

# The Shape of the Causative Verbal Domain: Evidence from Kashmiri

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*Abstract.* The properties of the productive morphological causative traditionally understood to be suggestive of biclausality have in more recent accounts been attributed to multiple layers within the verbal domain. This paper evaluates two approaches to the causative verbal domain: one requiring multiple stacked vPs as in Harley 2008 and Folli & Harley 2007, and a second in which causation instantiates a separate causative head as in Pykkänen 1999, 2008. Features particular to the Indic language Kashmiri, such as verbal agreement with the internal argument in ergative clauses, nominative causees, and iterated causation, provide new empirical ground for testing distinct predictions made by these two approaches. This paper ultimately argues that the CAUSEP approach better accounts for the facts in Kashmiri, and may also be better suited to capture parametric variation of productive causation crosslinguistically.

## 1. Introduction

The Indic language Kashmiri features a productive morphological–causative construction:

- (1) me ran-Ino:v su o:lav.  
I.ERG cook-CAUSE.PST.M.SG he.NOM potatoes.NOM  
'I had him cook potatoes.'<sup>1</sup>
- (2) təm' d'a:v-Ino:v-us bI mohn-as kita:b.  
he.ERG gave-CAUS.PST-1SG I.NOM Mohan-DAT book.NOM  
'He had me give a book to Mohan.'

The syntax and morphology of the productive causative have been extensively studied in languages like Japanese (e.g., Shibatani 1973; Miyagawa 1984, 1999; Kuroda 1993; Dubinski 1994; Harley 1995, 2008) as well as crosslinguistically (e.g., Aissen 1974; Comrie 1976; Marantz 1984; Alsina 1992, 1997; Haspelmath 1993; McGinnis 1998, 2001; Horvath & Siloni 2011). There is also a significant body of work on the causative in South Asian languages from a range of analytical traditions (e.g., Kachru 1976; Masica 1976; Saksena 1980; Butt 1995; Bhatt & Embick 2003;

I am very grateful to the audiences at the University of California, Santa Cruz, the University of Vermont, and Georgetown University, where versions of this work were presented. For their comments and suggestions I would also like to thank Jim McCloskey, Jaye Padgett, Peter Svenonius, Ruth Kramer, Alec Marantz, Julie Roberts, Rajesh Bhatt, Omkar Koul, and two anonymous Syntax reviewers. Thanks also to Jaya Chowdhury, Abir Bazaz, and Chandra Gupta.

<sup>1</sup> Glossing in this article is in large part consistent with the Leipzig glossing rules. Of particular note are pronominal enclitics suffixed to the verb, glossed with person and number plus PS for "pronominal suffix" (e.g., -1SGPS) and the imperfective suffix *-a:n*, glossed -IMPFV.

Butt & King 2006; Butt, King & Ramchand 2007; Ramchand 2008). However, the specific attributes of the causative in Kashmiri have been given little more than descriptive attention (Hook & Koul 1984, 2006; Syeed 1985; Altaha 1992), or addressed comparatively (Wali 1980, 1981; Bhatt 1999; Bhatt & Embick 2003).

Recent work has attributed the properties of the causative, particularly those traditionally understood to indicate biclausality, to multiple layers within the verbal domain (Travis 1984; Pytkäinen 1999, 2008; Harley 1995, 2008; Kratzer 2005; Folli & Harley 2007). In each of these approaches, the causative morpheme instantiates a functional head separate from the verb root, and multiple arguments such as causer and causee may be introduced into distinct specifiers.

In this paper I compare two recent minimalist approaches to the syntax of causative verbal domain as applied to the Kashmiri causative. Folli & Harley (2007) and Harley (2008) propose a causative verbal domain containing two stacked vPs. The higher of these vPs is instantiated by the causative morpheme and introduces the external argument in its specifier (which I will call the causer). The lower of these introduces a second external argument in its specifier (which I will call the causee) as an agent of the caused verb. This analysis is illustrated in (3a). An alternative approach, developed in Pytkäinen 1999, 2002, 2008, also assumes two functional layers within the causative verbal domain. The higher of these layers is a regular agentive vP introducing the causer into its specifier. The lower head is a causative head (here CAUSE), instantiated by the causative morphology and potentially introducing a causee in its specifier (in (3b)). The locus of causation in each structure is bolded.

- (3) a. [<sub>VP</sub> causer **v**<sub>CAUSE</sub> [<sub>VP</sub> causee v<sub>DO</sub> [<sub>VP</sub> internal argument  $\sqrt{\text{Root}}$ ]]]  
 b. [<sub>VP</sub> causer v [<sub>CAUSEP</sub> causee **CAUSE** [<sub>VP</sub> internal argument  $\sqrt{\text{Root}}$ ]]]

These two approaches (among other versions, i.e., Kratzer 2005, Ramchand 2008) are often lumped together as nearly interchangeable, and the facts often seem consistent with either implementation. However we will see here that features particular to Kashmiri, such as verbal agreement with the internal argument in ergative clauses with verbs of the ingesto-reflexive class, nominative causees, and iterated causation, provide new empirical ground for testing distinct predictions made by these two approaches. This paper asks how effective these two approaches are in accounting for Kashmiri in particular, and more generally how each approach could potentially accommodate crosslinguistic variation in the properties of the morphological causative. I suggest that the approaches to the causative verbal domain in (3) are not merely subtle variants, with slight differences in their ability to accommodate the facts of a lesser-studied language, but instead make fundamentally different claims about the nature of causation itself.

In section 2, I introduce the Kashmiri causative construction, with particular emphasis on those features that will be relevant in the comparison of the two accounts of the causative verbal domain. Section 3 presents an account of the Kashmiri causative according to each of the two approaches above, and examines the distinct predictions made by each proposal. Of particular interest is the degree to which the causee behaves like an external argument of the type introduced by vP, and the way

in which patterns of case assignment, agreement, passivization, and adverbial modification help us to diagnose the shape of the layers of the verbal domain. The CAUSEP approach emerges as the superior account for the Kashmiri causative, and the full analysis is fleshed out in section 4. In section 5, I examine a recent account of the causative in the related language Hindi-Urdu (Bhatt & Embick 2003), a variation on the iterated-VP approach, and demonstrate why this account cannot be extended to the facts of Kashmiri. Section 6 concludes the paper and points to ways in which the CAUSEP approach to the verbal domain may better capture crosslinguistic variation in the properties of the productive morphological causative.

## 2. Causatives in Kashmiri

The Indic language Kashmiri is a verb-second language exhibiting a pattern of split ergativity. Subjects of transitive verbs in the perfective aspect are marked with ergative case, and the verb must then agree with the unmarked nominative direct object.<sup>2</sup> This pattern will become an important diagnostic for the clause structure of causative constructions below.

The morphological causative in Kashmiri is derived by the addition of a suffix to the verb. This suffix takes the form *a:v* or *Ina:v/Ira:v*. The form taken by the suffix is determined by the root, and is only partially conditioned by the phonological form of the root, as we will see below. Notice that unlike in the case of the more studied causatives in Hindi-Urdu, there is no morphological distinction between the suffix associated with *direct* causation (in which the causer has direct control over the caused action) and *indirect* causation (in which the causer need not have direct control). Further, Kashmiri uses the same set of suffixes to form transitive verbs from intransitive roots (often called the transitive/inchoative alternation) as in (4), to form causative verbs from transitive or ditransitive verbs (in (5)), and to form causatives of verbs of the so-called ingestio-reflexive class (in (6)). This limited subclass of transitive verbs, including predicates such as ‘eat’, ‘drink’, ‘learn’, ‘hear’, and ‘read’, tend to refer to actions of physical or sensory ingestion or self-directed action (Masica 1976). Causatives containing these verbs have particular case-assignment properties that will prove vital to the argumentation.

### (4) Intransitives

Suffix: <i>-a:v</i>	ruk ‘stop’	ruka:v ‘stop/make stop’
	phas ‘get stuck’	phasa:v ‘entrap’
Suffix: <i>-Ina:v/Ira:v</i>	as ‘laugh’	asIna:v ‘make laugh’
	zev ‘be born’	zevIra:v ‘give birth’

### (5) Transitives/ditransitives

Suffix: <i>-a:v</i>	he ‘buy’	h’a:v ‘cause to buy’
	di ‘give’	d’a:v ‘cause to give’

<sup>2</sup> I follow Anand & Nevins 2006 in calling unmarked DPs “nominative.” As Kashmiri has no distinct accusative, I refrain from using this label (Wali & Koul 1997).

Suffix: <i>-Ina:v</i>	kar ‘do’	karIna:v ‘cause to do’
	par ‘read’	parIna:v ‘cause to read’

## (6) Ingesto-reflexive

Suffix: <i>-a:v</i>	ce ‘drink’	ca:v ‘give to drink’
	samIj ‘understand’	samja:v ‘explain’
Suffix: <i>-Ina:v</i>	bo:z ‘listen’	bo:zIna:v ‘cause to listen’
	par ‘study’	parIna:v ‘teach’

In the case of intransitive stems in (4), the choice among suffixed forms is unpredictable and determined by the root. Hook & Koul (1984) list eight patterns including those in which the stem vowel is lengthened and/or the final consonant of the stem is altered. There are also a set of suppletive forms such as *pe* ‘fall’/*tra:v* ‘make fall’. In the case of causativization of transitives and ingestio-reflexives as in (5)–(6), the suffix is primarily determined phonologically; all vowel-final stems are suffixed with *-a:v* (along with just a few consonant-final stems). The remainder are suffixed with *-Ina:v*. There are only a handful of suppletive and zero-change forms such as *tshun* ‘wear’/‘dress’.

Verbal agreement patterns are vital to understanding the syntax of the Kashmiri causative. There are two forms of agreement that appear on the verb in Kashmiri. Primary agreement is obligatory, and is controlled by the nominative (unmarked) argument, regardless of the grammatical role of that argument. Agreement encodes that argument’s gender and number features. This is the type of agreement referred to in this section. Secondary agreement (cliticization) is conditioned by the presence of certain pronouns and takes the form of a set of enclitics on the verb. This are discussed further in section 3.4.

When a causative of an intransitive is formed, whether unergative or unaccusative, case marking and agreement patterns follow those of any other transitive clause. This means that in the imperfective, inanimate direct objects and causees are always marked nominative. The case of animate direct objects and causees is determined by a person hierarchy; they will be marked dative except in the scenario in which the subject is of higher grammatical person, when it must appear in the nominative. This process, sometimes called “case lifting,” is visible in (7c), in which the subject is first person but the causee is third person and must therefore be in the nominative case (cf. (7d)). Crucially, case lifting is not available for dative-marked indirect objects, dative-marked benefactives, or obliques, a fact that will become important in section 5.

- (7) a. aslam      chu      akhba:r      par-a:n.      Noncausative transitive  
 Aslam.NOM AUX.ISG newspaper.NOM read-IMPFV  
 ‘Aslam is reading the newspaper.’
- b. bI      chus      po:n’      grak-Ina:v-a:n.      Causative of an unaccusative  
 I.NOM AUX.ISG water.NOM boil-CAUSE-IMPFV  
 ‘I am boiling water.’

- c. bI chus aslam as-Ina:v-a:n. Causative of an unergative  
 I.NOM AUX.1SG Aslam.NOM laugh-CAUSE-IMPFV I > III, case lifting  
 'I am causing Aslam to laugh.'
- d. mohnI chu aslam-as as-Ina:v-a:n. III = III, no case lifting  
 Mohan.NOM AUX.3SG Aslam-DAT laugh-CAUSE-IMPFV  
 'Mohan is causing Aslam to laugh.'

In the imperfective examples in (7), the auxiliary verb agrees with the nominative subject, just as it would in an imperfective transitive clause.

In the perfective, causativized intransitives once again display the case-marking and agreement properties of any other transitive clause. Kashmiri is split-ergative by aspect and requires ergative marking on transitive subjects in the perfective. Direct objects and causees are in the nominative case. Primary agreement must then be not with the subject but with the most prominent unmarked argument. In (8), this is the nominative direct object/causee.

- (8) a. aslam-an por akhba:r. Noncausative transitive  
 Aslam-ERG read.M.SG newspaper.NOM  
 'Aslam read the newspaper.'
- b. me as-Ino:v aslam. Causative of an unergative  
 I.ERG laugh-CAUSE.M.SG Aslam.NOM  
 'I made Aslam laugh.'

Causatives of transitives are somewhat more complex. Two patterns emerge. In the first in (9), called Pattern A here, the case of the causee in the imperfective is nominative if inanimate, or if animate its case is determined by the person hierarchy, just as in (7). In the perfective, the subject is ergative and causee is nominative, as in (10). In both cases, the internal argument is nominative as well.

- (9) bI chu su o:lav ran-Ina:v-a:n. I > III, case lifting  
 I.NOM AUX.1SG he.NOM potatoes.NOM cook-CAUS-IMPFV  
 'I am having him cook potatoes.'
- (10) me ran-Ino:v su o:lav.  
 I.ERG cook-CAUSE.PST.M.SG he.NOM potatoes.NOM  
 'I had him cook potatoes.'

Primary agreement in Pattern A is identical to that for causatives of intransitives: the verb agrees with the subject unless the sentence is ergative, in which case the verb agrees with the most prominent unmarked argument: the nominative causee. Although Pattern A is by no means rare among the world's languages, the nominative causee is not found in the closely related language Hindi-Urdu, and therefore presents

a challenge to recent accounts of causation developed for that language (i.e., Bhatt & Embick 2003).<sup>3</sup>

In the second pattern, called Pattern B, the causee is in the dative case, and then further marked with the instrumental postposition *athi*, glossed here as INSTR.<sup>4</sup> In the perfective aspect, this means that the only nominative argument in the sentence is the direct object, which will control primary agreement.

(11) bI    chu        t̄amis    athi    o:lav        ran-Ina:v-a:n.  
 I.NOM    AUX.1SG    he.DAT    INSTR    potatoes.NOM    cook-CAUS-IMPFV  
 ‘I am having him cook potatoes.’

(12) me    ran-Inə:v                t̄amis    athi    o:lav.  
 I.ERG    cook-CAUS.PST.M.PL    he.DAT    INSTR    potatoes.NOM  
 ‘I had him cook potatoes.’

Agreement in Pattern B is with the subject in the imperfective. However, in the perfective in (12), the verb must agree with the only unmarked argument, the plural direct object. The causee is unavailable for agreement because it is case-marked.

A final variation, crucial to the argumentation in this paper, is found in the causative of ingesto-reflexive verbs. Pattern A is identical to that for transitive verbs (as in (13)). But in Pattern B, ingesto-reflexives require the causee to be marked dative only and to not appear with the post-position *athi*.<sup>5</sup> Agreement in the perfective in (14) must still be controlled by the only remaining unmarked argument, the direct object.

(13) asi        par-Inə:v                ku:r        hisa:b.  
 WE.ERG    study-CAUSE.PST.F.SG    girl.F.NOM    math.M.NOM  
 ‘We taught the girl math.’

(14) asi        par-Ino:v                ko:ri        hisa:b.  
 WE.ERG    study-CAUSE.PST.M.SG    girl.F.DAT    math.M.NOM  
 ‘We taught the girl math.’

<sup>3</sup> A reviewer asks whether the nominative causee in Pattern A could have historically appeared in the accusative (also possible for some causees in Hindi-Urdu: Butt 2006), but now appears in the nominative because the two cases were collapsed in Kashmiri. While this might be so, it is the synchronic facts that will be of most interest to us here—for the purposes of agreement and passivization, the causee behaves identically to nominative (unmarked) direct objects.

<sup>4</sup> Complements of postpositions in Kashmiri must typically be marked with either dative or ablative case (determined by the postposition). Though this is not strictly understood as double case marking, double case marking can occur with genitive possessives (dative + ablative) and the complements of comparative/benefactive postpositions (genitive + dative).

<sup>5</sup> For the sake of consistency I will call the case-marking pattern for ingesto-reflexives in which the causee is marked dative Pattern B, indicating that the causee is nonnominative and will not be available for primary agreement.

As a comparison of (12) and (14) indicates, Pattern B is available for verbs expressing both direct and indirect causation. This distinction is further discussed in section 5.

In what follows, the Pattern B causatives of ingesto-reflexive verbs will be vital in diagnosing the shape of the verbal domain of Kashmiri causatives. In these causative clauses, when the subject is marked with ergative case the only nominative argument is the internal argument, and it is the internal argument that will attract primary agreement. Therefore, even the most deeply embedded argument must be accessible to probes outside of the verbal layer (such as the Tense head)—a fact that becomes challenging to account for under the iterated-vP approach.

Kashmiri permits a construction in which multiple causees are present, called here the extended causative. The causative suffix may optionally be iterated. Both causees are typically marked with (different) postpositions: the first causee is marked dative plus *athi*, just as it would be in Pattern B above. The second causee may appear in the genitive, followed by the post-position *zəriyi*, glossed ‘by’ here.

- (15) me    chal-Ina:v-Inə:v’        ra:mni   zəriyi raj-as    athi palav.  
I.ERG wash-CAUS-CAUSE.M.PL Ram.GEN by Raj-DAT INSTR clothes.NOM  
 ‘I got clothes washed by Raj through Ram.’

Hook & Koul (1984) also report the potential for extended causatives in Pattern A for ingest-reflexive verbs (that is, a Pattern A causative of a Pattern A causative), in which both causees appear the unmarked nominative.<sup>6</sup>

- (16) ?ma:ji        ca:v-Ino:v-us        bI        ku:r        dud.  
mother.ERG drink-CAUSE-M.1SG me.NOM.M girl.NOM milk.NOM  
 ‘Mother had me cause the girl to drink milk.’

Table 1 presents the case-marking possibilities for causees and direct objects of transitive and ingesto-reflexive verbs in Kashmiri. The alternation that will be of most interest to us here is that of case marking and agreement in ergative causative constructions (in the perfective), especially for verbs of the ingesto-reflexive class, because this will allow us to differentiate between accounts of the causative featuring a single phase and those featuring multiple phases in the verbal domain. In sum, if the causee is nominative, then agreement must be with the causee, whereas if the causee is oblique or dative, agreement must be with the direct object.

<sup>6</sup> I have added the grammaticality judgment “?” in (16). Hook & Koul (1984) call extended causatives of this type “less acceptable” in the text without any marking of the example itself at one point, and then present them without comment (or marking) elsewhere. A reviewer’s native speaker informants dislike these examples, whereas my informants report (16) as possible though not preferred. My informants also judge extended causatives in Pattern A ungrammatical for regular transitive verbs (noningesto-reflexives).

- (i) \*ma:ji        chal-Ino:v-us        bI        ku:r        pala:v.  
mother.ERG wash-CAUSE-M.1SG me.NOM.M girl.NOM clothes.NOM  
 ‘Mother had me cause the girl to wash clothes.’

**Table 1. Case-marking of causees and direct objects of transitive and ingesto-reflexive verbs in Kashmiri.**

Verb type		Causee	Direct object
Transitive			
Pattern A	Imperfect	DAT/NOM	NOM
	Perfect	NOM	NOM
Pattern B	Imperfect/perfect	OBL	NOM
Ingesto-reflexive			
Pattern A	Imperfect	DAT/NOM	NOM
	Perfect	NOM	NOM
Pattern B	Imperfect/perfect	DAT	NOM

### 3. Two Possible Approaches to the Causative Verbal Domain

In section 3.1, I turn to two recent implementations of the causative verbal domain: what I will call the iterated-vP approach (Folli & Harley 2007, Harley 2008), and the CAUSEP approach (Pylkkänen 1999, 2002, 2008). In section 5, I will also explore a variant of the iterated vP approach, proposed to account for causatives in Hindi-Urdu by Bhatt & Embick (2003). There are certainly other recent proposals (e.g., Ramchand 2008) that merit exploration, and although I do not treat them in depth here, I will touch on ways in which they overlap with the iterated-vP and CAUSEP approaches. In the sections that follow, I will argue that the CAUSEP approach provides the most successful account of the Kashmiri causative, and provides an important starting point for a crosslinguistic account of the causative verbal domain.

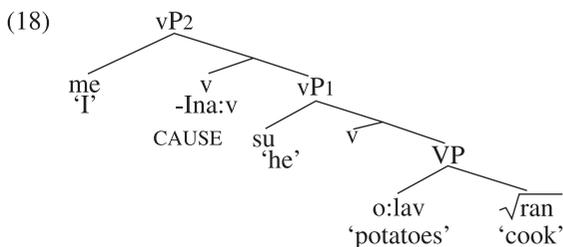
#### 3.1 Comparing Two Accounts

In the iterated-vP approach (Folli & Harley 2007, Harley 2008), the causativizing morpheme instantiates a *v* head which introduces the causer as an external argument. This head takes as its complement a second agentive vP which introduces the causee as an external argument in its specifier. An important note about terminology is required here. Throughout this article, I will follow Bhatt & Embick 2003, Folli & Harley 2007, and Harley 2008 in using *v* or *v*<sub>AG</sub> to refer to the transitivizing verbal head that introduces the external argument. This is the same head as that Pylkkänen labels Voice (Kratzer 1996) or  $\theta_{EXT}$  (importantly this is distinct from Marantz's (1997) verbalizing head, also called *v*).

Under the iterated-vP account, the Kashmiri causative in (17) would have a structure like that in (18):<sup>7</sup>

- (17) me ran-Ino:v su o:lav.  
 I-ERG cook-CAUSE.PST.M.SG he-NOM potatoes  
 'I had him cook potatoes.'

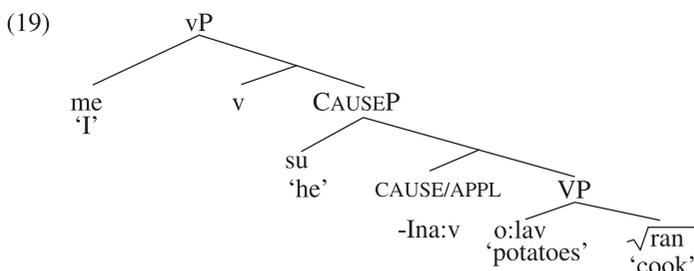
<sup>7</sup> Note that the structure in (18) assumes that although Kashmiri is in general head-final, functional projections are left-headed (for more on this see Bhatt 1999, Manetta 2006). The clause-final verb root must ultimately appear in second position.



In the iterated-vP approach, causation is a verbalizing morpheme, meaning that it instantiates little v head. This  $v_{\text{CAUSE}}$  head is responsible for the introduction of the external argument causer into its specifier. What is unique to causation in this view is that it (necessarily) introduces an external argument (the causer), and takes as its complement a complete vP. Importantly Harley (2008) identifies both of the v heads in a structure like (18) as phase-defining (in the sense of Chomsky 2001). This means that the verbal complex is comprised of at least two complete phases, and this will have ramifications for probe-goal interactions sensitive to phase boundaries.

Pylkkänen (1999, 2002, 2008) argues instead that causation serves only to introduce a causing event, not necessarily an external argument. She presents evidence from at least two environments in which she claims that unaccusative causatives imply a causing event but do not introduce an external argument: Japanese adversity causatives and Finnish desiderative causatives. She argues that if causation is not *necessarily* tied to the introduction of an external argument causer, then it should not be understood as an agent-introducing vP. Instead, it instantiates a different kind of syntactic head (called here CAUSE), which may, but need not, introduce an argument (the causee) in its specifier in concert with the applicative head APPL.

In this approach, the causer (when present) is introduced by a regular agentive vP. This v then takes as its complement the CAUSEP, headed by the causative morpheme. The CAUSE/APPL head may introduce the causee into its specifier when present (not the causer), and takes VP as its complement. The causee is interpreted as the applied argument of the causing action. The structure for the Kashmiri causative sentence in (17) under the CAUSEP approach is in (19):



This approach claims that causation relates a caused event (and potentially a participant in that event) to a causing event. Crucially it does not introduce an agentive

causer, nor does it take a complete vP as its complement. In this view only the v head is phase-defining, so the verbal domain in (19) is comprised of a single phase.

There are obvious differences between the implementation of the causative verbal domain in (18) and in (19). The causative morpheme heads distinct syntactic projections in each account, and these projections have distinct properties. In the iterated-vP account, causation is an agentive v head, while in the CAUSEP account, it is not an agentive v head but instead a head solely dedicated to the introduction of causing events. The second clear difference is the relationship of the causer to the causative morpheme. In the iterated-vP approach, introducing a causer agent is one of causation's primary jobs, while in the CAUSEP approach the introduction of a causer is divorced from the event of causation, based on Pykkänen's empirical claims about causer-less causatives. Finally in each case the causee is in a distinct relationship to the caused event. In the iterated-vP account, it is a normal agent of the caused event (in Spec,vP), while in the CAUSEP account it is a participant (not necessarily agentive) in the caused action and an applied argument of the causing event.

Beyond these, there are a host of more nuanced differences that fall out from the structures generated under these two approaches. The iterated-vP account asserts that the causative is an additional verbal layer built on top of the verbal domain of a regular (noncausative) clause. In (18) the lower vP is unremarkable, and could be a vP participating in either a causative or noncausative clause. In (19), on the other hand, there is no single constituent that resembles the vP in a noncausative clause. The upshot of this contrast is that the specifier of vP<sub>1</sub> (the causee) in the iterated-vP structure in (18) should behave much like the external argument of a regular (noncausative) clause. The CAUSEP approach, on the other hand, asserts that the causee is a different kind of argument; we might predict that in some languages the causee would have properties distinct from those of regular external arguments. A second difference has to do with phasehood. If in the iterated-vP proposal each vP is a phase, operations sensitive to phase boundaries, processes understood as probe-goal relations, should treat causative clauses and noncausatives differently. The CAUSEP approach contains only a single phase-defining head in the verbal domain; we would expect operations sensitive to phases to treat causative and noncausative clauses similarly.

### 3.2 *The Status of the Causee*

The first aspect of the two proposals we will explore more closely is the position of the causee. Does the causee in Kashmiri have the same properties as garden variety agents introduced in Spec,vP? Does the causee behave more or less like the agent of a noncausative clause? This section will revisit some of the classic tests applied to causatives: those meant to determine whether causatives are mono- or biclausal (Aissen 1974, Comrie 1976, Burzio 1986, Harley 2008, Horvath & Siloni 2011, among many others). The iterated-vP approach re-opens the question of the way in which properties of the causative suggestive of biclausality are understood. If the causative is in fact a single clause, we must now ask if it nevertheless contains (at least) two complete phases and (at least) two points at which agents are introduced.

At first pass, the answer seems to be yes: there are at least two agents introduced in a morphological causative. A traditional test for biclausality is whether the causee may antecede a subject-oriented anaphor (Kuno 1973, Shibatani 1973). Like agents of noncausative clauses and like causers, causees in Kashmiri can antecede the subject-oriented reflexive *pa:n* or the reflexive possessive pronoun *panun* (for similar facts in Hungarian, see Horvath & Siloni 2011).

- (20) a. mohnan<sub>i</sub> kar-Ino:v no:ka:r<sub>j</sub> panIn'<sub>i/j</sub> kə:m.  
 Mohan-ERG do-CAUSE.M.SG servant.NOM.M self's work.NOM.F  
 'Mohan had the servant do self's (Mohan's own/the servant's own) work.'<sup>8</sup>  
 b. mohnan<sub>i</sub> chəl-Ino:v no:ka:r<sub>j</sub> panun pa:n<sub>i/j</sub>.  
 Mohan-ERG wash-CAUSE.M.SG servant.NOM.M self's self.NOM.M  
 'Mohan had the servant wash himself (= Mohan/the servant).'

This property is sometimes cited as a way to determine the status of the causee in languages like Japanese: that is, whether or not it is a "real" subject and the degree to which this correlates with introduction into Spec,vP (Murasugi & Hashimoto 2005, Saito 2006, Harley 2008).

However, many other kinds of subjects in Kashmiri can also antecede the reflexive *pa:n*. For instance, in (21) the reflexive is anteceded by a dative subject. Nonnominative subjects in Hindi-Urdu have been argued not to be generated in Spec,vP (Davison 2004). In (22), the reflexive is anteceded by the subject of a nominalized clause, and in (23) by the derived subject in a passive.

- (21) Reflexive anteceded by dative subject  
 ma:la:yi chu panun pa:n pasand.  
 Mala-DAT AUX self's self likes  
 'Mala likes herself.' (Hook & Koul 1984:126)

- (22) Reflexive anteceded by subject of nominalized clause  
 me a:v nI khosh [mohn-un pa:n-as mutalakh tabsur kar-un].  
 I.DAT AUX NEG like Mohan-GEN self-DAT about analyze do-INF  
 'I did not like Mohan's analyzing about himself.' (Hook & Koul 1984:127)

<sup>8</sup> This is only possible for case-marking Pattern A (nonoblique causee). In Pattern B, in which the causee is oblique/dative, only the causer may serve as an antecedent to the subject-oriented reflexive. Wali & Koul (1997) note that Pattern A is not found in the related language Hindi-Urdu, and unsurprisingly only the causer is able to antecede the subject-oriented reflexive in this language (see Mahajan 1990, Mohanan 1994). If Anand & Nevins (2006) are on the right track in assuming that the property of being able to antecede a subject-oriented reflexive in Hindi-Urdu aligns with the position Spec,TP, then we might propose that the nominative causee in Kashmiri is ultimately found in Spec,TP, while the oblique/dative causee is not. However, it is challenging to locate material in Spec,TP in Kashmiri, given that Kashmiri is a verb-second language in which the tensed verb is generally understood to appear in C and the preverbal constituent in Spec,CP.

## (23) Reflexive anteceded by derived subject

panIni ma:ji-hIndi zəriyi a:yi ku:r mohn-as ha:v-InI  
 self.ABL mother-GEN.ABL by PASS girl.NOM Mohan-DAT show-INF.ABL  
 ‘The girl was shown to Mohan by her own (self’s) mother.’

Pylkkänen (2002, 2008), who addresses the same facts for languages like Japanese and Finnish, suggests this indicates that the kind of subjecthood that these types of reflexives require does not strictly align with the agent introduced in Spec,vP (see also Anand & Nevins 2006). For instance, it is certainly not the case that the antecedent of the reflexive in the passive sentence in (23) originated in Spec,vP. This is therefore not a good diagnostic for determining whether the causee is in fact introduced in the specifier of an agentive vP.

Another test traditionally used to argue for biclausality at some stage of the derivation is the ability of the causee to control subject-oriented adjuncts of various types (Kayne 1975, Postal 1986, Burzio 1986, Dubinsky 1994, Harley 2008). Folli & Harley (2004) claim that the fact that the dative causee in Italian can control a PRO in an adjoined gerund demonstrates its status as an external argument of the type introduced into Spec,vP. However, in Kashmiri (as Anand & Nevins [2006] demonstrate for Hindi-Urdu), the ability to control into an adjunct is not reserved for arguments introduced into Spec,vP, either. For instance, in (24), the derived subject of the passive, *Mohan*, can control the PRO in the adjoined gerund.

(24) mohan a:v mar-ana la:thi sI:th’ [PRO galat java:b d-ith].  
 Mohan PASS hit-INF.ABL baton with PRO wrong answer give-PART  
 ‘Mohan was hit with a baton [PRO having given the wrong answer].’

So far the above diagnostics seem not to identify agents introduced into Spec,vP, but instead identify some kind of syntactic subjecthood (perhaps, for instance, ultimate positioning in Spec,TP as Anand & Nevins [2006] suggest). Pylkkänen proposes that the potential to be modified by agent-oriented adverbs is a better way to identify whether arguments have been introduced into the specifier of an agentive vP. As she points out for Finnish, we would expect to see a causee in Spec,vP modified by adverbs like ‘on purpose’. However this kind of modification is reserved only for the causer in Finnish, in (25). Precisely the same facts hold for Kashmiri in (26) (for a discussion of these facts in Hungarian see Horvath & Siloni 2011):<sup>9</sup>

<sup>9</sup> As a reviewer points out, other types of participants may also be modified by ‘on purpose’, as in ‘He fell on purpose’. However, here what we are concerned with is that agents of the type introduced in the specifier of agentive vP are typically modifiable by ‘on purpose’ and adverbs like it. Since causees in languages like Finnish and Kashmiri are not able to be modified by these adverbs (even when they are participants in the kinds of actions that can plausibly be done purposefully), it suggests they may not be agents of this type.

- (25) Jussi naura-tti Mari-a tarkoituske-lla.  
 Jussi.NOM laugh-CAUSE Mari-PAR purpose-on  
 ‘Jussi, on purpose, caused Mari to laugh.’  
 ≠ ‘Jussi caused [Mari to laugh on purpose].’ (Pylkkänen 1999:177)
- (26) asha-i as-Ino:v karim zaenəθ.  
 Asha-ERG laugh-CAUSE Karim on-purpose  
 ‘Asha, on purpose, caused Karim to laugh.’  
 ≠ ‘Asha caused [Karim to laugh on purpose].’

Other types of adverbial modification have also been used as diagnostics of causative structure, such as the interpretation of temporal adverbs. In Kashmiri, causation certainly involves two events, as illustrated by (27), in which the adverb *quickly* can modify either the causing event or the caused event.

- (27) mohn-an kar-Ino:v no:ka:r jal-jal kə:m.  
 Mohan-ERG do-CAUSE.M.SG servant.NOM quick-quick work.NOM  
 ‘Mohan quickly caused the servant to do the work.’  
 ‘Mohan caused the servant to do the work quickly.’

However it is the modification by agent-oriented adverbials like the purpose clause that helps distinguish clauses with multiple agents from those without. Interestingly, the facts in Kashmiri contrast with the causative construction in Venda, in which Pylkkänen (2008:119) demonstrates that agent-oriented adverbial scope is ambiguous (modifying the causer or the causee). Under the CAUSEP account, in Kashmiri CAUSE takes a VP complement, which serves as a second attachment point for temporal adverbs giving rise to the ambiguity in (27), but which does not contain a second agent. On the other hand, Pylkkänen proposes that Venda is a language in which CAUSE takes a full vP as its complement. We will return to address the way in which the CAUSEP approach handles crosslinguistic variation in causatives in section 6.

The tests reviewed here are not particularly satisfying. It seems that the ability to antecede subject-oriented reflexives and control PRO in an adjoined gerunds are not exclusive to arguments introduced in Spec,vP, but instead pick out some wider set of syntactic subjects, meaning that these tests fail to give us the kind of information we need. Agent-oriented adverbial modification, on the other hand, points to a contrast between the properties of agents of noncausative clauses (as well as causers) and the properties of the causee, casting doubt on the claim that causees in languages like Kashmiri are introduced in Spec,vP. A more robust set of diagnostics is certainly needed to assess the predictions of the two proposals. In what follows we will also continue to ask to what degree the traditional tests for mono- and biclausal properties of causatives afford us a better understanding of the verbal layers of the Kashmiri causative.

### 3.3 Case Assignment and Agreement

The relatively complex pattern of case assignment and agreement in Kashmiri provides a better series of tests of the shape of the causative verbal domain. In general, causative clauses tend to appear to be monoclausal domains for case marking and agreement purposes, and Kashmiri is no exception. However the facts of Kashmiri force us to ask whether *monoclausal* must be interpreted more strictly as *monophasal*.

We will first examine the way in which the ergative-nominative case paradigm is assigned in the perfective aspect in Kashmiri. It will become clear that none of the three commonly assumed approaches to ergative case assignment in Kashmiri are fully compatible with the iterated-vP approach, though at least two could be implemented in the CAUSEP account. Ultimately in what follows I will adopt the approach to case assignment proposed by McFadden & Sundaresan (2011) in which nominative serves as a default case for those arguments not assigned other marked cases via structural case assignment. However, the goal of this section is to determine whether any other case assignment/agreement analyses are compatible with the iterated-vP approach to the causative.

Ergative-nominative case assignment in Kashmiri could proceed along the lines proposed by Anand & Nevins (2006) for the related language Hindi-Urdu. Under this proposal, ergative case is a lexical case assigned by *v* to the argument introduced in Spec,vP. The Tense head (T) then assigns nominative case to and agrees with the closest available unmarked argument in its c-command domain.<sup>10</sup> If ergative is a lexical case assigned by *v* to the argument in Spec,vP, in the iterated-vP approach this would suggest that the causee can potentially be assigned ergative case, since it is introduced in an unremarkable Spec,vP (that is, a vP which is in no way associated with causation). Presumably in such a scenario T would agree with the direct object if unmarked or otherwise default to third-person masculine singular agreement. But the causee can never be marked ergative, nor can there be two ergative-marked arguments in a clause.

- (28) \*me ran-Ino:v təm' o:lav.  
 I.ERG COOK-CAUSE.PST he.ERG potatoes  
 'I had him cook potatoes.'

This approach to ergative case-assignment seems to be incompatible with the iterated-vP account of the causative verbal domain, on the grounds that there would be no way to prevent (28). Specifically, there is no way to prevent the lower vP from assigning ergative case to the causee. Under the CAUSEP approach, on the other hand, there is only one vP, the vP introducing the causer at the top of the verbal domain. It is then correctly predicted that only causers can be assigned ergative case in an ergative clause.

<sup>10</sup> Only nominals without overt case marking (i.e., nominatives) are available for primary agreement in Hindi-Urdu and Kashmiri (see Subbarao 2001 and Bhatt 2005).

There are other approaches to ergative case assignment in Kashmiri, however. One alternative approach, assumed in various versions in Bhatt's (1999) account of Kashmiri and Bhatt's (2005) analysis of long-distance agreement in Hindi-Urdu, claims that ergative case is assigned by T in association with transitive *v* and perfective aspect, but that case assignment is dissociated from agreement. This means that after assigning ergative case to the most accessible, otherwise unmarked nominal in its *c*-command domain, T then can probe for an argument with which to Agree. Agreement takes place when T probes an accessible nominative argument and values its uninterpretable features with the interpretable  $\phi$ -features found on that argument. Crucially, T cannot probe beyond the phase immediately beneath it (Chomsky 2001, Svenonius 2005), so for instance, agreement cannot take place across a finite CP phase (Bhatt 1999, Bhatt 2005).

- (29) tse            chu-y/\*cha-y                            ba:sa:n ki    mary    yiyi.  
 you.DAT    AUX.3SG.M-2SG/AUX.3SG.F-2SG    think    that    Mary.F    come.FUT  
 'You think that Mary will come.'

In a Kashmiri causative clause that is ergative, agreement can be with the nominative causee (as in (30a)). Moreover, in causatives of ingesto-reflexive verbs, the causee may be marked dative, as in (30b) below. In this scenario, the verb must agree with the nominative masculine direct object *hisa:b* 'math'.

- (30) a. asi            par-Inə:v                            ku:r            hisa:b  
 we.ERG    study-CAUSE.PST.F.SG    girl.F.NOM    math.M.NOM  
 'We taught the girl math.'  
 b. asi            par-Ino:v                            ko:ri            hisa:b.  
 we.ERG    study-CAUSE.PST.M.SG    girl.F.DAT    math.M.NOM  
 'We taught the girl math.'

In the case of the iterated-*vP* approach, both nominative and dative causees are introduced into the specifier of the lower *vP*. Harley (2008) analyzes the productive morphological causative in Japanese, in which the causee alternates in case-marking between accusative and dative. For both cases, she posits the causee to be located in the specifier of a phase defining *vP* beneath the phase-defining *vP* headed by  $v_{\text{CAUSE}}$ . Further, Folli & Harley (2007) analyze the causative in Italian, in which the causee alternates in case-marking between dative and oblique. They posit that the oblique causee is an adjunct (for a similar analysis of the Kashmiri oblique causee, as found in Pattern B, see section 4), but they claim that the dative causee is introduced in the specifier of an agent-introducing phase-defining *vP* (also called  $v_{\text{DO}}$ ), beneath the phase-defining *vP* headed by  $v_{\text{CAUSE}}$ . Notice that regardless of the other cases available in the paradigm (dative-accusative in Japanese, oblique-dative in Italian), the dative causee is always introduced into the specifier of a phase-defining *vP* in these approaches.

Because both *vPs* are phases in the iterated-*vP* approach, we would expect material beneath the edge of the lower *vP* to be unavailable for interaction with the T head,

having been transferred to the interfaces. The internal argument *hisa:b* ‘math’ in (30b) would therefore be inaccessible, and we would predict (30b) to be ungrammatical.<sup>11</sup> In the CAUSEP approach, on the other hand, the dative and nominative causees are introduced into the specifier of the CAUSE head. Therefore the entire verbal domain consists of only a single phase (the vP)—all internal arguments of the caused verb are available for agreement at the point at which T is introduced, and are not transferred to the interfaces until the construction of the CP phase.

At this point, neither approach to the ergative-nominative structure in Kashmiri (ergative case is lexical and assigned by *v* to its specifier *or* ergative case is structural and assigned by T in its c-command domain) is compatible with the iterated-vP approach to the causative verbal domain. Both seem to be workable under the CAUSEP account. There is a third approach to case and agreement endorsed in Harley 1995 and Folli & Harley 2007, and although we might expect it to be well suited to the iterated-vP approach to causatives, we will see that it cannot account for the Kashmiri case paradigm at all. This relativistic approach claims that morphological realization of structural case is dependent on the assignment of other structural case-assigning positions in the same clause. For instance, in Japanese, the causee is assigned either dative or accusative by the same case-assigning position; the morphological case that surfaces is dependent on the other cases assigned in the clause. For ergative clauses, case is determined relativistically (following Harley 1995) from the bottom up, beginning with the mandatory nominative (absolutive). Ergative case is dependent and assigned to the next argument up.<sup>12</sup> However, in ergative causatives in Kashmiri multiple nominatives can be assigned. Only the causer can be marked ergative, regardless of how many arguments appear in a single clause. Harley (1995) claims that in languages in which the nominative (mandatory) case controls agreement, agreement is purely a reflex of case checking. Whenever nominative is checked, that NP’s features are realized. Hook & Koul (1984) present ergative causatives in Kashmiri with multiple nominatives in which agreement must be with the more structurally prominent unmarked argument, suggesting that agreement is a probe-goal relation:

- (31) a. *təm’*      *kar-Ino:v*      *no:kar*      *kə:m*.  
 you.ERG do-CAUSE.M.SG servant.NOM.M work.NOM.F  
 ‘You caused the servant to do the work.’

<sup>11</sup> A reviewer asks whether this proposal for case assignment within the iterated-vP approach could be saved if we assumed that the internal argument must move into the specifier of the embedded vP in order to be accessible to the T head probe. Certainly Kashmiri permits scrambling, and the word order of constituents following the second-position verb is fairly free. However, this movement would presumably not be motivated by discourse considerations. Movement for the purposes of accessibility for agreement is not a strong motivation for short A-movement, since it is not an uninterpretable feature of the DP that must be valued, but instead an uninterpretable feature of the Tense head. Finally, note that under the iterated-vP account the lower *v* has no features related to causation, so we could not hypothesize that this movement is a property of causative structures in particular. As we will see, the CAUSEP approach requires no such movement for case assignment/agreement to proceed.

<sup>12</sup> Anand & Nevins (2006) point out that any case assignment mechanism assuming ergative is dependent on absolutive will be challenged by ergative-oblique patterns in Indic languages in which no absolutive is assigned and agreement is default (third-person masculine singular).

- b. ?ma:ji      ca:v-Ino:v-us      bI      ku:r      dud.  
 mother.ERG drink.CAUSE-CAUSE-1SG me.NOM.M girl.NOM.F milk.NOM.M  
 ‘Mother had me have the girl drink milk.’

In (31a), for instance, although there are two nominatives, the causee and the direct object, agreement must be with the causee. Under Harley’s (1995) relativistic case assignment mechanism this would be the second nominative to be assigned, not the first. Therefore, even if we could adjust the case parameter to correctly assign multiple nominatives from the bottom up, constraining agreement to be with the “last” of these would be need to be explicitly stipulated. On the other hand, understanding agreement as a probe-goal relation with T makes sense of (31a,b); the most structurally prominent unmarked argument controls agreement.

In summary, of these three possible accounts of ergative case assignment, only two appear to be plausible accounts for Kashmiri. Neither of these is completely compatible with the iterated-vP approach to the causative verbal domain. However both of these are compatible with the CAUSEP approach to the verbal domain. In what follows, I will adopt a version of the second proposal, in which ergative is assigned by T in association with perfective aspect and transitive v. I will additionally assume, following McFadden & Sundaresan 2011, that nominative case is a default case, and is assigned to any arguments not receiving more marked cases structurally. But before providing a detailed derivation of the Kashmiri causative under the CAUSEP approach in section 4, we will turn to another set of arguments concerning passivization.

### 3.4 Passivization

The passivization of causative structures is another context in which mono/biclausality was traditionally tested (Kuno 1973, Miyagawa 1984, Zubizarreta 1985, Heycock 1987). Additionally, passivization allows us to examine the way in which another probe-goal interaction responds to the causative verbal domain. Kashmiri permits either the nominative causee to undergo passivization, as in (32a), or the direct object to undergo passivization in the scenario in which the causee is marked either oblique or dative, as in (32b).

- (32) a. ləDkI      a:v      tsoT      kh’a:v-InI.      Causee  
 boy.NOM.M PASS.M bread.NOM.F eat.CAUSE-INF.ABL  
 ‘The boy was caused to eat bread.’  
 b. tsoT      a:yi      ləDk-as      kh’a:v-InI.      Direct object  
 bread.NOM.F PASS.F boy-DAT.M eat.CAUSE-INF.ABL  
 ‘The bread was caused to be eaten by the (both: Hook & Koul 1984:116) boy.’

A dative-marked causee cannot be passivized, so for instance (33a) cannot have the intended reading ‘The boy was caused to eat bread’. Further, when the structurally more prominent causee is nominative (unmarked) it must be passivized over the

direct object. Example (33b) cannot have the reading ‘The bread was caused to be eaten by the boy’ (compare with (32a)).<sup>13</sup>

- (33) a. ləDk-as a:yi tsoT kh'a:v-InI.  
 boy-DAT.M PASS.F bread.NOM.F eat.CAUSE-INF.ABL  
 ≠ ‘The boy was caused to eat bread.’  
 b. tsoT a:yi ləDkI kh'a:v-InI.  
 bread.NOM.F PASS.F boy.NOM.F eat.CAUSE-INF.ABL  
 ≠ ‘The bread was caused to be eaten by the boy.’

Assuming a common account of the passive, the Tense head probes its c-command domain and interacts with the closest accessible argument (in Kashmiri this excludes overtly case-marked material) (Chomsky 2000, 2001). The T head can only probe into the domain of the most recently constructed phase (vP), not beyond. In a noncausative clause, the internal argument is accessible until the CP phase is constructed.

Under the iterated-vP approach to the causative, the T head would be able to probe to the edge of the lower (noncausative) vP. This means that the causee (introduced into the specifier of the lower vP) should be accessible to the probe, and it should passivize (as we see in (32a)). The material within (as opposed to on the edge of) the lower vP should have already transitioned to the interfaces, however.<sup>14</sup> This means that the under the iterated-vP approach we do not necessarily predict the existence of (32b), the passive of an ingesto-reflexive causative in which the direct object undergoes passivization.<sup>15</sup>

In the CAUSEP approach, on the other hand, we would expect to see both types of passive available in a causative clause, as there is only a single phase comprising the verbal domain.<sup>16</sup> The T head would probe and interact with the highest unmarked argument in the causative clause, whether that is the causee (as in (32a)) or the

<sup>13</sup> Note that (33a) could potentially be a version of (32b) with marked word order (meaning ‘The bread was caused to be eaten by the boy’), and (33b) could potentially be a version of (32a) with marked word order (meaning ‘The boy was caused to eat bread’).

<sup>14</sup> According to the iterated-vP approach the lower vP is always a phase, irrespective of our assumptions about the phasehood of passive vPs (see Legate 2003). The lower vP has features related neither to the passive nor to causation under this account, so movement of the internal argument to this lower vP phase edge in order to make it accessible to the T probe would be difficult to motivate.

<sup>15</sup> It is not entirely clear to me how the passive causative verbal domain looks under this account. For Japanese, Harley (2008) claims that the passive morpheme *-rare* introduces an agentless *v* above  $v_{\text{CAUSE}}$ . We must also assume this version of  $v_{\text{CAUSE}}$  is unsaturated, and that there is no causer. This  $v_{\text{CAUSE}}$  then takes a regular  $v_{\text{DO}}$  as its complement. Similarly in Kashmiri, *yun* ‘to come’ would instantiate an agentless *v* head above (the also causerless)  $v_{\text{CAUSE}}$  (unlike in Italian—see Folli & Harley 2007). Which of these three stacked vPs would be phase-defining is not clear, although, following Legate 2003, perhaps they all are. Under the CAUSEP approach, on the other hand, it seems that we would simply exchange the active *v* for a passive (unsaturated) *v*. This should not affect the CAUSE head (or the causee) at all.

<sup>16</sup> This would also help explain the contrast between ungrammatical noninterrogative extraction out of finite embedded clauses in Kashmiri and grammatical “long passives” from nonfinite embedded clauses as in (i)—these arguably lack an internal vP phase (Wurmbrand 2001).

- (i) Kita:b a:yi mash-nI [ra:jas \_\_\_\_ ra:th din’].  
 book.NOM.F PASS forget-INF.ABL Raj.DAT yesterday give.INF  
 ‘The book was forgotten to be given to Raj yesterday (by someone).’

internal argument (as in (32b))—both are accessible. This argument can then subsequently move to Spec,CP to precede the second position verb to derive the word order in (32).

### 3.5 Pronominal Clitics

A final source of evidence for the shape of the verbal domain and the nature of its arguments in Kashmiri comes from secondary agreement, the sets of pronominal enclitics. Kashmiri has several sets of pronominal clitics of varying degrees of optionality that mark the person, gender, and number of a pronominal argument in clauses in which the subject is of higher grammatical person than that argument (for instance, if the subject is first person but the pronominal argument is second or third person). The system of pronominal clitics and their conditioning factors are relatively complex, so I present here just the two sets that are relevant to this discussion (see Wali & Koul 1997 for a thorough review).

Nonperfective nominative objects (typically those that have been case lifted) cause a pronominal clitic reflective of their person and number to be suffixed to the verb. For instance, in (34) the subject is of lower grammatical person than the object, so the object appears in the nominative case. The bolded clitic *-ath*, marking second-person singular, must be suffixed to the verb.<sup>17</sup>

- (34) bI    chu-s-**ath**        tsI        an-a:n.        I > II, case lifting, NOM clitic marking  
           I.NOM    AUX-1SG-2SGPS    you.NOM    bring-IMPV  
           ‘I am bringing you.’

Dative clitics mark the person and number of dative arguments (regardless of grammatical function) when the subject is higher in grammatical person than the dative argument. While first and third person dative pronouns do not co-appear with the suffix, second person pronouns may. In (35), the bolded clitic *-ay* marks the person and number of the dative pronoun *tse* ‘you’.

- (35) bI    chu-s-**ay**        tse        an-a:n.        I > III, DAT clitic marking  
           I        AUX-1SG-2SGPS    you.DAT    bring-IMPV  
           ‘I am bringing (something) to/for you.’<sup>18</sup>

In causative constructions, the nonperfective nominative clitics can mark the features of the causee when the external argument is of higher grammatical person, as in (36).

<sup>17</sup> The pronominal suffixes that mark nonperfective nominative objects are as follows (Wali & Koul 1997:250):

(i) Person	Singular	Plural
I	-m	-Ø
II	-th	-v(i)
III	-n	-kh

<sup>18</sup> The set of dative pronominal suffixes is identical to the nonperfective nominative/ergative set except for the second person singular, which is *-y*, as in (35) in the text.

Importantly, nominative clitics do not appear when these differences in person pertain between the subject and the indirect object (37), nor between an agent and an embedded agent (38).

- (36) **bI** chu-s-**ath**      tsI      kath      I > II, case lifting, NOM clitic marking  
 I    AUX-1SG-2SGPS    you.NOM    story  
 bo:z-**Ina**:v-a:n.  
 hear-CAUSE-IMPFV  
 'I am having you hear a story.'      (Hook & Koul 1984:110)

- (37) **bI** chu-s-**\*ath**      tse      philim    ha:v-a:n.  
 I    AUX-1SG-2SGPS    you.DAT    film      show-IMPFV  
 'I am showing you a film.'      (Hook & Koul 1984:110)

- (38) **bI** chu-s-**\*ath**      yatsh-a:n    ki    tsI      gotsh-ukh    gatsh-un.  
 I    AUX-1SG-2SGPS    want-IMPFV    that    you.NOM    should-2SG    go-INF  
 'I want that you should go.'

It seems that the system of pronominal clitics is yet another domain in which the causee patterns with the direct object of a noncausative clause, as opposed to an indirect object or an external argument/causer.

Hook & Koul (1984) construct a set of three nonperfective causative sentences containing iterated causation that demonstrate the range of possibilities for nonperfective nominative pronominal clitic marking in a context with multiple causees. In the examples below, the clitic and the argument whose features are marked by the clitic are both in boldface.

- (39) **bI** chu-s-**an**      tse      **athI** **su**      tse:rI      I > III  
 I    AUX-1SG-3SGPS    you.DAT    INST    he.NOM    apricots.NOM  
 kh'a:v-**Ina**:v-a:n.  
 eat.CAUSE-CAUSE-IMPFV  
 'I am having you cause him to eat apricots.'

- (40) **bI** chu-s-**ath**      **tsI**      t̄omis    tse:rI      kh'a:v-**Ina**:v-a:n.    I > II  
 I    AUX-1SG-2SGPS    you.NOM    he.DAT    apricots.NOM    eat.CAUSE-CAUSE-IMPFV  
 'I am having you cause him to eat apricots.'

- (41) **bI** chu-s-**ath**      **tsI**      su      tse:rI      kh'a:v-**Ina**:v-a:n.    I > II  
 I    am-1SG-2SGPS    you.NOM    he.NOM    apricots.NOM    eat.CAUSE-CAUSE-IMPFV  
 'I am having you cause him to eat apricots.'

- (42) **\*bI** chu-s-**an**      tsI      **su**      tse:rI      kh'a:v-**Ina**:v-a:n.    I > II  
 I    am-1SG-3SGPS    you.NOM    he.NOM    apricots.NOM    eat.CAUSE-CAUSE-IMPFV  
 Intended: 'I am having you cause him to eat apricots.'

The data in (39)–(42) indicate that the clitic must mark the features of the highest nominative argument. In (39), a Pattern B causative built on a Pattern A causative, since *tse* ‘you’ is marked oblique, the clitic corresponds to the third-person first causee *su* ‘he’. In (41), a Pattern A causative built upon another Pattern A causative, *tsI* ‘you’ is nominative, so its features must be marked by the clitic irrespective of the case of the first causee *su* ‘he’ (comparing (40) with (41)). It is ungrammatical to mark the features of the first causee when the second (and higher) causee is nominative (as in (42)).

Based on data like that in (39)–(42), Wali & Koul (1994) and Subbarao & Munshi (2000) have analyzed the pronominal clitic in Kashmiri as the realization of a head distinct from T that probes its domain to interact and Agree with an appropriate goal. While I will not evaluate these proposals in detail here, this clitic head would require its goal to be accessible within its c-command domain.

In the case of a Pattern A causative of a ditransitive verb, there is a dative internal argument that can optionally be cliticized in an ergative structure. The second-person dative clitic may surface as the enclitic *-iy* suffixed to the verb in a structure like (43) below.<sup>19</sup>

- (43) me d'a:v-**Ino:v-iy** su **tse** kita:b.  
 I.ERG give.PST-CAUSE.MSG-2SGPS he.NOM you.DAT book  
 ‘I had him give a book to you.’

For the dative argument *tse* ‘you’ to be an accessible goal in (43), there must be no additional phase boundary intervening between the clitic head and the goal. In the iterated-vP account, the verbal domain in (43) contains two vP phases. If we assume (as is desirable) that all probes are limited in their domain by the phase in precisely the same way, this would mean that the dative argument is too deeply embedded to be accessible at the point of introduction of the purported clitic head.

Under the CAUSEP approach, the verbal domain comprises a single phase (regardless of how many causative morphemes and/or causees are present). In the case of (43), in which the clitic marks the features of the dative argument, the only completed phase at the point of introduction of a clitic head below T would be the vP. All arguments are accessible to the clitic probe. The dative argument would interact with the clitic probe, and its interpretable phi features will value those on the clitic head, causing its person and gender features to be expressed. Pronominal cliticization provides further indication that the CAUSEP approach is a better model of the Kashmiri verbal domain.

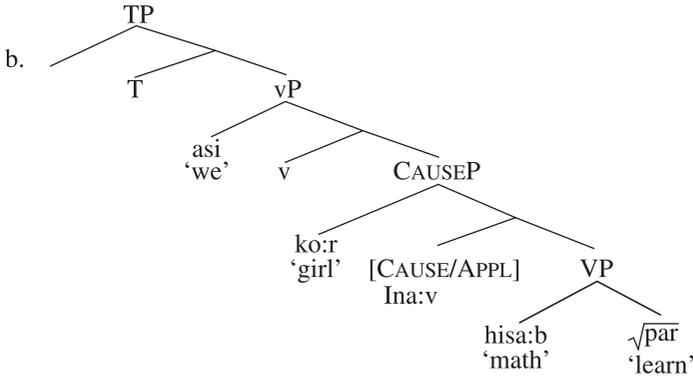
#### 4. The CAUSEP Approach to Kashmiri Causatives

Having arrived at the conclusion that the CAUSEP structure is a better fit for the properties of the Kashmiri causative, let us now walk through the complete derivation

<sup>19</sup> This construction was produced independently by several native-speaker informants (Jaya Chowdhury, Abir Bazaz). Omkar Koul (p.c.) indicates that the availability of this version may vary by dialect.

of a range of Kashmiri causative structures under the account. Example (44) contains a Pattern A causative in which the causee is marked nominative.

- (44) a. asi par-*Inə:v* ko:r hisa:b.  
 we.ERG study-CAUSE.PST.F.SG girl.F.NOM math.M.NOM  
 ‘We taught the girl math.’



As discussed in section 3.3 we will assume that ergative case assignment proceeds along the lines proposed in Bhatt 2005. That is, the Tense head (in association with perfective aspect and transitive v) assigns ergative case to the highest argument in its domain via a probe-goal interaction. This means that the external argument, appearing in Spec,vP, will be marked ergative, as in (44b). I will further adopt the account of case assignment proposed by McFadden & Sundaresan (2011), that nominative case is a default case which is not assigned structurally by a head, but instead appears on those arguments which do not received a marked case (e.g., ergative, dative). In (44b), neither the internal argument *hisa:b* ‘math’ nor the causee *ko:r* ‘girl’ are assigned a marked case and therefore appear nominative.

Primary agreement occurs when the uninterpretable phi features on the Tense head probe their c-command domain and interact with the highest unmarked (nominative) argument. In this case this is the causee *ko:r* ‘girl’ in the specifier of the CAUSE head, valuing the uninterpretable features on T feminine singular, ultimately reflected by the form of the suffix *-Inəv* on the tensed verb form.

To arrive at the final verb-second word order in (44), it is generally assumed that the Root *par* ‘study’ will move through the functional heads to C, gathering verbal morphology along the way (Bhatt 1999; Manetta 2006, 2008). In this case, the root will combine with both the causative suffix *-Ina:v* in the CAUSE head and the tense and agreement morphology in the Tense head. In (44) the causer *asi* ‘we’ has moved to Spec,CP as the preverbal constituent.

Consider the Pattern B causative of an ingesto-reflexive, with the causee marked dative:

- (45) asi par-Ino:v ko:ri hisa:b.  
 we.ERG study-CAUSE.PST.M.SG girl.F.DAT math.M.NOM  
 ‘We taught the girl math.’

In (45), the causer will be assigned ergative case in the manner described above. In addition, the causee will be assigned dative case by the CAUSE/APPL head upon entering the derivation. As above, the internal argument *hisa:b* ‘math’ will be assigned nominative by default, as it is assigned no marked case (McFadden & Sundaresan 2011). As in (44), the  $\phi$ -features on the Tense head will probe their domain and interact and Agree with the highest unmarked argument, now the internal argument. Crucially, since the verbal domain consists of only a single phase in the CAUSEP account, the internal argument is accessible to the T probe. Finally, the tensed verb will move to C and the causer to Spec,CP, creating verb-second word order.<sup>20</sup>

Regarding a causative clause with an oblique causee, as in (46), I follow Bhatt & Embick 2003 and Ramchand 2008 in the assumption that the causee is adjoined.

- (46) me ran-Inə:v təmis athi o:lav.  
 I.ERG cook-CAUS.PST.M.PL he.DAT INSTR potatoes.NOM  
 ‘I had him cook potatoes.’

The structure of (46) will be nearly identical to that in (44b) except that instead of the causee being introduced into the specifier of CAUSEP, it is instead contained in a postpositional phrase adjoined to CAUSEP. Case assignment and agreement processes proceed more or less as they do in the discussion of (45) above, with default nominative assigned only to the internal argument.

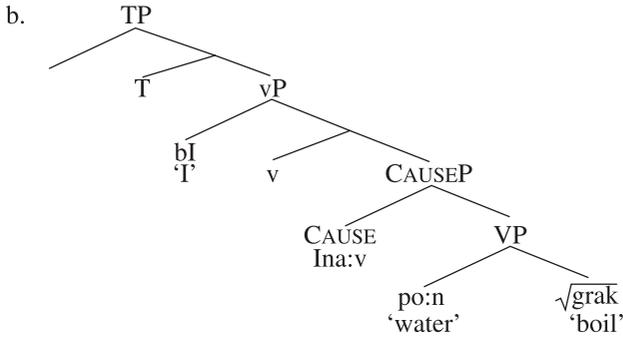
Finally, let us consider the causative applied to an unaccusative verb, creating a transitive sentence like (47).

<sup>20</sup> Deriving a sentence with two causees, such as that in (i), is a trivial extension of the derivations in (44)–(46).

- (i) me chal-Ina:v-Inə:v’ ra:mni zəriyi raj-as athi palav.  
 I.ERG wash-CAUS-CAUSE.M.PL Ram.GEN by Raj-DAT INSTR clothes.NOM  
 ‘I had Ram have Raj wash the clothes.’

Case assignment and agreement proceeds along the lines described in the text. The highest unmarked argument will enter into the operation Agree with the Tense probe. The verb will be suffixed with two causative morphemes as it passes through two CAUSE heads on the way to C.

- (47) a. bI chus po:n' grak-Ina:v-a:n.  
 I.NOM AUX.1SG water.NOM boil-CAUSE-IMPV  
 'I am boiling water.'



Under the CAUSEP account, the sentence in (47a) will have the structure in (47b). Note that in (47b) the causative morpheme is not hosted by the head CAUSE/APPL that combines with unaccusative roots, but instead simply by CAUSE, which does not introduce a causee. The fact that certain roots (unaccusatives) enter into transitivity alternations by combining with CAUSE, while others can combine with CAUSE/APPL (unergatives), and still other roots can combine directly with  $v_{[AG]}$  (transitives), is assumed to be part of the unpredictable information associated with the root (see Bhatt & Embick 2003).

This section has provided derivations for the range of causative structures in Kashmiri under the CAUSEP approach. The next section compares this account to a recent approach to causatives in the related language Hindi-Urdu.

## 5. Causatives in Hindi-Urdu: Bhatt & Embick 2003

Bhatt & Embick's (2003) account of causatives in the closely-related language Hindi-Urdu deserves special attention here. In many ways this account is a version of the iterated-vP account discussed above, and therefore shares some of the drawbacks of that approach. The unique component of this account is the proposal that the causative in Hindi-Urdu is built on the passive structure. However, since neither Kashmiri case-marking and agreement patterns nor other properties of the causee are consistent with this analysis, it is impossible to extend the syntactic structure Bhatt & Embick propose for Hindi-Urdu to the Kashmiri causative. Once again, it will be the causative of the ingesto-reflexive class of verbs that plays a crucial role in assessing the viability of this approach. Further, in a careful comparison of the characteristics of the causative in the two closely related languages Hindi-Urdu and Kashmiri, we can see important micro-variation that must be accounted for in any crosslinguistic approach to causation.

5.1 Bhatt & Embick 2003

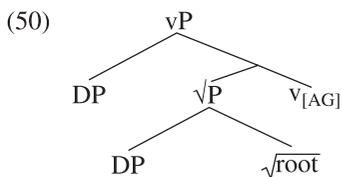
Bhatt & Embick's analysis of Hindi-Urdu, much like that presented here, seeks to account for both the causative/inchoative alternation, in which an intransitive form alternates with a transitive form as in (48), as well as what is often called indirect causation, in which a causative is formed from an existing transitive form, as in (49).

- (48) a. *makaan jal raha hai.* Hindi-Urdu  
 house.M burn prog.M AUX.PRS  
 'The house is burning.'  
 b. *DakaitoN-ne makaan jal-aa diy-aa.*  
 bandits-ERG house.M burn-CAUSE give-PERF.M  
 'The bandits burned the house.'

- (49) *zamiindaar-ne DakaitoN-se makaan jal-vaa diy-aa.* Hindi-Urdu  
 landlord-ERG bandits-INSTR house.M burn-CAUSE give-PERF.M  
 'The landlord had the house burned by the bandits.'

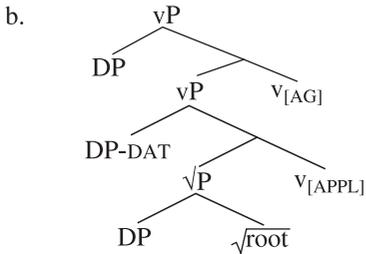
They couch this analysis in the Distributed Morphology framework (Halle & Marantz 1993 and subsequent work). Crucially, in this framework there is no *Lexicon*, so all verbal alternations must be syntactic in origin. They claim that what is common to both transitivity and causativization is the introduction of an agent (via the specifier of agentive *v* head, labeled  $v_{[AG]}$ ). What is unique to causativization in their view is the introduction of two distinct events in a cause relation.

Bhatt & Embick's account is relatively wide-ranging, attempting to explain a number of details concerning verbal morphology and syntax in Hindi-Urdu, but I will present here only the portion of the account most relevant to the questions at hand. In a nutshell, they propose that the transitives of unaccusative and unergative roots are formed with the introduction of a  $v_{[AG]}$ , as in (50).



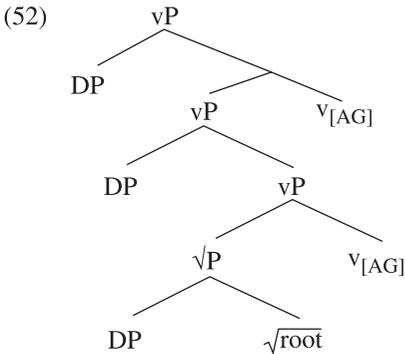
They propose that the causative of the class of ingesto-reflexives (a class with similar properties to that in Kashmiri) has the same structure as that of typical double-object verbs, as in (51).

- (51) a. ram-ne sita-ko vo bhaashaa sikh-aa-yii. Hindi-Urdu  
 Ram-ERG Sita-DAT that language.F learn-CAUSE-PFV.F  
 'Ram taught Sita that language.'



They note that the dative-marked causee in the causatives of ingesto-reflexive verbs in Hindi-Urdu does not seem to be an agent, and should therefore not be introduced by  $v_{[AG]}$ , but instead by an applicative head. As we will see below, though the structure in (51b) may be adequate for Hindi-Urdu, it cannot be the correct structure for ingesto-reflexive causatives in Kashmiri.

For indirect causatives, or causatives of transitives, Bhatt & Embick propose a structure with stacked agentive vPs. However, this approach differs from the approach of Folli & Harley (2007) and Harley (2008) in that they assume that the lower  $v$  is uniformly a passive one, and that an agent is not introduced in its specifier. Instead, the causee is adjoined much like the demoted agent of a passive, as in (52). I will address the suitability of this approach for Kashmiri later.



## 5.2 Extending Bhatt & Embick's Approach to Kashmiri

The account described in section 5.1 cannot easily be extended to Kashmiri. The first concern centers on Bhatt & Embick's claim that the causatives of transitives are built on a passive substructure in Hindi-Urdu. They present a number of facts in support of this claim. They first point out similarities in case assignment in the passive and causative structures. In Hindi-Urdu, when the causee is realized, it must be marked

with instrumental case (in (53a)). This same case can potentially (although is not typically) used to mark demoted agents of the passive (in (53b)).

- (53) a. zamiindaar-ne (DakaitoN-se) makaan jal-vaa diy-aa. Hindi-Urdu  
 landlord-ERG bandits-INSTR house burn-CAUSE give-PERF.M  
 ‘The landlord had the house burned by the bandits.’  
 b. tum-se itnaa khaanaa kaise khaay-aa jaat-aa hai?  
 you-INSTR so much food how eat-PERF.M PASS-HAB.M AUX.PRS  
 ‘How is it that so much food is eaten by you?’

This state of affairs contrasts sharply with Kashmiri, in which causees can potentially be marked nominative, as in (54a,b), or can appear in dative case followed by the instrumental postposition (54c). As discussed in section 2 above, there are two configurations in which a causee can appear in the nominative in Kashmiri. The first is in a nonperfective clause, with either an inanimate causee, or an animate causee that has undergone ‘case lifting’ because the subject is of higher grammatical person (as in (54a)). The second is when it is in an ergative structure, as in (54b).

- (54) a. bI chu-s-an su o:lav I > III, case lifting  
 I-NOM AUX-1SG-3SGPS he.NOM potatoes.NOM  
 ran-İna:v-a:n.  
 cook-CAUS-IMPFV  
 ‘I am having him cook potatoes.’  
 b. me ran-İno:v su o:lav.  
 I-ERG cook-CAUSE.PST.MSG he.NOM potatoes.NOM  
 ‘I had him cook potatoes.’  
 c. bI chu t̄amis athi o:lav ran-İna:v-a:n.  
 I.NOM AUX he.DAT INSTR potatoes.NOM cook-CAUS-IMPFV  
 ‘I am having him cook potatoes.’

Of course, nominative case is not available for demoted agents of the passive in Kashmiri. They are instead typically in the genitive/possessor form, marked with ablative case, then followed by the postposition *z̄ariyi* or *d̄as* ‘by’ (in (55)). Wali & Koul (1997) report that some speakers also permit the demoted agent to be marked dative.<sup>21</sup> Crucially, in contrast to causees, demoted agents in the passive can never undergo case lifting.

- (55) tsI yi-kh me hava:İI kar-nİ t̄am’sİnd-i d̄as/\*su.  
 you.NOM pass.FUT-2SGPS me.DAT handover do-INF.ABL he.GEN-ABL by/he.NOM  
 ‘You will be handed over to me by him.’

<sup>21</sup> The postposition *z̄ariyi* can potentially be used with second causees in an extended causative (see sect. 2), only when accompanying a first causee that has already been marked with the postposition *athi*. However, this doesn’t seem to provide any compelling evidence for similar syntax for causatives and the passive.

Finally, although the causee is always optional in Hindi-Urdu, nominative causees cannot be dropped in Kashmiri.

- (56) *aslam-an le:kh-ino:v-us \*(bI) ciTh'*.  
 Aslam-ERG write-CAUSE-1SG me.NOM letter  
 'Aslam had me write a letter.'

There is a clear pattern of contrasts between causees in Kashmiri and in Hindi-Urdu. That the causee is always realized as an adjunct, much like the demoted agent of the passive, could be a sensible claim for Hindi-Urdu given the facts presented here. However, it cannot be the right approach to all causees in Kashmiri, given that the causee can be nominative, can control primary agreement, and is obligatory when nominative. In Kashmiri we are forced to say that at least the unmarked nominative and dative causees are arguments, not adjoined to a passive vP.

### 5.3 *A Modified Version of Bhatt & Embick's Account*

Given that Bhatt & Embick's approach to Hindi-Urdu causatives cannot be adopted for Kashmiri without modification, one could envision a hybrid account for Kashmiri in which oblique causees are in fact generated in structures like those Bhatt & Embick propose (in (52)), but nominative causees are introduced into the specifier of the lower vP in an iterated-vP structure, just as Folli & Harley (2007) and Harley (2008) suggest.<sup>22</sup> In causatives with oblique causees, the accessibility of the internal argument for probe-goal interactions is clearly explained as the lower (passive) vP need not be a phase. In causatives with nominative causees, with the important exception of the cliticization facts in (43), to this point we have encountered no clear evidence in Kashmiri that the internal argument is in fact accessible, since nearly all probes outside of the verbal layer must interact with the nominative causee. If an alternative explanation could be devised for the cliticization facts, the iterated-vP approach to nominative causees could still be viable.

Further, Bhatt & Embick's approach to causatives of ingesto-reflexive verbs in Hindi-Urdu has the potential to explain the availability of the internal argument for probe-goal interactions in causatives with dative-marked causees. As in (51) above, they claim that these dative causees are introduced in the specifier of an applicative head ( $v_{[APPL]}$ ). Crucially this head does not introduce agents, and it is not phase-defining. Therefore under this account, the accessibility of internal arguments in such causatives in both Hindi-Urdu and Kashmiri would be unsurprising. However, it is also vital to note that under Bhatt & Embick's approach the dative causees of ingesto-reflexive verbs are understood to be syntactically identical to dative indirect objects in double-object structures. That is, we should expect the ingesto-reflexive dative causee and dative indirect objects to pattern together. However, in Kashmiri this is not what

<sup>22</sup> I am indebted to an anonymous *Syntax* reviewer for pointing out this alternative and prompting the addition of the argumentation in this section.

we find. Once again, the casuatives of ingesto-reflexives will prove to be a critical diagnostic.

In this hybrid account, for causatives of ingesto-reflexives in Kashmiri we would need to understand the structures containing a nominative causee (those in Pattern A) to be generated in an iterated-vP structure, and those containing the dative causee to be generated in double-object structure (i.e., the dative causee is introduced in the specifier of  $v_{[APPL]}$  as in (51b)). Furthermore, we would expect the two types of structures to alternate freely, such that the nominative causee and the dative causee would always be available, in all the same environments. This is certainly true for the perfective, as (13)–(14) attest. We would also expect that in the imperfective, the nominative causee and the dative causee should both be available in case-lifting environments, in which the subject is of higher grammatical person than the object. This is because “true” datives, such as those found in the double-object construction, cannot be case-lifted, as in (57).

- (57) bI chu-s-\*an t̄əm̄is/\*su cith' div-a:n. I > III, no case lifting  
 I.NOM AUX-1SG-3SGPS he.DAT/he.NOM letter give-IMPV  
 ‘I am giving him a letter.’

However, this is not the pattern we find. Instead, dative case is *never* available on the causee in the causative of an ingesto-reflexive in a case-lifting environment. This fact is apparent in the contrast in (58).

- (58) a. \*bI chu-s t̄əm̄-is dangal I > III, \*no case lifting  
 I.NOM AUX-1SGPS him-DAT wrestling  
 hech-Ina:v-a:n.  
 teach-CAUSE-IMPV  
 ‘I am causing him to learn wrestling.’  
 b. bI chu-s-an su dangal I > III, case lifting  
 I.NOM AUX-1SGPS-3SGP he.NOM wrestling  
 hech-Ina:v-a:n.  
 teach-CAUSE-IMPV  
 ‘I am causing him to learn wrestling.’ (both: Wali & Koul 1997:216)

This is not what Bhatt & Embick’s approach to dative causees of the causatives of ingesto-reflexives would lead us to expect. If the nominative causee of ingesto-reflexives is always introduced in a stacked vP construction and the dative causee is always introduced in a  $v_{[APPL]}$  structure and these are both freely available, (58a) should be grammatical. The only fix that might allow us to prevent (58a) would be to claim that the stacked vPs and  $v_{[APPL]}$  structures freely alternate in the perfective but in imperfective case lifting environments we are limited to only stacked vPs—this stipulation seems hard to justify.

There are crucial contrasts between the causative in Hindi-Urdu and the causative in the related language Kashmiri. First of all, Hindi-Urdu does not exhibit nominative causees, meaning that any analysis of Kashmiri causation will have to provide a way

to derive Pattern A. Second, Hindi-Urdu does not exhibit case-lifting, so there are no tests available to tease apart the behavior of datives in ingesto-reflexive causatives and “true” datives such as those in double-object constructions. However it is clear here that even with significant modification Bhatt & Embick’s approach to causatives in Hindi-Urdu cannot be extended to Kashmiri. The CAUSEP approach then emerges as the superior account of Kashmiri causatives, and could in principle be applied to causation in Hindi-Urdu as well.

## 6. Conclusion

This paper presented two types of approaches to the verbal domain of the productive morphological causative construction—approaches that are often labeled interchangeable. The iterated-vP approach (Folli & Harley 2007, Harley 2008) claims at its core that causation not only introduces a causing event, but also crucially introduces an agent of that event (the causer). The CAUSEP approach (Pylkkänen 1999, 2002, 2008) claims instead that causation introduces only the causing event (though it may relate participants to that event in various ways). Under this second view, the introduction of the causer is not particular to causation but is instead simply the function of the agentive *v*, as in the introduction of the agent of a noncausative clause.

The properties of the Kashmiri causative revealed that these two approaches are not in fact interchangeable, but instead make distinct predictions about the attributes of causative clauses. In particular, operations sensitive to phase boundaries in Kashmiri suggest that causatives are monophasal. However, the iterated-vP analysis contains at least two phases in each causative verbal domain. The CAUSEP account, on the other hand, does not, and is therefore a better fit for agreement, passivization, and cliticization facts in Kashmiri (particularly visible in causatives of verbs of the ingesto-reflexive class). Furthermore, the Kashmiri data indicate that the causee does not pattern with the kind of argument introduced in the specifier of vP, lending further support to the CAUSEP account in which causees are not introduced by a  $v_{[AG]}$ .

The properties of the productive morphological causative traditionally understood to be suggestive of biclausality have in more recent accounts been attributed to multiple layers within the verbal domain. The research presented here suggests that monoclausality be even more strictly defined, as monophasality, or a structure with only a single agentive *v* head.

The interpretation of the various causative structures discussed in this article presents several challenges. As Bhatt & Embick (2003) point out, causation crucially involves two distinct events. Across all accounts discussed here, what is particular to causation is a mechanism relating the caused event to the causing event. How this interpretation arises differs significantly from account to account. In the case of Pylkkänen’s approach it is the denotation of the CAUSE head itself that introduces the meaning associated with causation. Bhatt & Embick, on the other hand, present an approach to the semantics of the causative in which causation is introduced by a syncategorematic rule that applies when normal modes of semantic composition fail. Although an in-depth account of the semantics of the causative is outside the scope of

the present article, there are a number of approaches that are broadly compatible with the syntactic account advocated for here.

At this point the question of how the CAUSEP account handles variation in the presentation of the morphological causative arises. For languages such as Japanese (Harley 2008) and Italian (Folli & Harley 2007), the iterated-vP analysis seems to capture the facts without difficulty. In these languages the causative morpheme, and hence causation, can plausibly be introduced by *v*, which can in turn plausibly take a complete vP as its complement. For the most part Japanese and Italian seem to require causation to be accompanied by a causer (though see Pykkänen 2008 for Japanese). They also lack ergative-nominative structures, meaning there is no ergative case assignment or primary agreement with internal arguments, such as those investigated here in Kashmiri. In the absence of these diagnostics, we have no reason to assume for Japanese and Italian that causation is not a causer-introducing *v* head.

On the other hand, languages like Finnish and Kashmiri indicate that the iterated-vP account cannot necessarily be extended to all causative verbal domains. Given a family of assumptions we would like to maintain about agentive vP, that it is a phase and that it can introduce an agent argument into its specifier, there appear to be languages in which causation is not best understood as a morpheme introduced in a *v* head.

The problem at hand is this: if we are both committed to the position that causation *is* *v* and equally committed to the notion that *v* is a phase-defining head, we will be unable to account for the facts of Kashmiri as they are presented here. To account for these facts we must be willing to compromise in one of the following ways: either (a) not all complete agentive *v* heads define phases, or (b) causation does not (or does not always) instantiate a *v*. It seems to me that the second of these is a more palatable path, given the current structure of the theory, and that that an analysis of the causative already exists that allows us to seriously pursue (b).

Although I do not explore this question in detail here, Pykkänen (2002, 2008) proposes that there are two sources of crosslinguistic variation in causatives: bundling of the CAUSE and  $v_{[AG]}$  (“Voice-bundling”), and size of the complement taken by CAUSE (vP, VP, or bare root). As Pykkänen (2008) points out, languages with Voice-bundling are languages like English, which do not permit causatives of unaccusatives (not languages like Kashmiri or Hindi-Urdu, contra Bhatt & Embick’s claim [2003:7] that Hindi-Urdu is Voice-bundling). The size of the complement taken by CAUSE can be diagnosed by the way in which adverbs may modify the structure. In languages like Kashmiri, the ability of temporal adverbs to modify both the caused and causing event indicates that the complement is at least VP-sized, but the fact that agent-oriented adverbials may not modify the causee indicates that it is not vP-sized.

Crucially, a causing event is the hallmark of CAUSE crosslinguistically. Under the CAUSEP account, whether or not a language permits causees at all, and the specific properties of those causees, are then determined by the functional vocabulary of the language. What additional heads CAUSE may be bundled with (APPL,  $v_{[AG]}$ ), as well as the complements it may take, will produce the variation seen in productive causatives, even between closely related languages.

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