

# Agreement and Verb Types in Kutchi Gujarati<sup>\*</sup>

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## **Abstract**

This paper explores the the  $\phi$ -agreement system in Kutchi Gujarati, focusing on canonical transitive cases and on non-canonical cases involving psych predicates and modal auxiliaries. Based on the agreement pattern in the future perfect, we argue that  $\phi$ -agreement in Kutchi Gujarati involves two agreement probes, a higher (number / person) probe in *T*, and a lower (gender / number) probe in the *v/Asp* area. After showing how such a system derives the split-ergative agreement pattern in canonical transitive constructions (section 2), we extend our analysis to other types of verbs, specifically to psych predicates (such as *gam* ‘like’) and to constructions that involve modal auxiliaries (such as *par* ‘have to’), both of which require a dative-marked subject (section 3).

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## 1 Background on $\phi$ -agreement in Indo-Aryan languages

$\phi$ -agreement in Indo-Aryan languages (such as Gujarati and Hindi) is generally assumed to exhibit a so-called aspectually conditioned *split ergative* pattern (cf. Dixon 1994), instantiated by (1) for Standard Gujarati (abbreviated as *SG*): In the ‘imperfective’ aspects (e.g. habitual and progressive), the transitive subject is not case marked, and the verb agrees with the subject, (1a). Contrastively, in the ‘perfective’ aspects (e.g. simple past and future perfect),<sup>1</sup> the transitive subject bears the ergative case marker *-e*, and the verb agrees with the direct object, (1b).

(1) Standard Gujarati (Mistry 2004:3-4)

a. *šilaa kaagaL lakh-t-i.* past habitual

Sheela(f) letter(m) write-ipfv-f

‘Sheela used to write a letter.’

b. *šilaa-e kaagaL lakh-y-o.* past perfective

Sheela(f)-erg letter(m) write-pfv-m

‘Sheela wrote a letter.’

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<sup>1</sup> For now, we follow the usual simplification from work on Indo-Aryan languages, which collapses the notions of imperfective, habitual and progressive into ‘imperfective’ on the one hand, and the notions of perfective and perfect into ‘perfective’ on the other hand. Naturally, this glosses over the fundamental differences between perfective and perfect, but this is nevertheless justified, since each of these groups patterns uniformly with respect to the directionality of agreement.

Morphological alignment (i.e. case marking and  $\phi$ -agreement) in Standard Gujarati) is summarized in (2), where *DOM* stands for ‘differential object marking’, an affix *-ne* on the direct object that generally marks specificity (cf. Mistry 1997 for Standard Gujarati).

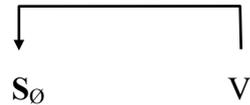
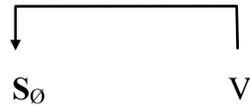
(2) **morphological alignment in Standard Gujarati**

a. *past imperfective*

b. *past perfective*

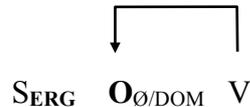
i. intransitive

i. intransitive



ii. transitive

ii. transitive



Many recent approaches to Indo-Aryan languages such as Standard Gujarati and Hindi-Urdu generally assume a single  $\phi$ -agreement probe, usually on *T* (cf. Bhatt 2005, and more recently Bhatt & Walkow, to appear). This  $\phi$ -agreement probe targets the subject when it is not case marked; if the subject is case-marked, it becomes unavailable for agreement and the  $\phi$ -agreement probe must probe further and target the object. In the same vein, Bobaljik (2008) argues that  $\phi$ -agreement always targets the structurally highest DP in a  $\phi$ -probe’s agreement domain, while tracking morphological

case. For the pattern in (2), a single probe approach could be modeled as follows. On the one hand, the  $\phi$ -probe on *T* agrees with the subject if it can, and with the (structurally lower) object otherwise. On the other hand, ergative-marked subjects cannot trigger agreement, which means that ergative-marking (in the perfective aspect) gives rise to object agreement.

Furthermore, Bhatt (2005:800-801) argues that subject agreement and object agreement are not fully symmetrical. Based on data from Standard Gujarati, he shows that object agreement lacks person features. In the intransitive, (3a), the present tense auxiliary exhibits person and number agreement (2<sup>nd</sup> plural) with the intransitive subject; by contrast, in the transitive, (3b), the present tense auxiliary lacks person agreement (3<sup>rd</sup> singular and 3<sup>rd</sup> plural being identical forms in Gujarati). The underlying idea that (3b) involves object agreement both on the participle (*māryā* ‘struck’) and on the auxiliary (*che*) directly follows from a view that assumes a single  $\phi$ -probe in Standard Gujarati.

(3) Standard Gujarati (Bhatt 2005:801, (3b) from Magier 1983a:324)

- a. *tEhme*    *aw-yā*            *cho.*                            present perfect  
       you.pl    come-pfv.m.pl    be.pres.2.pl  
       ‘You have come.’

b. *māĩ tam-ne mār-yā che.*

I.erg you.pl-dom strike-pfv.m.pl be.pres.3

‘I have struck you.’

In the following section, we discuss data from Kutchi Gujarati and Marwari, which challenge a *single probe* view on  $\phi$ -agreement for these languages. Since Kutchi Gujarati, Marwari and Standard Gujarati are closely related languages, it follows that a single probe analysis should also be questioned for Standard Gujarati.

## 2 A Dual Probe System for Kutchi Gujarati and Marwari

### 2.1 The Basic Alignment Patterns

In the remainder of our paper, we focus on Kutchi Gujarati, an Indo-Aryan language spoken in the Kutch district of the Gujarat state in North-West India.<sup>2</sup> Other languages spoken in this area include Kachchi (an Indo-Aryan language related to Sindhi) and Kachi Koli. As shown below, Kutchi Gujarati exhibits systematic similarities to Marwari (Magier 1983a, 1983b) in its  $\phi$ -agreement system. This should not come as a surprise; while Marwari and Gujarati are geographically close, allowing for contact phenomena, it is also generally assumed (cf. Tessitori 1913, 1914-16) that

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<sup>2</sup> Our language consultants are based in different locations within the Kutch district, including its capital city Bhuj, and the port city Mandvi.

both languages evolved from Old Western Rajasthani, sometimes called Old Gujarati (spoken approximately between 1000 CE and 1500 CE), cf. Magier (1983a), Desai & Ramsay-Brijball (2004).

The basic  $\phi$ -agreement pattern in Kutchi Gujarati and Marwari is similar to that of Standard Gujarati. We find split-ergativity that correlates with aspect. However, both Kutchi Gujarati and Marwari exhibit this split only in their agreement systems, not in their case systems.

Consider first the Kutchi Gujarati data in (4).<sup>3</sup> In intransitive constructions, verbal  $\phi$ -agreement targets the subject both in the imperfective, (4a), and in the perfective, (4b).

- (4) a. **Reena** *naach-th-i*. past habitual intrans.  
Reena(f) dance-ipfv-f  
'Reena used to dance.'
- b. **Reena** *naach-i*. past perfective intrans.  
Reena(f) dance-pfv.f  
'Reena danced.'

Contrastively, we encounter the familiar agreement split in the transitive constructions;  $\phi$ -agreement targets the transitive subject in the imperfective, (5a), but it targets the transitive object in the perfective, (5b). However, in

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<sup>3</sup> Examples throughout this paper are from Kutchi Gujarati, unless noted otherwise.

Kutchi Gujarati, the case pattern in the imperfective and the perfective are identical.<sup>4</sup> The intransitive and transitive subject is unmarked, whereas the direct object can be unmarked or bear a semantically triggered differential object marker *-ne*, cf. (5a) and (5b).<sup>5,6</sup> The differential object marker, if present, does not block object agreement (a core difference between Kutchi Gujarati/Standard Gujarati/Marwari on the one hand and Hindi-Urdu on the other hand).

(5) a. **Reena** *kutro(-ne)* *mar-th-i* past habitual trans.

Reena(f) dog(m)-dom hit-ipfv-f

‘Reena used to hit a/the dog.’

b. **Reena** ***kutro(-ne)*** *mar-y-o* past perfective trans.

Reena(f) dog(m)-dom hit-pfv-m

‘Reena hit a/the dog.’

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<sup>4</sup> This is a difference between Kutchi Gujarati and Standard Gujarati, where transitive subjects carry an ergative marker *-e* in the perfective. It is worth emphasizing that there are many varieties of Gujarati, and little descriptive work has been carried out at this point. To illustrate the current state, the *UCLA Language Materials Project* (URL: <http://www.lmp.ucla.edu/profile.aspx?langid=85&menu=004>) lists 8 key dialects, for which little descriptive and theoretical linguistic work is available. See also Magier (1983a) for an extensive discussion of the dialect problematic for Marwari.

<sup>5</sup> We depart from standard notation, e.g. Butt & Ahmed (2011), Butt (2012), where *-ne* is glossed as *acc(usative)* whenever it attaches to the direct object, and gloss it as *dom* instead (for *differential object marking*); we follow convention and gloss *-ne* as *dat(ive)* whenever it attaches to DPs other than the direct object, e.g. to indirect objects or to oblique subjects.

<sup>6</sup> Note that *-ne* in Kutchi Gujarati only has the dative/accusative use, whereas *-ne* in Hindi-Urdu only has an ergative use. Nevertheless, Kutchi Gujarati *-ne* and Hindi-Urdu *-ne* are historically connected: Butt & Ahmed (2011) argue that Hindi-Urdu *-ne* was a loan from neighboring languages such as Haryani, in which *-ne* has both a dative/accusative use and an ergative use (Butt & Ahmed 2011:562). (Butt & Amhed 2011 argue that *-ne* originally derived from Old Rajasthani *kanhaiN* ‘aside, near’, cf. Tessitori 1913, 1914-16.)

The perfective pattern in (4b) and (5b) is illustrated for perfective clauses in Marwari, in (6) and (7) respectively, as documented by Magier (1983a, 1983b). The intransitive verb *ā* ‘come’ in (6a-b) agrees with the subject, whereas the transitive verb *jīml* ‘eat’ in (7a-b) agrees with the object, *lāpsī* ‘wheat gruel’ in (7a), and *ek sogro* ‘one piece of millet-bread’ in (7b). As in Kutchi Gujarati, Marwari lacks the morphological ergative case marking found in Standard Gujarati and Hindi-Urdu.

(6) Marwari (Magier 1983b:248)

a. *rām aṭhe kāle ā-īyo* past perfective intrans.

Ram here yesterday come-pfv.m

‘Ram came here yesterday.’

b. *sītā aṭhe kāle ā-ī*

Sita here yesterday come-pfv.f

‘Sita came here yesterday.’

(7) Marwari (Magier 1983b:248)

a. *rām lāpsī jīml-ī* past perfective trans.

Ram wheat-gruel.f eat-pfv.f

‘Ram ate wheat gruel.’

b. *sītā ek sogro jīml-īyo*

Sita one millet.bread.m eat-pfv.m

‘Sita ate one (piece of) millet-bread.’

To sum up, we have seen that Kutchi Gujarati and Marwari have a  $\phi$ -agreement split that correlates with aspect; nevertheless, these languages lack overt morphological structural case, i.e. we do not find ergative marking or accusative marking, but differential object marking (*dom*).<sup>7,8</sup> The core question can be stated as follows: How do we best derive the  $\phi$ -agreement pattern in Kutchi Gujarati and Marwari?

In sections 2.2-2.4, we argue that agreement in Kutchi Gujarati and Marwari involves a *dual probe*  $\phi$ -agreement system (as opposed to a *single probe*  $\phi$ -agreement system); specifically,  $\phi$ -agreement involves a probe on T and a second probe in the *v/Asp* domain (cf. Bobaljik 1993, Laka 1993, 2000, and Rezac 2008b). We argue that the lower probe (in the *v/Asp* domain) is responsible for the Kutchi Gujarati agreement split. In fact, the higher probe lacks an *overt* reflex in all examples that we discussed above.

## 2.2 Future Perfect, Present Perfect and Dual Probes

Most *single probe*  $\phi$ -agreement analyses of Indo-Aryan languages adopt the view that subjects in the perfective are unavailable for  $\phi$ -agreement. This is

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<sup>7</sup> Later on, we will see examples of inherent/lexical dative marking, which occurs in indirect objects and certain subjects in Kutchi Gujarati and other Indo-Aryan languages.

<sup>8</sup> Since both languages (Kutchi Gujarati and Marwari) developed from Old Western Rajasthani, it can be assumed that Kutchi Gujarati and Marwari evolved from a system that had split-ergativity both in its case system and in its agreement system (as is still found in Standard Gujarati). Remnants of ergative-marking are still found in the Kutchi Gujarati focus marking-system, e.g. *-e* can be used as a focus marker, similar to the use of Standard Gujarati *-e* as a (synchronically non-ergative) inclusive marker that means ‘also’, as documented by Mistry (1997:437).

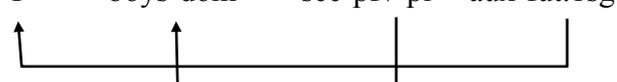
reflected by Bhatt’s (2005) assumption that the present tense auxiliary in (3b), repeated in (8), agrees with the object (*tam-ne*), and fails to do so with respect to the object’s person features.

(8) Standard Gujarati (Bhatt 2005:801, from Magier 1983a:324)

*māĩ tam-ne mār-yā che.* present perfect  
 I.erg you.pl-dom strike-pfv.m.pl be.pres.3  
 ‘I have struck you.’

Kutchi Gujarati and Marwari exhibit a very different pattern, first observed for Marwari by Magier (1983a, 1983b), which has largely gone unnoticed in the formal syntactic literature on Indo-Aryan agreement. While the perfective participle exhibits agreement with the direct object (as expected), the tense auxiliary exhibits agreement with the subject.<sup>9</sup> This nested agreement pattern is illustrated for the Kutchi Gujarati future perfect in (9).

(9) a. *Hu chokra-ne jo-y-a ha-is.* future perfect

I boys-dom see-pfv-pl aux-fut.1sg  


‘I will have seen the boys.’

<sup>9</sup> Of course, this is a surprisingly ‘normal’ pattern in Indo-European, which we also find in French participle agreement; cf. Magier (1983a, 1983b).

b. *John mane jo-i ha-se.*

John me.dom see-pfv.f.sg aux-fut.3sg

The diagram consists of a horizontal line with two vertical lines extending upwards from it. The first vertical line is positioned under 'John' and the second under 'me.dom'. A horizontal line connects the top of these two vertical lines, with an upward-pointing arrowhead at the 'John' end. A second horizontal line is positioned below the first, with vertical lines extending upwards from it to 'see-pfv.f.sg' and 'aux-fut.3sg'. A horizontal line connects the top of these two vertical lines, with an upward-pointing arrowhead at the 'see-pfv.f.sg' end.

‘John will have seen me.’ (*speaker is female*)

Crucially, the aspectually triggered agreement split still holds in the future tense, between the future perfect in (9), where the aspectual participle agrees with the direct object, and the future imperfective in (10), where both the aspectual participle and the tense auxiliary agree with the subject.

(10) a. *Hu chokra-ne jo-th-i ha-is.* future imperfective

I boys-dom see-ipfv-f.sg aux-fut.1sg

The diagram consists of a horizontal line with two vertical lines extending upwards from it. The first vertical line is positioned under 'I' and the second under 'see-ipfv-f.sg'. A horizontal line connects the top of these two vertical lines, with an upward-pointing arrowhead at the 'I' end. A second horizontal line is positioned below the first, with vertical lines extending upwards from it to 'see-ipfv-f.sg' and 'aux-fut.1sg'. A horizontal line connects the top of these two vertical lines, with an upward-pointing arrowhead at the 'see-ipfv-f.sg' end.

‘I will see the boys.’ (*speaker is female*)

b. *John amne jo-th-o ha-se.*

I us.dom see-ipfv-m.sg aux-fut.3sg

The diagram consists of a horizontal line with two vertical lines extending upwards from it. The first vertical line is positioned under 'I' and the second under 'see-ipfv-m.sg'. A horizontal line connects the top of these two vertical lines, with an upward-pointing arrowhead at the 'I' end. A second horizontal line is positioned below the first, with vertical lines extending upwards from it to 'see-ipfv-m.sg' and 'aux-fut.3sg'. A horizontal line connects the top of these two vertical lines, with an upward-pointing arrowhead at the 'see-ipfv-m.sg' end.

‘John will see us.’

In Marwari, we find a  $\phi$ -agreement pattern identical to the pattern in (9) in the present perfect, given in (11).

(11) Marwari, Magier (1983b:250)

a. *mhāī sītā-ne dekhī hū.* present perfect

I Sita-dom saw.f am.1sg

‘I have seen Sita.’

b. *āp sītā-ne dekhī ho.*

you(pl) Sita-dom saw.f are.1pl

‘You have seen Sita.’

c. *mhe sītā-ne dekhī hā.*

we(excl) Sita-dom saw.f are.1pl

‘We have seen Sita.’

d. *ve sītā-ne dekhī hai.*

they Sita-dom saw.f are.3sg/pl

‘They have seen Sita.’

The nested patterns in Kutchi Gujarati and Marwari sharply contrast with the Standard Gujarati example in (8). A plausible explanation for this difference derives from the observation that Standard Gujarati, as opposed to Kutchi Gujarati and Marwari, requires morphological ergative case

marking in the perfective aspect, which can be assumed to block the auxiliary agreement found in (9) and (11), in accord with Bobaljik (2008).

Based on these languages' future perfect and present perfect patterns, we propose that Kutchi Gujarati and Marwari involve two  $\phi$ -agreement probes, a higher number / person probe that is located in  $T$  and a lower number / gender probe that is located in the  $v/Asp$  domain. To derive the split-agreement pattern, we propose the following, illustrated in (13) below. The lower  $v/Asp$  probe always agrees with the direct object and the higher  $T$  probe always agrees with the subject. In the future perfect, both probes have an overt reflex, giving rise to the nested agreement pattern. However, in the imperfective, the two probes share one agreement domain, which causes the two probes to act as *one* complex  $v/Asp/T$  probe (cf. D'Alessandro 2011 for the concept of complex probes). This  $v/Asp/T$  probe has established an Agree relationship with both the direct object (via  $v/Asp$ ) and the subject (via  $T$ ). In the spirit of Bobaljik (2008), PF then spells out morphological agreement with the structurally higher argument, i.e. with the subject. To account for the agreement split, we assume that the formation of such a complex  $v/Asp/T$  probe requires a local relationship between  $v/Asp$  and  $T$ , which is interrupted by an additional head that is present in the perfective and absent in the imperfective. For mnemonic reasons, we call this the *Perf* head. (The idea that split-ergativity is due to such a structural asymmetry is due to Coon & Preminger 2011, Coon 2013, though they assume the

opposite of our analysis, namely that the imperfective involves an additional head lacking in the perfective.)

Our analysis of (12a-b), repeated from (9a) and (10a) is given in (13a-b). The four arrows indicate agreement between  $v/Asp$  and the direct object and between  $T$  and the subject respectively.<sup>10,11</sup> In (13b), the dotted oval marks the unification of the  $v/Asp$  probe and the  $T$  probe, which has the consequence that object agreement on  $v/Asp$  will not be spelled out at PF, while all verbal elements spell out subject agreement. (We adopt standard assumptions such as the view that the subject originates in Spec,vP; cf. Chomsky 2001, 2004. For expository ease, we omit traces in this illustration.)

(12) a. *Hu chokra-ne jo-y-a ha-is.* future perfect

I boys-dom see-pfv-pl aux-fut.1sg

‘I will have seen the boys.’

b. *Hu chokra-ne jo-th-i ha-is.* future imperfective

I boys-dom see-ipfv-f.sg aux-fut.1sg

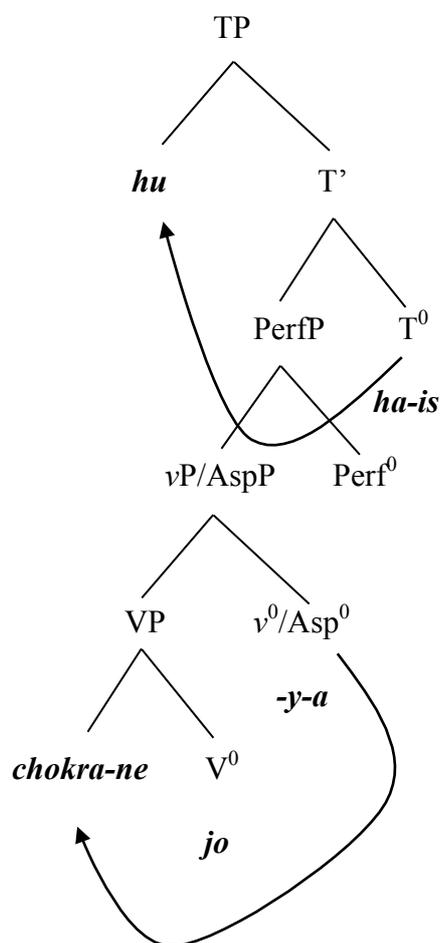
‘I will see the boys.’ (*speaker is female*)

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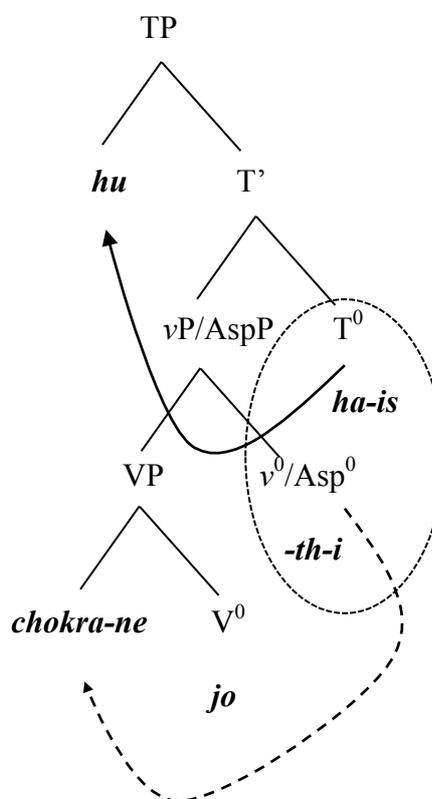
<sup>10</sup> Our analysis does not depend on whether the probe that is responsible for object agreement is active on  $v^0$  or  $Asp^0$  or on both (or another functional head in the lower area of the clause). For arguments that a higher probe is associated with  $T$  and a lower probe with  $v$ , see Bobaljik (1993), Laka (1993, 2000) and Rezac (2008b).

<sup>11</sup> The idea that there is a *Perf* head (possibly encoding the meaning of the Perfect) above the clausal *Asp* head (which encodes perfectivity vs imperfectivity) is inspired by Iatridou et al. (2003:181).

(13) a. Perfective pattern



b. Imperfective pattern



It is beyond the scope of this paper to include a formal implementation of how *v/Asp* and *T* are united into a single probe in (13b), and why this is interrupted by an additional intervening head in (13a). See Grosz & Patel-Grosz (2013) for an analysis based on D'Alessandro's (2011) idea of complex probes. The following section addresses the question of whether this analysis can also be applied to the more familiar agreement patterns in

the past tense. We provide arguments that the same dual probe analysis should be applied there, arguing that past *T* simply remains unpronounced.

### 2.3 Past vs Future

One obvious concern at this point seems to be that the future is more complex than the past, i.e. the future contains an additional auxiliary, *ha-*. This holds equally for the perfective cases in (14) and for the imperfective cases in (15), i.e. the additional structure cannot cause the agreement split.

(14) a. *Hu chokra-ne jo-y-a ha-is.* future perfect  
 I boys-dom see-pfv-pl aux-fut.1sg  
 ‘I will have seen the boys.’

b. *Hu chokra-ne jo-y-a.* past perfective  
 I boys-dom see-pfv-pl  
 ‘I saw the boys.’

(15) a. *Hu chokra-ne jo-th-i ha-is.* future imperfective  
 I boys-dom see-ipfv-f.sg aux-fut.1sg  
 ‘I will see the boys.’ (*speaker is female*)

b. *Hu chokra-ne jo-th-i.* past habitual  
 I boys-dom see-ipfv-f.sg  
 ‘I used to see the boys.’ (*speaker is female*)

Nevertheless, two questions arise: First, can the analysis in (13) also derive the agreement split in the past perfective vs past imperfective if *T* does not have an overt realization? Second, should we worry that the future examples in (14) and (15) involve some type of biclausal structure absent in the past?

To answer the first question, we propose that this is indeed the case. We treat past tense in Kutchi Gujarati as the unmarked tense whenever aspect is overtly marked (compare Dahl & Velupillai 2011 for a general discussion of similar tense/aspect interactions). As a consequence, past tense does not need to be (and in fact cannot be) overtly expressed in these basic cases.<sup>12</sup> In analogy with the future tense examples, we then treat (14b) and (15b) as involving a null *T*-head that covertly agrees with the subject, cf. (16a-b).

- (16) a. *Hu chokra-ne jo-y-a Ø.* past perfective  
 I boys-dom see-pfv-pl aux.past.1sg  
 ‘I saw the boys.’
- b. *Hu chokra-ne jo-th-i Ø.* past habitual  
 I boys-dom see-ipfv-f.sg aux.past.1sg  
 ‘I used to see the boys.’ (*speaker is female*)

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<sup>12</sup> Interestingly, the past progressive seems to be more marked than the past habitual in that it requires an additional auxiliary, as in (i). However, this auxiliary differs from future and present tense auxiliaries in that it lacks person agreement; therefore, we do not treat it as a spell-out of *T*.

i. *Hu chokra-ne jo-th-i th-i.*  
 I boys-dom see-ipfv-f.sg aux.prog-f.sg  
 ‘I was watching the boys.’ (*speaker is female*)

The second question (i.e. whether the future is biclausal) is more difficult to answer, since the mere presence of an additional auxiliary *may* be taken to indicate a biclausal structure (cf. Coon 2013). However, based on the following observations, we argue that this is not the case. The driving force for inserting an auxiliary in (14) and (15) does not seem to be the future tense, but the fact that aspect is explicitly marked by the imperfective *-th-* morpheme or the perfective *-y-* morpheme. As opposed to languages such as English and German, which require a periphrastic future (e.g. *he will sleep*), the future tense in Kutchi Gujarati can be expressed on the main verb unless the main verb combines with an aspectual affix, as shown in (17).

- (17) a. **Hu** *chokra-ne jo-is.* simple future  
 I boys-dom see-fut.1sg  
 ‘I will see the boys.’
- b. **John** *mane jo-se.*  
 John me.dom see-fut.3sg  
 ‘John will see me.’

The insertion of an additional *ha-* auxiliary can then be derived as follows. First, we have seen that [+past] *T* is unpronounced, (16), whereas [+future] *T* must be spelled out in the shape of the agreeing *-is/-se/...* affix that we see in (17). Second, we have argued that *-y-* and *-th-* are overt realizations of perfective and imperfective aspect, respectively, which combine with a

*v/Asp* agreement marker. We propose that (like many other languages, including English) Kutchi Gujarati does not generally allow aspectual and temporal affixes on the same verb, i.e. a combination such as *jo-y-a-is* is excluded in (14a). As a consequence, we can assume, following Bjorkman (2011), that the auxiliary *ha-* is some sort of pleonastic form, which is inserted in order to serve as an attachment host for the future tense affix whenever aspectual information is overtly expressed, occupying the unique affix slot on the main verb.

#### **2.4 On the Optionality of Aspectual Information**

We now conclude section 2 by addressing one more question with respect to our analysis. We have argued above that *T* always agrees with the subject, even if *T* does not have any overt reflex (i.e. in the past tense). By analogy, the question arises whether the lower probe in the *v/Asp* layer always agrees with the object as well. No part of our proposal hinges on the answer to this question, but the following facts indicate that the answer is affirmative.

Kutchi Gujarati (on a par with Standard Gujarati, Mistry 1997, and the Ripano dialect of Italian, D'Alessandro 2011) exhibits adverb agreement, which tracks the participle agreement that exhibits the agreement split, i.e. we find subject agreement on adverbs with intransitive subjects, (18a-b), and with transitive subjects in the imperfective, (19a); and we find object agreement on adverbs with transitive objects in the perfective, (19b).

- (18) a. *Khimji vel-o av-th-o ha-se.* future imperf.  
 Khimji early-m come-ipfv-m aux-fut.3  
 ‘Khimji will arrive early.’
- b. *Khimji vel-o av-y-o ha-se.* future perfect  
 Khimji early-m come-pfv-m aux-fut.3  
 ‘Khimji will have arrived early.’
- (19) a. *Hu chokra-ne vel-i jo-th-i ha-is.* future imperf.  
 I boys-dom early-f see-ipfv-f aux-fut.1sg  
 ‘I will see the boys early.’ (*speaker is female*)
- b. *Hu chokra-ne vel-a jo-y-a ha-is.* future perfect  
 I boys-dom early-pl see-pfv-pl aux-fut.1sg  
 ‘I will have seen the boys early.’

It is a plausible assumption that adverb agreement is due to the lower *v/Asp* probe, since it always patterns together with *v/Asp*-agreement. Therefore, examples like (20), which lack *v/Asp*-agreement on a participle, indicate that some lower head in the *v/Asp* domain is also active when there is no aspectual participle to exhibit the relevant  $\phi$ -agreement.

- (20) a. *Khimji vel-o av-se.* *simple future*  
 Khimji early-m come-fut.3  
 ‘Khimji will arrive early.’

- b. *Hu vel-i av-is.* *simple future*  
 I early-f come-fut.1sg  
 ‘I will arrive early.’

## 2.5 Interim Summary

In this section, we have argued for a dual probe analysis of split  $\phi$ -agreement in Kutchi Gujarati and Marwari (focusing our discussion on Kutchi Gujarati). We have argued that these languages involve a higher probe on *T*, which always agrees with the subject, and a lower probe in the *v/Asp* domain, which always agrees with the object. Both instances of agreement can remain unpronounced, e.g. in the unmarked past tense, section 2.3, and if there are no aspectual participles, section 2.4; nevertheless, we have argued that both agreement relations are always established. The split agreement pattern arises from an interaction between these two agreement processes. In the imperfective aspect, *T* and *v/Asp* combine into a single probe, yielding agreement with the structurally highest argument (i.e. the subject) at the PF interface. Contrastively, in the perfective aspect, such a unification of *T* and *v/Asp* does not take place, and the two probes are spelled out independently (unless one of them is unpronounced); this gives rise to the nested agreement pattern in the Kutchi Gujarati future perfect and in the Marwari present perfect.

### 3 Extension to Non-Canonical Agreement Configurations

#### 3.1 Lexical Case Interacts with Agreement in Kutchi Gujarati

In the previous sections, it has become clear that the  $\phi$ -agreement system of Kutchi Gujarati and Marwari does not seem to be sensitive to any notion of structural/dependent case. While the perfect in Standard Gujarati involves an ergative subject that cannot trigger verbal agreement, (21a), Kutchi Gujarati and Marwari exhibit subject agreement on the tense auxiliary in the future perfect, (21b), and present perfect, (21c), respectively. (This auxiliary agreement occurs in addition to the object participle agreement found in all three languages). We have also seen that the differential object marker *-ne* does not block object agreement (where applicable); this is also illustrated in (21).

(21) a. *māĩ tam-ne mār-yā che.* [Standard Guj.]

I.erg you.pl-dom strike-pfv.m.pl be.pres.3

‘I have struck you.’ (Magier 1983a:324)

b. *hu chokra-ne jo-y-a ha-is.* [Kutchi Guj.]

I boys-dom see-pfv-pl aux-fut.1sg

‘I will have seen the boys.’

c. *mhe sītā-ne dekhī hā.* [Marwari]

we(excl) Sita-dom saw.f are.1pl

‘We have seen Sita.’ (Magier 1983b:250)

However, this is not the full story. While structural case does not seem to affect agreement, lexical/inherent case does. Specifically, the non-structural dative case<sup>13</sup> on the Experiencer argument of *gam* ‘like’ does not allow for agreement, i.e. *gam* ‘like’ always exhibits agreement with the argument that lacks case marking. Example (22) contrasts with the regular transitive example in (5) in that the agreement pattern is identical in the imperfective, (22a), and in the perfective, (22b), always targeting the argument that lacks case marking. The question arises whether the properties of this construction also fall out of our analysis of  $\phi$ -agreement, as proposed above. We argue that they do, and analyze this pattern in section 3.2. Specifically, we will see evidence, in the spirit of Baker (2008), that the person probe on *T* requires a more local relationship to its goal than the lower probe in *v/Asp*, which lacks person features, agreeing only for number and gender.

- (22) a. *Reena-ne kutro gam-th-o past habitual psych verb*  
 Reena(f)-dat dog(m) like-ipfv-m  
 ‘Reena used to like a/the dog.’
- b. *Reena-ne kutro gam-y-o past perfective psych verb*  
 Reena(f)-dat dog(m) hit-pfv-m  
 ‘Reena liked a/the dog.’

---

<sup>13</sup> The label *dative* is arbitrary and should not be understood as a technical term. We follow the usual convention of calling non-differential-object-marking uses of the Gujarati *-ne* marker *dative* to indicate that it differs from the use of *-ne* as a differential object marker. (The latter is often labeled *accusative*.) As a diagnostic, while DPs with the DOM marker *-ne* can trigger verbal agreement, this is impossible for DPs with the *dative* marker *-ne*.

### 3.2 Agreement with Psych Predicates in Kutchi Gujarati

From the perspective of our analysis, we expect that psych verbs like *gam* ‘like’ behave on a par with intransitives, i.e. neither of the two arguments qualifies as an external argument. This view is supported by the fact that the unmarked word order is one where the dative argument precedes the unmarked argument (both of which are located inside the VP, as has been proposed for psych predicates in many other languages, e.g. Bobaljik & Wurmbrand 2003). This becomes clear if we consider binding facts (see also Mistry 2004:15 for similar observations in Standard Gujarati). While the Experiencer argument of *gam* ‘like’ can bind a reflexive in possessor position, as shown in (23a), the scrambled direct object of *mar* ‘hit’ cannot do so, as shown in (23b).<sup>14</sup>

- (23) a. **Ene<sub>i</sub>** [eno      **potha-no<sub>i</sub>**    *dikro*] *gam-yo*.      psych verb  
           3.dat  3.gen.m    self-gen.m    son      like-pfv.m  
           ‘She liked her own son.’ (lit. ‘She liked herself’s son.’)
- b. <sup>??</sup>**Ene<sub>i</sub>** [eno      **potha-no<sub>i</sub>**    *dikro*] *mar-i*.      transitive verb  
           3.dom 3.gen.m    self-gen.m    son      hit-pfv.f  
           ‘Her own son hit her.’ (lit. ‘Herself’s son hit her.’)

<sup>14</sup> The fact that (23b) is marked ‘??’ rather than ‘\*’ reflects the observation that reflexive in possessor position can sometimes be contextually licensed without being syntactically bound. We cannot test cases with psych verbs where the non-case-marked element is a reflexive, since reflexives in Kutchi Gujarati must be case-marked.

We now encounter the following facts, which may seem puzzling at first. On the one hand, in the cases without person agreement (i.e. if the agreeing DP is in the unmarked 3<sup>rd</sup> person), the underlying word order must be preserved. This is shown in (24a-b).

- (24) a. *Reena-ne i gam-se*  
Reena-dat 3sg/pl like-fut.3
- b.\* *i Reena-ne gam-se*  
3sg/pl Reena-dat like-fut.3  
'Reena will like them/him/her.'

On the other hand, once we introduce first or second person arguments, the order obligatorily reverses, as shown in (25) and (26).

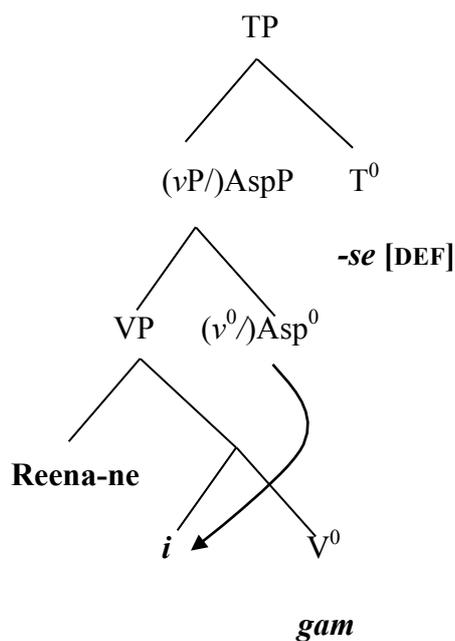
- (25) a.\* *Reena-ne ame gam-se/si*  
Reena-dat 2pl like-fut.3/2pl
- b. *ame Reena-ne gam-si*  
2pl Reena-dat like-fut.2pl  
'Reena will like us.'

- (26) a.\* *Reena-ne hu gam-se/is*  
           Reena-dat 1sg like-fut.3/1sg
- b. *hu Reena-ne gam-is*  
       1sg Reena-dat like-fut.1sg  
       ‘Reena will like me.’

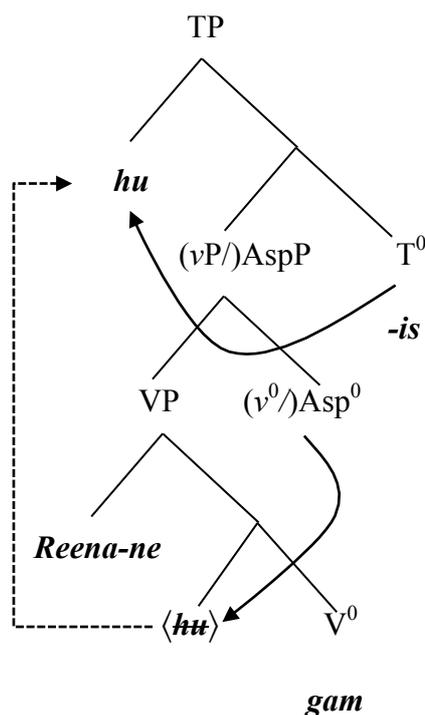
Due to their behavior in (24)-(26), psych verbs allow us to refine our analysis of agreement in Kutchi Gujarati. Specifically, such a pattern follows under a view like Baker’s (2008), who assumes that person agreement, as opposed to gender/number agreement, requires a local (Spec-Head) relationship between the agreeing DP and the probe. Kutchi Gujarati exhibits person agreement on its future tense and present tense auxiliary, which we have localized in *T*. For psych predicates, we thus find two configurations, one in which *T* exhibits default agreement (3<sup>rd</sup> singular/plural *-se*), in (24), and one in which *T* attracts the non-case-marked DP to its specifier in order to agree for person (possibly in connection with licensing of a structural nominative case, as we will see later). This difference is illustrated in (27). Since perfective and imperfective do not give rise to split-agreement with psych predicates (or, more generally, intransitives), we only illustrate for the imperfective case; also, we remain agnostic as to whether psych predicates project a *vP* or not. It is worth pointing out the following. If movement in (27b) is parasitic on licensing of structural nominative case, as conjectured in section 3.3.5

below, then the driving force for movement cannot be an EPP feature, but it must be the (first and second) person features of the nominative argument.

(27) a. 3<sup>rd</sup> person pattern



b. 1<sup>st</sup>/2<sup>nd</sup> person pattern



We can thus summarize the difference between transitive verbs like *mar* ‘hit’ and psych predicates like *gam* ‘like’ as follows. Much in the spirit of the standard analyses for languages such as English and German (e.g. Bobaljik & Wurmbrand 2003), *mar* ‘hit’ is a true transitive predicate, (28a), the subject of which is generated in SpecvP, whereas *gam* ‘like’ is an unaccusative predicate with two internal arguments, (28b).

- (28) a. [<sub>VP</sub> SUBJ [<sub>VP</sub> DO<sub>DOM</sub> *mar*] *v*]  
 b. [<sub>VP</sub> IO<sub>DAT</sub> [<sub>VP</sub> DO *gam*]]

The next section extends our proposal to an apparent case of *long distance agreement (LDA)* with the modal *par* ‘have to’. What we find is that LDA in Kutchi Gujarati also seems to involve the *v/Asp* probe rather than the *T* probe (possibly in contrast to Hindi-Urdu LDA, Bhatt 2005, Chandra 2007).

### 3.3 ‘Long Distance Agreement’ in Kutchi Gujarati

Another type of construction that appears to involve dative-marked subjects is the modal construction with *par* ‘have to’, illustrated in (29).<sup>15,16</sup> Here, the embedded verb (which occurs with an apparent infinitive affixe -*v*-) as well as the apparent matrix verb (*par* ‘have to’) agree with the direct object.

- (29) a. *Khimji-ne Reena-ne jo-v-i par-th-i.* past habitual  
 Khimji.m-dat Reena.f-dom see-inf-f have.to-ipfv-f  
 ‘Khimji used to have to watch Reena.’

<sup>15</sup> The verb root *par* has three uses: It occurs as a main verb *par* ‘fall’, as a light verb *par* ‘sudden initiation of an event’ (gloss based on Cardona 1965:130 for Standard Gujarati) and as a modal *par* ‘have to’. Following Ramchand (2008b), we assume that the main verb use and the light verb use draw on the same lexical entry. However, we assume that the modal use *par* ‘have to’ (which we discuss in this section) uses a distinct lexical entry, though it plausibly originated from *par* ‘fall’ (cf. Magier 1983a:176, who glosses Marwari *par* as ‘befall’, i.e. in its modal use, *par* may have originated as *par* ‘it befalls someone to do something’).

<sup>16</sup> Note that Kutchi Gujarati does not seem to have many verbs that allow for such long distance agreement; all the ones that do seem to require a dative-marked subject.

- b. *Khimji-ne Reena-ne jo-v-i par-i* past perfective  
 Khimji.m-dat Reena.f-dom see-inf-f have.to-pfv.f  
 ‘Khimji had to watch Reena.’

In the absence of a direct object, default agreement (neuter singular) arises, as shown in (30).

- (30) a. *Khimji-ne su-v-u par-th-u.* past habitual  
 Khimji.m-dat sleep-inf-n have.to-ipfv-n  
 ‘Khimji used to have to sleep.’

- b. *Khimji-ne su-v-u par-u.* past perfective  
 Khimji.m-dat sleep-inf-n have.to-pfv.n  
 ‘Khimji had to watch Reena.’

The question that this section addresses is how to integrate the LDA patterns in our analysis of  $\phi$ -agreement in Kutchi Gujarati.

### 3.3.1 Two Possible Analyses of the Modal *par*

Constructions with *par* ‘have to’ raise two questions in light of the discussion above. First, given the superficial similarity to psych predicates (experiencer subject and no agreement split), why can the object carry the differential object marker *-ne*? This question arises since such differential object marking is ruled out with psych predicates like *gam* ‘like’, (31b).

- (31) a. *Reena kutro-ne mar-y-o* past pfv. transitive  
 Reena(f) dog(m)-dom hit-pfv-m  
 ‘Reena hit the dog.’
- b. *Reena-ne kutro(\*-ne) gam-y-o* past pfv. psych verb  
 Reena(f)-dat dog(m)-dom hit-pfv-m  
 ‘Reena liked the dog.’

Second, we observe that person agreement with the direct object is excluded, as shown in (32b) versus (32c), which is reminiscent of Bhatt’s (2005) *Person Generalization* originally proposed in connection with examples like (3b).<sup>17</sup>

- (32) a. *Reena-ne mane mar-v-o par-y-o.* past perfective  
 Reena.f-dat me.dom hit-inf-m have.to-pfv-m  
 ‘Reena had to hit me.’ (*speaker is male*)
- b. *Reena-ne mane mar-v-o par-se / \*-is.* simple future  
 Reena.f-dat me.dom hit-inf-m have.to-fut.def/\*1sg  
 ‘Reena will have to hit me.’ (*speaker is male*)
- c. *hu Reena-ne gam-is*  
 1sg Reena-dat like-fut.1sg  
 ‘Reena will like me.’

---

<sup>17</sup> Note that it does not seem to be possible to embed *gam* ‘like’ under *par* ‘have to’, with a reading such as ‘Reena will have to like me’.

In the spirit of Bhatt's (2005) analysis of Hindi-Urdu long-distance agreement, we can argue that the Kutchi Gujarati construction involves restructuring (cf. Cinque 2004, Wurmbrand 2001), one core indication for restructuring being the long distance agreement on the apparent matrix predicate *par* 'have to' (cf. Bhatt 2005:779). We can also show that embedded objects can take scope over *par* 'have to' (cf. Bhatt 2005:799), as in (33b), which further corroborates a restructuring analysis.

- (33) a. *Valji-ne*      *[[amukaj chopri] vanch-v-i]* *par-i*.  
           Valji.m-dat    some            book-f    read-inf-f    have.to-pfv-f  
           'Valji had to read some of these books.'
- b. <sup>OK</sup> *some* » *have to* (*de re*):  
           For some specific books, Valji had to read them.
- c. <sup>OK</sup> *have to* » *some* (*de dicto*):  
           Valji's need: to read some books (no matter which ones).

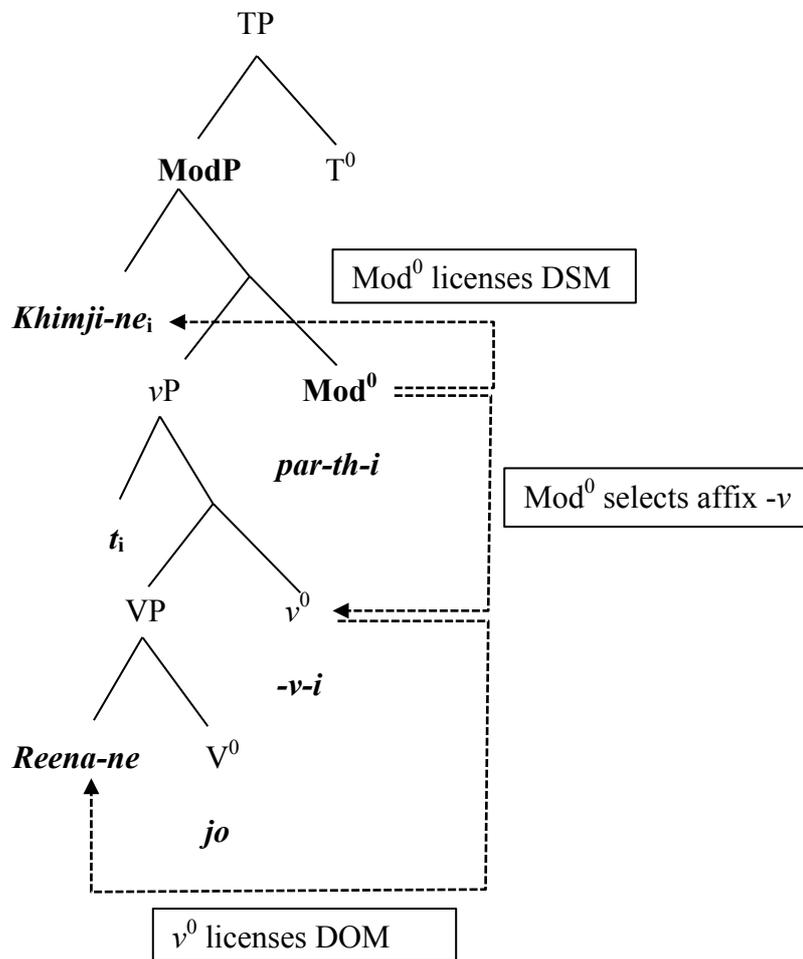
However, the fact that psych predicates do not allow for differential object marking indicates that differential object marking (on a par with accusative marking in nominative-accusative languages) requires a transitive *v*. As a consequence, a restructuring analysis must allow for the presence of a transitive *v*P in constructions with *par* 'have to'. At this point, it becomes crucial to consider Wurmbrand's (2001, 2004) distinction between functional restructuring and lexical restructuring. An analysis in terms of

functional restructuring would treat *par* ‘have to’ as a modal auxiliary; contrastively, an analysis in terms of lexical restructuring would treat *par* ‘have to’ as a main verb, which selects an infinitival complement that is smaller than a CP or TP. We could thus posit the two competing analyses in (35) and (36) for the construction in (34). (We omit *Asp* in these illustrations, which is plausibly located above *Mod*.)

- (34) *Khimji-ne* [ *Reena-ne jo-v-i* ] *par-th-i*.  
 Khimji.m-dat Reena.f-dom see-inf-f have.to-ipfv-f  
 ‘Khimji used to have to watch Reena.’

A functional restructuring analysis, (35), would treat the ‘infinitival’ affix on the main verb as a marker of modality (i.e. similar to ‘affix hopping’ in English, cf. Chomsky 1957, the auxiliary *par* would trigger the affix form *-v* on the next lower verbal element). Similarly, the apparent *Experiencer* dative on the subject would not be an instance of theta-related case, since *par* ‘have to’ as an auxiliary would not assign any theta roles; rather, it would be an instance of differential subject marking (Butt & Ahmed 2011 and Butt 2012), abbreviated as *DSM* in (35). As indicated, we assume that *v* licenses differential object marking, possibly in connection to structural accusative licensing.

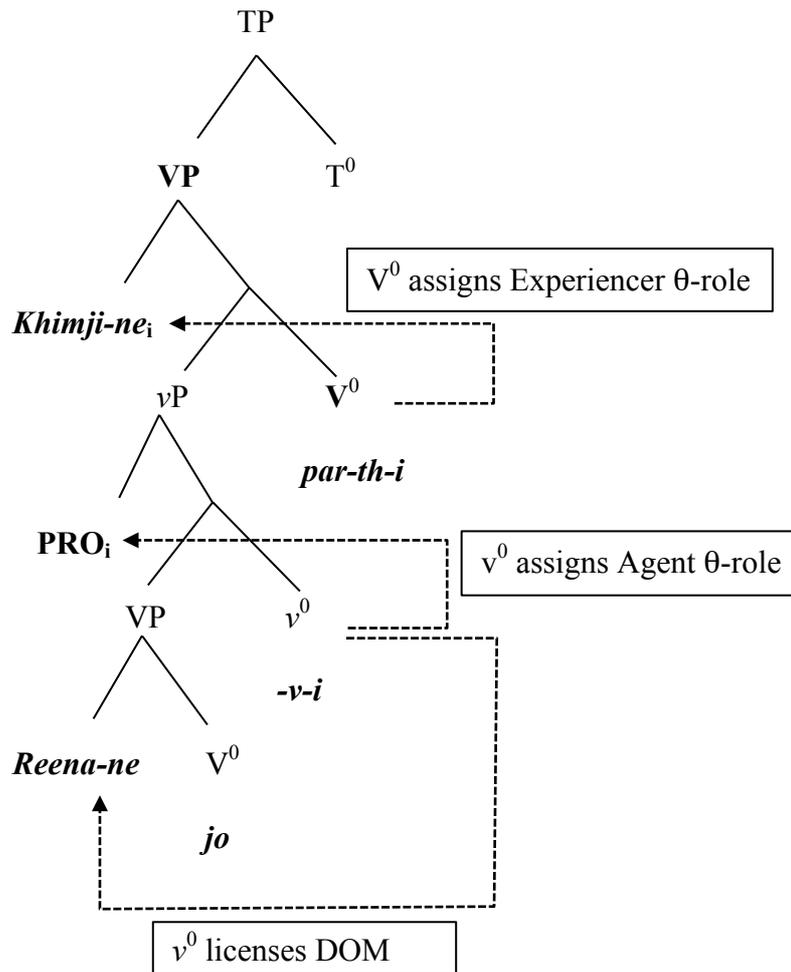
(35) *functional restructuring analysis*



In contrast to (35), if we assume a lexical restructuring analysis, *par* ‘have to’ is analyzed as a matrix verb that selects a *vP* complement, as shown in (36) (at least if the lower verb is transitive). In this case, it would be plausible that the dative marking on the subject is an instance of  $\theta$ -related case (cf. Woolford 2006, Rezac 2008a), due to an *Experiencer*  $\theta$ -role assigned by *par* ‘have to’. Since the embedded verb *jo* ‘see, watch’ would

assign an *Agent*  $\theta$ -role, the construction would be expected to have the properties of a control construction, which we indicate by means of the PRO in (36).

(36) *lexical restructuring analysis*



We now proceed by discussing arguments in favor of the functional restructuring analysis in (35), which treats *par* 'have to' as a modal

auxiliary, i.e. as a functional restructuring predicate as opposed to a (lexical restructuring) main verb.

### 3.3.2 *par* does not Assign a Theta Role

The first argument concerns the fact that *par* ‘have to’ does not seem to assign an *Experiencer* theta role (by virtue of which it would require its dative subject to be animate), even though it appears to assign lexical / inherent dative to its subject; its dative argument can be inanimate, (37a). In this respect, *par* ‘have to’ clearly contrasts with *gam* ‘like’, which does require its dative argument to be an animate *Experiencer*, (37b).

(37) a. *Dablu-ne par-v-u par-y-u*  
container-dat fall-inf-n have.to-prf-n

‘The container had to fall.’

b.# *Dablu-ne par-va gam-y-u*  
container-dat fall-obl.inf like-prf-n

‘The container liked/enjoyed to fall.’

### 3.3.3 *par* does not Combine with Light Verbs

The second argument concerns the fact that main verbs in Kutchi Gujarati can generally be combined with aspectual light verbs, such as *ja* ‘go’, (38b), or *le* ‘take’, (39b), both of which indicate completion of an event; *ja* ‘go’ and *le* ‘take’ are amongst the most productive light verbs in Kutchi Gujarati,

and combine quite freely with a wide range of matrix verbs (cf. Cardona 1965 for Standard Gujarati, which is similar in this respect). In line with Butt (1995) and Ramchand (2008a, 2008b, 2012), we assume that light verbs are *not* auxiliaries, but serve to fine-tune the event structure of a verbal predicate, i.e. they contribute to the core verbal meaning. This is reflected by the fact that light verb constructions do not exhibit agreement on lower verbal elements, as opposed to constructions that involve genuine auxiliaries, cf. section 3.3.5. In a light verb construction, agreement is only reflected on the (highest) light verb, and not on the main verb. The main verb (and potential intermediate light verbs, which we do not discuss here) show up with the uninflected linking morpheme *-i*, as shown in (38b)/(39b).

(38) a. *Khimji par-y-o.*

Khimji fall-prf-m

‘Khimji fell.’

b. *Khimji par-i g-y-o.*

Khimji fall-link<sup>18</sup> go-prf-m

‘Khimji fell down.’

---

<sup>18</sup> Throughout this paper, we gloss *-i* as ‘link’ for ‘linking element’, much in the spirit of the label ‘compound verbs’, which is sometimes used for Indo-Aryan light verb constructions, e.g. Kachru (2006). This linking element is invariable/uninflected. It is attached to any verb root if the verb combines with a light verb (cf. Cardona 1965:134 for Standard Gujarati); e.g. *par* ‘fall’ becomes *pari* when combining with *ja* ‘go’.

- (39) a. *Khimji naach-y-o.*  
 Khimji dance-prf-m  
 ‘Khimji danced.’
- b. *Khimji naach-i li-dh-u.*  
 Khimji dance-link take-prf-n  
 ‘Khimji finished dancing.’

Based on the distribution of these light verbs, we infer that there is a high probability that a main verb in Kutchi Gujarati is compatible with the light verb *ja* ‘go’ or *le* ‘take’ or both. Contrastively, we expect a modal auxiliary to be incompatible with any light verbs, since light verbs only combine with main verbs. The prediction is that a main verb like *gam* ‘like’ should combine with light verbs, whereas *par* ‘have to’ may be unable to do so. This is exactly what we find. (40) shows that *gam* ‘like’ is compatible with both *ja* ‘go’ and *le* ‘take’ (and possibly with other light verbs as well),. Contrastively, *par* ‘have to’ is not compatible with either, (41), and as far as we can tell, *par* ‘have to’ cannot combine with any light verb at all.<sup>19</sup>

- (40) a. *Khimji-ne su-va gam-i g-y-u*  
 Khimji-dat sleep-obl.inf like-link go-prf-n  
 ‘Khimji eventually liked sleeping.’

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<sup>19</sup> The full set of light verbs in Kutchi Gujarati is yet to be determined.

b. *Khimji-ne su-va gam-i li-dh-u*  
 Khimji-dat sleep-obl.inf like-link take-prf-n  
 ‘Khimji stopped liking to sleep.’

(41) a.\* *Khimji-ne su-v-u par-i g-y-u*  
 Khimji-dat sleep-inf-n have.to-link go-prf-n  
 (*intended*: ‘Khimji eventually had to sleep.’)

b.\* *Khimji-ne su-v-u par-i li-dh-u*  
 Khimji-dat sleep-inf-n have.to-link go-prf-n  
 (*intended*: ‘Khimji stopped having to sleep.’)

### 3.3.3 *par* Constructions cannot Passivize

Our third argument for treating *par* ‘have to’ as a modal auxiliary rather than a main verb is based on the observations that the infinitival argument of *gam* ‘like (to)’ can become the subject of a passive construction, as in (42), which is not the case for the VP embedded by *par* ‘have to’ in (43).<sup>20</sup> This follows if the infinitival that expresses the *Subject Matter of Emotion* (cf. Pesetsky 1991, 1996) has the status of a verbal complement in constructions with *gam* ‘like’, (42), whereas no such thing holds in constructions with *par* ‘have to’, (43).

<sup>20</sup> To create the passive, an affix *-(v)a* is adjoined to the verb stem, followed by the linking affix *-i*, and the light verb *ja* ‘go’ is added. The alternation between *-a* and *-va* is phonologically determined (*-va* occurs after a vowel). (See also Cardona 1965:116 for Standard Gujarati.)

(42) Kutchi Gujarati

a. *mane su-va gam-y-u*  
me.dat sleep-obl.inf like-pfv-n  
'I liked to sleep.'

b. *su-va gam-a-i g-y-u*  
sleep-obl.inf like-pass-link go-pfv-n  
'Sleeping/To sleep was liked.'

(43) Kutchi Gujarati

a. *mane su-v-u par-y-u*  
me.dat sleep-inf-n have.to-pfv-n  
'I had to sleep.'

b.\* *su-v-u par-a-i g-y-u*  
sleep-inf-n have.to-pass-link go-pfv-n  
(intended: 'Sleeping/To sleep was necessary.')

### 3.3.4 *par* does not Exhibit Selectional Variability

A fourth (though weaker) argument can be construed from the fact that *par* 'have to' does not exhibit any selectional variability. In contrast to English *need* and *like*, which can take infinitival complements (*I need/like to eat*) as well as DP complements (*I need/like food*), Kutchi Gujarati *par* 'have to' only ever occurs in combination with an 'infinitival' vP, (44a), and never with a noun phrase, (44b). Contrastively, true infinitival complements of

main verbs generally appear to have the distribution of nominals (cf. Cardona 1965 for Standard Gujarati, and Magier 1983a for Marwari), as illustrated in (45a-b); (45) shows that *gam* ‘like’ not only combines with infinitivals (*su-va* ‘to sleep’), but also with noun phrases (*saak* ‘curry’).

(44) a. *mane su-v-u par-y-u*  
 me.dat sleep-inf-n have.to-pfv-n  
 ‘I had to sleep.’ (or: ‘I needed to sleep.’)

b.\* *mane saak par-y-u*  
 me.dat curry have.to-pfv-n  
 (intended: ‘I needed curry.’)

(45) a. *mane su-va gam-y-u*  
 me.dat sleep-obl.inf like-pfv-n  
 ‘I liked to sleep.’

b. *mane saak gam-y-u*  
 me.dat curry.n.sg like-pfv-n  
 ‘I liked the curry.’

### 3.3.5 Agreement with *par* is not Long Distance

‘Long distance agreement’ on *par* ‘have to’ can now be simply viewed as an instance of auxiliary agreement; as we see in (46b) and (46c), the number/gender agreement that we see in the lower part of the clause (and

which we attribute to a *v/Asp* probe) spreads onto auxiliaries and modals. We can treat this as an agreement chain that is established between a functional *Asp / Mod* head (spelled out by the respective auxiliary) and the next lower head in the clausal spine (cf. also Bhatt 2005 for similar assumptions).

(46) a. past habitual

*Reena-ne kutro(-ne) jo-th-o.*

Reena.f-dat dog.m-dom see-ipfv-m

‘Reena used to watch a/the dog.’

b. past progressive

*Reena-ne kutro(-ne) jo-th-o t-o.*

Reena.f-dat dog.m-dom see-ipfv-m aux.prog-m

‘Reena was watching a/the dog.’

c. past progressive with modal

*Reena-ne kutro(-ne) jo-v-o par-th-o t-o.*

Reena.f-dat dog.m-dom see-inf-m have.to-ipfv-m aux.past-m

‘Reena used to have to watch a/the dog.’

### 3.3.6 The Lack of Person Agreement in Modal Constructions

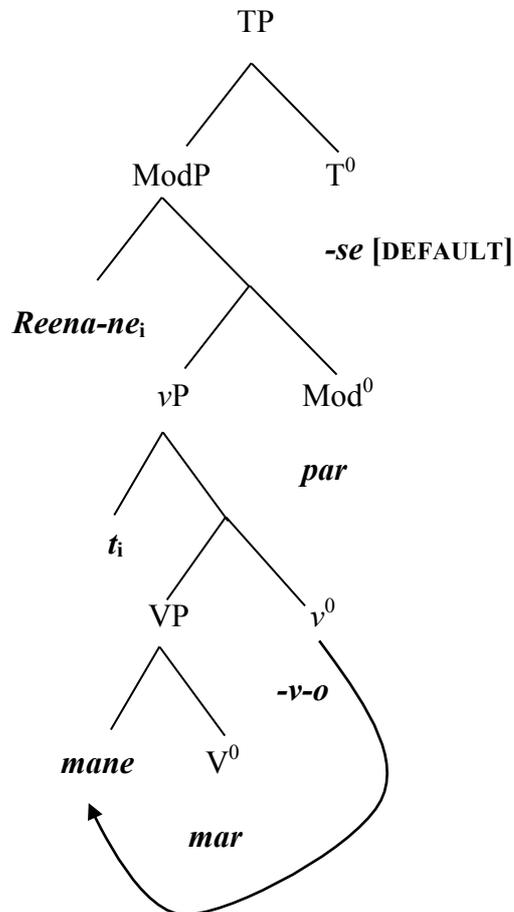
Having argued for a functional restructuring analysis of constructions with *par* ‘have to’, we can now address the second problem outlined at the

beginning of this section, namely the lack of person agreement in such modal constructions, repeated in (47).

- (47) *Reena-ne mane mar-v-o par-se / \*-is.* simple future  
Reena.f-dat me.dom hit-inf-m have.to-fut.def/\*1sg  
'Reena will have to hit me.' (*speaker is male*)

The relevant configuration that we have argued for in the previous sections is given in (48) (omitting *Asp*, which is plausibly located between *Mod* and *T*). Here, the lower probe (which is connected to *v*, see above) agrees with the direct object *mane* 'me', as indicated. However, 'true' direct objects (which we can define as direct objects that can carry differentially object marking) cannot move to SpecTP, and thus cannot trigger person agreement on T, in concurrence with Baker's (2008) proposal, yielding a configuration very much like (27a).

(48) *functional restructuring analysis*



The question now arises why arguments that can carry differential object marking are unavailable for movement to *SpecTP*. The explanation seems to be as follows. We have discussed above (in section 3.3.1) that differential object marking appears to be connected to abstract (accusative) case licensing by *v*. If we assume that movement to *SpecTP* in Kutchi Gujarati is parasitic on abstract nominative/absolute case licensing by *T*, we derive that an accusative-licensed object cannot move to *SpecTP* and thus cannot trigger person agreement on *T*.

#### 4. Conclusion

In this paper, we have explored three types of verbal elements in Kutchi Gujarati: Canonical transitive predicates such as *mar* ‘hit’, the psych verb *gam* ‘like’ and the modal *par* ‘have to’. Focusing on the agreement patterns in the respective constructions, we argued that  $\phi$ -agreement in Kutchi Gujarati involves two probes, a number / gender probe in the *v/Asp* domain, which always agrees with the transitive object (or intransitive subject), and a number / person probe in *T*, which always agrees with the (transitive / intransitive) subject. We have shown that the higher  $\phi$ -probe in *T* requires a local relation with the intended agreement trigger; this is possible in the case of psych verbs in spite of their unaccusative structure (as long as the non-case-marked argument moves to *SpecTP*), but it is not possible in the case of modal constructions with *par* ‘have to’, since transitive direct objects are barred from moving to *SpecTP*.

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