Combinig CPs by Restrict: evidence from Buryat

INTRODUCTION In this paper I argue that the proposal made in (Kratzer 2006) is the right analysis for non-nominalized CPs in Buryat. Attitude verbs are decomposed: the set of doxastic alternatives comes not from attitude verbs, but from CPs with which they combine by Restrict (Chung & Ladusaw 2004). According to this analysis, attitude predicates take internal arguments referring to the content of the attitude, but no external argument. CP clauses are predicates of content individuals, and when they combine with attitude verbs, they do not saturate, but just modify their content arguments, which undergo existential closure later in the derivation, (1)-(3) adapted from (Kratzer 2006: 3).

(1) $[\![\text{believes}]\!]^{w,g} = \lambda x \lambda e.\text{believe}(x)(e)(w)$.

(2) $[\![\text{that there are ghosts}]\!]^{w,g} = \lambda x \forall w'[\text{compatible}(x)(w') \rightarrow \exists y \text{ ghosts}(y)(w')]$

(3) $[\![\text{believes that there are ghosts}]\!]^{w,g} = \lambda x \lambda e.\text{believe}(x)(e)(w)$ & $\forall w'$
    $[\text{compatible}(x)(w') \rightarrow \exists y \text{ ghosts}(y)(w')]$

I argue that this way of composition is necessary in order to account for some Buryat data.

ARGUMENT#1: ADJUNCT MORPHOLOGY The first piece of evidence comes from morphology. The complementizer -*gə* in Buryat, which is a grammaticalized verb of speech, can either be nominalized and bear accusative case morphology, (4a), or bear the converbial morphology (-*žə*, (4b)) that we independently see on sentential adjuncts, (5).

(4) a. darima badma üstər   nom unš-a: gə:-**š-i:jə**   mədə-nə
       Darima Badma yesterday book read-PST say-**PART-ACC** know-PRS

   b. darima badma üstər   nom unš-a: gə:-**žə**   mədə-nə
       Darima Badma yesterday book read-PST say-**CONV** know-PRS

      'Darima knows that Badma read a book yesterday.'

(5) ojuna üxibü: türə-**žə**   badma əsəgə bolo-bo
    Ojuna child   give.birth-**CONV** Badma father become

    'When Ojuna gave birth to a child, Badma became a father.'

If morphology reflects how these clauses are constructed, then non-nominalized CPs should be modifiers, which is expected if they are combined by Restrict. In addition, when a non-nominalized CP is substituted by a proform, it is substituted by the same proform that is used for substituting for sentential adjuncts (to be shown in the full version of the paper).

ARGUMENT#2: CPs COMBINE WITH NOUNS Non-nominalized CPs in Buryat, unlike nominalized ones, can combine with nouns that do not take arguments. This is expected under the view that CPs are properties of individuals (but not under the standard view): CPs can combine with nouns via Predicate Modification (Kratzer 2006, Moulton 2015).

(6) badma sajana bul-ja: gə-**žə**   sonosxol du:l-a:
    Badma Sajana win-PST say-**CONV** rumour   hear-PST

    'Badma heard a rumour that Sajana won.'

I show that the analysis in (Moulton 2015), where CPs are treated as properties, but are not combined via Restrict, cannot hold for Buryat. Moulton(2015) claims that CPs that are not saturating evoke a type mismatch in the complement position of verbs, which leads to two obligatory movements (CP movement + remnant movement of AspP). I argue that while Buryat non-nominalized CPs are not saturating, there is no reason to believe that they undergo any obligatory movement. Thus, a principle of composition such as Restrict is required in order for such CPs to combine with verbs.

Argument#3: more than one CP per clause The analysis in which CPs are combined via Restrict makes a prediction: Restrict could in principle apply several times, restricting the content argument of an attitude verb more than once before the application of existential closure. I show that this prediction is borne out for Buryat: more than one CP is possible per clause, if both specify the same content individual, as in (7).

(7) ojuna [xən nəgən xoto so: oš-o: gə:-**žə**]   [badma ulan-udə so: oš-o:
     Ojuna someone   city to go-PST say-CONV Badma Ulan-Ude to go-PST

     gə:-**žə**]   han-a:
     say-CONV think

     'lit. Ojuna thought that someone went to the city that Badma went to the city.'

In (7) the first CP restricts the internal argument of *think* to individuals whose content is someone's going to the city, and the second CP restricts it even more to the individuals whose content is Badma's going to Ulan-Ude. It is not obvious how theories that do not have Restrict as a rule that can combine CPs with verbs would account for (7).

Argument#4: CPs -vs- nominalizations with non-factive verbs Additional argument for the Restrict analysis of Buryat non-nominalized CPs comes from the following phenomenon: some non-factive verbs of Buryat presuppose the existence of their complement when it is a nominal or a nominalized clause. The striking case of this is in (8): *think* starts meaning *remember* (cf. English *think of*, which displays similiar behavior). While nominalized CPs behave like other nominals with this respect, non-nominalized CPs never display the existence presupposition with these verbs, (9).

(8) dugar   mi:sgəi-n   zagaha ədi-h-i:jə-n'   /mi:sgəi-jə   han-a:
     Dugar.NOM kitten-GEN fish   eat-PART-ACC-3SG /kitten-ACC think-PST

     'Dugar ***thought /remembered** that the kitten ate the fish /the kitten.'

(9) dugar   mi:sgəi   zagaha əd-jə: gəžə   han-a:
     Dugar.NOM kitten.NOM fish   eat-PST COMP think-PST

     'Dugar **thought /*remembered** that the kitten ate the fish.'

I show that the decomposition analysis of attitude predicates, together with treating some non-factive verbs as verbs of use (Diesing 1992), can account for the data as in (8)-(9). Using diagnostics in (Diesing 1992), I argue that some attitude predicates of Buryat presuppose existence of their theme arguments similarly to verbs of use like *read*. Nominals and nominalized clauses are real internal arguments not only syntactically (complements), but also semantically (combine via FA), so when they occur as theme arguments of these verbs, their existence is presupposed. CPs, on the other hand, while syntactically can be complements, are not semantic arguments, but are just modifiers that combine via Restrict. Since a CP just names a property of the content individual, no similiar presupposition arises (technical implementation of this idea will be presented in the full version of the paper). I show that the emergence of this presupposition is clearly connected to internal argument status, and not just to the nominal status of the complement (as argued for English in (Kastner 2015)). Non-factive verbs which do not take internal arguments in accusative case can never develop this presupposition with nominalized clauses.

Conclusion I provide four different arguments that CPs in Buryat combine with verbs via Restrict. This implies that the typology of CPs sketched in (Moulton 2015) cannot be correct. Whether CPs saturate the argument slot of a verb or not is not connected to movement: it is possible for a CP to denote a property and stay in situ.