysed in this way:

- (22) *rājabhī rāmaṃ hantum na śakyate*
 king.INS.PL R.ACC slay.INF NEG can.PASS.3SG
 ‘Rāma cannot be slain by the kings.’

- (23)
$$\left[\begin{array}{l} \text{PRED} \text{ ‘CAN(OBL}_\theta\text{,COMP)’} \\ \text{NEG} + \\ \text{OBL}_\theta \left[\text{PRED ‘KINGS’}_1 \right] \\ \text{COMP} \left[\begin{array}{l} \text{PRED ‘SLAY(SUBJ,OBJ)’} \\ \text{SUBJ} \left[\text{PRED ‘PRO’}_1 \right] \\ \text{OBJ} \left[\text{PRED ‘RĀMA’} \right] \end{array} \right] \end{array} \right]$$

Following the argument structure model of Kibort (2001, 2004, 2006, 2007), as adopted by Dalrymple et al. (2019: 338–351), we can represent the passive as the addition of the specification [+R] to the arg₁, which causes it to map to OBL_θ:

(24)		‘can’	⟨	arg ₁	arg ₃	⟩
	[default]			[−O]	[+O,+C]	
	[passive]			[+R]		
	Mapping:			OBL _θ	COMP	

For *śak*, the same analysis will apply whether the embedded infinitive is transitive or intransitive. But for *iṣ*, I proposed above two different argument structures for the active, depending on whether the embedded infinitive is transitive or intransitive.

The intransitive case is simpler. I proposed that an intransitive infinitival complement of *iṣ* is an OBJ, but an OBJ that does not become SUBJ in the passive.²⁰ This can be effected neatly in argument structure terms by treating the OBJ complement clause as an arg₃. It will therefore have the default feature specification [+O], and so cannot map to SUBJ; the highest grammatical function it can map to is OBJ.²¹

(25)		‘want’	⟨	arg ₁	arg ₃	⟩
	[default]			[−O]	[+O]	
	[passive]			[+R]		
	Mapping:			OBL _θ	OBJ	

This will produce the f-structure in (27) for the sentence in (26).

- (26) *rāmeṇa svapitum iṣyate*
 R.INS.SG sleep.INF want.PASS.3SG
 ‘Rāma wants to sleep.’

$$(27) \left[\begin{array}{l} \text{PRED} \text{ 'WANT'} \langle \text{OBL}_\theta, \text{OBJ} \rangle \\ \text{OBL}_\theta \left[\text{PRED} \text{ 'RĀMA'}_I \right] \\ \text{OBJ} \left[\begin{array}{l} \text{PRED} \text{ 'SLEEP'} \langle \text{SUBJ} \rangle \\ \text{SUBJ} \left[\text{PRED} \text{ 'PRO'}_I \right] \end{array} \right] \end{array} \right]$$

When *iṣ* takes a transitive infinitival complement clause, I assume that the trivalent argument structure applies, as in (21). The passive will again fall out unproblematically:

- (28) *rājabhī rāmo hantum iṣyate*
 king.INS.PL R.NOM.SG slay.INF want.PASS.3SG
 ‘(Lit.) Rāma is wanted to be slain by the kings.’

(29)		‘want’	⟨	arg ₁	arg ₃	⟩	arg ₂
	[default]			[−O]	[+O]		[−R]
	[passive]			[+R]			
	Mapping:			OBL _θ	OBJ	SUBJ	

²⁰If the infinitival clause itself were the subject in the passive, we would have to admit control into the subject, which has been claimed to exist in some languages (see Arka & Simpson 1998, Stiebels 2007, Patejuk & Przepiórkowski 2021), but is usually considered problematic.

²¹Furthermore, the only difference between the COMP of the intransitive *śak* and the OBJ complement clause of *iṣ* is the [+C] feature of the former.

$$(30) \left[\begin{array}{l} \text{PRED 'WANT'} \langle \text{OBL}_\theta, \text{OBJ} \rangle \text{SUBJ}' \\ \text{OBL}_\theta \left[\text{PRED 'KINGS'}_1 \right] \\ \text{SUBJ } \boxed{1} \left[\text{PRED 'RĀMA'} \right] \\ \text{OBJ } \left[\begin{array}{l} \text{DIS } \boxed{1} \\ \text{PRED 'SLAY'} \langle \text{SUBJ}, \text{OBJ} \rangle' \\ \text{SUBJ } \left[\text{PRED 'PRO'}_1 \right] \\ \text{OBJ } \boxed{1} \end{array} \right] \end{array} \right]$$

The subject in the passive corresponds to the object of the active construction, while the subject of the active appears as an oblique. Thus the object of the infinitive – which is also the non-thematic object of the matrix verb – is the nominative subject in the passive. The anaphoric control relation still holds between the agent of the matrix verb and the subject of the infinitive.

Turning now to the agreeing passive with *śak* (32), the situation is similar but slightly different. Essentially we have the same construction as with *iṣ*, but the matrix verb has no object in the active. As discussed above, I propose that the passive of *śak* has an alternative argument structure available, paralleling that for the passive of *iṣ*, which licenses an additional argument:

(31)		'can-pass'	<	arg ₁	arg ₃	>	arg ₂
	[default]			[-O]	[+O],[+C]		[-R]
	[passive]			[+R]			
	Mapping:			OBL _θ	XCOMP		SUBJ

- (32) rājabhī rāmo hantum na śakyate
king.INS.PL R.NOM.SG slay.INF NEG can.PASS.3SG
'Rāma cannot be slain by the kings.'

$$(33) \left[\begin{array}{l} \text{PRED 'CAN'} \langle \text{OBL}_\theta, \text{XCOMP} \rangle \text{SUBJ}' \\ \text{NEG } + \\ \text{OBL}_\theta \left[\text{PRED 'KINGS'}_1 \right] \\ \text{SUBJ } \boxed{1} \left[\text{PRED 'RĀMA'} \right] \\ \text{XCOMP } \left[\begin{array}{l} \text{DIS } \boxed{1} \\ \text{PRED 'SLAY'} \langle \text{SUBJ}, \text{OBJ} \rangle' \\ \text{SUBJ } \left[\text{PRED 'PRO'}_1 \right] \\ \text{OBJ } \boxed{1} \end{array} \right] \end{array} \right]$$

7 The control relations

We must now consider the constraints on the two control relations: the anaphoric relation between the thematic argument of the matrix verb and its corresponding embedded argument, and the functional control relation between the non-thematic argument of the matrix and its corresponding embedded argument.

7.1 The anaphoric control relation

The primary control relation, that between e.g. the active subject and the subject of the complement clause, has to be modelled in a way that transcends the active-passive alternation. That is, the same control relation holds between two arguments in the active and the passive; the only difference is the grammatical function of the argument in the matrix clause: SUBJ in the active, OBL_θ in the passive.

It is worth noting that the continuity of this control relation across active and passive supports, indeed requires, a demotional approach to the passive in Sanskrit, whereby the active subject appears as an

oblique argument in the passive; in contrast, a suppressional approach to the passive would see the argument role underlying the active subject eliminated in the passive, leaving it unable to control.

For the control relation to hold across both active and passive, we must state the control relation in terms of underlying argument position in the matrix clause rather than grammatical functions. That is:²²

$$(34) \quad \mathcal{R}((\uparrow \text{COMP SUBJ})_{\sigma} \text{INDEX}) = (\uparrow_{\sigma} \text{ARG}_1 \text{INDEX}).$$

The position in the complement clause can be referred to in terms of the grammatical function SUBJ, since it does not vary.

In this paper I have considered subject control verbs, or more properly arg_1 control verbs. Although it is not a widely recognized possibility, object control is also possible in Sanskrit, for example:²³

$$(35) \quad \begin{array}{llll} \text{yadi mām} & \text{anujānīyād} & \text{bhavān} & \text{gantum tapo-vanam} \\ \text{if me.ACC permit.OPT.3SG you.HON.NOM go.INF ascetic-grove.ACC} \\ \text{'If your honour would allow me to go to the ascetic's grove...'} & & & \text{(Mahābhārata 14.2.12ab)} \end{array}$$

Object control interacts with the ergative past participle construction (36), and the passive (37), entirely as expected: the controlling argument is marked nominative in both, as the ergative object in the former, and the passive subject in the latter.

$$(36) \quad \begin{array}{llll} \text{bhavaty} & \text{upādhyāyena asmy} & \text{anujñāto} & \text{gṛhaṃ gantum} \\ \text{you.HON.VOC.F master.INS be.PRS.1SG permit.PST.PTCP.NOM.SG home.ACC go.INF} \\ \text{'Lady, your master has permitted me to go home.'} & & & \text{(Mahābhārata 1.3.99b)} \end{array}$$

$$(37) \quad \begin{array}{llll} \text{idānīm itaḥ} & \text{pratyāsanne kusumapure na ko 'py} & \text{amudrālāñchito} \\ \text{now from_here nearby.LOC K.LOC not anyone.NOM.SG not-ring-marked.NOM.SG} \\ \text{nirgantum praveṣṭum vānumodyate} \\ \text{exit.INF enter.INF or=permit.PASS.3SG} \\ \text{'Now from here no one is permitted to enter or exit nearby Kusumapura without the mark of the} \\ \text{signet-ring.'} & & & \text{(Mudrārākṣasa 5)} \end{array}$$

For such verbs, then, the control relation will make reference to the arg_2 position in the s-structure:

$$(38) \quad \mathcal{R}((\uparrow \text{COMP SUBJ})_{\sigma} \text{INDEX}) = (\uparrow_{\sigma} \text{ARG}_2 \text{INDEX}).$$

7.2 The functional control relation

For *iṣ*, again, the relation is independent of the active-passive alternation so must be stated with reference to the s-structure. The relation holds between the matrix OBJ and the embedded OBJ in the active, and the matrix SUBJ and the embedded OBJ in the passive.²⁴

$$(39) \quad (\uparrow_{\sigma} \text{ARG}_2)_{\sigma-1} = (\uparrow \text{OBJ DIS})$$

For *śak* it only applies in the passive, so could be stated in purely f-structural terms:

$$(40) \quad (\uparrow \text{SUBJ}) = (\uparrow \text{COMP DIS})$$

But if we refer to s-structure here too, we can combine these two equations into one:

$$(41) \quad (\uparrow_{\sigma} \text{ARG}_2)_{\sigma-1} = ((\uparrow_{\sigma} \text{ARG}_3)_{\sigma-1} \text{DIS})$$

²²For the formalism, see Dalrymple et al. (2018) and Dalrymple et al. (2019: 517–528).

²³For more details see Lowe et al. (forthcoming[b]).

²⁴On accounting for potential case mismatch, see fn. 13.

8 An alternative analysis

The analysis presented above requires somewhat parallel, but ultimately different, analyses for double control with intransitive (e.g. *śak*) and transitive (e.g. *iṣ*) control verbs. It requires positing two distinct argument frames for *iṣ* in the active, the choice between which depends on the transitivity of its complement, a feature more typical of complex predication than control constructions (Dalrymple & King 2000: 4, referencing Butt 1995). A second argument frame is also posited for *śak*, but only in the passive.

This analysis, in particular the double argument frame for *iṣ*, is suggested by the evidence of the ergative, given in (4b) above, repeated below:

- (42) *rāmeṇa rāvaṇo hantum iṣtaḥ*
 R.INS.SG R.NOM.SG slay.INF want.PST.PTCP.NOM.SG
 ‘Rāma wanted to slay Rāvaṇa.’

Granted that we are dealing with a control structure, and not a complex predication, the case of *rāvaṇa* here can only be accounted for by assuming object-to-object raising, as detailed above. The only way we could avoid assuming two argument frames for *iṣ* in the active would be to provide an alternative explanation of the ergative agreement pattern.

It should not need emphasizing that the ergative past participle construction is not a passive. Although informal accounts often describe the past participle as ‘passive with transitive verbs, active with intransitive verbs’, it is better described simply as (morphosyntactically) ergative: the participle agrees with the S argument of an intransitive verb, and the O argument of a transitive verb. The past participle does not function as the passive of any active paradigm, even only with transitive verbs, and its morphosyntactic similarity with the passive (including the instrumental case of the A argument) is in a sense accidental, or at least secondary. Nor is it the case, as often assumed (e.g. Patel-Grosz 2021), that the past participle derives historically from a passive construction; it is ergative, not passive, as far back as we can reconstruct.

On the other hand, the morphosyntactic similarity with the passive evidently led to a degree of interaction between the ergative past participle and the passive (as discussed by Lowe et al. 2024: 34–38). For example, while the past participle formed to an intransitive base normally agrees with the S argument, occasionally constructions are found where the participle appears in the default (non-agreeing) neuter singular form, with the S argument in the instrumental; that is, identical to the passive of an intransitive. So, beside the finite passive of the intransitive verb *sthā* ‘stand, remain’, shown in (43b) (beside the simple finite active in (43a)), one occasionally finds uses of the past participle as in (43d), contrasting with the usual and regular construction in (43c).

- (43) a. *devadattaḥ tiṣṭhati*
 D.NOM stand.ACT.3SG
 ‘Devadatta stands/remains.’
 b. *devadattena sthīyate*
 D.INS stand.PASS.3SG
 ‘Devadatta stands/remains.’ (Lit. ‘It is stood by D.’)
 c. *devadattaḥ sthitaḥ*
 D.NOM stand.PST.PTCP.NOM
 ‘Devadatta stood/remained.’
 d. *devadattena sthitam*
 D.INS stand.PST.PTCP.N.SG
 ‘Devadatta stood/remained.’ (Lit. ‘It was stood by D.’)

This shows that the usually ergative past participle can, albeit rarely, function as a passive with intransitive verbs. With transitive verbs, since there is no morphosyntactic difference between passive and ergative, one cannot be sure, but logically it must be the close similarity of passive and ergative with transitive verbs which underlies the reinterpretation of the ergative as passive with intransitive verbs.

One might conceive, then, that the ergative past participle when formed to transitive verbs was, at some point, at least optionally, reinterpreted as passive. That is, speakers might have lost the distinct morphosyntactic alignment rules of the ergative when formed to transitive verbs, instead treating such past participles with reference to the rules for passivization. Given that the rules for passivization are required elsewhere in the grammar, while distinct rules for the formation of the ergative to transitive verbs are not, this is on some level a simplification of the grammar.

If we can treat the past participle, when formed to transitive verbs, as a passive, then we can explain examples like (42) by reference to the passive, and we do not require two argument frames for transitive control verbs like *iṣ* in the active. That is, we could treat transitive control verbs like *iṣ* almost identically to intransitive verbs like *śak* in the active, the only difference between them being the difference in the GF of their complement clause (as seen above).

There remains the difference that intransitive verbs like *śak* are attested with two possible passive constructions, while transitive verbs like *iṣ* are attested with only one; cf. (1b)–(1c). Under the alternative approach developed in this section, this difference could be accounted for by a relatively small difference between the verb classes. The secondary argument frame for *śak*, given in (31), would in fact apply to all control verbs, being the only means of licensing a nominative case argument with the passive of a control verb (whether transitive or intransitive). Then, we would simply have to say that this alternative argument frame is optional (though by far most common) with *śak*, but obligatory with *iṣ*. Why this argument frame should be obligatory with some (transitive) control verbs and not others is another question (perhaps reflecting the transitive nature of the control verb).

Overall, such an approach would involve fewer stipulations, and would crucially avoid having to assume two argument frames for transitive control verbs, the choice between which must depend on the transitivity of the complement. However, the major disadvantage is that it fails to properly distinguish the ergative past participle construction from the passive; whether the trade-off is worth it is a question for future research.

9 Conclusion

In this paper I have presented an LFG analysis of control constructions in Sanskrit. I have argued that all relevant verbs in Sanskrit are equi verbs, and adopted an anaphoric control analysis of this. At the same time, at least in the passive, and for underlyingly transitive verbs like *iṣ* ‘want’ also in the active, there is a second control relation holding between the matrix and embedded predicates. As a non-thematic argument of the matrix verb, the control relation here is a functional control relation. Such double control constructions are rarely described in the literature, but are found in a number of unrelated languages, to the select inventory of which Sanskrit may now be added.

Acknowledgements

The analysis presented here has built in different ways on the work of Miriam and Tracy, as almost all work in LFG necessarily does. Whether or not the analysis can withstand their critical eye, I offer the attempt, at least, in honour of their manifold contributions to LFG and theoretical syntax more broadly.

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