Argument Introducing Pluractionals: An Investigation of Kyrgyz and Kazakh Assistives

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1 Introduction

How verbs get associated with their arguments has been a long-standing research question in linguistics. According to the traditional view, verbs denote relations between sets of individuals (their arguments), thus verbal denotations make direct reference to their arguments. The Neo-Davidsonian tradition argues against this position, maintaining that verbs denote properties of events (following, in part, Davidson 1967), and arguments are associated with verbs via secondary predicates called thematic roles (Carlson 1984, Parsons 1990, Dowty 1991, Krifka 1992). This stance on the logical or mental representation of verb meaning was shown to be extendable to syntactic verbal representations by Kratzer 1996, building on morphological and syntactic evidence put forth by Marantz 1984. Kratzer (1996) proposed that the external, for instance Agent, argument is not part of the denotation of the verb, rather it is added to the syntax by the Voice projection, a claim, which has since been supported by abundant empirical and theoretical evidence (Pylkkänen 2008, Harley 2013, Harley 2017, Legate 2014, Alexiadou et al. 2015, J. Wood 2015, Nie 2020, inter alia). This paper investigates a construction descriptively referred to as "assistives," found in several Turkic languages[1] focusing on the closely related languages Kyrgyz and Kazakh[2], and argues that Voice is not the only syntactic projection that can introduce Agents, thus contributing to our understanding of argument introducing heads (Pylkkänen 2008, Harley 2013, Legate 2014, J. Wood and Marantz 2017).

The assistive exponent is /(I)ʃ/, and, as shown in (1), it attaches to the verb stem. The assistive construction contains an external argument (*men* 'I' in (1)), which I call the "assister," and a

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[1]To my knowledge there has been very little cross-Turkic descriptive work done on these constructions, consequently it is hard to know exactly which Turkic languages have assistives. But it seems clear to me that Turkic languages other than Kyrgyz and Kazakh also have this construction. For instance, a Turkmen consultant informs me that Turkmen (Daşoğuz dialect) also has this construction.

[2]The Kyrgyz and Kazakh data come from the author's elicitation with one Kyrgyz (from Bishkek) and one Kazakh speaker (from Almaty-area). The examples have been elicited over one and a half years during weekly elicitation sessions. The examples presented in the paper have been double (triple and quadruple-checked), as we kept going back to the examples over this time period. The paper only presents Kyrgyz data, Appendix-A contains the equivalent Kazakh sentences. I found no difference between the Kyrgyz and Kazakh data with respect to the assistives, so every claim made about Kyrgyz extends to Kazakh assistives as well. The only difference between the two languages is that Kazakh does not have the plural agreement marker that Kyrgyz has, discussed in detail in 5.1.

dative-marked noun phrase (*Azim* in (1)), the "assistee." The subject agreement suffix, marked on the predicate, tracks the assister; it cannot index summative agreement with the assister and the assistee (*-k* '1pl'), or agreement with the assistee (*-Ø* '3sg'). The assistive is responsible for introducing the dative-marked assistee, which can be shown to be an argument (see §2.1).

(1) Men Azim-ge ʧurka-**ʃ**-tɯ-m /*-k /*Ø.
I Azim-DAT run-**ASST**-PST-1SG /-1PL /-3SG
'I helped Azim run.'

There has been very little descriptive work done on assistives, setting aside short mentions in Kyrgyz and Kazakh descriptive grammars (e.g., Abduvaliev 2015), the most extensive work is Nedjalkov 2003, where, to the best of my knowledge, the term "assistive" originates from, along with the English translation[3] with the verb "help." This approach suggests that the assistive denotes a relation between a *helping* event and the base event. This paper argues against this view, providing extensive evidence that the assistive denotes event plurality.

Consider the same assistive construction in the scenarios presented in (2) and (3): if the assistive indeed denotes a *helping* event, it would be predicted to be felicitous in the contexts (2a) through (2d), where the English bi-clausal construction with *help* can be felicitously uttered. This is, however, not borne out, the assistive is not compatible with these contexts. The assistive is only appropriate in a situation such as (3), where both the assister and the assistee perform the base event in such a way that they divide the internal argument (the path argument *5 km*), and perform subevents of the base event on unique argument parts (to be discussed in detail in 4). Thus assistives are a type of event pluralizers, or pluractionals (Cusic 1981, Lasersohn 2013, Garrett 2001, E. J. Wood 2007, Henderson 2012).

(2) a. I am an athletics coach and I explain Azim what is the best way to run.

b. I show Azim how to run.

c. I remove obstacles from Azim's way to allow him to run.

d. I keep encouraging Azim during his run, telling him not to give up.
#Men Azim-ge ʧurka-**ʃ**-tɯ-m.
I Azim-DAT run-**ASST**-PST-1SG
Intended: 'I helped Azim run.'

(3) Azim had to run 5 km. There was an option that I could run some of the distance for him, so I ran 2 km out of Azim's 5 km, and Azim ran 3 km.
Men Azim-ge ʧurka-**ʃ**-tɯ-m.
I Azim-DAT run-**ASST**-PST-1SG
∼'Me and Azim ran.'[4]

The main claim this paper puts forth is that the assistive denotes two sets of events, and the Agents of these two event sets are the assister and the assistee. One Agent, the assister, is added by Voice, but the other Agent, the assistee, is introduced by the assistive-pluractional.

[3]This translation is not very intuitive for my consultants either, who, at the outset of this project, proposed translations such as 'Me and Azim ran' or 'Me and Azim ran together' for (1).

[4]This English translation also falls short from capturing the assistive's denotation (as discussed in §4). Lacking a more apt English equivalent, I continue translating these constructions with 'help' in the paper.

The paper appeals to syncretic uses of the exponent /(I)ʃ/ to support the two main components of the proposed analysis: 1. that the assistive is a type of pluractional, and 2. that some pluractionals can introduce Agents. First, consider (4), where the exponent /(I)ʃ/ realizes the plural agreement feature. As §5 shows in detail, the plural agreement /(I)ʃ/'s distribution is different from the assistive's and the reciprocal's (in (5)), and it can follow both the assistive and the reciprocal.

(4) Kanɯkej ɕana Azim ʧurka-**ʃ**-tɯ-Ø.
Kanykei and Azim run-**PL**-PST-3
'Kanykei and Azim ran.'

The syncretism between the assistive /(I)ʃ/ and the plural agreement /(I)ʃ/ can be accounted for within a realizational grammatical theory, such as Distributed Morphology (Halle and Marantz 1993), where syntactic representations do not contain phonological material, known as Separation Hypothesis (Beard 1995). When the output of the syntactic component is sent to the PF-component of grammar, it is subject to morphological operations. Vocabulary Items (VIs), which are pairings between features and a phonological exponent, are inserted subsequently to certain types of morphological operations (Embick and Noyer 2001, Arregi and Nevins 2012) abiding the general principles (Subset Principle) of Vocabulary Insertion (Halle and Marantz 1993). Under this theory of grammar, syncretism arises when a VI bears a feature that is compatible with multiple terminals in different syntactic configurations, and there is no VI that has more matching features with the features specified on these terminals.

This paper treats the Vocabulary Item /(I)ʃ/ to be specified for [–singular], which allows it to be inserted into a terminal that has the [–singular] feature. (4) is a clear instance of this, as /(I)ʃ/ spells out the [–singular] number feature. The upshot of this is that the assistive /(I)ʃ/ in (1) can also be accounted for this way, throwing additional support behind the claim that assistives are a type of pluralizers (event pluralizers, to be precise).

The Vocabulary Item /(I)ʃ/ also spells out a node descriptively referred to as the "reciprocal" (Nedjalkov 2003, Nedjalkov 2006), shown in (5). These Kyrgyz-style verbal reciprocals are probably more commonly encountered cross-linguistically than assistives (Dimitriadis 2004, Bruening 2006, Faller 2007, Moyse-Faurie et al. 2008, Yamada 2010, Siloni 2012, inter alia). The reciprocal introduces a comitative noun phrase (*Azim menen* 'with Azim'), which can be shown to be an Agent argument (§5.2). Following Faller (2007), I advocate for a decomposition analysis of verbal reciprocals, whereby they are derived by distinct operations, such as plurality (or more specifically, pluractionality), reflexivity, and distinctness condition on co-arguments. Thus, this approach treats verbal reciprocals on par with periphrastic reciprocals, which are widely regarded as decomposable into more general, independently attested operations (Heim et al. 1991, Sternefeld 1998, Beck 2001). The exponent /(I)ʃ/ in verbal reciprocals is treated as the spell-out of pluractional head, which can introduce an Agent argument, the instrumental-marked noun phrase (*Azim menen* 'with Azim' in (5)). Thus, verbal reciprocals provide additional evidence that certain pluractionals can introduce Agent arguments.

(5) Men Azim menen muʃta-**ʃ**-tɯ-m.
I Azim INSTR punch-**REC**-PST-1SG
'Me and Azim punched each other.'

The paper is organized as follows: §2 shows that the assistee is an argument (§2.1), then presents evidence why it cannot be introduced by the commonly discussed argument introducing heads, such as Causative (§2.2), Applicative (§2.3), or Voice (§2.4). §3 introduces the core descriptive observations about assistives. §4 interprets these descriptive observations, and proposes that assistives are

a type of pluractionals, which can introduce Agents. §5.2 extends this analysis to reciprocals. §5.1 investigates the plural agreement use of the Vocabulary Item /(I)ʃ/ in support of the "pluralizer" analysis for other uses of the exponent /(I)ʃ/. §6 concludes.

2 Introducing the assistee

After demonstrating that the assistee is an argument (2.1), this section explores whether the assistive /(I)ʃ/ can combine with, or be the spell-out of any of the well-known argument introducing heads, such as the causative (2.2), applicative (2.3) or Voice (2.4) to introduce the dative-marked argument (the assistee). The data presented in these subsections reveal that the assistee does not pattern with causees or applied arguments, furthermore standard Voice-diagnostics (modification by instrumental, comitative and agent-oriented adverbs) indicate that the assistive only has a single Voice projection, the one that introduces the assister. This leads to the conclusion that the assistee is an argument not introduced by either causative, applicative or Voice. The head responsible for introducing the assistee is the topic of §4. §2.5 offers a short overview of the assistive's syntactic position in the verb phrase.

2.1 The assistee is an argument

The first task is to show that the dative-marked assistee is an argument. To demonstrate this, I use the omission test, cross-sentential anaphora licensing, and clefting. These diagnostics clearly demonstrate that the assistee is an argument.

The dative assistee can only be omitted if it is recoverable from the context. That is, assistees pattern with arguments, which, when dropped, can be recovered from the context, and contrast with adjuncts, whose reference is not recoverable upon omission (Rákosi 2003, Rákosi 2008, Siloni 2012, inter alia). In (6) the dropped assistee is not felicitous in an out-of-the-blue context, suggesting that the assistee is an argument. The omitted assistee cannot have an existential interpretation ('someone') irrespective of the context. The assistive with omitted assistee is only felicitous when the context provides an antecedent for the *pro* standing in for the assistee, as in (7).

(6) A: What did you do yesterday?
B:
#Yj-dy tazala-**ʃ**-tɯ-m.
house-ACC clean-**ASST**-PST-1SG
Intended: 'I helped **someone** clean the house.'
Only available: 'I helped **him/her/them** clean the house.'

(7) A: I helped my mother$_i$ yesterday.
B: What did you do? / How did you help her?
A: **pro**$_i$ (Yj-dy) tazala-**ʃ**-tɯ-m.
pro$_i$ (house-ACC) clean-**ASST**-PST-1SG
'I helped **her**$_i$ clean (the house).'

The argument status of the assistee can be further supported by cross-sentential anaphora licensing. Implicit arguments can serve as antecedents for pronominal elements in the following clause, in contrast to implicit adjuncts, which cannot be recovered for binding purposes. The assistee is omitted in (8), but the implicit assistee can serve as a binder for the *pro*-possessor in the following sentence, demonstrating that the assistee behaves as an argument.

(8) A: I helped my mother$_i$ yesterday.
B: What did you do? / How did you help her?
A:
pro$_i$ (Yj-dy) tazala-ʃ-tɯ-m. **pro**$_i$ Kœp iʃ-i bar eken.
pro$_i$ (house-ACC) clean-**ASST**-PST-1SG **pro**$_i$ lot work-POSS.3 COP COP.EVID.3SG
'I helped (**her**$_i$) clean (the house). (**She**$_i$) had a lot to do.'

Additional evidence for the argumenthood of the assistee comes from clefting. Gribanova (2013) observes that only argument pivots are allowed in Uzbek cleft constructions, whereas adjunct pivots are banned. I follow Akkuş 2021a: 234-236, who uses clefting as a diagnostic for argumenthood. The pivot is indicated in bold in the following examples, the cleft clause, shown in square brackets, is a headless relative, and it precedes the pivot. The pivot's extraction site from the cleft clause is indicated by "Ø". Examples (9a)-(9b) illustrate that clefting is only available if the pivot is an argument in the cleft clause: in (9a), the pivot, *Bektur*, corresponds to the subject in the cleft clause, whereas in (9b) the pivot is the indirect object. Other types of argument pivots (e.g., direct object, dative causee pivots) pattern the same way.

(9) a. [Ø$_i$ Yj-dy tazala-gan] (kiʃi) **Bektur**$_i$ bol-gon.
[Ø$_i$ house-ACC clean-NF] (person) **Bektur**$_i$ COP-PRF.3SG
'It was **Bektur** [who cleaned the house].'

b. [Kanɯkej Ø$_i$ belek ber-gen] (kiʃi) **Bektur**$_i$ bol-gon.
[Kanykei Ø$_i$ gift give-NF] (person) **Bektur**$_i$ COP-PRF.3SG
'It was **Bektur** [to whom Kanykei gave a gift].'

In contrast, adjunct pivots are disallowed: the pivot in (10a) corresponds to the by-phrase in the passive construction, and in (10b) the pivot is a temporal adjunct 'yesterday'. Because the pivots in (10a) and (10b) correspond to an adjunct position in the cleft clause, these sentences are ill-formed.

(10) a. *[Ø$_i$ Yj-dy tazala-n-gan] (kiʃi) **Bektur**$_i$ bol-gon.
[Ø$_i$ house-ACC clean-PASS-NF] (person) **Bektur**$_i$ COP-PRF.3SG
Intended: 'It was **Bektur** [by whom the house was cleaned].'

b. *[Kanɯkej Ø$_i$ meni ʧakɯr-gan] (ubakɯt) **keʧee**$_i$ bol-gon.
[Kanykei Ø$_i$ I.ACC call-NF] (time) **yesterday**$_i$ COP-PRF.3SG
Intended: 'It was **yesterday** [when Kanykei called me].'

The prediction is that if the assistee is an argument, it should be available as a pivot for clefting. This is borne out: (11) illustrates that the assistee can serve as a pivot in clefting constructions. This demonstrates that the assistee is an argument and not an adjunct.

(11) [Kanɯkej Ø$_i$ yj-dy tazala-**ʃ**-kan] (kiʃi) **Bektur**$_i$ bol-gon.
[Kanykei Ø$_i$ house-ACC clean-**ASST**-NF] (person) **Bektur**$_i$ COP-PRF.3SG
'It was **Bektur** [to whom Kanykei helped clean the house].'

Having established that the dative assistee is an argument,[5] we turn to the question of its introducing head. At the outset, it would appear that there are several potential candidates: the

[5]The assistee is not an intervenor for A-movement in examples such as (ia), but this does not mean that it is not an argument. In the language, dative arguments do not act as intervenors for A-movement in general, as illustrated

similarity in meaning between sociative causatives and assistives might suggest that assistives are a type of causative (§2.2). Alternatively, the assistee could be an applied argument introduced by Appl (§2.3), or Voice (§2.4). §2.2-§2.4 show that none of these fit the assistives.

2.2 The assistee is not introduced by Cause

As causatives are known to have assistive (i.e., helping) meaning extensions (see especially in the typological literature, such as Kulikov 1993, Dixon 2000, Shibatani and Pardeshi 2002, but also Lyutikova and Tatevosov 2018, Myler and Mali 2021), there is a possibility that the assistive is a type of causative. However, the assistive does not contain a *causing* event (§2.2.1), and when the assistive is followed by the causative, the assistee is dative marked – a case-marking pattern not allowed for causatives of causatives (§2.2.2).

2.2.1 No *causing* event in the assistive

According to Pylkkänen (2008), causatives universally introduce a *causing* event which combines with the base event. This also holds for causatives with assistive meaning component.[6] An illustrative example comes from Tatar (Turkic), where "sociative causatives" are marked by two causative morphemes, shown in (12). In (12), there is a *causing* event ranging over the *running* event (Lyutikova and Tatevosov 2018). The external argument, *trainer* is the causer, but at the same time it is also interpreted as the helper of the assistee, *Marat*.

(12) Trener Marat-nɤ jeger-t-ter-de.
trainer Marart-ACC run-CAUS-CAUS-PST.3SG
'The trainer made (and helped) Marat run.'
(TATAR, Lyutikova and Tatevosov 2018: 4)

Kyrgyz assistives do not denote a *causing* event, thus they fail to satisfy Pylkkänen's definition of causativity. Sentence (13) demonstrates that the assistive cannot be used in a context that requires the presence of a *causing* event to bring about the base event. Even if we add some kind of helping meaning component ('She offered to help her'), as in the case of the Tatar sociative causative in (12), the assistive construction remains infelicitous.

(13) Begimjan had Aselia clean the house, but Begimjan also offered to help Aselia.
#Begimʤan Aselja-ga yj-dy tazala-ʃ-tɯ.
Begimjan Aselia-DAT house-ACC clean-**ASST**-PST.3SG
Intended: 'Begimjan made Aselia clean the house (and she also helped Aselia).'
Only available: 'Begimjan helped Aselia clean the house.'

by (ib), where the dative-causee, which I take to be an argument, does not prevent the object 'the house' from advancing to subject position (for similar Turkish data see Legate et al. 2020, Akkuş 2021a).

(i) a. Yj Bektur-ga tazala-**ʃ-ɯl**-dɯ.
house Bektur-DAT clean-**ASST-PASS**-PST.3SG
'The house was such that someone helped Bektur clean it.'

b. Yj Bektur-ga tazala-**t-ɯl**-dɯ.
house Bektur-DAT clean-**CAUS-PASS**-PST.3SG
'The house was such that someone had Bektur clean it.'

[6]Note that "sociative causatives" do not form a uniform class, see Myler and Mali (2021) pointing out differences between isiXhosa (Bantu) and Tatar (Turkic) sociative causatives.

2.2.2 The causative of assistives

Kyrgyz allows the iteration of causative suffixes, illustrated in (14), but (probably) not the iteration of causative events. It is an open question how the meaning of the "double" causative is different from the "single" causative. My preliminary elicitations indicate that the double causative expresses either forceful causation by a person with authority, or allowing the causee to perform the action. Similar facts have been reported for Turkish in Key 2013.

(14) Begimʤan Aselja-ga yj-dy tazala-**t-tɯr**-dɯ.
Begimjan Aselia-DAT house-ACC clean-**CAUS-CAUS**-PST.3SG
Yes: 'Begimjan had Aselia clean the house.'
Not: *'Begimjan had someone make Aselia clean the house.'

Crucially, a second causee marked with either the accusative or the dative, cannot be inserted in the "double" causative construction. My consultants straightforwardly reject sentences such as (15), with either a dative or accusative-marked second causee.

(15) *Begimʤan **Dʒanara-ga/nɯ** Aselja-ga yj-dy tazala-**t-tɯr**-dɯ.
Begimjan **Janara-DAT/ACC** Aselia-DAT house-ACC clean-**CAUS-CAUS**-PST.3SG
Intended: 'Begimjan had Janara make Aselia clean the house.'

Now consider (16), which is marginally available for speakers. I should preface the discussion with the caveat that the judgements were very difficult for such sentences, speakers went back and forth on their judgements. Nevertheless, (16) was judged to be much better than the double causative with two causees in (15), which was clearly ungrammatical. In (16), the assistive is embedded by the causative, and both the causee (*Janara*) and the assistee (*Aselia*) are overt. The causee, *Janara*, is in the accusative, dative marking results in ill-formedness.[7] This shows that assistives do not pattern with causatives when embedded under another causative, suggesting that assistives are not causatives.

(16)??Begimʤan **Dʒanara-nɯ/*ga** Aselja-ga yj-dy tazala-**ʃ-tɯr**-dɯ.
Begimjan **Janara-ACC/*DAT** Aselia-DAT house-ACC clean-**ASST-CAUS**-PST.3SG
'Begimjan had Janara help Aselia clean the house.'

[7]Constructions such as (16) leave a lot of unanswered questions that this paper cannot attempt to account for: the assignment of accusative to the causee in (16) is one of them. As these sentences are only marginally acceptable (and as this is not the focus of the paper), I do not attempt to propose an explanation.

Also, the causative of the assistive can be passivized, again, with marginal acceptability, shown in (ia). What is noteworthy regarding this construction is that only the direct object can advance to the subject position, the dative-assistee and the accusative-marked causee cannot. Dative arguments cannot become subjects in passive clauses in the language, so it does not come as a surprise that the dative assistee cannot advance to subject position here either (for similar Turkish data, with some speaker variation, see Legate et al. 2020, Akkuş 2021a). However, accusative causees in "regular" causatives can become subjects when passivized. This is not available for the passive of the causativized assistive in (ib).

(i) a. ??Tamak Aselja-ga bɯʃɯr-**ɯʃ-tɯr-ɯl**-dɯ.
food Aselia-DAT cook-**ASST-CAUS-PASS**-PST.3SG
'The food was such that someone had someone else help Aselia make it.'

b. *Dʒanara Aselja-ga tamak bɯʃɯr-**ɯʃ-tɯr-ɯl**-dɯ.
Janara Aselia-DAT food cook-**ASST-CAUS-PASS**-PST.3SG
Intended: 'Janara was made to help Aselia cook food.'

This section showed that the assistive does not satisfy the definition of causatives (Pylkkänen 2008) and that it patterns differently from causatives. Consequently the assistive cannot be considered a causative, and the assistee cannot be introduced by Cause.

2.3 The assistee is not introduced by Appl

There is also the possibility that the assistee is an applied argument given the assistee's beneficiary-like semantics. Kyrgyz has high and low applicatives, which do not allow applicative iteration. I argue that the assistive is not an applicative because it can co-occur with applicatives.

To my knowledge, the applicative in Kyrgyz has not been the topic of any study. Kyrgyz has a quite different applicative system than Turkish, a better studied Turkic language in this respect (see e.g., Tonyalı 2015). In Kyrgyz, I distinguish low and high applicatives following McGinnis 2001 and Pylkkänen 2008: low applicatives denote a transfer of possession between two individuals, whereas high applicatives express a relation between an individual and an event. The low applicative has a zero exponent following the verbal stem, and the applied argument is in the dative, shown in (17).[8]

(17) Begimʤan Aselja-ga tamak ʤasa-**Ø**-dɯ.
Begimjan Aselia-DAT food make-**L.APPL**-PST.3SG
'Begimjan made food for Aselia.'

The high applicatives exponent is /(I)p ber/, as in (18b), and the applied argument is dative-marked. (18a) demonstrates that the phonologically zero applicative exponent cannot spell out the high applicative.

(18) a. *Begimʤan Aselja-ga yj bojo-**Ø**-du.
Begimjan Aselia-DAT house paint-**L.APPL**-PST.3SG
Intended: 'Begimjan painted the house for Aselia.'

b. Begimʤan Aselja-ga yj bojo-**p ber**-di.
Begimjan Aselia-DAT house paint-**H.APPL**-PST.3SG
'Begimjan painted the house for Aselia.'

Cross-linguistically it is extremely common for languages that have both low and high applicatives to disallow applicative iteration, i.e., the co-occurrence of low and high applicatives (Marantz 1993, Peterson 2007, Nie 2020). A possible explanation for this rather surprising restriction comes from Nie (2020): she accounts for this robust cross-linguistic pattern by suggesting that in these non-recursive languages applicatives heads cannot license applied arguments. Voice (under T) can license the external argument and an additional c-commended argument. As applicatives are not licensers, Voice can license one argument introduced by high or low Appl, but not both. Kyrgyz is a language that does not allow applicative iteration. (19a) demonstrates that two applied arguments are ill-formed within the same clause. One might question whether the reason for ungrammaticality is the double dative marking, which is, indeed, dispreferred in the language. However, there is evidence that this is not the reason. If one of the applied arguments is left unpronounced, as in

[8]The high applicative exponent, /(I)p ber/, can also be used in this context, given in (i). It requires further investigation to determine if there is any difference between (17) and (i), and if so, exactly what the difference is.
(i) Begimʤan Aselja-ga tamak ʤasa-**p ber**-di.
Begimjan Aselia-DAT food make-**H.APPL**-PST.3SG
'Begimjan made food for Aselia.'

(19b), the dative-clash is avoided and the construction could, conceivably, be acceptable with the "double applicative" interpretation. Yet this is not the case. The only available interpretation of the phonological form in (19b) is with a single applicative, given in (19c).

(19) a. *Begimʤan Dʒanara-ga Aselja-ga tamak ʤasa-**Ø-p ber**-di.
Begimjan Janara-DAT Aselia-DAT food make-**L.APPL-H.APPL**-PST.3SG
Intended: 'Begimjan made food for Aselia, for Janara.'

b. *Begimʤan pro Aselja-ga tamak ʤasa-**Ø-p ber**-di.
Begimjan pro Aselia-DAT food make-**L.APPL-H.APPL**-PST.3SG
Intended: 'Begimjan made food for Aselia, for her/him.'

c. Begimʤan Aselja-ga tamak ʤasa-**p ber**-di.
Begimjan Aselia-DAT food make-**H.APPL**-PST.3SG
'Begimjan made food for Aselia.'

If the assistive construction contains an applicative head, the prediction is that the assistive cannot combine with other applicatives, because, if we go with the analysis in Nie (2020), Voice can only license one of the applied arguments. This is, however, not borne out. In the perfectly well-formed (20a), the high applicative embeds the assistive. My consultants find that the assistive-high applicative construction is much better if one of the arguments is left implicit to avoid two consecutive dative-marked DPs. This said, they reluctantly accept (20b) with the overt applied argument and assistee, adding that "there is no other way to say it [in a given context]."

(20) a. Begimʤan Aselja$_i$-ga pro$_i$ yj-dy tazala-**ʃ-ɯp ber**-di.
Begimjan Aselia$_i$-DAT pro$_i$ house-ACC clean-**ASST-H.APPL**-PST.3SG
'Begimjan helped Aselia$_i$ clean the house for her$_i$'.[9]

b.??Begimʤan Aselja-ga Dʒanara-ga yj-dy tazala-**ʃ-ɯp ber**-di.
Begimjan Aselia-DAT Janara-DAT house-ACC clean-**ASST-H.APPL**-PST.3SG
'Begimjan helped Janara clean the house for Aselia.'

In conclusion, the assistive does not contain an applicative head, because, in a language where applicative iteration is otherwise banned, the assistive can co-occur with the applicative. It follows that the dative-marked assistee is not an applied argument.[10]

2.4 The assistee is not introduced by Voice

This section looks at assistive constructions when modified with Voice-selecting adjuncts, such as instrumental and comitative phrases, agent-oriented and mental-attitude adverbs (Bruening

[9]Other interpretations are possible, although much harder to get. The unpronounced pronoun, which can either be interpreted as the the applied argument (as in (ia)) or as the assistee (in (ib)), does not necessarily have to be co-referent with the overt DP.

(i) a. Begimʤan pro$_j$ Aselja$_i$-ga yj-dy tazala-**ʃ-ɯp ber**-di.
Begimjan pro$_j$ Aselia$_i$-DAT house-ACC clean-**ASST-H.APPL**-PST.3SG
'Begimjan helped Aselia$_i$ clean the house for him/her$_j$'.

b. Begimʤan Aselja$_i$-ga pro$_j$ yj-dy tazala-**ʃ-ɯp ber**-di.
Begimjan Aselia$_i$-DAT pro$_j$ house-ACC clean-**ASST-H.APPL**-PST.3SG
'Begimjan helped him/her$_j$ clean the house for Aselia$_i$.'

[10]3.3 offers additional evidence against analyzing assistees as applied arguments by showing that the assistee is an Agent, a thematic-role unexpected for applied arguments.

2013, Matsuoka 2013, Legate et al. 2020), to determine whether the assistive-marked predicates contain one or two Voice projections. The conclusion of this investigation is that these Voice-diagnostics demonstrate the presence of just one VoiceP, in whose specifier the assister is introduced. Consequently, the assistee is not introduced by Voice.

I follow Legate et al. 2020 in analyzing instrumental (*with the vacuum cleaner*) and comitative phrases (*with the neighbor*) as adjuncts selecting for VoiceP (see also Bruening 2013 for a slightly different analysis where the instrumental and the comitative select for an unsaturated Voice projection). If the verbal construction contains two VoicePs, there are two possible attachment sites for the instrumental and the comitative, yielding two different interpretations. This is possible, for instance, in the Sason Arabic make-causative in (21), where the instrumental phrase 'with the stick' can modify either the base event, *painting*) or the *causing* event, indicating that this construction has two VoicePs (Akkuş 2021b, Akkuş to appear).

(21) Kemal sa buaɣ sir beyt **wara sope**
Kemal made.3M paint do.INF house **with stick**
1. 'Kemal had [someone paint the house with the stick].'
2. 'Kemal, with the stick, [had someone paint the house].'
(Sason Arabic, Akkuş to appear)

Such ambiguity is not available in assistives. In (27), the instrumental phrase *with the vacuum cleaner* can only modify the event performed by the assister (i.e., *Begimjan* performed the cleaning with the vacuum cleaner). The interpretation where only the assistee, *Aselia* used the vacuum cleaner is absent.

(22) Begimʤan Aselja-ga **pɨl'esos menen** yj-dy tazala-**ʃ**-tɯ.
Begimjan Aselia-DAT **vacuum INSTR** house-ACC clean-**ASST**-PST.3SG
Yes: 'Begimjan, with the vacuum cleaner, helped Aselia clean the house.'[11]
Not: 'Begimjan helped Aselia clean the house with the vacuum cleaner (where only Aselia used the vacuum cleaner).'

Comitatives phrases behave identically to instrumentals. The comitative phrase *with the neighbor* in (23) can only be associated with the assister, *Begimjan*, but not with the assistee, *Aselia*. Thus, the only available reading of the assistive construction in (23) modified by a comitative is that '[Begimjan together with the neighbor] helped Aselia clean the house.' The reading where 'Begimjan helped [Aselia together the neighbor] clean the house' is not possible.

(23) Begimʤan Aselja-ga **koʃuna menen** yj-dy tazala-**ʃ**-tɯ.
Begimjan Aselia-DAT **neighbor INSTR** house-ACC clean-**ASST**-PST.3SG
Yes: 'Begimjan, together with the neighbor, helped Aselia clean the house.'
Not: 'Begimjan helped Aselia clean the house together with the neighbor (where only Aselia cleaned together with the neighbor).'

[11] In §4 I show that assistives do not denote a *helping* event, but define (sub)event plurality. The rough translation of this sentence is, then, 'Begimjan, with the vacuum cleaner, did some of the house cleaning, and Aselia did the rest of the house cleaning,' Regardless, the instrumental (and all the other adjuncts discussed in this section) can only modify the event that the assister performs. That is, (22) cannot have the interpretation 'Begimjan did some of the house cleaning, and Aselia, with the vacuum cleaner, did the rest of the house cleaning,'

The fact that instrumental and comitative do not create ambiguity suggests that the assistive contains only one VoiceP, which introduces the external argument (the assister). These diagnostics show that the projection that introduces the assistee is not Voice.

This claim is further strengthened by evidence provided by agent-oriented and mental-attitude adverbs, such as *carefully* or *patiently*. Agent-oriented and mental-attitude adverbs express a relation between an event and the external argument via the mediation of a functional projection (Matsuoka 2013, and references therein). This functional head is Voice (or Pred in the sense of Bowers 1993 as in the original formulation of Matsuoka 2013). Thus, the prediction is that if there are two VoicePs in the assistive structure, ambiguity would arise: the adverb can either modify the relation between the event and the assistee or the event and the assister. This is, yet again, not borne out. The mental attitude adverb *patiently* in (24) can only pertain to the assister, i.e., the assister patiently performed an event. Modification of the assistee's relation to the base event is not available.

(24) Begimʤan Aselja-ga **ʧɯdamduuluk menen** yj-dy tazala-**ʃ**-tɯ.
Begimjan Aselia-DAT **patience INSTR** house-ACC clean-**ASST**-PST.3SG
Yes: 'Begimjan patiently helped Aselia clean the house.' (Begimjan was patient.)
Not: 'Begimjan helped Aselia patiently clean the house.' (Aselia was patient.)

2.5 Morphosyntax of the assistive-marked verb

Before turning to the discussion of the assistive as pluractional, it is worth taking a closer look at the assistive's syntactic position, and its possible combinations with other verbal categories, as these are going to inform the proposed analysis. The main point this section is to show that the assistive is low in the verbal structure, only vP and the applicative can precede it.

Examples (25a)-(26b) look at the categories the assistive embeds. The assistive can embed vPs, as it can follow overt verbalizers. In (25a), the root is $\sqrt{taza}$ (the phonological form *taza*, with a zero adjectival head, has the meaning 'clean (adj.)'), the spell-out of the categorizing little-v is /LA/. The applicative can also be followed by the assistive, as demostrated by (25b).

(25) a. Begimʤan Aselja-ga yj-dy taza-**la-ʃ**-tɯ.
Begimjan Aselia-DAT house-ACC $\sqrt{clean}$-**v-ASST**-PST.3SG
'Begimjan helped Aselia clean the house.'

b. Begimʤan Aselja$_i$-ga pro$_i$ kœjnœk tig-**ip ber-iʃ**-ti.
Begimjan Aselia$_i$-DAT pro$_i$ shirt sew-**APPL-ASST**-PST.3SG
'Begimjan helped Aselia$_i$ make a shirt for herself$_i$.'[12]

In contrast, CauseP and VoiceP cannot be embedded by the assistive. The assistive cannot follow the causative allomorph /t/ in (26a) regardless of whether the causee is overt or not, or whether it is accusative or dative marked. Similarly, the passive /(I)n/ cannot be followed by the assistive in (26b). Note that active Voice is phonologically zero. The table in (27) offers a summary.

[12]Other interpretations are possible, too, similarly to those noted for (20a).

(26) a. *Begimʤan Aselja-ga (Dʒanara-ga/nɯ) yj-dy tazala-**t-ɯʃ**-tɯ.
Begimjan Aselia-DAT (Janara-DAT/ACC) house-ACC clean-**CAUS-ASST**-PST.3SG
Intended: 'Begimjan helped Janara get (Aselia) clean the house.'

b. *Yj Aselja-ga tazala-**n-ɯʃ**-tɯ.
House Aselia-DAT clean-**PASS-ASST**-PST.3SG
Intended: 'The house was such that it was helped clean for Aselia.'

(27) Categories embedded by the assistive

vP	Asst	✓
ApplP	Asst	✓
CauseP	Asst	×
VoiceP	Asst	×

As for verbal categories selecting for the assistive, I have shown in (20a) that the applicative can embed the assistive, while the causative, as in (16), is only marginal with the it. Additionally, active or passive Voice can also follow the assistive, shown with the passive in (28a). Two assistives cannot co-occur, as in (28b). A summary of these patterns is given in the table in (29).

(28) a. Yj Aselja-ga tazala-**ʃ-ɯl**-dɯ.
House Aselia-DAT clean-**ASST-PASS**-PST.3SG
'The house was such that someone helped Aselia clean it.'

b. *Begimʤan (Aselja-ga) Dʒanara-ga yj-dy tazala-**ʃ-ɯʃ**-tɯ.
Begimjan (Aselia-DAT) Janara-DAT house-ACC clean-**ASST-ASST**-PST.3SG
Intended: 'Begimjan helped Janara help (Aselia) clean the house.'

(29) Categories embedding the assistive

AsstP	Asst	×
AsstP	Cause	??
AsstP	Appl	✓
AsstP	Voice	✓

3 What the assister and the assistee exactly do

This section looks at the relation between the base event, the assister, and the assistee. The main descriptive observation is that the assister and the assistee both perform events that satisfy the denotation of the base predicate.

3.1 The assistive is not like bi-clausal constructions with *help*

Consider (30), which contains a bi-clausal construction with the matrix predicate *ʤardam ber-* 'to help'. Crucially, in this bi-clausal construction the assister (*Kanykei*) does not need to perform the event in the denotation of the base predicate. That is, *Kanykei* does not have to *run* to make the bi-clausal construction with *ʤardam ber-* 'to help' felicitous.

(30) a. Kanykei removed obstacles from Azim's way to allow him to run.

b. Kanykei explained Azim how to run.

c. Kanykei kept encouraging Azim while he was running.
Kanɯkej Azim-ge ʧurka-gan-ga **ʤardam ber-di**.
Kanykei Azim-DAT run-NMLZ-DAT **help give-PST.3SG**
'Kanykei helped Azim run.'

In contrast, the assistive in infelicitous in contexts where either the assister or the assistee does not perform the event in the denotation of the base predicate. In contexts (31a)-(31c) the assister, *Kanykei*, provides assistance to the assistee, *Azim*, but she does not perform the *running* event. In stark contrast with the bi-clausal *help* construction in (30), the assistive is not felicitous in such contexts.

(31) a. Kanykei removed obstacles from Azim's way to allow him to run.

b. Kanykei explained Azim how to run.

c. Kanykei kept encouraging Azim while he was running.
#Kanɯkej Azim-ge ʧurka-**ʃ**-tɯ.
Kanykei Azim-DAT run-**ASST**-PST.3SG
Intended: 'Kanykei helped Azim run.'

For completeness sake, it is worth showing that the assistee must also perform the event in the denotation of the base predicate. As demonstrated in (32), if the assistee, *Azim*, does not run, the assistive is infelicitous.

(32) a. Azim removed obstacles from Kanykei's way to allow her to run.

b. Azim explained Kanykei how to run.

c. Azim kept encouraging Kanykei while she was running.
#Kanɯkej Azim-ge ʧurka-**ʃ**-tɯ.
Kanykei Azim-DAT run-**ASST**-PST.3SG
Intended: 'Kanykei helped Azim run.'

This demonstrates that the assistive is fundamentally different from bi-clausal *help* constructions.[13]

[13] One might wonder if the assistive has a bi-eventive structure, including some kind of vP with the meaning 'help', and whether this vP is responsible for introducing the assistee. This is not the case. Assistives can be shown to be mono-eventive by diagnostics with *again*. *Again* is considered an event modifier (Stechow 1996, Fabricius-Hansen 2001, Beck 2005, inter alia); if there is a vP associated with the 'helping' meaning component, *again* should be able to target that event. This is, however, not what we see: *again* cannot target the hypothetical *helping* event, demonstrated in (i).

(i) Kanɯkej Azim-ge **kajradan/kajra** yj-dy tazala-**ʃ**-tɯ.
Kanykei Azim-DAT **again/again** house-ACC clean-**ASST**-PST.3SG
Yes: (Kanykei together with Azim had cleaned the house, later) 'Kanykei together with Azim cleaned the house again.'
Not: (Kanykei helped Azim cut the grass yesterday, later) 'Kanykei again helped Azim (this time) clean the house.' (help again)

3.2 The assistive forms symmetric predicates

The observation that the assister and assistee have to perform some event in the denotation of the base event extends to all possible contexts. This is demonstrated by the infelicitous follow-up sentences (33a) and (33b), which attempt to cancel the inferences that the assister or the assistee perform a *running* event.

(33) Kanɯkej Azim-ge ʧurka-ʃ-tɯ.
Kanykei Azim-DAT run-**ASST**-PST.3SG
'Kanykei helped Azim run.'

a. #Birok Kanɯkej ʧurka-gan ʤok.
but Kanykei run-PF NEG.3SG
'But Kanykei didn't run.'

b. #Birok Azim ʧurka-gan ʤok.
but Azim run-PF NEG.3SG
'But Azim didn't run.'

The empirical generalization that the assister and the assistee perform the event in the denotation of the base predicate is crucial for the analysis developed in 4, thus it was subject to extreme scrutiny during the author's elicitations with native speaker consultants, and it holds in all contexts except one.

This "participation requirement" can only be flouted if either the assister or the assistee was going to perform the event but some legitimate reason (e.g., sudden illness) keeps them from doing so. In (34), the assistee, *Azim*, had the intention to *do the dishes*, but was prevented by an illness. However, both participants still have to be present to oversee the event (e.g., they cannot leave and let the other participant carry out the action, as demonstrated by the infelicitous (35)). I presume that in the case of (34) the intention to participate is as good as actual participation.

(34) Azim had to do the dishes but he couldn't come in contact with water due to a flare-up of a skin infection. Kanykei did the dishes for him(=Azim). Azim was there while Kanykei did the dishes.
Kanɯkej Azim-ge idiʃ-ter-di ʤuu-ʃ-tu.
Kanykei Azim-DAT dish-PL-ACC wash-**ASST**-PST.3SG
'Kanykei helped Azim do the dishes.'

(35) Azim had to do the dishes but he can't come in contact with water due to a flare-up of a skin infection, so Kanykei did the dishes for him(=Azim). Azim was resting in the living room while Kanykei did the dishes in the kitchen.
#Kanɯkej Azim-ge idiʃ-ter-di ʤuu-ʃ-tu.
Kanykei Azim-DAT dish-PL-ACC wash-**ASST**-PST.3SG
Intended: 'Kanykei helped Azim do the dishes.'

In conclusion, it is part of the assistive's semantic meaning that both the assister and the assistee perform the event in the denotation of the base predicate, or differently put, the assistive denotes a symmetric predicate (for the notion of symmetricity see Winter 2018, and references therein).

3.3 Two Agents

3.1 and 3.2 implicitly suggest that the assister and the assistee are volitional Agents of the base event. This section shows that this is in fact the case.

The assistive is ill-formed with verbs that combine with non-agentive external arguments.[14] In (36a), the intransitive *burning* event has a Patient external argument. (36a) is ungrammatical because the assister and the assistee are not Agents. Contrast (36a) with the grammatical (36b), where the transitive *burn* combines with an Agent external argument.

(36) a. *Kanɯkej Azim-ge ʤan-**ɯʃ**-tɯ.
Kanykei Azim-DAT burn-**ASST**-PST.3SG
Intended: 'Kanykei helped Azim burn(intr).'

b. Kanɯkej Azim-ge œzyn ʤandɯr-**ɯʃ**-tɯ.
Kanykei Azim-DAT self.3POSS.ACC burn(tr)-**ASST**-PST.3SG
'Kanykei helped Azim burn himself.'

Furthermore, the assistive is ungrammatical if either the assister or the assistee (or both) are non-agentive causers (*wind*) or instrumentals (*hammer*).[15] (37a) and (37b) demonstrate that non-agentive causers (*wind*) and instrumentals (*hammer*) are disallowed as assisters and assistees, respectively.

(37) a. Kanɯkej / *ʃamal / *balta Azim-ge tereze-ler-di sɯndɯr-**ɯʃ**-tɯ.
Kanykei / *wind / *axe Azim-DAT window-PL-ACC break-**ASST**-PST.3SG
'Kanykei/ *The wind/ *The axe helped Azim break the window.'

b. Kanɯkej Azim-ge / *ʃamal-ga / *balta-ga tereze-ler-di sɯndɯr-**ɯʃ**-tɯ.
Kanykei Azim-DAT / *wind-DAT / *axe-DAT window-PL-ACC break-**ASST**-PST.3SG
'Kanykei helped Azim / *the wind/ *the axe break the window.'

4 Assistives as pluractionals

4.1 Event plurality

§3 established that in a sentence like (38) the assister *Kanykei* and the assistee *Azim* are both Agents of a *running* event. One way to think about the assistive is that it denotes event plurality: an event performed by *Kanykei* and an event perfomed by *Azim*. This subsection starts investigating how the assistive defines event plutality.

(38) Kanɯkej Azim-ge ʧurka-**ʃ**-tɯ.
Kanykei Azim-DAT run-**ASST**-PST.3SG
'Kanykei helped Azim run.'

An important point to make is that the assistive does not just require the plurality of the base event. If this was the case, the assistive would be felicitous in the contexts in (39), where both the

[14] The agentivity requirement of the assistee is consistent with the claim put forth in 2.3 that the assistee is not an applied argument. Applied arguments, in both low and high applicatives, are Beneficiaries not Agents.

[15] I am not considering fairy tale scenarios where *wind* or *hammer* might have human-like properties. I am also disregarding metonymic uses of *hammer*.

assister and the assistee perform the base event side-by-side or consecutively. In (39a), *Kanykei* runs next to the *Azim* with the intention of helping or supporting him, in (39b) *Kanykei* shows *Azim* how to run before *Azim* sets out to run. In both of these contexts, the assister and the assistee perform the event in the denotation of the base predicate, satisfying the "participation requirement" outlined in §3. Yet the assistive is not felicitous in these contexts.

(39) a. Kanykei ran next to Azim, cheering for him/ supporting him.

b. Kanykei taught Azim how to run by showing him how to do it.
#Kanɯkej Azim-ge ʧurka-ʃ-tɯ.
Kanykei Azim-DAT run-**ASST**-PST.3SG
Intended: 'Kanykei helped Azim run.'

That is, the assistive (40c) is not entailed given (40a) and (40b). If it is true that "Azim ran," and "Kanykei ran," it is not necessarily true that the assistive that we render into English as "Kanykei helped Azim run" is true.

(40) a. Kanɯkej ʧurka-dɯ.
Kanykei run-PST.3SG
'Kanykei ran.'

b. Azim ʧurka-dɯ.
Azim run-PST.3SG
'Azim ran.'

c. ⊭Kanɯkej Azim-ge ʧurka-ʃ-tɯ.
Kanykei Azim-DAT run-**ASST**-PST.3SG
'Kanykei helped Azim run.'

This suggest that the assistive is not merely the spell-out of the *-operator (algebraic or cumulative closure), which applies to distributive predicates, such as *run*, when they take plural arguments (Sternefeld 1998, Krifka 1992, Kratzer 2005 inter alia; for an overview see Champollion 2019).[16] The predicate *run* in (41c)[17] combines with the plural (external) argument *Kanykei and Azim*, the *-operator distributes the *running* event over the mereological sum of *Kanykei* and *Azim*.[18] Cumulatively closed predicates satisfy the entailment relation in (41). As the assistive in (40c) does not satisfy this entailment, the event plurality effects observed with the assistive cannot be attributed to the algebraic closure.

(41) a. Kanɯkej ʧurka-dɯ.
Kanykei run-PST.3SG
'Kanykei ran.'

[16]The same claim would extend to other potential distributive operators, such as Link's VP-attaching D-operator (Link et al. 1987).

[17]Note that the suffix /(I)ʃ/ does not spell out the assistive in (41c), but the [–singular] agreement feature. For more details see §5.1.

[18]Following Sternefeld (1998) the definition of algebraic closure is the following.
For any set P, *P is the smallest set such that:
(a) P ⊆ *P, and
(b) if a ∈ *P and b ∈ *P, then a ⨁ b ∈ *P.

b. Azim ʧurka-dɯ.
Azim run-PST.3SG
'Azim ran.'

c. ⊨Kanɯkej ʤana Azim ʧurka-ʃ-tɯ.
Kanykei and Azim-DAT run-PL-PST.3
'Kanykei and Azim ran.'

4.2 Plurality of subevents

Then, how does the assistive define event plurality? Consider once again sentence (42) and the context it can be felicitously uttered. In (42), the internal argument, which is the path argument *5 km*, is divided into two parts, *2 km* and *3 km*. The assister, *Kanykei*, and the assistee, *Azim*, perform *running* events corresponding to the path argument parts.

(42) Azim had to run 5 km. There was an option that Kanykei could run some of the distance for him, so Kanykei ran 2 km of Azim's 5 km, and Azim ran 3 km.
Kanɯkej Azim-ge (beʃ km) ʧurka-**ʃ**-tɯ.[20]
Kanykei Azim-DAT (five km) run-**ASST**-PST.3SG
'Kanykei helped Azim run (5 km).'

The same is true for all assistive-marked predicates, as demonstrated by an additional example in (43). Here, the internal argument is the object, *(seven) trees*, which gets divided into a *two-tree* and a *five-tree* part.[23] *Kanykei* and *Azim* perform *cutting* events on these argument parts: *cutting1*$_{\text{Kanykei}}$ → *2trees*, *cutting2*$_{\text{Azim}}$ → *5trees*.

(43) Azim had to cut down seven trees. He asked Kanykei to help him. Kanykei cut down two trees, Azim cut down five.
Kanɯkej Azim-ge ʤeti bak-tɯ kɯj-**ɯʃ**-tɯ.
Kanykei Azim-DAT seven tree-ACC cut.down-**ASST**-PST.3SG
'Kanykei helped Azim cut down the seven trees.'

Thus, the assistive defines event plurality by mapping (sub)events performed by different Agents onto argument parts. The following sections are concerned with providing a formal analysis of the (sube)event plurality defined by the assistive and its connection to introducing the Agent (assistee) argument.

[20]The argument of the assistive-marked predicate has to be cumulative, it cannot be the argument part corresponding to either the assister (2 km) or the assistee's (3 km) *running* event. This is illustrated in (i).

(i) Azim had to run 5 km. There was an option that Kanykei could run some of the distance for him, so Kanykei ran 2 km of Azim's 5 km, and Azim ran 3 km.
#Kanɯkej Azim-ge eki / yʧ km ʧurka-**ʃ**-tɯ.[22]
Kanykei Azim-DAT two / three km run-**ASST**-PST.3SG
Intended: 'Kanykei helped Azim run 2/3 km.'

[23]The partitions can also consist of non-atomic parts of the internal argument. These parts may be nonconsecutive. For instance, if *Kanykei* and *Azim* took turns hacking at the tree with an axe, the two partitions compose of nonatomic *tree*-parts upon which *Kanykei* and *Azim* performed *cutting* events.

4.3 Pluractionals

This section gives an overview of pluractionals, and showcases a well-described Kaqchikel pluractional that shares some similarities with the Kyrgyz assistive. The analysis of this Kaqchikel pluractional will inform the proposed analysis in §4.4.

Pluractionality is a category, usually expressed by verbal morphology, that can only be truthfully uttered in plural-event contexts. Linguistic work on pluractionals has been greatly influenced by the notion that there are systematic parallelisms between the nominal and the verbal denotations (e.g., Bach 1986, Krifka 1998). The overarching idea is that plural denotations found in the nominal domain, e.g., count pluralities, group pluralities, bare plurals, etc., are available in the verbal domain as well (E. J. Wood 2007, Henderson 2012). Given that there are many different types of nominal plurality, it is only expected that verbal plurality also shows variation (for a typological overview see Cusic 1981, Garrett 2001, E. J. Wood 2007, Henderson 2012). The main insight of Henderson (2012), a seminal work on the topic, is that pluractionals do not directly require the event argument to be plural, instead they create a restriction on the spatiotemporal trace or theta-role function of the event that can only be satisfied by non-singular events.

Take Kaqchikel (Mayan) *-la'*-pluractionals as an example (Henderson 2012): the *-la'*-marked predicate in (44) is false in a single event scenario, e.g., if the first person subject gives a single collective hug to the children, but it is also false if she gives multiple collective hugs to the children. This indicates that the event plurality does not arise from the pluractional simply requiring the event-cardinality to be greater than one. Instead, *-la'* breaks the base event into subevents, and requires the thematic role to map these subevents onto atomic parts of the internal argument (Henderson 2012: §5, §6). In (44), the *hugging* subevents are mapped by the Theme thematic role onto atomic members of the set *children*.

(44) X-e'-in-q'ete-**la'** ri ak'wal-a'.
COM-A3p-E1s-hug-**PLRC** the child-PL
'I hugged the children individually.'
(KAQCHIKEL, Henderson 2012: 181)

Henderson (2012) proposes an analysis whereby *-la'* decomposes the event into atomic event parts and manipulates the predicate's theta-role function to map these plural atomic events on atomic individuals.[24] (45) offers a formal representation of the pluractional-marked VP's interpretation based on Henderson 2012: 197. The part about event cardinality, |e|>n, simply reflects the intuition that these pluractionals are preferred in contexts where there is a large number of events. The main contribution of *-la'* is that it maps atomic subevents (*e'*) of the main event *e* onto atomic members of the set denoted by the (internal) argument mediated by a thematic role.

(45) $\exists e[^*\textsc{hug}(e) \wedge |e|>n \wedge \forall e' \leq e[\mathbf{atom(e')} \rightarrow \mathbf{atom(th(e'))}] \wedge$
a. $th(e)=\sigma x.^*\textsc{child}(x) \wedge$
b. $ag(e)=Sp]$

[24]Note that this is only the preliminary analysis proposed by Henderson (2012). His final formulation of the semantic contribution of *-la'* makes use of sets of assignment functions. For more details see Henderson 2012: §6. The motivation for this approach is that *-la'* can license dependent indefinites. As the Kyrgyz assistive does not license dependent indefinites, I do not follow this part of his analysis.

The following section builds on Henderson's account on pluractionals and argues that Kyrgyz assistives are similar to Kaqchikel distributive pluractionals in *-la'*. In line with Henderson's analysis, I propose an analysis where the assistive-pluractional maps subevents to proper parts of the internal argument by the relevant theta-role function.

4.4 The proposal: Assistives are argument introducing pluractionals

Returning to the Kyrgyz example in (42), repeated as (46), the assistive's contribution can be characterized similarly to the Kaqchikel *-la'* pluractional. The Kyrgyz assistive partitions that internal argument into two proper parts. In (46), the internal argument is the path argument *5 km*, which is divided into two parts, *2 km* and *3 km*. The assistive defines two subevents sets of the event in the denotation of the base predicate in such a way that each of these subevents is carried out on a unique argument part. The relevant thematic role, provided by the base predicate, is responsible for establishing the mappings between subevent sets and argument parts. In (46), the subevent sets are *running* subevents performed by *Kanykei* and *running* subevents performed by *Azim*. These subevent sets get mapped onto a unique argument part by the relevant thematic role: Path(run_{Kanykei}, *2 km*), Path(run_{Azim}, *3 km*).

(46) Azim had to run 5 km. There was an option that Kanykei could run some of the distance for him, so Kanykei ran 2 km of Azim's 5 km, and Azim ran 3 km.
Kanɯkej Azim-ge (beʃ km) ʧurka-**ʃ**-tɯ.
Kanykei Azim-DAT (five km) run-**ASST**-PST.3SG
'Kanykei helped Azim run (5 km).'

The assistive's contribution is then to decompose the base event into two sets of subevents, break the argument into two proper parts, and then map each unique subevent onto a unique argument part. The formal definition in (47) says that the assistive takes a predicate and returns two sets of events, such that they are the subevents of the event *e"* in the denotation of the base predicate, and there exists *x* and *x'* such that they are proper parts of *x"*, which is the argument to which the theta-role function maps the base event *e"*, and the same theta-role maps the subevent *e* to the argument part *x*, and *e'* to *x'*.[25] The analysis in (47) makes explicit reference to an internal argument, so one might ask what happens if there is no internal argument to partition. Also, this analysis presupposes that the relation between the event and the internal argument is incremental (in the sense of Krifka 1998). These questions are addressed in §4.5.

(47) First version:
$\lambda V \lambda e,e' \exists e'',x,x'',x''[e,e' <e''(V(e'')) \wedge x,x' < x'' \wedge \theta(e,x) \wedge \theta(e',x') \wedge \theta(e'',x'')]$

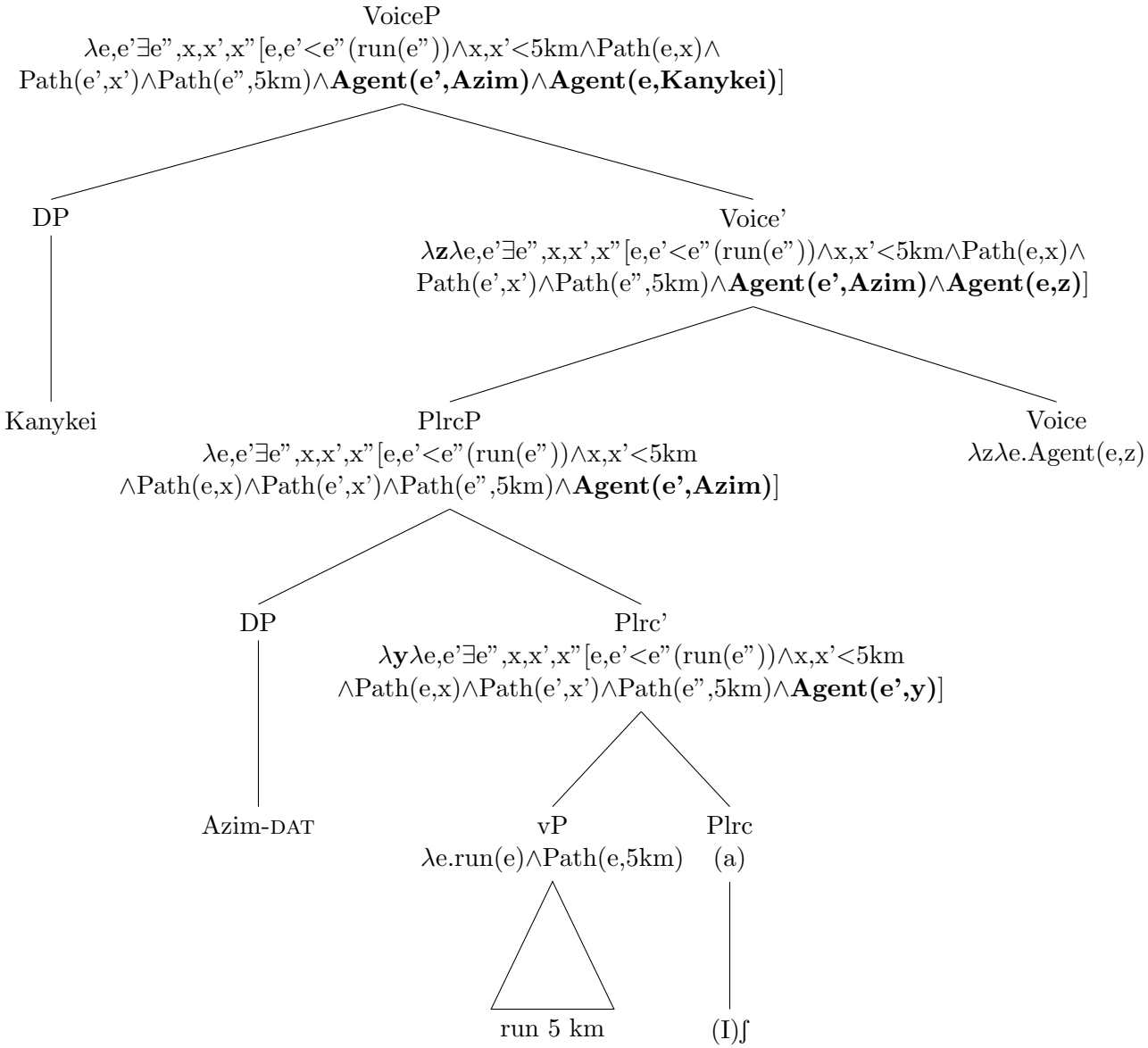
(47) does not make reference to the Agents of the subevent sets *e* and *e'*. Imagine for a moment that (47) is all that the pluractional did, and the assistive-marked VP had only one Agent. The meaning would be that the Agent *z* performs subevent *e* on the argument part *x* and subevent *e'* on *x'*. Under this scenario, the asssitive meaning would be that *Kanykei runs 2 km* and *Kanykei runs 3 km*, which is indistinguishable from saying that *Kanykei runs 5 km*. That is, the subevents *e* and *e'* cannot be individuated given the definition in (47). The proposal is that the pluractional

[25] The reader might wonder what the distribution of tasks is between the assister and assistee, given that in most of the above examples, e.g., in 46, the assister seems to do less than the assistee. While native speakers have the intuition that the assister has to do less than the assistee, it is possible to find examples where this is not the case. One such example is (34), where the assistee does not do anything and the assister does all the work. This indicates that the inference about the distribution of tasks is an implicature.

needs to add an argument to individuate subevents *e* and *e'*. Thus, the pluractional introduces an Agent, the assistee,[26] which is defined as the Agent of the subevent set *e'*: λy.Agent(e',y), given in (48). Following Kratzer (1996), the assister, which is the external argument, is simply added by Voice. That is, the Agent of the event set *e* is provided by Voice. In the resulting structure the thematic uniqueness principle (Carlson 1984, Carlson 1998, Parsons 1990) is satisfied, as the assister is the Agent of *e* and the assistee is the Agent of *e'*. The compositional analysis of the proposed structure is provided in (49).

(48) Final version:
λVλ**y**λe,e'∃e",x,x',x"[e,e' <e"(V(e")) ∧ x,x' < x" ∧ θ(e,x) ∧ θ(e',x') ∧ θ(e",x") ∧ **Agent(e',y)**]

(49)



(a) λVλ**y**λe,e'∃e",x,x',x"[e,e'<e"(V(e"))∧x,x'<x"∧θ(e,x)∧θ(e',x')∧θ(e",x")∧**Agent(e',y)**]

[26] I consider the dative on the assistee a lexically assigned case licensed by the pluractional.

4.5 Predictions

The proposal in (48) makes some predictions about the type of predicate that is compatible with the assistive-pluractional. Specifically, according to the proposed analysis the assistive mandates the presence of an argument, and requires incremental relation between the event and its internal argument, consequently the assistive is predicted to be incompatible with predicates that do not have an internal argument and with predicates where there is no incremental relation between the event and the internal argument. This section looks at these predictions more closely, and concludes that both of them are borne out, indicating that the proposed analysis in (48) is on the right track.

4.5.1 Presence of an internal argument

One of the cornerstones of the analysis in (48) is that the internal argument needs to be divided into proper parts. Thus, the first prediction is that the assistive is not compatible with predicates that do not have an internal argument, as there would be no internal argument to break down into parts. In (50), there is no internal argument onto which the *sleeping* event could be mapped. Just as we predict, the assistive is not compatible with this predicate.

(50) *Dʒanara bala-ga ukta-**ʃ**-tɯ.
Janara child-DAT sleep-**ASST**-PST.3SG
Intended: 'Janara helped the child sleep.'

Other unergative verbs[27] that lack an internal argument are also incompatible with the assistive. In (51a) and (51b), the verbs *run*, *swim*, and *walk* are unsuitable for the assistive. Notice that in these contexts, there is no internal path argument.

(51) a. Kanykei ran/swum together with Azim with the intention of helping him.
#Kanɯkej Azim-ge ʧurka-**ʃ**-tɯ / syz-**yʃ**-ty.
Kanykei Azim-DAT run-**ASST**-PST.3SG / swim-**ASST**-PST.3SG
Intended: 'Kanykei helped Azim run/swim.'

b. Janara walked with the child, holding his hand.
#Dʒanara bala-ga bas-**ɯʃ**-tɯ.
Janara child-DAT walk-**ASST**-PST.3SG
Intended: 'Kanykei helped the child walk.'

The verbs *swim*, *run*, and *walk* can optionally take a path argument, *5 km* in (52a) or *100 m* in (52b), which is the only context where the assistive is compatible with these verb phrases. This demonstrates that the prediction that the assistive-pluractional requires the presence of an internal argument is borne out.

(52) a. Azim had to run/swim 5 km, Kanykei ran/swum 2 km out of Azim's 5 km, Azim ran/swum 3 km.
Kanɯkej Azim-ge ʧurka-**ʃ**-tɯ / syz-**yʃ**-ty.
Kanykei Azim-DAT run-**ASST**-PST.3SG / swim-**ASST**-PST.3SG
'Kanykei helped Azim run/swim.'

[27] Unaccusative verbs are ruled out because their external arguments are not Agents. Recall that the assister and the assistee have to be Agents (§3.3).

b. The child had to walk 100 m, Janara walked some of the distance for him.
Dʒanara bala-ga bas-**ɯʃ**-tɯ.
Janara child-DAT walk-**ASST**-PST.3SG
'Kanykei helped the child walk.'

4.5.2 Incrementality

(48) proposed that the assistive establishes unique subevent-argument part mappings. However, not every predicate can establish unique mappings between its subevents and the proper parts of the internal argument. *Pushing the cart* or *driving the car* are representative examples of a the latter type of predicates: when one drives a car, it is not conceptualized as *car*-parts being affected by unique *driving* subevents. In other words, the relationship between the *driving* event and the internal argument *car* is not an incremental relation (for the formal definition of incrementality see Krifka 1998). In contrast, *cutting down trees* or *running 5 km* are typical examples of the former type of predicates, which have incremental relation between event and internal argument: *cutting down trees*, for instance, proceeds in an incremental fashion, where there are unique *tree*-parts matched with unique *cutting* subevents.[28]

As the assistive defines unique subevent-argument part pairings, the prediction is that the assistive is incompatible with predicates where the argument is not affected by the event in an incremental fashion. This is borne out. In (53), there is an internal argument present, *the car*, yet the assistive is infelicitous in these contexts, because the assistive cannot establish unique mappings between *driving* subevents and *car*-parts.

(53) a. Kanykei drove Azim's car to make sure it runs well before letting Azim drive it.

b. Kanykei showed Azim how to drive a car (by driving Azim's car).
#Kanɯkej Azim-ge maʃina ajda-**ʃ**-tɯ.
Kanykei Azim-DAT car drive-**ASST**-PST.3SG
Intended: 'Kanykei helped Azim drive the car.'

The assistive sentence in (53) can only be felicitously used if we add a path argument into the structure, as in (54) *from Bishkek to Yssyk-Kul*. In (54), it is possible to establish an incremental relation between the *driving* event and the path argument, rendering the assistive felicitous.

(54) Azim had to drive from Bishkek to Yssyk-Kul, Kanykei went along and drove some of the distance.
Kanɯkej Azim-ge maʃina ajda-**ʃ**-tɯ.
Kanykei Azim-DAT car drive-**ASST**-PST.3SG
'Kanykei helped Azim drive the car.'

Another type of predicate where there is no incremental relation between event and argument is punctual events, such as achievement verbs, which, given the punctual aspectual nature of the event, are not divisible into subevents, and consequently they are not mappable onto argument parts. One such an example is *entering the store*, where the *entering* event takes just a moment (i.e., it is punctual), hence not divisible. (55) shows that, as predicted, the assistive cannot combine with such predicates.

[28] I am disregarding the possibility of performing multiple subevents on the same argument part. E.g., in the case of *cleaning the house*, one might clean the same *house*-part twice. See Krifka 1998 for the relevant discussion.

(55) *Dʒanara apa-sun-a magazin-ge kir-**iʃ**-ti.
Janara mother-POSS.3SG-DAT store-DAT enter-**ASST**-PST.3SG
Intended: 'Kanykei helped her mother enter the store.'

In sum, both predictions made by the proposed analysis in (48) are borne out: the presence of an internal argument is indeed obligatory, and there must be an incremental relation between the event and the internal argument, suggesting that the analysis is on the right track.

4.6 Cross-linguistic parallels

One might think that the Kyrgyz assistive has a unique semantic contribution, but this is not the case. It is possible to find constructions in unrelated languages that have a very similar (if not the same) denotation.

A well-described case study comes from the Bantu language Kinande, where the morpheme *-ik-/-ek-*, referred to as the "sociative causative," conveys a helping-like meaning, but without any causative meaning component (Schneider-Zioga and Mutaka 2019, Irimia and Schneider-Zioga 2022). Consider the context in (56), where *Magulu* is carrying planks, and the parents ask his brother to help him. As *Magulu* is already carrying planks, it does not make sense for the parents to ask the brother to have him carry planks. That is, the verbal morpheme *-ek-* in (56) does not convey causation.

(56) Magulu is already carrying planks and his parents see that and feel sorry for him doing so much work alone. After seeing Magulu's actions, they send Kambale, his brother, over to help carry planks. (Kambale is clearly not causing any plank carrying in this situation.)
Parents:
Kwê támi. Sí-wu-li-ya-hek-**ek**-a-y-a Magulú y' oko-mbágó?
Q dear. NEG-2SG-TAM-go-carry-**SOC**-TAM-TR-FV 1Magulu 1LK 17LOC-plank
U-ká-kol-á hanó hó ki?
2SG-TAM-do-FV 16here 16LK 7what
'What, Dear? [i.e., wait a minute!] Why don't you go and help Magulu carry planks? What are you doing here?'
(KINANDE, Irimia and Schneider-Zioga 2022)

The Kinande "sociative causative" requires the co-participation of the "assister" and the "assistee" (my terms) in the event denoted by the base predicate the same way the Kyrgyz assistive does. The "assister" and the "assistee" divide the base event amongst themselves, so that the "assister" performs some of the event, and the "assistee" performs the rest (Schneider-Zioga and Mutaka 2019, Irimia and Schneider-Zioga 2022). For instance, in (56) *Magulu* carries some of the planks and his brother carries the rest. Consequently, *-ik-/-ek-* is expected to be incompatible with the same events that the Kyrgyz assistive is. This is indeed what we see in Kinande (Schneider-Zioga and Mutaka 2019: 281-297). Schneider-Zioga and Mutaka (2019) mention a particularly revealing example with the base predicate *cross the road* given in (57). (57) is judged "pragmatically bizarre" by native speakers, as it denotes that someone crosses some of the road for the child, and then the child crosses what is left of the road to be crossed. The reader will recall that this is the same meaning that the Kyrgyz assistive conveys with verbs such as *run* (see (46)).

(57) #erí-kiɾuk-**ik**-y-á ɔ́mwaná y' (ɔkɔ) ndáki
5-jump-**SOC**-TRANS-FV 1child 1LK (17LOC) 9road
'to help a child cross (part of) the road'
(KINANDE, Schneider-Zioga and Mutaka 2019: 297)

The striking parallel between the Kinande "sociative causative" and the Kyrgyz assistive demonstrates that the meaning denoted by the assistive is not just a "fluke" but a cross-linguistically attested construction.

5 /(I)ʃ/ syncretism

This section looks at two syncretic uses of the Vocabulary Item /(I)ʃ/: §5.1 discusses /(I)ʃ/ as the spell-out of plural agreement features in the 3PL agreement marker on verbal predicates, while §5.2 examines verbal reciprocal constructions, where /(I)ʃ/ is the exponent of the reciprocal marker.

5.1 /(I)ʃ/ as plural agreement marker

Kyrgyz is well-known for using the Vocabulary Item /(I)ʃ/ as an agreement marker with third person plural subjects, shown in (58)[29] (Hebert and Poppe 1963: 19, Abduvaliev 2015: 191-192, 201-205, Nedjalkov 2003). The Kazakh equivalent of the VI /(I)ʃ/ is not used this way. The /(I)ʃ/ agreement marker precedes TAM markers, a very curious position for an agreement marker in the language, given that all other agreement suffixes follow TAM markers (see the table in (61)).

(58) Baldar Biʃkek-ke bar-**ɯʃ**-tɯ.
child.PL Bishkek-DAT go-**PL**-PST.3
'The children went to Bishkek.'

The plural agreement /(I)ʃ/ can follow both the assistive, as in (59a), and the reciprocal /(I)ʃ/, shown in (59b). The co-occurrence of these markers suggests that these are distinct syntactic nodes realized by the same vocabulary item.

(59) a. Baldar Azim-ge tamak ɕasa-**ʃ-ɯʃ**-tɯ.
child.PL Azim-DAT food make-**ASST-PL**-PST.3
'The children helped Azim make food.'

b. Baldar Azim menen ur-**uʃ-uʃ**-tu.
child.PL Azim INSTR hit-**REC-PL**-PST.3
'The children and Azim hit each other.'

The goal of this subsection is to provide additional evidence for analyzing the assistive as a type of pluractional by taking a closer look at the syncretic /(I)ʃ/ agreement marker. The discussion to follow reveals that /(I)ʃ/ in the agreement marking usage spells out the [–singular] agreement feature. This is only possible if the Vocabulary Item /(I)ʃ/ is specified for [–singular]. Consequently, the assistive is also a type of pluralizer, as it can be spelt out by a VI specified for the [–singular] feature.

[29] My consultant indicated that the /(I)ʃ/-marked version is preferred to the one without /(I)ʃ/, at least with animate or agentive subjects. The optionality of plural agreement with 3PL subjects is a well-attested phenomenon in other Turkic languages that have an overt plural agreement exponent, for Turkish see Bamyacı et al. 2014 and references therein.

5.1.1 /(I)ʃ/ is an agreement marker

As it might not be self-evident that /(I)ʃ/ in (58) is an agreement marker, the following discussion presents data supporting this claim. /(I)ʃ/ shows up on the verbal predicate in every configuration where the head bears agreement features. When other agreement morphemes cannot be indicated, i.e., when there are no agreement features present in the syntactic representation, /(I)ʃ/ is also disallowed. An illustrative example is provided in (60a), where the relevant part is the temporal adverbial clause 'until we arrive'. Subject agreement is disallowed in this construction due to the lack of agreement features, a common phenomenon in Kyrgyz adverbial clauses in general. In such clauses, /(I)ʃ/ is also disallowed, shown in (60c). That is, /(I)ʃ/ patterns with agreement morphemes, suggesting that it is a type of agreement morpheme as well.

(60) a. [Biz kel-gen-(*__ibiz__)-ge tʃejin] Maksat ukta-p kal-at.
[we come-NF-(*__1PL__)-DAT until] Maksat sleep-Ip AUX-PRS.3SG
'Maksat will be sleeping [until we arrive].'

b. [Baldar kel-gen-ge tʃejin] Maksat ukta-p kal-at.
[child.PL come-NF-DAT until] Maksat sleep-Ip AUX-PRS.3SG
'Maksat will be sleeping [until we arrive].'

c. *[Baldar kel-__iʃ__-ken-ge / kel-__iʃ__-ken-in-e tʃejin] Maksat ukta-p kal-at.
[child.PL come-__PL__-NF-DAT / come-__PL__-NF-3-DAT until] Maksat sleep-Ip AUX-PRS.3SG
Intended: 'Maksat will be sleeping [until we arrive].'

5.1.2 /(I)ʃ/ spells out [–singular] in the context of verbs

At this point, the reader might wonder if /(I)ʃ/ can only indicate agreement with 3PL subjects. This is indeed the case. The table in (61) gives an overview of the agreement exponents.[30] The detailed analysis of the curious agreement marking pattern with /(I)ʃ/ is the subject of a separate paper by the author, which makes use of post-syntactic operations, such as (plural) fission and lowering followed by Vocabulary Insertion (Noyer 1992, Embick and Noyer 2001, Arregi and Nevins 2012), to derive /(I)ʃ/-agreement in Kyrgyz. The remainder of this section reviews the key points of this analysis.

[30]The choice of the agreement paradigm is solely determined by the preceding TAM marker (for similar Turkish data see Kornfilt 1996, Güneş 2021). Exponents of the sI-paradigm are used after nominalized clauses and to mark agreement with the possessor on the possessee, for this reason this paradigm is also known as the "possessive paradigm." Note that /(I)ʃ/ can only occur after verbal predicates.

(61) Exponents of agreement morphemes

Agr node	**k-paradigm**	**z-paradigm**	**sI-paradigm**
1SG	TAM-m	TAM-mIn	NMLZ-(I)m
2SG	TAM-ŋ	TAM-sIŋ	NMLZ-(I)ŋ
2SG.POLITE	TAM-ŋIz	TAM-sIz	NMLZ-(I)ŋIz
3SG	TAM-Ø	TAM-Ø	NMLZ-(s)I(n)
1PL	TAM-k	TAM-BIz	NMLZ-(I)bIz
2PL	TAM-ŋAr < ŋ -LAr	TAM-sIŋAr < sIŋ -LAr	NMLZ-(I)ŋAr < (I)ŋ -LAr
2PL.POLITE	TAM-ŋIzdAr < ŋIz -LAr	TAM-sIzdAr < sIz -LAr	NMLZ-(I)ŋIzdAr < (I)ŋIz -LAr
3PL	**(I)ʃ**-TAM- Ø	**(I)ʃ**-TAM- Ø	**(I)ʃ**-NMLZ- (s)I(n) ∼ NMLZ-LAr- (s)I(n)

A closer inspection of the data given in (61) reveals that Kyrgyz 2PL, 2PL.POLITE and 3PL agreement markers are not mono-morphemic, as they consist of a suffix that spells out person features (indicated by boxes in (61)) and an exponent corresponding to the [–singular] feature. Take the 2PL agreement suffix, /ŋ-LAr/[31] in the k-paradigm as an example: it can be decomposed into /ŋ/ and /LAr/. /LAr/ is the default plural exponent, also used, for instance, to pluralize nouns (e.g., *alma-**lar*** 'apple-**PL**'). Importantly, /ŋ/ also spells out the 2SG node. This indicates that the Vocabulary Item /ŋ/ is specified for person features, but not for number features, which makes it compatible with both singular and plural second person forms. All other exponents indicated with text boxes in the 2PL, 2PL.POLITE and 3PL agreement suffixes also realize the corresponding singular form. I derive the bi-morphemicity of the 2PL, 2PL.POLITE and 3PL agreement markers by proposing a fission rule, given in (62), that targets [–author (+/–participant), –singular] feature bundles and splits them into two nodes, following Arregi and Nevins (2012) formulation of feature-targeting fission rules. By defining fission this way it is possible to account for both the mono-morphemic singular and 1PL agreement suffixes and the bi-morphemic 2PL, 2PL.POLITE and 3PL markers.

(62) Kyrgyz fission rule:
Agr[–author (+/–participant), –singular] → Agr[–author (+/–participant)] Agr[–singular]

In the Agr[–author, –participant] Agr[–singular], i.e., 3PL, configuration a lowering operation (Embick and Noyer 2001) is triggered,[32] whereby the Agr[–singular] feature is lowered onto the Asp node. The output of the lowering operation is given in (63).

(63) Output of Lowering:
[TP [AspP [VoiceP **Agr[–singular]**] ASPECT^0] TENSE^0 Agr[–author, –participant]]

[31] This is the underlying form, which undergoes phonological adjustments. Kyrgyz does not allow rising sonority in heterosyllabic consonant clusters, a phenomenon called Syllable Contact Law (see e.g., Gouskova 2004). The phonological processes attested in the agreement exponents in (61) are the result of the Syllable Contact Law.

[32] In the forthcoming paper, I motivate this operation by proposing another fission rule for features bundles with [–participant] feature, whose output is Agr[–singular] Agr[–author (–participant)]. In this configuration the Tense node becomes adjacent to Agr[–singular], i.e., **Tense-Agr[–singular]**-Agr[–author (–participant)], which is a highly unusual feature ordering (cf. the empirical study by Trommer (2003) on cross-linguistically attested person and number feature orderings). I argue that Lowering is a repair operation to "fix" this unusual feature ordering.

Vocabulary Insertion takes place following fission and lowering, in accordance with the post-syntactic rule orderings postulated in Arregi and Nevins 2012. To account for the distribution of /LAr/ and /(I)ʃ/, I propose in (64) that the distribution of the VI /(I)ʃ/ is conditioned by contextual allomorphy: in the environment of a verbal projection, which I define as carrying [+V] feature following Baker 2003, /(I)ʃ/ is inserted, whereas /LAr/ is the elsewhere form.

(64) Vocabulary Items:
[–singular] ↔ /(I)ʃ/ | [+V]_
[–singular] ↔ /LAr/

This section provided evidence that the Vocabulary Item /(I)ʃ/ is specified for the [–singular] feature. This lends independent support to the claim that the assistive is a type of pluralizer, as the VI /(I)ʃ/ would only be allowed to spell out the assistive if the assistive node also contains a plural feature.

5.2 Another argument-introducing pluractional: The reciprocal

This section turns to another syncretic use of the Vocabulary Item /(I)ʃ/, commonly referred to as the "reciprocal" (see Nedjalkov 2003 for a descriptive look at Kyrgyz reciprocals, and Nedjalkov 2006 for Turkic reciprocals), to support the other major claim made by the paper, namely that the pluractional can introduce an Agent argument. (5) is an illustrative example, repeated as (65).

(65) Men Azim menen muʃta-**ʃ**-tɯ-m.
I Azim INSTR punch-**REC**-PST-1SG
'Me and Azim punched each other.'

This section shows that the analysis proposed for the assistive-pluractional in §4.4 is extendable to other types of pluractional constructions. The main argument to be put forth is that reciprocals are also a type of pluractional that can introduce Agent arguments. §5.2.1 introduces two types of reciprocals: periphrastic and verbal reciprocals, followed by a short digression in §5.2.2, where we review previous analyses for the periphrastic reciprocals with the intention to extend these analyses to verbal reciprocals in §5.2.3. §5.2.4 shows that the comitative phrase is an Agent argument in the reciprocal, and §5.2.8 submits that this Agent is introduced by the pluractional.

5.2.1 Two types of reciprocals

There are two[33] main types of reciprocal constructions cross-linguistically (Siloni 2012): *periphrastic reciprocals* containing an anaphor that is roughly equivalent to English *each other*, illustrated by a Kyrgyz example in (66a); and *verbal reciprocals*[34] consisting of a symmetric verb, such as (66b) (for the notion of symmetricity see Carlson 1998, Dimitriadis 2008, Winter 2018).

[33]Siloni (2012) argues for a third type of reciprocal construction, which shares some properties with both periphrastic and lexical (a.k.a. verbal) reciprocals, attested in some Romance and Slavic languages. As Turkic languages do not have this type, I am not going to discuss them in the paper.

[34]I am going to use the term "verbal reciprocal" (following Bruening 2006) for constructions such as (66b), where there is a designated verbal morpheme expressing "reciprocal semantics" of some sort. Note that Siloni calls these constructions "lexical reciprocals," but I refrain from using this term, as it might mislead the reader into thinking that these expressions need to be derived in the lexicon, a position this paper argues against.

(66) a. Men ʤana Azim **biri-biribiz-di** muʃta-dɯ-k. (periphrastic reciprocal)
I and Azim **each.other-ACC** punch-PST-1PL
'Me and Azim punched each other.'

b. Men Azim menen muʃta-**ʃ**-tɯ-m. (verbal reciprocal)
I Azim INSTR punch-**REC**-PST-1SG
'Me and Azim punched each other.'

(67) a. ⊨I punched Azim.
b. ⊨Azim punched me.

The difference between the two reciprocal types is not reducible to their morpho-syntax, their truth conditions are also distinct, as evidenced by different entailment relations induced by these reciprocals.

While both periphrastic and verbal reciprocals entail that both participants (*men* 'I' and *Azim* in (66a) and (66b)) perform the event denoted by the verb, demonstrated by the entailed (67a) and (67b), the reverse does not hold. If the *punching* events are not performed simultaneously, as in (68), only the periphrastic reciprocal (68a) is entailed, but not the verbal reciprocal (68b). The verbal reciprocal is only entailed if the punching events are performed by the participants at the same time,[35] as in the context in (69).

(68) I punched Azim **before class**. Azim punched me **after class**.

a.⊨Men ʤana Azim **biri-biribiz-di** muʃta-dɯ-k.
I and Azim **each.other-ACC** punch-PST-1PL
'Me and Azim punched each other.'

b.⊭Men Azim menen muʃta-**ʃ**-tɯ-m.
I Azim INSTR punch-**REC**-PST-1SG
'Me and Azim punched each other.'

[35]Simultaneity is not an entirely apt concept to characterize the verbal reciprocal's distribution. When the reciprocal attaches to verbs of communication, the denoted events do not have to take place at the same time (see (ia)), but this does mean that the verbal reciprocal is entailed in contexts similar to (68). (ib) illustrates that if the *letter sending* events performed by *me* and *Azim* are seen as unconnected, the verbal reciprocal is not felicitous. Thus, a more suitable generalization regarding the verbal reciprocal's distribution would be to say that the subevents denoted by them either occur on one occasion, or they are conceptualized as "connected," for instance, by a common cause (e.g., me and Azim agree that we are going to stay in touch with each other).

(i) a. Me and Azim exchanged letters every week (i.e., I sent him a letter one week, and he responded the next, and so on.)
Men Azim menen kat ʤaz-**ɯʃ**-tɯ-m.
I Azim INSTR letter write-**REC**-PST-1SG
'Me and Azim wrote letters to each other.'

b. I wrote a letter to Azim last year, but he never responded (he even forgot about my letter). This year he wrote me a letter.
#Men Azim menen kat ʤaz-**ɯʃ**-tɯ-m.
I Azim INSTR letter write-**REC**-PST-1SG
Intended: 'Me and Azim wrote letters to each other.'

The explanation for this restriction on the verbal reciprocal is that it denotes plurality of subevents, not events (cf. Bruening 2006, Faller 2007, Dimitriadis 2008).

(69) I punched Azim. **At the same time** Azim punched me back.

a.⊨ Men ʤana Azim **biri-biribiz-di** muʃta-dɯ-k.
I and Azim **each.other-ACC** punch-PST-1PL
'Me and Azim punched each other.'

b.⊨ Men Azim menen muʃta-**ʃ**-tɯ-m.
I Azim INSTR punch-**REC**-PST-1SG
'Me and Azim punched each other.'

5.2.2 Decomposing periphrastic reciprocals

Periphrastic reciprocals, such as the English (70b), can be derived by general mechanisms independently available in the grammar, such as plurality, anaphoricity, and distinctness of arguments (Heim et al. 1991, Sternefeld 1998, Beck 2001). An influential school of thought maintains that periphrastic reciprocals with weak-reciprocal interpretation[36] are a special case of relational plurals, such as (70a) (Langendoen 1978, Sternefeld 1998, Beck 2001). Notice that the LF representations of relational plurals and periphrastic reciprocals in (71a) and (71b) (given based on Langendoen 1978 and Sternefeld 1998) are only different with respect to the non-identity condition at the individual level in the logical representation of the periphrastic reciprocal, marked in bold. The relational plural in (71a) expresses that for each member of the set *women*, there exists an individual from the set *prisoners* such that the woman released the prisoner, and for each member of the set *prisoners*, there is an individual in the denotation of *women* such that the woman released the prisoner. In the periphrastic reciprocal in (71b), *each other* fills in the object position, and it establishes an anaphoric link with the subject, *the women*. Thus, periphrastic reciprocals are a special case of relational plurals, where the subject and object are identical, i.e., *The women released the (same set of) women*. Crucially, however, reflexive relations at the individual level have to be blocked, that is, readings where some women release themselves. To prevent this, the non-identity conditions x $\neq$ y and z $\neq$ w are added to the LF representations.

(70) a. The women released the prisoners. (relational plural, Langendoen 1978: 185)

b. The women released each other. (periphrastic reciprocal, Faller 2007: 266)

(71) a. LF of "The women released the prisoners" (relational plural)
$(\forall x \in \text{women})\ (\exists y \in \text{prisoners})\ (\text{release}(x)(y)) \wedge (\forall w \in \text{prisoners})\ (\exists z \in \text{women})\ (\text{release}(z)(w))$

b. LF of "The women released each other" (periphrastic reciprocal)
$(\forall x \in \text{women})\ (\exists y \in \text{women})\ (\text{release}(x)(y) \wedge \mathbf{x \neq y}) \wedge (\forall w \in \text{women})\ (\exists z \in \text{women})\ (\text{release}(z)(w) \wedge \mathbf{z \neq w})$

Under this family of approaches the LF of the relational plural, and consequently of the periphrastic reciprocal, can be derived by the **-operator, which applies to binary relations and pluralizes its arguments in such a way that the truth conditions in (72) are satisfied (Sternefeld 1998, Beck and Sauerland 2000, Beck 2001).

[36] The interpretation of reciprocals is notoriously complex, see Langendoen 1978, Beck 2001, and Bruening 2006 for detailed discussion on the possible interpretations of the reciprocal. In this paper, I am only discussing the (two-way) weak-reciprocal interpretation.

(72) [**R](X)(Y)=1 iff
$\forall x \in X \wedge \exists y \in Y \wedge R(x)(y) \wedge \forall y \in Y \wedge \exists x \in X \wedge R(y)(x)$

(Beck and Sauerland 2000: 351)[37]

The periphrastic reciprocal is minimally different from the relational plural in that it contains an antecedent group (the external argument) and an anaphoric element (in English, the phrase *each other*), which is co-referent with the antecedent group. There are competing views regarding the source of the distinctness condition at the individual level, some argue that, in English, *other* in *each other*, supplies it (Heim et al. 1991), others treat it as a presupposition (Beck 2001), or as a default condition that is added to any predicate unless it is explicitly negated by an overt reflexive operator (Faller 2007: 278-279).

While there are polemic views about how exactly periphrastic reciprocals can be decomposed into more general operations, such as pluralization, anaphoricity and distinctness condition (or under competing analyses: pluralization, reflexivity and universal quantification (e.g., Heim et al. 1991)), all of the referenced analyses agree that periphrastic reciprocals decompose into "simpler," independently attested operations.

5.2.3 Decomposing verbal reciprocals

While there is the intuition that (event) plurality, reflexivity (or anaphoricity), and distinctness of co-arguments are also part of the denotation of the *verbal reciprocal*, there is no clear consensus on whether each of these contributions can be derived compositionally. There are several approaches, couched in very different theoretical frameworks, that argue for just one composite reciprocal head, which subsumes all of the above mentioned functions (Dalrymple et al. 1994, Bruening 2006, Dimitriadis 2008, Siloni 2012). To highlight this position I give a brief overview of an influential analysis by Siloni 2012.

Siloni (2012) argues that verbal reciprocals are derived by the lexical operation "bundling" (Reinhart and Siloni 2005), whereby two theta-roles are composed into one complex theta-role, which then gets assigned to a single argument in the syntax. Reciprocal bundling in (73) composes the Agent and the Theme roles in such a way that the output verb gets marked as "symmetric." Symmetric verbs, under this approach, are treated as verbs denoting events that consist of multiple subevents in the denotation of the base event.

(73) Reciprocal bundling
$V(\text{ACC})[\theta_i][\theta_j] \rightarrow V_{\text{SYM}}[\theta_i\text{-}\theta_j]$

(Siloni 2012)

This analysis then accounts for event plurality (at the subevent level) by relegating it to be a property of the "symmetrical verb," which is the output of a lexical bundling operation. Reflexivity is the result of the theta-role bundling operation.

While it cannot be discarded that such complex reciprocal heads exist cross-linguistically, this paper puts forth that they are not the only way to derive verbal reciprocals. This insight comes from Faller 2007: Faller proposes an analysis for the Cuzco Quechua verbal reciprocal in (74a) whereby the verbal reciprocal is decomposed into pluractionality,[38] reflexivity, and a default distinctness

[37] For some alternative but equivalent definitions of the **-operator, see Beck and Sauerland 2000.

[38] Note that syncretism between verbal reciprocals and pluractionals is a cross-linguistically attested phenomenon. Apart from Turkic languages and Cuzco Quechua, this syncretism has also been observed in Japanese (Yamada 2010), and in Madurese (Austronesian) (Davies 2000).

condition derived from Principle B. Thus, this approach treats periphrastic and verbal reciprocals not as fundamentally different, but decomposable into a similar set of operations. The Cuzco Quechua analysis is motivated by overt morphology composing the reciprocal semantics: both the *-na* and *-ku* suffixes are obligatorily present when the interpretation is reciprocal. The suffix *-na* is independently attested as a pluractional marker expressing repetitive semantics,[39] illustrated in (74b), while *-ku* is the marker of reflexivity, shown in (74c).

(74) a. Hayt'a-**na-ku**-n-ku.
kick-**PLRC-REFL**-3-PL
'They kicked each other.'
(Cuzco Quechua reciprocal, Faller 2007: 255)

b. ...mana-n saru-**na**-wa-na-nchis-chu ka-sqa-nchis-wan.
...not-DIR step.on-**PLRC**-10-NMLZ-1INCL-NEG be-NMLZ-1INCL-COM
'... they must not trample (step on) us **repeatedly** for what we are'
(Cuzco Quechua pluractional, Faller 2007: 263)

c. Asnu-n hayt'a-**ku**-n.
donkey-DIR kick-**REFL**-3
'The donkey kicks itself.'
(Cuzco Quechua reflexive, Faller 2007: 265)

Faller proposes a compositional analysis for the verbal reciprocal in (74a), where *-na* contributes the pluractional interpretation in (75),[40] and *-ku* supplies the reflexive meaning component. The distinctness condition is assumed to be default unless negated by an overt marker. The *-na*-marked pluractional verb *hayt'a-na-* 'kick-PLRC' breaks the base event into subevents *e'* and *e"*, and requires these subevents to have distinct <Agent, Theme> pairs to correctly capture weak reciprocal situations. That is, the verbal reciprocal does not represent a "special" verbal category, it can be decomposed into pluractionality, reflexivity, and distinctness of co-arguments.

(75) Denotation of the pluractional-marked VP in *hayt'a-na-* 'kick-PLRC' (in (74a))
$\lambda x.\lambda y.\lambda e[\neg AT(e) \wedge **kick'(e) \wedge *Agent(e) = x \wedge *Theme(e) = y \wedge \forall e',e'' \leq e[e' \neq e'' \rightarrow \neg[<Agent(e'), Theme(e')> \circ <Agent(e''), Theme(e'')>]]]$
(Faller 2007: 275)

I propose that Faller's analysis can be extended to Kyrgyz verbal reciprocals as well. The Vocabulary Item /(I)ʃ/ spells out the pluractional, while the reflexive has a zero exponent.[41] Similarly to the assistive, the reciprocal defines sets of subevents in the denotation of the base predicate by representing Agent-internal argument pairings in a specific way. The next section demonstrates that the comitative phrase in the Kyrgyz verbal reciprocal is an Agent argument, and argues that the pluractional introduces it.

[39] But note that other pluractional interpretations are also possible (for details, see Faller 2007: 261-265).

[40] Note that Faller's analysis assumes that reciprocals take plural subjects, although reciprocals with comitative arguments are also available in the language.

[41] Alternatives to this analysis can be explored in future work. For instance, it is possible that the pluractional and the reflexive are bundled. I also leave the exact nature of the reflexive unexplored, specifically if it is best analyzed in terms of delayed gratification (Myler 2016, and references therein) or anaphor binding.

5.2.4 Comitative argument and the pluractional

Having established that verbal reciprocals consist of a pluractional node, I turn to the comitative phrase (*Azim menen* 'with Azim' in (76b)). Reciprocal constructions often display, on the face of it, two different argument frames cross-linguistically: one with a plural subject formed by a coordinating conjunction (as in (76a)), the other with a potentially singular subject and a comitative noun phrase, sometimes also called the "discontinuous reciprocal," given in (76b) (Rákosi 2003, Rákosi 2008, Dimitriadis 2004, Dimitriadis 2008, Yamada 2010: §5, Siloni 2012: 306-313).

(76) a. Men **ɕana** Azim muʃta-**ʃ**-tɯ-k. (coordinated plural subject)
I **and** Azim punch-**REC**-PST-1PL
1. 'Me and Azim punched each other.'
2. 'Me and Azim exchanged punches with a (contextually specified) person.'

b. Men **Azim menen** muʃta-**ʃ**-tɯ-m. (singular subject, comitative phrase)
I **Azim INSTR** punch-**REC**-PST-1SG
'Me and Azim punched each other.'

One could frame the thorny question posed by the comitative phrase in verbal reciprocal the following way: periphrastic (§5.2.2) and verbal reciprocals (§5.2.3) can be derived by the same general operations (plurality, anaphoricity, distinctness of co-arguments). Despite these parallelisms between periphrastic and verbal reciprocals, cross-linguistically only verbal reciprocals admit comitative phrases (defined as a linguistic universal in Haspelmath 2007, see also Dimitriadis 2004). Such double argument frame is disallowed in the periphrastic reciprocal (77a), where the comitative phrase is banned, shown in (77b). The question is then: how can we derive the availability of the comitative phrase in verbal reciprocals, and at the same time block their occurrence in periphrastic reciprocals?

(77) a. **Men ɕana Azim** biri-biribiz-di muʃta-dɯ-k. (periphrastic reciprocal)
I and Azim each.other-ACC punch-PST-1PL
'Me and Azim punched each other.'

b. ***Men Azim menen** biri-biribiz-di muʃta-dɯ-m / muʃta-dɯ-k.
I Azim INSTR each.other-ACC punch-PST-1SG / punch-PST-1PL
Intended: 'Me and Azim punched each other.'

In what follows, I show that the comitative phrase in the Kyrgyz reciprocal is an Agent argument, and argue that it is introduced by the pluractional head, supporting the view that pluractionals can introduce Agent arguments. Additionally, I show that the dual argument structure frame attested with reciprocals is a mirage, at least in some languages (Kyrgyz and Kazakh being illustrative examples of such languages). The comitative argument is always present in the representation of plural subject reciprocals such as (76a). Thus, reciprocals, in at least some languages, come with only one argument frame, the one with a comitative phrase, which can be implicit, but nevertheless present in the syntactic representation.

5.2.5 The comitative is an argument

The comitative phrase can be shown to be an argument utilizing the argumenthood diagnostics introduced in §2.1. First, the implicit comitative phrase must always be recoverable from the context, that is, in out-of-the-blue contexts the comitative cannot be omitted. This is illustrated

in (78), where the comitative argument is no allowed to be left implicit in an out-of-the-blue context. This contrasts with the way comitative adjuncts pattern, which allow omission without the recoverability condition.

(78) I arrive home beaten up. My mom looks at me and asks: "What happened to you?"
I say:

a.# Muʃta-**ʃ**-tɯ-m.
punch-**REC**-PST-1SG
Intended: 'I exchanged punches with someone.'

b. Birœœ menen / Azim menen muʃta-**ʃ**-tɯ-m.
someone INSTR / Azim INSTR punch-**REC**-PST-1SG
'I exchanged punches with someone/Azim.'

When the context provides sufficient support for the omission of the comitative phrase, the implicit comitative phrase can license cross-sentential anaphora, another hallmark of arguments. In (79), the covert comitative phrase serves as the antecedent for the pronoun *anɯ* 'him' in the following sentence.

(79) A: Do you know anything about Azim$_i$? How is he doing these days?
B:
Men ketʃee **pro**$_i$ muʃta-**ʃ**-tɯ-m. **Anɯ**$_i$ bet-in-e sok-tu-m.
I yesterday **pro**$_i$ punch-**REC**-PST-1SG **he.ACC**$_i$ face-POSS.3SG-DAT blow-PST-1SG
'I exchanged punches with him$_i$ yesterday. I hit him$_i$ in the face.'

Finally, recall that only arguments, but not adjuncts, are allowed to serve as pivots in cleft constructions (Gribanova 2013, Akkuş 2021a: 234-236). The comitative phrase in (80) can serve as the pivot in clefts, indicating that it is indeed an argument.

(80) A: Who did you exchange punches with? Was it Azamat?
B: No,. . . :
[Men muʃta-**ʃ**-kan] (kiʃi) Azim bol-gon.
[I punch-**REC**-NF] (person) Azim COP-PRF.3SG
'It was Azim with whom I exchanged punches.'

5.2.6 The comitative argument is an Agent

The parallels between assistees and comitative phrases are not limited to both being arguments; the comitative argument has to be the Agent of (a subevent) of the base event, similarly to the assistee (see §3.3). The reciprocal construction becomes ill-formed if the comitative argument is an inanimate object, such as *muʃtaʃ baʃtɯgɯ* 'punching bag' in (81), as this phrase cannot be conceptualized as the Agent of a *punching* event. The same observation regarding the comitative argument has been made in other languages, such as Hungarian (Rákosi 2003, Rákosi 2008).

(81) *Azim **muʃtaʃ baʃtɯgɯ menen** muʃta-**ʃ**-tɯ.
Azim **punching bag** **INSTR** punch-**REC**-PST-3SG
Intended: 'Azim exchanged punches with the punching bag.'

In conclusion, the assistee and the comitative argument display some crucial similarities: they are both arguments, and bear the Agent theta-role associated with a subevent in the denotation of their base predicate.

5.2.7 Coordinated plural subjects

Some analyses treat the coordinated plural subject strategy as a separate argument frame available with the reciprocal (Siloni 2012), or even as the primary argument structure, of which the comitative phrase is derivative (for instance, Yamada 2010). While these views might be maintainable for some languages (e.g., Bruening (2006) states that Passamaquoddy reciprocals obligatorily take plural subjects), it cannot extend to every language with verbal reciprocal constructions. Kyrgyz is one such language, as reciprocals with plural subjects *always* involve an, overt or covert, comitative argument, thus the plural subject strategy cannot be considered an independent argument frame.

Kyrgyz plural subject reciprocals, illustrated in (82), are ambiguous between two readings: reciprocity between the individual members of the subject set, or between a contextually specified person and the individual members of the set denoted by the plural subject.

(82) [Men ʤana Azim]$_i$ pro$_{i/j}$ muʃta-**ʃ**-tɯ-k.
[I and Azim]$_i$ pro$_{i/j}$ punch-**REC**-PST-1PL
1. 'Me and Azim punched each other.'
2. 'Me and Azim exchanged punches with a (contextually specified) person.'

The comitative phrase is always insertable in such plural subject reciprocals to disambiguate the construction. Depending on the relevant interpretation, the comitative phrase can be either a reciprocal anaphor or a non-anaphoric noun phrase, as in (83). 2

(83) [Men ʤana Azim]$_i$ **biri-biribiz**$_i$ **menen** / **Bektur menen** muʃta-**ʃ**-tɯ-k.
[I and Azim]$_i$ **each.other**$_i$ **INSTR** / **Bektur INSTR** punch-**REC**-PST-1PL
1. 'Me and Azim punched each other.'
2. 'Me and Azim exchanged punches with Bektur.'

The reciprocal anaphor *biri-biribiz menen* in (83) is revealing regarding the syntactic status of the comitative phrase, as it can be shown that the reciprocal anaphor cannot serve as a comitative adjunct. (84a) is a sentence without reciprocal marking on the predicate. Using the reciprocal anaphor as a comitative adjunct renders the sentence ungrammatical, in contrast other types of adjuncts, such as *ʧoguu* or *birge* 'together' in (84b), are available.

(84) a. *[Men ʤana Azim]$_i$ **biri-biribiz**$_i$ **menen** tamak ʤasa-dɯ-k.
[I and Azim]$_i$ **each.other**$_i$ **INSTR** food make-PST-1PL
Intended: 'Me and Azim made food together.'

b. [Men ʤana Azim] **ʧoguu** / **birge** tamak ʤasa-dɯ-k.
[I and Azim] **together** / **together** food make-PST-1PL
'Me and Azim made food together.'

The contrast in the availability of the comitative reciprocal anaphor in (83) and (84a) offers compelling evidence in favor of analyzing the comitative phrase in (83) as an obligatory argument projected by the reciprocal. This is so, because if reciprocals could come with an argument frame where there is no comitative argument, the prediction would be that reciprocal anaphors would not

be available in these reciprocals, similarly to sentences such as (84a). This is, however, not borne out, which leads us to the conclusion that plural subject reciprocal constructions always project a comitative argument. Thus, the comitative argument is obligatory with the Kyrgyz reciprocal.

5.2.8 Introducing the comitative argument

Now we are in a better position to answer the question posed in the beginning of the discussion in §5.2.4: why is it that verbal reciprocals compose with a comitative argument, while periphrastic reciprocals do not?

While non-lexicalist approaches mostly gloss over the issue posed by the reciprocal argument, lexicalist approaches offer the following proposal to solve this problem: verbal reciprocals can introduce a dyadic argument frame consisting of an external and a comitative argument (Dimitriadis 2004, Dimitriadis 2008, Rákosi 2008, Siloni 2012), shown in (85). These approaches attempt to derive the comitative argument's properties from the symmetricity of the verbal reciprocal (Dimitriadis 2004, Dimitriadis 2008, Siloni 2012). Siloni (2012) proposes that the external argument bears the Agent-Theme bundled theta role, whereas the comitative argument comes without a prespecified thematic role. But the comitative argument gets interpreted with an Agent-Theme theta role, too, as the consequence of the symmetric property of the reciprocal verb. The symmetric verb, under this approach, is lexically specified to denote two underlying subevents in the denotation of the base verb. Because of the symmetricity of the reciprocal verb, the comitative is taken to be in a symmetric relation with the external argument, hence it gets interpreted with the same theta-role as the external argument, that is, with the Agent-Theme role.

(85) Dyadic reciprocal verb: V_{SYM} [Ag-Th], [Ø-WITH]

(Siloni 2012: 310)

The proposed analysis, while it is based on different theoretical foundations, agrees with the intuition behind the lexicalist proposals: the presence of the comitative argument is connected to certain properties of the reciprocal verb, namely that it denotes plurality of subevents. The proposal is that reciprocals, which are a type of pluractionals, define subevents by introducing the comitative (Agent) argument for some of these subevents, and rely on the Voice head to introduce the other Agent for the remaining subevents. That is, the same general approach that we used to capture the properties of the assistive can be extended to reciprocal constructions.

The upshot of this analysis is that it enables us to establish a principled connection between two syncretic constructions, the assistive and reciprocal, which would be impossible under the lexicalist approaches. The lexical operation of reciprocalization only forms reciprocal verbs, while assistives would need to be independently derived. In contrast, our proposal advocates for a unified approach, whereby both assistives and reciprocals are considered types of pluractionals that can introduce Agent arguments. At the same time, this analysis allows us to provide additional support for the claim that argument-introducing pluractionals exist.

6 Conclusions

This paper investigated some of the syncretic uses of the Kyrgyz Vocabulary Item /(I)ʃ/: the assistive, the reciprocal, and the plural agreement marker uses. The overarching argument is that the Vocabulary Item /(I)ʃ/ is specified for [–singular], and the reason why it can spell out the assistive, reciprocal, and plural agreement is that all of these nodes encode some kind of plurality, thus all of them are compatible with the VI /(I)ʃ/.

We dedicated much attention to the assistive construction, an empirically and theoretically understudied structure, which is usually rendered into English as 'help someone do something'. This translation was shown to be inaccurate (and often not intuitive for native Kyrgyz and Kazakh speakers). This rendering, most probably, attempts to reflect the bi-agentive nature of the assistive, where both the assister and the assistee perform an event, which is also characteristic to the English bi-clausal "help" constructions. A curious property of the assistive is the dative-marked Agent-argument (i.e., the assistee), which can be shown not to be added by the commonly known non-core argument introducing heads, such as Cause, Appl or Voice. This led us to explore the possibility that the assistive is directly responsible for introducing the assistee argument. The assistive was argued to be a type of event pluralizer (or pluractional) that divides the base event into two subevent sets. These subevent sets are individuated by their participants, specifically by their different Agents: one set of subevents is performed by the assister, the other by the assistee. The paper argued that the need to individuate subevents is the reason why this type of pluractional construction can introduce an Agent argument, the assistee.

This analysis is extendable to the syncretic reciprocal construction, which introduces a comitative Agent argument. While verbal reciprocals are known to be able to combine with a comitative phrase, the status of the comitative is often overlooked or it is considered an adjunct in non-lexicalist studies. This paper shows that the Kyrgyz and Kazakh comitative phrase in reciprocals is an Agent argument, and it is always present in verbal reciprocal constructions. Following Faller (2007), a compositional analysis was proposed, whereby verbal reciprocals can be derived by pluractionality, reflexivity, and distinctness of co-arguments. The pluractional component of the verbal reciprocals defines subevents of the event in the denotation of the main predicate. We argued that these subevents are individuated by their distinct Agents, and that this type of pluractional can also introduce an Agent argument (i.e., the comitative argument). If this analysis is on the right track, it can provide a way to account for the presence of a non-nominative Agent argument in a wide-range of constructions denoting event plurality.

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A Appendix: Kazakh data

(1) Men Ajnur-ga ʒygir-**is**-ti-m /*-k /*Ø.
I Ainur-DAT run-**ASST**-PST-1SG /-1PL /-3SG
'I helped Ainur run.'

(2) a. I am an athletics coach and I explain Ainur what is the best way to run.

b. I show Ainur how to run.

c. I remove obstacles from Ainur's way to allow her to run.

d. I keep encouraging Ainur during her run, telling her not to give up.
#Men Ajnur-ga ʒygir-**is**-ti-m.
I Ainur-DAT run-**ASST**-PST-1SG
Intended: 'I helped Ainur run.'

(3) Ainur had to run 5 km. There was an option that I could run some of the distance for her, so I ran 2 km out of Ainur's 5 km, and Ainur ran 3 km.
Men Ajnur-ga ʒygir-**is**-ti-m.
I Ainur-DAT run-**ASST**-PST-1SG
'I helped Ainur run.'

(4) NA

(5) Men Araj-men sog-**ɯs**-tɯ-m.
I Arai-INSTR hit-**REC**-PST-1SG
'Me and Arai hit each other.'

(6) A: What did you do yesterday?
B:
#Yj tazala-**s**-tɯ-m.
house clean-**ASST**-PST-1SG
Intended: 'I helped **someone** clean the house.'
Only available: 'I helped **him/her/them** clean the house.'

(7) A: I helped my mother$_i$ yesterday.
B: What did you do? / How did you help her?
A: **pro**$_i$ Yj tazala-**s**-tɯ-m.
pro$_i$ house clean-**ASST**-PST-1SG
'I helped **her**$_i$ clean the house.'

(8) A: I helped my mother$_i$ yesterday.
B: What did you do? / How did you help her?
A:
pro$_i$ (Yj-di) tazala-**s**-tɯ-m. **pro**$_i$ Kœp is-i bar eken.
pro$_i$ (house-ACC) clean-**ASST**-PST-1SG **pro**$_i$ lot work-POSS.3 COP COP.EVID.3SG
'I helped (**her**$_i$) clean (the house). (**She**$_i$) had a lot to do.'

(9a) [$Ø_i$ Yj-di tazala-gan] (kisi) **Ahmet**$_i$ edi.
[$Ø_i$ house-ACC clean-NF] (person) **Ahmet**$_i$ COP.PST.3SG
'It was **Ahmet** [who cleaned the house].'

(9b) [Ajnur $Ø_i$ sɯjlɯk ber-gen] (kisi) **Ahmet**$_i$ edi.
[Ainur $Ø_i$ gift give-NF] (person) **Ahmet**$_i$ COP.PST.3SG
'It was **Ahmet** [to whom Ainur gave a gift].'

(10a) *[$Ø_i$ Yj-di tazala-n-gan] (kisi) **Ahmet**$_i$ edi.
[$Ø_i$ house-ACC clean-PASS-NF] (person) **Ahmet**$_i$ COP.PST.3SG
Intended: 'It was **Ahmet** [by whom the house was cleaned].'

(10b) *[Ajnur $Ø_i$ meni ʃakɯr-gan] (wakɯt) **keʃe**$_i$ edi.
[Ainur $Ø_i$ I.ACC call-NF] (time) **yesterday**$_i$ COP.PST.3SG
Intended: 'It was **yesterday** [when Ainur called me].'

(11) [Aiʃa $Ø_i$ yj-di tazala-**s**-kan] (kisi) **Ajnur**$_i$ edi.
[Aisha $Ø_i$ house-ACC clean-**ASST**-NF] (person) **Ainur**$_i$ COP.PST.3SG
'It was **Ainur** [to whom Aisha helped clean the house].'

(13) Aisha had Ainur clean the house, but she (=Aisha) also offered to help Ainur.
#Ajʃa Ajnur-ga yj-di tazala-**s**-tɯ.
Aisha Ajnur-DAT house-ACC clean-**ASST**-PST.3SG
Intended: 'Aisha made Ainur clean the house (and she also helped Ainur).'
Only available: 'Aisha helped Ainur clean the house.'

(14) Ajʃa Ajnur-ga yj-di tazala-**t-tɯr**-dɯ.
Aisha Ainur-DAT house-ACC clean-**CAUS-CAUS**-PST.3SG
Yes: 'Aisha had Ainur clean the house.'
Not: 'Aisha had someone make Ainur clean thee house.'

(15) *Ajʃa **Arajlɯm-ga/nɯ** Ajnur-ga yj-di tazala-**t-tɯr**-dɯ.
Aisha **Arailym-DAT/ACC** Ainur-DAT house-ACC clean-**CAUS-CAUS**-PST.3SG
Intended: 'Aisha had Arailym make Ainur clean the house.'

(16)??Ajʃa **Arajlɯm-nɯ/*ga** Ajnur-ga yj-di tazala-**s-tɯr**-dɯ.
Aisha **Arailym-ACC/*DAT** Ajnur-DAT house-ACC clean-**ASST-CAUS**-PST.3SG
'Aisha had Arailym help Ainur clean the house.'

(17) Ajʃa Ajnur-ga tamak pisir-**Ø**-dɯ.
Aisha Ainur-DAT food cook-**L.APPL**-PST.3SG
'Aisha cooked food for Ainur.'

(18a) *Ajʃa Ajnur-ga yj boja-**Ø**-dɯ.
Aisha Ainur-DAT house paint-**L.APPL**-PST.3SG
Intended: 'Aisha painted the house for Ainur.'

(18b) Ajʃa Ajnur-ga yj boja-**p ber**-di.
Aisha Ainur-DAT house paint-**H.APPL**-PST.3SG
'Aisha painted the house for Ainur.'

(19a) *Ajʃa Arajlɯm-ga Ajnur-ga tamak pisir-**Ø-ip ber**-di.
Aisha Arailym-DAT Ainur-DAT food cook-**L.APPL-H.APPL**-PST.3SG
Intended: 'Aisha cooked food for Ainur, for Arailym.'

(19b) *Ajʃa pro Ajnur-ga tamak pisir-**Ø-ip ber**-di.
Aihsa pro Ainur-DAT food cook-**L.APPL-H.APPL**-PST.3SG
Intended: 'Aisha cooked food for Ainur, for her/him.'

(19c) Ajʃa Ajnur-ga tamak pisir-**ip ber**-di.
Aisha Ainur-DAT food cook-**H.APPL**-PST.3SG
'Aisha cooked food for Ainur.'

(20a) Ajʃa Ajnur$_i$-ga pro$_i$ yj-di tazala-**s-ɯp ber**-di.
Aisha Ainur$_i$-DAT pro$_i$ house-ACC clean-**ASST-H.APPL**-PST.3SG
'Aisha helped Ainur$_i$ clean the house for her$_i$'.

(20b)??Ajʃa Ajnur-ga Arajlɯm-ga yj-dy tazala-**s-ɯp ber**-di.
Aisha Ainur-DAT Arailym-DAT house-ACC clean-**ASST-H.APPL**-PST.3SG
'Aisha helped Arailym clean the house for Ainur.'

(22) Ajʃa Ajnur-ga yj-di **sɯpɯrgɯʃ-pen** tazala-**s**-tɯ.
Aisha Ainur-DAT house-ACC **broom-INSTR** clean-**ASST**-PST.3SG
Yes: 'Aisha, with a broom, helped Ainur clean the house.' (Or more accurately: 'Aisha, with a broom, cleaned some of the house, Ainur cleaned the rest.'
Not: 'Aisha helped Ainur clean the house with a broom (where only Ainur used the broom).'

(23) Ajʃa Ajnur-ga **kœrʃi-men** yj-di tazala-**s**-tɯ.
Aisha Ainur-DAT **neighbor-INSTR** house-ACC clean-**ASST**-PST.3SG
Yes: 'Aisha, together with the neighbor, helped Ainur clean the house.'
Not: 'Aisha helped Ainur clean the house together with the neighbor (where only Ainur cleaned together with the neighbor).'

(24) Ajʃa Ajnur-ga **sabɯr-men** yj-di tazala-**s**-tɯ.
Aisha Ainur-DAT **patience-instr** house-ACC clean-**ASST**-PST.3SG
Yes: 'Aisha patiently helped Ainur clean the house.' (Aisha was patient.)
Not: 'Aisha helped Ainur patiently clean the house.' (Ainur was patient.)

(25a) Ajʃa Ajnur-ga yj-di taza-**la-s**-tɯ.
Aisha Ainur-DAT house-ACC $\sqrt{clean}$-**V-ASST**-PST.3SG
'Aisha helped Ainur clean the house.'

(25b) Ajʃa Ainur$_i$-ga pro$_i$ kœjlek tig-**ip ber-is**-ti.
Aisha Ainur$_i$-DAT pro$_i$ shirt sew-**APPL-ASST**-PST.3SG
'Aisha helped Ainur$_i$ make a shirt for herself$_i$.'

(26a) *Ajʃa Ajnur-ga (Arajlɯm-ga/nɯ) yj-di tazala-**t**-**ɯs**-tɯ.
Aisha Ainur-DAT (Arailym-DAT/ACC) house-ACC clean-**CAUS-ASST**-PST.3SG
Intended: 'Aisha helped Ainur get (Arailym) clean the house.'

(26b) *Yj Ajnur-ga tazala-**n**-**ɯs**-tɯ.
House Ainur-DAT clean-**PASS-ASST**-PST.3SG
Intended: 'The house was such that it was helped clean for Ainur.'

(28a) Yj Ajnur-ga tazala-**s**-**ɯl**-dɯ.
House Ainur-DAT clean-**ASST-PASS**-PST.3SG
'The house was such that someone helped Ainur clean it.'

(28b) *Ajʃa (Arajlɯm-ga) Ajnur-ga yj-di tazala-**s**-**ɯs**-tɯ.
Aisha (Aselia-DAT) Janara-DAT house-ACC clean-**ASST-ASST**-PST.3SG
Intended: 'Aisha helped Ainur help (Arailym) clean the house.'

(30) a. Aisha removed obstacles from Ainur's way to allow her to run.

b. Aisha explained Ainur how to run.

c. Aisha kept encouraging Ainur while she was running.
Ajʃa Ajnur-ga ʒygir-y-ge kœmektes-ti.
Aisha Ainur-DAT run-NMLZ-DAT help-PST.3SG
'Aisha helped Ainur run.'

(31) a. Aisha removed obstacles from Ainur's way to allow her to run.

b. Aisha explained Ainur how to run.

c. Aisha kept encouraging Ainur while she was running.
#Ajʃa Ajnur-ga ʒygir-**is**-ti.
Aisha Ainur-DAT run-**ASST**-PST.3SG
Intended: 'Aisha helped Ainur run.'

(32) a. Ainur removed obstacles from Aisha's way to allow her to run.

b. Ainur explained Aisha how to run.

c. Ainur kept encouraging Aisha while she was running.
#Ajʃa Ajnur-ga ʒygir-**is**-ti.
Aisha Ainur-DAT run-**ASST**-PST.3SG
Intended: 'Aisha helped Ainur run.'

(33) Ajʃa Ajnur-ga ʒygir-**is**-ti.
Aisha Ainur-DAT run-**ASST**-PST.3SG
'Aisha helped Ainur run.'

(33a)#Birak Ajʃa ʒygir-gen ʒok.
but Aisha run-PF NEG.3SG
'But Aisha didn't run.'

(33b) #Birak Ajnur ʒygir-gen ʒok.
but Ainur run-PF NEG.3SG
'But Ainur didn't run.'

(34) Ainur had to do the dishes but she couldn't come in contact with water due to a flare-up of a skin infection. Arailym did the dishes for her(=Ainur). Ainur was there while Arailym did the dishes.
Arajlɯm Ajnur-ga ɯdɯs-tar-dɯ ʒu-**s**-tɯ.
Arailym Ainur-DAT dish-PL-ACC wash-**ASST**-PST.3SG
'Arailym helped Ainur do the dishes.'

(35) Ainur had to do the dishes but she can't come in contact with water due to a flare-up of a skin infection, so Arailym did the dishes for her(=Ainur). Ainur was resting in the living room while Arailym did the dishes in the kitchen.
#Arajlɯm Ajnur-ga ɯdɯs-tar-dɯ ʒu-**s**-tɯ.
Arailym Ainur-DAT dish-PL-ACC wash-**ASST**-PST.3SG
Intended: 'Arailym helped Ainur do the dishes.'

(36a) *Arajlɯm Ajnur-ga ʒan-**ɯs**-tɯ.
Arailym Ainur-DAT burn-**ASST**-PST.3SG
Intended: 'Arailym helped Ainur burn(intr).'

(36b) Arajlɯm Ajnur-ga œzin ʒandɯr-**ɯs**-tɯ.
Arailym Ainur-DAT self.3POSS.ACC burn(tr)-**ASST**-PST.3SG
'Arailym helped Ainur burn herself.'

(37a) Ajʃa / *ʒel / *balta Ajnur-ga tereze-ler-di sɯndɯr-**ɯs**-tɯ.
Aisha / *wind / *axe Ainur-DAT window-PL-ACC break-**ASST**-PST.3SG
'Aisha/ *The wind/ *The axe helped Ainur break the window.'

(37b) Ajʃa Ajnur-ga / *ʒel-ge / *balta-ga tereze-ler-di sɯndɯr-**ɯs**-tɯ.
Aisha Ainur-DAT / *wind-DAT / *axe-DAT window-PL-ACC break-**ASST**-PST.3SG
'Aisha helped Ainur / *the wind/ *the axe break the window.'

(38) Ajʃa Ajnur-ga ʒygir-**is**-ti.
Aisha Ainur-DAT run-**ASST**-PST.3SG
'Aisha helped Ainur run.'

(39) a. Aisha ran next to Ainur, cheering for her/ supporting her.

b. Aisha taught Ainur how to run by showing him how to do it.
#Ajʃa Ajnur-ga ʒygir-**is**-ti.
Aisha Ainur-DAT run-**ASST**-PST.3SG
Intended: 'Aisha helped Ainur run.'

(42) Ainur had to run 5 km. There was an option that Aisha could run some of the distance for her, so Aisha ran 2 km out of Ainur's 5 km, and Ainur ran 3 km.
Ajʃa Ajnur-ga ʒygir-**is**-ti.
Aisha Ainur-DAT run-**ASST**-PST.3SG
'Aihsa helped Ainur run.'

(43) Ainur had to cut down seven trees. He asked Aihsa to help her. Aisha cut down two trees, Ainur cut down five.
Ajʃa Ajnur-ga ʒeti agaʃ-tɯ kes-**is**-ti.
Aisha Ainur-DAT seven tree-ACC cut-**ASST**-PST.3SG
'Aihsa helped Ainur cut down the seven trees.'

(50) *Ajnur bala-ga ujɯkta-**s**-tɯ.
Ainur child-DAT sleep-**ASST**-PST.3SG
Intended: 'Ainur helped the child sleep.'

(51a) Aisha ran together with Ainur with the intention of helping her.
#Ajʃa Ajnur-ga ʒygir-**is**-ti.
Aisha Ainur-DAT run-**ASST**-PST.3SG
Intended: 'Aihsa helped Ainur run.'

(52a) Ainur had to run 5 km. There was an option that Aisha could run some of the distance for her, so Aisha ran 2 km out of Ainur's 5 km, and Ainur ran 3 km.
Ajʃa Ajnur-ga ʒygir-**is**-ti.
Aisha Ainur-DAT run-**ASST**-PST.3SG
'Aihsa helped Ainur run.'

(53) a. Aihsa drove Ainur's car to make sure it runs well before letting Ainur drive it.

b. Aihsa showed Ainur how to drive a car (by driving Ainur's car).
#Ajʃa Ainur-ga maʃina ajda-**s**-tɯ.
Aihsa Ainur-DAT car drive-**ASST**-PST.3SG
Intended: 'Aisha helped Ainur drive the car.'

(54) Ainur had to drive from Almaty to Uzynagash, Aisha went along and drove some of the distance.
Ajʃa Ainur-ga maʃina ajda-**s**-tɯ.
Aihsa Ainur-DAT car drive-**ASST**-PST.3SG
'Aisha helped Ainur drive the car.'

(55) *Ajʃa Ainur-ga magazin-ge kir-**is**-ti.
Aihsa Ainur-DAT store-DAT enter-**ASST**-PST.3SG
Intended: 'Aisha helped Ainur enter the store.'

(58-60c) NA

(65) Men Araj-men syj-**is**-ti-m.
I Arai-INSTR kiss-**REC**-PST-1SG
'Me and Arai kissed each other.'

(66a) Men ʒæne Araj bir-birimiz-di syj-di-k.
I and Arai each.other-ACC kiss-PST-1PL
'Me and Arai kissed each other.'

(66b) Men Araj-men syj-**is**-ti-m.
I Arai-INSTR kiss-**REC**-PST-1SG
'Me and Arai kissed each other.'

(67a-67b) ⊨I kissed Arai.
⊨Arai kissed me.

(68) I kissed Arai **before class**. Arai kissed me **after class**.

a.⊨Men ʒæne Araj bir-birimiz-di syj-di-k.
I and Arai each.other-ACC kiss-PST-1PL
'Me and Arai kissed each other.'

b.⊭Men Araj-men syj-**is**-ti-m.
I Arai-INSTR kiss-**REC**-PST-1SG
'Me and Arai kissed each other.'

(69) I kissed Arai, and **at the same time** Arai kissed me back.

a.⊨Men ʒæne Araj bir-birimiz-di syj-di-k.
I and Arai each.other-ACC kiss-PST-1PL
'Me and Arai kissed each other.'

b.⊨Men Araj-men syj-**is**-ti-m.
I Arai-INSTR kiss-**REC**-PST-1SG
'Me and Arai kissed each other.'

(76a) Men ʒæna Araj syj-**is**-ti-k.
I and Arai kiss-**REC**-PST-1PL
1. 'Me and Arai kissed each other.'
2. 'Me and Arai exchanged kisses with a (contextually specified) person.'

(76b) Men **Araj-men** syj-**is**-ti-m.
I **Arai-INSTR** kiss-**REC**-PST-1SG
'Me and Arai kissed each other.'

(77a) Men ʒæne Araj bir-birimiz-di syj-di-k.
I and Arai each.other-ACC kiss-PST-1PL
'Me and Arai kissed each other.'

(77b) *Men Araj-men bir-birimiz-di syj-di-m / syj-di-k.
I Arai-INSTR each.other-ACC kiss-PST-1SG / kiss-PST-1PL
Intended: 'Me and Arai kissed each other.'

(78) I arrive home beaten up. My mom looks at me and asks: "What happened to you?" I say:

a.# Sog-**ɯs**-tɯ-m.
hit-**REC**-PST-1SG
Intended: 'I fought with someone.'

b. Birew-men sog-**ɯs**-tɯ-m.
someone-INSTR hit-**REC**-PST-1SG
'I fought with someone.'

(79) A: Do you know anything about Ahmet$_i$? How is he doing these days?
B:
pro$_i$ Sog-**ɯs**-tɯ-m.
pro$_i$ hit-**REC**-PST-1SG
'I fought with him$_i$.'

(80) A: Who did you fight with? Was it Ahmet?
B: No,. . . :
[Men sog-**ɯs**-kan] (kisi) Arɯstan edi.
[I hit-**REC**-NF] (person) Arystan COP.PST.3SG
'It was Arystan with whom I fought.'

(82) [Men ʒæna Araj]$_i$ pro$_{i/j}$ syj-**is**-ti-k.
[I and Arai]$_i$ pro$_{i/j}$ kiss-**REC**-PST-1PL
1. 'Me and Arai kissed each other.'
2. 'Me and Arai exchanged kisses with a (contextually specified) person.'

(83) [Men ʒæna Araj]$_i$ bir-birimiz$_i$-ben / Ajʃa-men syj-**is**-ti-k.
[I and Arai]$_i$ each.other$_i$-INSTR / Aisha-INSTR kiss-**REC**-PST-1PL
'Me and Arai kissed each other/Aisha.'

(84a) *Men ʒæne Araj bir-birimiz-ben tamak pisir-di-k.
I and Arai each.other-INSTR food cook-PST-1PL
Intended: 'Me and Arai cooked food together.'

(84b) Men ʒæne Araj birge tamak pisir-di-k.
I and Arai together food cook-PST-1PL
'Me and Arai cooked food together.'