

Argument Introducing Pluractionals

An Investigation of Kyrgyz and Kazakh Assistives

Eszter Ótött-Kovács*
Cornell University
eo264@cornell.edu

Abstract

This paper investigates a verbal category called “assistive” in two closely-related Turkic languages, Kyrgyz and Kazakh, which appears to have a helping-like interpretation. The assistive construction includes a dative-marked Agent argument, which is shown not to be introduced by the commonly known noncore argument introducing heads Cause, Applicative, or Voice. The paper argues that the assistive does not encode a helping event, rather it is a hitherto unidentified type of event pluralizer (pluractional), which can introduce an Agent argument. The paper presents novel data showing that the assistive defines event plurality at the level of subevents: it requires that the embedded event be divided into two subevent sets such that the embedded event is the sum of the two subevent sets and the dative-marked argument is the Agent of one of the subevent sets. Thereby, the paper contributes to the inventory of pluractionals and to the cross-linguistically attested noncore argument introducing categories.

1 Introduction

The way verbs compose 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

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languages¹ focusing on the closely-related languages Kyrgyz and Kazakh², 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 dative-marked noun phrase (*Azim* in (1)), the “assiste.” 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 (*-∅* ‘3SG’). The assistive is responsible for introducing the dative-marked assistee, which can be shown to be an argument (see §3.1).

- (1)

ASSISTER	Men
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ASSISTEE	Azim-ge
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 maʃina ajda-ʃ-tu-m /*k /*∅.
I Azim-DAT car drive-ASST-PST-1SG /1PL /3SG
‘I helped Azim drive the car.’

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 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 defines a type of 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 subevents of the embedded event *driving the car from Bishkek to Osh*. In this case, the assister and the assistee may split up the event amongst each other in such a way that the assistee drives from Bishkek to Jalal-Abad and the assister drives the car from Jalal-Abad to Osh, thus they together drive from Bishkek to Osh. In light of these facts, the paper puts forth an analysis that treats the assistive as a type of event pluralizer, or pluractional (Cusic 1981, Lasersohn 1995, Garrett 2001, E. J. Wood 2007, Henderson 2012), which defines event plurality at the level of subevents.

- (2) a. I am a driving instructor, I explained Azim how to drive.
b. Azim had to drive a long distance, he(=Azim) asked me to ride with him in the car to entertain him during the long drive.
c. Azim had to drive a long distance, he(=Azim) asked me to ride with him to help him navigate.

¹To 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.

²The Kyrgyz and Kazakh data come from the author’s elicitation with two Kyrgyz consultants (from Bishkek and Osh) and one Kazakh speaker (from the Almaty-area). The data presented in this paper was elicited with one of the Kyrgyz consultant (from Bishkek) over one and a half years during weekly elicitation sessions. During the revisions, I double-checked all the data with another Kyrgyz speaker (from Osh), who also helped with acquiring judgements from other Kyrgyz speakers. The paper only presents Kyrgyz data, Appendix-A contains the corresponding 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.

d. I showed Azim how to drive the car before Azim drove the car.

#Men Azim-ge mafina ajda-**f**-tuu-m.
 I Azim-DAT car drive-**ASST**-PST-1SG
 Intended: ‘I helped Azim drive the car.’

(3) Azim had to drive from Bishkek to Osh and asked me to help him. I drove some of the distance, Azim did the rest.

Men Azim-ge (Bifkek-ten Of-ko tfej-in) mafina ajda-**f**-tuu-m.
 I Azim-DAT (Bishkek-ABL Osh-DAT to) car drive-**ASST**-PST-1SG
 ‘I helped Azim drive the car (from Bishkek to Osh).’

The paper submits that the assistive-pluractional defines two subevent sets that add up to the event in the denotation of the embedded predicate, and the assistive introduces a dative-marked argument, the assistee, as the Agent of one of these subevent sets. Thus, the assistive is a type of pluractional that introduces an Agent argument. This way the paper contributes to our inventory of cross-linguistically attested noncore argument introducing categories and the theory of Agent introducing heads.

The paper is structured as follows: §2 offers a detailed descriptive overview of the assistive’s usage and meaning. §3 turns its attention to the dative-marked assistee: §3.1 shows that the assistee is an argument, the following subsections demonstrate that the assistee is not introduced by the commonly discussed argument introducing heads, such as the Causative (§3.2), Applicative (§3.3), or Voice (§3.4). §4 presents the analysis, which defines the assistive as a type of pluractional that can introduce an Agent argument. §4.6 discusses a very similar construction in the Bantu language Kinande based on Schneider-Zioga and Mutaka 2019 and Irimia and Schneider-Zioga 2023, and extends the proposed analysis to the Kinande construction. §5 concludes.

2 Descriptive preliminaries

The so-called assistive is spelt out by the suffix /**(I)f**/³ on the verbal stem. Tense, Aspect, Mood and Modality markers always follow the assistive, for instance the past tense suffix [tuu] in (4) must come after the assistive. The assistive construction always includes (at least) two participants: the external argument, which I call the “assistee,” and the dative-marked participant, dubbed the “assistee.”

(4)

ASSISTEE	Kanykei
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ASSISTEE	Azim-ge
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 mafina ajda-**f**-tuu.
 Kanykei Azim-DAT car drive-**ASST**-PST.3SG
 ‘Kanykei helped Azim drive the car.’

2.1 The assistive does not denote a *helping* event: The participation requirement

The only work that clearly identifies the assistive as a distinct category is Nedjalkov (2003: 210-211). This is also the work that uses the term “assistive” to name the construction, which it translates

³Capital letters in affixes indicate that the corresponding vowel is subject to vowel harmony. “I” has four possible realizations in Kyrgyz: [i], [u], [u], [y] (for more details on Kyrgyz and Kazakh vowel harmony see Washington 2017) The round brackets around vowels mark that the sound is not present when the suffix attaches to a stem ending in a vowel.

into English with the verb “help.”⁴ Although never explicitly stated by Nedjalkov (2003), this approach implies that the assistive denotes a relation between a *helping* event and the base event.⁵ Under this view, the assistive verb *maʃina ajda-f-* ‘car drive-ASST’ in (4) denotes a *helping* event, whose Agent is the assister, and a *car driving* event with the assistee as its Agent.

If this is the right approach, we predict that the assistive is felicitous whenever the assister performs some type of *helping* event to facilitate the completion of the base event. The contexts in (5a)-(5c) are set up in a way that the assister, *Kanykei*, provides assistance to the assistee, *Azim*, to help him(=the assistee) perform the *car driving* event. If the assistive merely added a *helping* event, the assistive-marked predicate would be expected to be felicitous in these contexts. However, (5) shows that this prediction is not borne out, the assistive is incompatible with all of these contexts.

- (5) a. Kanykei is a driving instructor, and she(=Kanykei) explained Azim how to drive.
 b. Azim has to drive a long distance, he(=Azim) asks Kanykei to ride with him in the car to entertain him during the long drive.
 c. Azim has to drive a long distance, he(=Azim) asks Kanykei to ride with him to help him with the navigation.
 #Kanukej Azim-ge maʃina ajda-f-tu.
 Kanykei Azim-DAT car drive-ASST-PST.3SG
 Intended: ‘Kanykei helped Azim drive the car.’

Note that the bi-clausal construction with the matrix predicate *ʒardamdaf-* ‘to help’ that embeds a nominalized verb is perfectly fine in these contexts. The acceptability of (6) underscores that constructions that express a *helping* event are acceptable in these contexts. Importantly, it also implies that, contrary to a hypothetical Nadjelkov-style analysis, the assistive does not denote a *helping* event, and this is the reason why the assistive is infelicitous in (5).

- (6) a. Kanykei is a driving instructor, and she(=Kanykei) explained Azim how to drive.
 b. Azim has to drive a long distance, he(=Azim) asks Kanykei to ride with him in the car to entertain him during the long drive.
 c. Azim has to drive a long distance, he(=Azim) asks Kanykei to ride with him to help him with the navigation.
 Kanukej Azim-ge maʃina ajda-gan-ga ʒardamdaf-tu.
 Kanykei Azim-DAT car drive-NMLZ-DAT help-PST.3SG
 ‘Kanykei helped Azim drive the car.’

A notable property of the felicitous sentence with *ʒardamdaf-* ‘help’ is that the two participants perform different events: *Kanykei* provides assistance either by *teaching Azim*, *entertaining Azim*, or by *navigating*, on the other hand *Azim* carries out a *car driving* event. This is also how the assistive is intended to be performed in (5). My consultants report that this is exactly the source of infelicity of the assistive in (5): only one of the two participants performs the event in the

⁴As the paper shows, this translation, while it captures some aspects of the assistive’s meaning, it is not entirely accurate. A better, albeit wordier, translation would be: ‘x helped y perform event e by performing a subevent of event e.’

⁵I use the terms “base event” and “embedded event” interchangeably to refer to the predicate of events that the assistive composes with.

denotation of the base predicate. Thus, the assistive can only be felicitously used if the assister and the assistee both perform events that are in the denotation of the base event.

The difference between the bi-clausal sentence with *ǰardamdaf-* ‘help’ and the assistive is illustrated by the contrast in acceptability of follow-up sentences that negate that either the helper or the person receiving help performs the embedded event. (7a), which negates that the helper, *Kanykei*, performed a *car driving* event, is a felicitous follow-up after sentence (7).

- (7) Kanukej Azim-ge maƒina ajda-gan-ga **ǰardamdaf-tu.**
 Kanykei Azim-DAT car drive-NMLZ-DAT **help-PST.3SG**
 ‘Kanykei helped Azim drive the car.’
- a. Birok Kanukej maƒina ajda-gan ǰok.
 but Kanykei car drive-PRF NEG.3SG
 ‘But Kanykei didn’t drive the car.’
- b. #Birok Azim maƒina ajda-gan ǰok.
 but Azim car drive-PRF NEG.3SG
 ‘But Azim didn’t drive the car.’

In contrast, a sentence that states that either the assister or the assistee do not perform an event in the denotation of the base predicate cannot felicitously come after the assistive in (8), illustrated by the infelicitous follow-up sentences (8a) and (8b).

- (8) Kanukej Azim-ge maƒina ajda-**f**-tu.
 Kanykei Azim-DAT car drive-**ASST**-PST.3SG
 ‘Kanykei helped Azim drive the car.’
- a. #Birok Kanukej maƒina ajda-gan ǰok.
 but Kanykei car drive-PRF NEG.3SG
 ‘But Kanykei didn’t drive the car.’
- b. #Birok Azim maƒina ajda-gan ǰok.
 but Azim car drive-PRF NEG.3SG
 ‘But Azim didn’t drive the car.’

That is, the assistive requires both the assister and the assistee to perform an event in the denotation of the base predicate.⁶ I will refer to this as the “participation requirement,” given in (9). The assistive cannot be felicitously used in contexts, such as in (5a)-(5c), where this condition

⁶The 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 (ia), the assistee, *Azim*, had the intention to *do the dishes*, but was prevented to do so 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 (ib)). I presume that in the case of (ia) the intention to participate is as good as actual participation.

- (i) a. Azim had to do the dishes and asked Kanykei to help him. However, Azim suddenly realized that he can’t come in contact with water due to a sudden flare-up of a skin infection. Kanykei did the dishes. Azim was there while Kanykei did the dishes.
 Kanukej Azim-ge idif-ter-di ǰuu-**f**-tu.
 Kanykei Azim-DAT dish-PL-ACC wash-**ASST**-PST.3SG
 ‘Kanykei helped Azim do the dishes.’
- b. Azim had to do the dishes and asked Kanykei to help him. However, Azim suddenly realized that he can’t come in contact with water due to a sudden flare-up of a skin infection. Kanykei did the dishes. Azim was resting in the living room while Kanykei did the dishes in the kitchen.

is not satisfied. As there is no such requirement for the bi-clausal *help* construction in (6), the sentence is felicitous.

(9) PARTICIPATION REQUIREMENT (to be revised):

The assister and the assistee perform an event in the denotation of the base event.

Additionally, eventhood diagnostics with *again* also support the conclusion that there is no *helping* event in the assistive construction. *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. Moreover, if the assistive has a bi-eventive structure with some kind of vP expressing the meaning ‘help,’ the sentence with *again* is predicted to be ambiguous, as it could modify either the *helping* event or the embedded event. This is, however, not what we see: *again* cannot target a *helping* event, and no ambiguity arises when the assistive-marked verb is modified with *again*, as in (10). First, *again* cannot target the hypothetical *helping* event, shown by the unavailable (b) reading, where the assister helped before (with a different task) and then she helped again. Additionally, the adverb cannot modify the embedded *cleaning* event (or to be more precise: the *cleaning* subevent performed by the assistee, more on this in the next section), illustrated by the (c) reading. The only possible interpretation of the sentence in (10) is the one where *again* targets the assister’s contribution (i.e., the assister cleaned together with Azim before, and then she cleaned again together with Azim), shown in (a). §2.5 and §4 provide parallel facts and explanation for the reading in (a). For now, it is enough to note that no ambiguity arises with *again*, suggesting that the assistive is monoeventive. This provides further support to the claim that there is no *helping* event in the assistive.

(10) Kanukey Azim-ge **kajradan/kajra** yj ɕuɯjna-ʃ-tu.

Kanykei Azim-DAT **again/again** house clean-ASST-PST.3SG

(a) Yes: (Kanykei helped Azim clean the house, later) ‘Kanykei helped again Azim clean the house.’⁷

(b) Not: (Kanykei helped Azim cut the grass yesterday, later) ‘Kanykei again helped Azim (this time) with cleaning the house.’ (Kanykei helps again)

(c) Not: (Azim cleaned yesterday, later) ‘Kanykei helped Azim clean the house again.’ (Azim cleans again)

2.2 The division requirement

This subsection introduces data showcasing that the participation requirement is not sufficient to describe the assistive. If the only condition on the felicitous use of the assistive was the participation requirement, we would expect the assistive to be appropriate in any context where the assister and the assistee both perform an event in the denotation of the embedded predicate. This is, however, not what we see. In (72) both *Kanykei* and *Azim* perform *car driving* events, yet the assistive is infelicitous.

#Kanukey Azim-ge idɯf-ter-di ɕuu-ʃ-tu.
 Kanykei Azim-DAT dish-PL-ACC wash-ASST-PST.3SG
 Intended: ‘Kanykei helped Azim do the dishes.’

⁷This sentence could be used in a context where “Kanykei and Azim had cleaned the house together (i.e., Kanykei helped Azim) but the house wasn’t clean enough, so they cleaned it again (Kanykei helped Azim by cleaning again).”

- (11) a. Kanykei drove Azim’s car to make sure it runs well before letting Azim drive it.
 b. Kanykei showed Azim how to drive the car (by driving it) before Azim drove the car.
 #Kanukej Azim-ge mafina ajda-**f**-tuu.
 Kanykei Azim-DAT car drive-**ASST**-PST.3SG
 Intended: ‘Kanykei helped Azim drive the car.’

The assistive is only appropriate in contexts such as (12), where the embedded event can be divided in such a way that the assistee performs a subevent of the base predicate and the assister performs the remaining subevent(s). In (12) the embedded event is *driving the car*, and the assister and the assistee divide this event amongst each other in such a way that the assister performs some of the *car driving* and the assistee does the rest.

- (12) Azim had to drive from Bishkek to Osh and asked Kanykei help him. Kanykei drove some of the distance, Azim did the rest.
 Kanukej Azim-ge (Bifkek-ten Of-ko tfejini) mafina ajda-**f**-tuu.
 Kanykei Azim-DAT (Bishkek-ABL Osh-DAT to) car drive-**ASST**-PST.3SG
 ‘Kanykei helped Azim drive the car (from Bishkek to Osh).’

(13) and (14) offer another pair of example where this is shown. In (13), where both the assister and the assistee perform the base event side-by-side or consecutively: in (13a) *Kanykei* runs next to *Azim* with the intention of helping or supporting him, in (13b) *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, yet the assistive is not felicitous.

- (13) 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.
 #Kanukej Azim-ge tfurka-**f**-tuu.
 Kanykei Azim-DAT run-**ASST**-PST.3SG
 Intended: ‘Kanykei helped Azim run.’

This sentence can only be used felicitously if the assister and the assistee perform the embedded *running 5 km* event in such a way that one of them performs some of the *running 5 km* and the other does the rest. That is, *Kanykei* runs, for instance, 2 km and *Azim* 3 km.⁸

- (14) 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.
 Kanukej Azim-ge (bef km) tfurka-**f**-tuu.
 Kanykei Azim-DAT (five km) run-**ASST**-PST.3SG
 ‘Kanykei helped Azim run (5 km).’

⁸The 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.
 #Kanukej Azim-ge eki / ytf km tfurka-**f**-tuu.
 Kanykei Azim-DAT two / three km run-**ASST**-PST.3SG
 Intended: ‘Kanykei helped Azim run 2/3 km.’

Then, a more accurate generalization would be to say that the assistive defines an eventuality where both the assister and the assistee perform subevents of the base event, and the subevents performed by the assister and the assistee add up to the embedded event. I refer to this updated descriptive generalization as the “division requirement,” given in (15). This new generalization can account for the facts discussed in the previous section in relation to the participation requirement, but is also able to explain the additional assistive data offered in this section.

(15) DIVISION REQUIREMENT:

The base event is divided into two subevent sets. The assister performs one of these subevent sets, the assistee performs the other.

I.e., base event = subevent_{ASSISTER} + subevent_{ASSISTEE}

2.2.1 Uniqueness of argument parts

The division requirement defines the partitioning of the base event. One might wonder if these subsets must be disjoint or whether they can fully or partially overlap. This section shows that partial overlap between the subevent sets is possible, but complete overlap is banned.

In the context in (16), *Begimjan* and *Aselia* clean different rooms of the house, but they both clean the kitchen. As the example shows, the assistive is compatible with this interpretation, indicating that the subevent sets do not need to be disjoint, partial overlap is allowed.

- (16) Aselja had to clean the house and she asked Begimjan to help her. Aselja cleaned the bedrooms and the kitchen, and Begimjan cleaned the bathroom and the living room. Because the kitchen did not seem clean enough after Aselja cleaned it, Begimjan cleaned the kitchen, too.

Begimɕan Aselja-ga yj-dy ɕujna-f-tu.
 Begimjan Aselia-DAT house-ACC clean-ASST-PST.3SG
 ‘Begimjan helped Aselia clean the house.’

However, the subevents performed by the assister and the assistee cannot entirely overlap either. The assister and the assistee perform the same *cleaning the house* event in (17); the assistive is not compatible with this context.

- (17) Aselja had to clean the house and she asked Begimjan to help her. Aselja cleaned the entire house, but it didn’t look clean enough to Begimjan, so she cleaned the entire house, too.

#Begimɕan Aselja-ga yj-dy ɕujna-f-tu.
 Begimjan Aselia-DAT house-ACC clean-ASST-PST.3SG
 Intended: ‘Begimjan helped Aselia clean the house.’

2.2.2 The division requirement and scenarios

The generalization that both the assister and the assistee perform subevents of the base event extends to complex eventualities such as *look after the livestock*, but it is worth taking a closer look at these predicates as we need to be more nuanced here. Such predicates are sometimes referred to as scenarios (Link 1987, Krifka 1992: 45). Scenarios denote sets of events where some subevents do not strictly obey the mapping-to-object principle (Krifka 1992, 1998). In the case of scenarios, the assister and the assistee’s contribution does not need to abide by the mapping-to-object principle.

For instance, not every subevent of the *looking after the livestock* event is mapped to the object, *livestock*, as it can include subevents such as *cleaning the animals' shelter*, *providing water* etc., that is, subevents that are not mapped to the direct object *livestock*. The assistive can combine with such verb phrases, and the subevents performed by the assister and the assistee do not need to satisfy the denotation of the base verb in the strict (mapping-to-object) sense. The following contexts illustrate this point. In (18a) the assister, *Kanykei*, cleans the animals' shelter, and in (18b) she pours water into the troughs. Neither one of the events are mapped onto the direct object 'livestock.' That is, in (18a) and (18b) the assister carries out events that do not obey the mapping-to-object principle, as the event is not performed on the internal argument *mal* 'livestock.'

- (18) a. Azim had to look after the livestock, and he asked Kanykei to help him. Kanykei cleaned the animals' shelter, Azim did other types of work around the livestock (e.g., took them out to graze, cleaned the animals, etc.)
- b. Azim had to look after the livestock, and he asked Kanykei to help him. Kanykei poured water into the troughs, Azim did other types of work around the livestock (e.g., took them out to graze, cleaned the animals, etc.)
 Kanukej Azim-ge mal kara-**f**-tu.
 Kanykei Azim-DAT livestock look.after-**ASST**-PST.3SG
 'Kanykei helped Azim look after the livestock.'

One thing to note about such predicates is that they work best with the assistive when the assister and the assistee perform events that count as typical and indispensable subevents of the denoted scenario. For instance, *cleaning the animals' shelter* and *providing water* are sets of subevents that are traditionally associated with the *looking after the livestock* scenario (as illustrated in (18a) and (18b)). Contrast this with the hypothetical *fixing the car* scenario in (19a). *Handing over tools* (as in (19b)) and *wiping the tools clean* (in (19b)) are not indispensable subevents of *fixing the car*, and speakers reject the assistive in such contexts.

- (19) a. Azim had to fix the car, and asked Kanykei to help him. Kanykei and Azim both did some fixing on the car.
 Kanukej Azim-ge mafina-nu oŋdo-**f**-tu.
 Kanykei Azim-DAT car-ACC fix-**ASST**-PST.3SG
 'Kanykei helped Azim fix the car.'
- b. Azim had to fix the car, and asked Kanykei to help him. Kanykei was handing tools to Azim, but she did not do any work on the car.
 #Kanukej Azim-ge mafina-nu oŋdo-**f**-tu.
 Kanykei Azim-DAT car-ACC fix-**ASST**-PST.3SG
 Intended: 'Kanykei helped Azim fix the car.'
- c. Azim had to fix the car, and asked Kanykei to help him. Kanykei cleaned the tools that Azim wanted to use, but she did not do any work on the car.
 #Kanukej Azim-ge mafina-nu oŋdo-**f**-tu.
 Kanykei Azim-DAT car-ACC fix-**ASST**-PST.3SG
 Intended: 'Kanykei helped Azim fix the car.'

There seem to be some gray area and potentially some individual and contextual variation regarding what can be considered a "typical and indispensable" subevent of a scenario. Consider the *doing the dishes* scenario in (20a). *Drying the dishes* in (20b) might be a necessary subevent

of *dish washing* for some speakers (in certain contexts) but not for others. The judgements reflect these idiosyncrasies: my consultants noted that it is very hard to tell if the assistive is acceptable in this context.

- (20) a. Azim had to do the dishes. He asked Kanykei to help him. Both Kanykei and Azim washed some of the dishes.
 Kanuukej Azim-ge idif-ter-di ɕuu-ʃ-tu.
 Kanykei Azim-DAT dish-PL-ACC wash-**ASST**-PST.3SG
 ‘Kanykei helped Azim do the dishes.’
- b. Azim had to do the dishes. He asked Kanykei to help him. When they do dishes at Azim’s house, they always dry the dishes with a kitchen towel, because there is no place in the kitchen to air dry the dishes. Kanykei dried the dishes, Azim did the dishes. (Kanykei didn’t do the dishes.)
 ??Kanuukej Azim-ge idif-ter-di ɕuu-ʃ-tu.
 Kanykei Azim-DAT dish-PL-ACC wash-**ASST**-PST.3SG
 ‘Kanykei helped Azim do the dishes.’

This section showed that while the assister and the assistee both have to perform subevents of the base predicate, but they do not need to perform subevents that satisfies the denotation of the base verb in a strict mapping-to-object sense.

2.3 Predicates incompatible with the assistive

If the formulation of the division requirement is on the right track, it is predicted that the assistive is only compatible base predicates that (1) are divisible in such a way that the assistee partially carries out the base event and the assister completes the remaining event (§2.3.1), (2) and these participants are Agents (§2.3.2). The conclusion of this section is that this prediction is borne out.

2.3.1 The assistive and non-divisible events

The generalization in (15) treats the assistive construction as a predicate where the embedded event description is equivalent to the sum of subevents performed by the assister and the assistee. If this is correct, the assistive can only compose with a base predicate if it can be divided amongst multiple Agents.

Not every predicate of events is divisible this way. One predicate type that does not lend itself to division into subevents is punctual events, which, given their aspectual nature, cannot be split into subevents. Such predicates include ones like *entering the store*, *arrive at the airport* or *win the lottery*. These predicates denote achievements, which take just a moment and for this reason they cannot be divided into subevents. (21a), (21b) and (21c) demonstrate that the assistive cannot combine with such predicates.

- (21) a. *Dʒanara apa-sum-a magazin-ge kir-**if**-ti.
 Janara mother-POSS.3SG-DAT store-DAT enter-**ASST**-PST.3SG
 Intended: ‘Kanykei helped her mother enter the store.’
- b. *Dʒanara Azim-ge aeroport-ko zet-**if**-ti.
 Janara Azim-DAT airport-DAT reach-**ASST**-PST.3SG
 Intended: ‘Kanykei helped Azim arrive at the airport.’

- c. *Dʒanara Azim-ge lotereja uturp al-**uʃ**-tuu.
 Janara Azim-DAT lottery win-**ASST**-PST.3SG
 Intended: ‘Kanykei helped Azim win the lottery.’

Another type of predicate that cannot be divided into subevents are stative verbs, as shown in (22). Stative predicates such as *like spinach* in (22a), *fear snakes* in (22b) and *know the answer* in (22c) are not divisible into subevents, and for this reason they cannot compose with the assistive.

- (22) a. *Dʒanara bala-ga ʃpinat-tur ɟakʃur koer-**yʃ**-ty.
 Janara child-DAT spinach-ACC good see-**ASST**-PST.3SG
 Intended: ‘Janara helped the child like spinach.’
- b. *Dʒanara bala-ga ɟuʎan-dan kork-**uʃ**-tu.
 Janara child-DAT snake-ABL fear-**ASST**-PST.3SG
 Intended: ‘Janara helped the child fear snakes.’
- c. *Dʒanara bala-ga ɟoop-tu bil-**ij**-ti.
 Janara child-DAT answer-ACC know-**ASST**-PST.3SG
 Intended: ‘Janara helped the child know the answer.’

Additionally, there are predicates that can be divided into subevents but these subevents cannot sensibly be performed or experienced by multiple participants. Predicates of events denoting bodily functions in (23) are an illustrative example of such predicates. In (23a), a single *sleeping* event cannot be performed in such a way that the assister completes the assistee’s sleep. Likewise, a single *dying* event, in (23b), is not divisible between two participants. Finally, *digesting the food* in (23c) cannot be split between multiple participants. Because the embedded events in (23a)-(23c) cannot be divided in such a way that the subevents are carried out by multiple participants, the assistive is not compatible with these predicates.

- (23) a. *Dʒanara bala-ga ukta-**f**-tuu.
 Janara child-DAT sleep-**ASST**-PST.3SG
 Intended: ‘Janara helped the child sleep.’
- b. *Dʒanara Azim-ge kaza bol-**uʃ**-tu.
 Janara Azim-DAT die-**ASST**-PST.3SG
 Intended: ‘Janara helped Azim die.’
- c. *Noʃpa Aselja-ga tamak-tu siŋdir-**ij**-ti.
 No-spa Aselia-DAT food-ACC digest-**ASST**-PST.3SG
 Intended: ‘No-spa (name of a medicine) helped Aselia digest the food.’

Another type of predicate with which the assistive can only compose if certain conditions are met are predicates that do not establish unique mappings between their subevents and the proper parts of their internal argument. *Pushing the cart* or *driving the car* are representative examples of such 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, *doing the dishes*, *fixing the car*, *cleaning the house*, etc. are typical examples of predicates with incremental relation between event and internal argument: *cleaning*

the house, for instance, proceeds in an incremental fashion, where there are unique *house*-parts matched with unique *cleaning* subevents.⁹

The assistive can only compose with such predicates if another, e.g. path, argument is added with which the event is in an incremental relation. The assistive is felicitous in (24), where there is a contextually specified path argument ‘from Bishkek to Yssyk-Kul.’ The path argument is in an incremental relation with the *driving* event because for each unique *driving* subevent there is a corresponding unique path part. When the path argument is added, the *driving* event becomes partitionable in such a way that two agents perform *driving* subevents adding up to one *driving* event.

- (24) Azim had to drive from Bishkek to Yssyk-Kul, Kanykei went along and drove some of the distance.

Kanukej Azim-ge (Bifkek-ten Oj-ko tfejın) mafına ajda-**f**-tuu.
 Kanykei Azim-DAT (Bishkek-ABL Osh-DAT to) car drive-**ASST**-PST.3SG
 ‘Kanykei helped Azim drive the car (from Bishkek to Osh).’

Contrast (24) with (25), where the assistive is not felicitous. In (25) there is not an argument with which the *driving* event can establish an incremental relation, as it is not possible to create unique mappings between unique *driving* subevents and unique car parts. Therefore, the assistive cannot be used with this type of predicate.

- (25) a. Kanykei drove Azim’s car to make sure it runs well before letting Azim drive it.
 b. Kanykei showed Azim how to drive the car (by driving it) before Azim drove the car.
 #Kanukej Azim-ge mafına ajda-**f**-tuu.
 Kanykei Azim-DAT car drive-**ASST**-PST.3SG
 Intended: ‘Kanykei helped Azim drive the car.’

These examples show that incrementality correlates with the divisibility of the event between multiple Agent participants. Thus, the assistive can only compose with predicates with incremental relation between their event and an internal argument.

If this is correct, one wonders if the assistive is able to combine with intransitive verbs that do not have an internal argument and for this reason they cannot establish incremental relation between the event and an argument. Motion verbs are a representative group of verbs that can be intransitive.¹⁰ As expected, such verbs are not compatible with the assistive. In (26), the verbs *run* and *swim* take no internal argument (i.e., there is no path argument in the structure), and as the example shows the assistive is not allowed.

- (26) Kanykei ran/swam together with Azim with the intention of helping him.

#Kanukej Azim-ge tjurka-**f**-tuu / syz-**yf**-ty.
 Kanykei Azim-DAT run-**ASST**-PST.3SG / swim-**ASST**-PST.3SG
 Intended: ‘Kanykei helped Azim run/swim.’

The assistive can only attach to a motion verb if the verb composes with a path argument. The path argument *5 km* is added to the motion verbs *swim* and *run* in (27), as a result the assistive

⁹I 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.

¹⁰Other types of intransitive verbs are also incompatible with the assistive. Such examples were discussed above: ‘sleep’ in (23a) and ‘die’ in (23b).

is felicitous with this construction. Notice that the path argument has an incremental relation with the event in these examples, further strengthening the observation that incrementality and the divisibility of the event between multiple Agent participants correlate.

- (27) Azim had to run/swim 5 km, Kanykei ran/swam 2 km out of Azim’s 5 km, Azim ran/swam 3 km.

Kanuwej Azim-ge tʃurka-ʃ-tu / syz-yʃ-ty.
 Kanykei Azim-DAT run-ASST-PST.3SG / swim-ASST-PST.3SG
 ‘Kanykei helped Azim run/swim.’

2.3.2 The assister’s and the assistee’s thematic role

The division requirement in (15) says that the assister and the assistee *carry out* the subevents, which implicitly suggests that these participants bear the Agent thematic role. This section shows that the assistee is always an Agent, while the assister can bear Agent or Causee thematic roles.

The first observation is that the assistive is ill-formed when the assistee is not an Agent. A potential confound with this claim is that many predicates that compose with Patient or Experiencer arguments are incompatible with the assistive on different grounds. For instance, predicates with Patient (e.g., *kaza bol-* ‘die’ in (23b)) or Experiencer arguments (*ʃpinattui ʒakʃu kær-* ‘like spinach’ in (22a), *ʒwulandan kork-* ‘fear snakes’ in (22b)) were shown to be not suitable for the assistive because these events cannot be partitioned in such a way that multiple participant perform the subevents.

This said, there are some predicates that take non-agentive participants and may be used in contexts where the subevents can be associated with different participants. In (28a) and (28b), the assister and the assistee are intended to be the Experiencers of a *seeing* and a *hearing* event. (28a) satisfies the division requirement (aside from the part which treats the assister and the assistee as “doers”), as the base event *see the house* can be partitioned into two subevents: *Kanykei* is the Experiencer of *seeing* one house-part, *Azim* is the Experiencer of *seeing* the remaining parts. In a similar vein, the *hearing the musical notes* event in the context given in (28b) can be conceived as divisible, where the assister hears some of the notes and the assistee hears the remaining ones. Even though these sentences are in compliance with the division requirement, they are ill-formed. The ungrammaticality arises due to the assister’s and assistee’s theta-roles; the assistive is only compatible with the Agent θ -role, Experiencers are disallowed.

- (28) a. Azim was supposed to inspect a large house, he asked Kanykei to help him. Kanykei saw half of the house, and Azim saw the other half.

*Kanuwej Azim-ge yj-dy kær-yʃ-ty.
 Kanykei Azim-DAT house-ACC see-ASST-PST.3SG
 Intended: ‘Kanykei helped Azim see the house.’

- b. There is a game where sounds are played, and the person who plays the game has to listen for specific notes (e.g., C5) and push a button when they hear them. Azim played this game and asked Kanykei to help him.

*Kanuwej Azim-ge muzikaluk nota-lar-duu ug-uʃ-tu.
 Kanykei Azim-DAT musical note-PL-ACC hear-ASST-PST.3SG
 Intended: ‘Kanykei helped Azim hear the musical notes.’

Furthermore, the assistive is ungrammatical if either the assister or the assistee (or both) are inanimate Causers (*wind*) or instrumentals (*hammer*) (for the Causer thematic role see Alexiadou et al. 2006). (29a) and (29b) demonstrate that non-agentive Causers (*wind*) and instrumentals (*hammer*) are disallowed as assisters and assistees, respectively.¹¹

- (29) a. Kanukej / *ʃamal / *balta Azim-ge tereze-ler-di sundur-**uʃ**-tuu.
 Kanykei / *wind / *axe Azim-DAT window-PL-ACC break-**ASST**-PST.3SG
 ‘Kanykei/ *The wind/ *The axe helped Azim break the window.’
- b. Kanukej Azim-ge / *ʃamal-ga / *balta-ga tereze-ler-di sundur-**uʃ**-tuu.
 Kanykei Azim-DAT / *wind-DAT / *axe-DAT window-PL-ACC break-**ASST**-PST.3SG
 ‘Kanykei helped Azim / *the wind/ *the axe break the window.’

Context does not ameliorate the acceptability of inanimate participants. The following examples attempt to set up a situation where the assister could plausibly be an inanimate Causer, such as the *rain*, the *wind*, or an *axe*. Speakers straightforwardly reject (30) and similar sentences. They note that the problem with these sentences is that one of the participants is not a person. These ungrammatical examples demonstrate that the assistive is not compatible with inanimate participants despite abundant contextual support.

- (30) a. Azim wants to water his huge garden, but gets tired after watering some of the yard. To his luck, it starts raining, so the rest of the garden gets watered too by the rain.
 *Dʒamgʉr Azim-ge bak-tuu sugar-**uʃ**-tuu.
 rain Azim-DAT garden-ACC water-**ASST**-PST.3SG
 Intended: ‘The rain helped Azim water the garden.’
- b. Azim was battering at the windows, but he couldn’t break all of them. To his luck, a huge storm was brewing outside and an especially strong gust of wind knocked a tree against the remaining windows, breaking them.
 *ʃamal Azim-ge tereze-ler-di sundur-**uʃ**-tuu.
 wind Azim-DAT window-PL-ACC break-**ASST**-PST.3SG
 Intended: ‘The wind helped Azim break the windows.’
- c. Azim was battering at the windows, but he couldn’t break all of them. To his luck, a sudden earthquake made an axe fly off the ground and hit the remaining unbroken window, causing it to break.
 *Balta Azim-ge tereze-ler-di sundur-**uʃ**-tuu.
 axe Azim-DAT window-PL-ACC break-**ASST**-PST.3SG
 Intended: ‘The axe helped Azim break the windows.’

These examples illustrate that the assistive is only compatible with predicates that compose with agentive participants. Having this established, one might wonder if the assistee and the assister must always bear identical thematic roles, e.g., if the assister may be anything other than an Agent. It turns out that this is possible when the causative embeds the assistive. An illustrative example is given in (31), which is marginally acceptable for my consultants, as discussed in detail in §3.2. When the causative composes with the assistive, the assister, *Janara*, is understood to be the causee of the *causing* event. The assistee, *Aselia*, is not a causee, she remains the Agent of her subevents. That is, in (31) the assister and the assistee bear non-identical theta roles: the assistee

¹¹I am not considering fairy tale scenarios where *wind* or *hammer* might have human-like properties. I am also disregarding metonymic uses of *hammer*.

is an Agent and the assister bears the Causee role. The Causee theta-role encompasses a “Doer” without the Initiator component (Akkuş 2021a, Akkuş 2022, for the Doer-Initiator distinction see also Sigurdsson and J. Wood 2021 and references therein).

- (31)?? Begimđan Džanara-nu Aselja-ga yj-dy ǧujna-**f-tur**-du.
 Begimjan Janara-ACC Aselia-DAT house-ACC clean-**ASST-CAUS**-PST.3SG
 Yes: ‘Begimjan had Janara help Aselia clean the house.’ (Causee is Janara)
 Not: ‘Begimjan had Janara and Aselia clean the house.’ (*Causees are Janara and Aselia)
 Not: ‘Begimjan had Aselia clean the house (and Janara helped Aselia clean).’ (*Causee is Aselia)

2.4 Division of tasks, temporal and spatial properties

The previous sections demonstrated that the assistive establishes an event partition such that the subevents carried out by the assister and the assistee add up to the event denoted by the embedded predicate. This section explores if there is any division of labor between the assister and the assistee, and the temporal and spatial properties of the subevents carried out by the assister and the assistee.

While speakers are (often strongly) preferential towards contexts where the assistee does more work than the assister, as in (32a), this does not necessarily need to be the case, shown in context (32b), where the assister does more than the assistee.

- (32) a. Aselja had to clean the house and she asked Begimjan to help her. Aselja did the lion’s share of the cleaning, Begimjan only cleaned her own bedroom.
 b. Aselja had to clean the house and she asked Begimjan to help her. Begimjan happened to work very fast that day, and she ended up cleaning most of the house, Aselia did less than Begimjan.
 Begimđan Aselja-ga yj-dy ǧujna-f-tu.
 Begimjan Aselia-DAT house-ACC clean-ASST-PST.3SG
 ‘Begimjan helped Aselia clean the house.’

This said, my consultants only accept the assistive if the assistee either wants or has to carry out the embedded event, shown in (33a). That is, the completion of the embedded event is the assistee’s responsibility. In contrast, the embedded *house cleaning* event in (33b) is intended to be the assister’s job. Speakers straightforwardly reject the assistive in this context, adding that you can only use the assistive here if you swap *Begimjan* and *Aselia*, i.e., Aselia helped Begimjan clean the house.

- (33) a. Aselia wanted/had to clean the house and she asked Begimjan to help her. Aselia did the lion’s share of the cleaning, Begimjan only cleaned her own bedroom.
 Begimđan Aselja-ga yj-dy ǧujna-f-tu.
 Begimjan Aselia-DAT house-ACC clean-ASST-PST.3SG
 ‘Begimjan helped Aselia clean the house.’
 b. Begimjan wanted/had to clean the house and she asked Aselia to help her. Aselia did the lion’s share of the cleaning, Begimjan only cleaned her own bedroom.
 #Begimđan Aselja-ga yj-dy ǧujna-f-tu.
 Begimjan Aselia-DAT house-ACC clean-ASST-PST.3SG
 Intended: ‘Begimjan helped Aselia clean the house.’

Before moving on to the next section, it is worth taking a look at the temporal properties of the subevents performed by the assister and assistee, specifically, if there is any temporal ordering requirement between the denoted subevents. (34a) and (34b) show that it does not matter which participant performs the event first: the assistee is the first to clean in (34a), the assister is the first in (34b). That is, the assistive does not impose any restriction on the subevents' temporal ordering.

- (34) a. Aselia had to clean the house and she asked Begimjan to help her. Aselia started cleaning half an hour before Begimjan joined her.
- b. Aselia had to clean the house and she asked Begimjan to help her. Begimjan started cleaning half an hour before Aselia joined her.
 Begimđan Aselja-ga yj-dy ǫʷjɲa-ʃ-tu.
 Begimjan Aselia-DAT house-ACC clean-ASST-PST.3SG
 ‘Begimjan helped Aselia clean the house.’

In a related manner, the assistive has no restrictions on the space where the subevents are carried out as long as they can be conceptualized as part of a single event. In (35), the assister and the assistee perform *blackcurrant cleaning* subevents at different locations. This is acceptable as long as these subevents are considered part of one event, e.g., if they are connected by a common goal (“Aselia’s neighbor wants to make varenye”).

- (35) Aselia’s neighbor had to clean a lot of blackcurrant because she wanted to make varenye. The neighbor asked Aselia for her help. The neighbor took some of the blackcurrant to her own house and cleaned it there, Aselia cleaned the remaining blackcurrant in her own house.
 Aselja kofuna-sun-a karagat tazala-ʃ-tu.
 Aselia neighbor-POSS.SG3-DAT blackcurrant clean-ASST-PST.3SG
 ‘Aselia helped her neighbor clean blackcurrant.’

2.5 The assistive under the scope of negation and question operators

A further notable property of the assistive is its meaning when under the scope of negative or question operator. Negation¹² in (36) can only scope over the event part performed by the assister. Negation cannot target the assistee’s subevent ((b) reading under (36)) or the entire event ((c) reading). The only way to negate both the assister’s and the assistee’s part is where there is an understanding that the assistee’s event can only take place if the assister participates ((d) reading). For instance, *Aselia* is in frail health and she can only clean if someone helps her. There was an agreement between *Aselia* and *Begimjan* that *Begimjan* would come over and help *Aselia* clean. But because *Begimjan* did not clean, the entire *cleaning* event fell through. In this case, I consider the negation to be targeting only the assister’s subevent, and it is implied that the assistee’s subevent cannot take place if the assister does not participate.¹³

¹²Negation is marked by the the negative suffix /bA/ on the verbal stem. The negative suffix always follows the Voice morpheme. The negative suffix cannot occur in any other position.

¹³This example is telling in terms of whether the assistee’s subevent is entailed or implied, arguing in favor of the latter. That is, negation can only scope over the subevent performed by the assister, the assistee’s contribution is implied.

- (36) Begimđan Aselja-ga yj ǫujna-*f-pa*-duu.
 Begimjan Aselia-DAT house clean-ASST-NEG-PST.3SG
 (a) Yes: ‘Begimjan didn’t help Aselia clean the house.’ (Begimjan didn’t clean, Aselia cleaned.)
 (b) Not: ‘Begimjan helped but Aselia didn’t clean the house.’ (Aselia didn’t clean, Begimjan cleaned.)
 (c) Not: ‘It’s not the case that there was an event such that Begimjan did some of it, and Aselia did the rest.’ (Begimjan and Aselia didn’t clean.)
 (d) Possible: ‘Begimjan didn’t help Aselia clean the house, [therefore] Aselia didn’t clean either.’ (Begimjan and Aselia didn’t clean. Only possible if it is contextually understood that Aselia can only clean if she gets help.)

The same pattern emerges in the case of polar questions, as illustrated in (37). Only the assister’s subevent can be under the scope of the question operator, in contrast the assistee’s event ((b) reading) or the entire event ((c) reading) cannot be questioned. The question in (37) cannot be answered by ‘No, Aselia didn’t clean’ or ‘No, Begimjan and Aselia didn’t clean.’ The only congruent answer is ‘No, Begimjan didn’t clean/help’ or ‘Yes, Begimjan cleaned.’

- (37) Begimđan Aselja-ga yj ǫujna-*f-tu*-**bu**?
 Begimjan Aselia-DAT house clean-ASST-PST.3SG-Q
 (a) Yes: ‘Did Begimjan help Aselia clean the house?’ (Did Begimjan clean?)
 (b) Not: ‘Did Aselia clean (and Begimjan also cleaned)?’
 (c) Not: ‘Was there a house cleaning event such that Begimjan did some of it and Aselia did the rest?’

That is, negation and questioning can only target the subevent carried out by the assister, the assistee’s subevent or the entire (sum) event cannot be under the scope of negative and question operators. This pattern is discussed in the context not-at-issue meanings in §3.3.2 and accounted for by the proposed analysis in §4.3.

2.6 Desiderata

This section gave a descriptive overview of the assistive-marked predicates: the core empirical generalization was captured by the so-called “division requirement,” repeated in (38). The division requirement states that the assistive requires the embedded event to be partitioned into subevents carried out by the assister and the assistee such that the event in the denotation of the embedded predicate must be the sum of these subevents.

- (38) DIVISION REQUIREMENT:

The base event is divided into two subevent sets. The assister performs one of these subevent sets, the assistee performs the other.

I.e., base event = subevent_{ASSISTER} + subevent_{ASSISTEE}

This section also looked at the scope of negation and questioning with respect to the assistive, and observed that these operators can only target the subevent performed by the assister but not the subevent carried out by the assistee or the embedded base event. Additionally, it was also observed that the assistee must be an Agent. The analysis in §4 attempts to account for these empirical findings. Before the proposal is presented, the next section §3 focuses on the status of the dative-marked assistee to show that it is an argument and it is not introduced by the most commonly discussed noncore argument introducing heads (Pylkkänen 2008).

3 Introducing the assistee

After demonstrating that the assistee is an argument (§3.1), this section explores whether the assistive /*(I)j*/ can combine with, or be the spell-out of any of the well-known argument introducing heads, such as the Causative (§3.2), Applicative (§3.3) or Voice (§3.4) 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 the Causative, Applicative or Voice head. §3.5 offers a short overview of the assistive’s syntactic position in the verb phrase. The head responsible for introducing the assistee is the topic of §4.

3.1 The assistee is an argument

This section shows that the dative-marked assistee is an argument. I use the omission test, cross-sentential anaphora licensing, and clefting to determine the assistee’s syntactic status. These diagnostics clearly demonstrate that the assistee is an argument.

The omission test determines whether a noun phrase is an argument by looking at the noun phrase’s recoverability upon omission. When dropped, arguments can be recovered from the context, whereas the reference of adjuncts is not recoverable (Rákosi 2003, Rákosi 2008, Siloni 2012, *inter alia*). Consequently, arguments cannot be dropped if there is not enough contextual support to recover their reference.¹⁴ The direct object, an argument, cannot be felicitously omitted in the out-of-the-blue context in (39a). Leaving out the direct object is only possible if there is enough contextual support to recover the omitted noun phrase’s reference, as in (39b). In contrast, the adjunct ‘in the forest’ can be dropped even in an out-of-the-blue context such as in (39c) without affecting the sentence’s acceptability.

- (39) a. A: What did you do yesterday?
B:
#*pro* *Kuɯj-du-m*.
pro cut.down-PST-1SG
Intended: ‘I cut [it] down.’
- b. A: What happened to the *tree_i* that was in your backyard?
B:
pro_i *Kuɯj-du-k*.
pro_i cut.down-PST-1PL
‘We cut [*it_i*] down.’
- c. A: What did you do yesterday?
B:
(*Tokoj-do*) *terek kuɯj-du-m*.
(forest-LOC) tree cut.down-PST-1SG
‘I cut down tree(s) (in the forest).’

¹⁴It should be noted that certain types of arguments can be dropped even in out-of-the-blue contexts. For instance, Akkuş (2021a) shows that the causee in causatives is an argument, yet it can be felicitously omitted in out-of-the-blue contexts. This indicates that the omission test in and of itself is not an entirely reliable argumenthood diagnostics as it produces “false negatives.”

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. In (40) 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 (41).

- (40) A: What did you do yesterday?
 B:
 #*pro* Terek kuj-**uɸ**-tu-m.
pro tree cut.down-**ASST**-PST-1SG
 Intended: ‘I helped **someone** cut down tree(s).’
 Only available: ‘I helped **him/her/them** cut down tree(s).’

- (41) A: I helped my father_{*i*} yesterday.
 B: What did you do? / How did you help him?
 A: **pro**_{*i*} Terek kuj-**uɸ**-tu-m.
pro_{*i*} tree cut.down-**ASST**-PST-1SG
 ‘I helped **him**_{*i*} cut down tree(s).’

The argument status of the assistee can be further supported by cross-sentential anaphora licensing. Implicit arguments can serve as antecedents for pronominal elements, shown in (42a), in contrast to the implicit adjunct ‘forest’ in (42b), which cannot be recovered for binding purposes.

- (42) a. A: What happened to the tree_{*i*} that was in your backyard?
 B:
pro_{*i*} Kuj-du-k. **pro**_{*i*} Ajabaj tfoŋ bol-tfu.
*pro*_{*i*} cut.down-PST-1PL. *pro*_{*i*} too big COP-PPRT.3SG
 ‘We cut [it_{*i*}] down. [It_{*i*}] was too big.’
- b. A: What did you do yesterday?
 B:
 #~~tokoj~~-de Terek kuj-du-m. **pro** Itf-in-de tfoŋ terek-ter bar
 forest-LOC tree cut.down-PST-1SG **pro** inside-POSS.3SG-LOC big tree-PL COP
 eken.
 COP.EVID.3SG
 Intended: ‘I cut down tree(s) [in the forest]. There are big trees in it [=the forest].’

When the assistee is omitted in (43), the implicit assistee can serve as a binder for the *pro*-possessor in the following sentence, demonstrating that the assistee patterns with arguments.

- (43) A: I helped my father_{*i*} yesterday.
 B: What did you do? / How did you help him?
 A:
pro_{*i*} Terek kuj-**uɸ**-tu-m. **pro**_{*i*} Kœp if-i bar eken.
pro_{*i*} tree cut.down-**ASST**-PST-1SG **pro**_{*i*} lot work-POSS.3 COP COP.EVID.3SG
 ‘I helped (**him**_{*i*}) cut down tree(s). (**He**_{*i*}) had a lot of work 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 (44a)-(44b) illustrate that clefting is only available if the pivot is an argument in the cleft clause: in (44a), the pivot, *Bektur*, corresponds to the subject in the cleft clause, whereas in (44b) the pivot is the indirect object. Other types of argument pivots (e.g., direct object, dative causee pivots) pattern the same way.

- (44) a. [Ø_i Yj-dy ɖujna-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. [Kanukej 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 (45a) corresponds to the by-phrase in the passive construction, and in (45b) the pivot is a temporal adjunct ‘yesterday’. Note that in Kyrgyz passive constructions *by*-phrases are fairly marginal, to the extent that they can be included, they are marked with the ablative. Marking the pivot, *Bektur*, with the ablative does not change the acceptability of (45a). Because the pivots in (45a) and (45b) correspond to an adjunct position in the cleft clause, these sentences are ill-formed.

- (45) a. *[Ø_i Yj ɖujna-l-gan] (kiʃi) **Bektur-(dan)**_i bol-gon.
 [Ø_i house clean-PASS-NF] (person) **Bektur-(ABL)**_i COP-PRF.3SG
 Intended: ‘It was **Bektur** [by whom the house was cleaned].’
- b. *[Kanukej Ø_i meni ʃakur-gan] (ubakut) **ketʃee**_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: (46) illustrates that the assistee can serve as a pivot in clefting constructions. This demonstrates that the assistee is an argument and not an adjunct.

- (46) [Kanukej Ø_i yj-dy ɖujna-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,¹⁵ we turn to the question of its introducing head. At the outset, it would appear that there are several potential candidates: the similarity in meaning between sociative causatives and assistives might suggest that assistives are a type of causative (§3.2). Alternatively, the assistee could be an applied argument introduced by Appl (§3.3), or Voice (§3.4). §3.2-§3.4 show that none of these fit the assistives.

¹⁵The 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 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).

3.2 The assistee is not introduced by Cause

As some 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 (§3.2.1), and when the assistive is followed by the causative, the assistee is dative marked – a case-marking pattern not allowed for causatives of causatives (§3.2.2).

3.2.1 No *causing* event in the assistive

According to Pykkänen (2008), causatives universally introduce a *causing* event which combines with the base event. This also holds for causatives with assistive meaning component.¹⁶ An illustrative example comes from Tatar (Turkic), where “sociative causatives” are marked by two so-called causative morphemes, /t/ and /ter/, shown in (47). In (47), 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 helping the causee, *Marat* perform the embedded *running* event. Lyutikova and Tatevosov (2018) argue that such “double causative” constructions do not contain two *causing* events, as the Tatar sentence in (47) is not compatible with contexts where there is intermediate causer (i.e., contexts where the trainer orders someone to make Marat run). Based on Lyutikova and Tatevosov’s discussion of the construction, other types of intermediate participants, e.g. a causee-assister, seem to be unavailable as well. That is, the meaning of (47) is not ‘the trainer orders someone to help Marat run.’

- (47) The trainer ordered Marat to start running, and kept on giving him advise or encouraging him in the course.

Trener Marat-nx jeger-t-ter-de.
trainer Marart-ACC run-CAUS-CAUS-PST.3SG
‘The trainer made (and helped) Marat run.’

(TATAR, Lyutikova and Tatevosov 2018: 3-4)

Kyrgyz assistives do not denote a *causing* event, thus they fail to satisfy Pykkänen’s definition of causativity. Sentence (48) 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 (47), the assistive construction remains infelicitous.

- (48) Begimjan had Aselia clean the house, but Begimjan also offered to help Aselia.

#Begimġan Aselja-ga yj-dy ġujna-f-tu.
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.’

- (i) a. Bektur-ga yj ġujna-f-**ul**-du.
Bektur-DAT house clean-ASST-PASS-PST.3SG
‘The house was such that someone helped Bektur clean it.’
b. Bektur-ga yj ġujna-t-**ul**-du.
Bektur-DAT house clean-CAUS-PASS-PST.3SG
‘The house was such that someone had Bektur clean it.’

¹⁶Note 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.

3.2.2 The causative of assistives

Kyrgyz allows the iteration of causative suffixes, illustrated in (49). There has been a debate in the literature about the analysis of such “double causatives:”¹⁷ Key (2013) claims that the “double causative” marking does not reflect the iteration of causative events, rather it is the result of morphological reduplication triggered by a [+focus] feature giving rise to meanings such as forceful causation. Nie (2022) argues against Key’s analysis: relying on eventhood diagnostics she shows that the iteration of causative events is possible. Nie’s findings only apply for double causatives of unergative base verbs, where one causee is dative and the other is accusative. She reports that speakers find Turkish double causatives of transitive base verbs (with two overt dative-marked causees) degraded. She attributes this contrast between unergative and transitive base verbs to a general aversion to two dative-marked arguments, or potentially to “parsing limitations.”

The Kyrgyz data align with the Turkish data cited in Key 2013 and Nie 2022. The double causative of the unergative base verb *ƒurka-* ‘run’ allows a dative and an accusative marked causee. Just as in Turkish, the double causative in (49) is associated with two *causing* events.¹⁸

- (49) Begimĉan mugalim-ge Aselja-nu ƒurka-**t-tur**-du.
 Begimjan teacher-DAT Aselia-ACC run-**CAUS-CAUS**-PST.3SG
 ‘Begimjan had the teacher make Aselia run.’

Just in Turkish, double causatives of transitive base verbs are not acceptable with two overt causees, irrespective of whether the second causee marked with either the accusative or the dative. My consultants straightforwardly reject sentences such as (50), with either a dative or accusative-marked second causee even if one of the arguments are moved away.

- (50) *Begimĉan **Dĉanara-ga/nu** Aselja-ga yj-dy ĉuĉjna-**t-tur**-du.
 Begimjan **Janara-DAT/ACC** Aselia-DAT house-ACC clean-**CAUS-CAUS**-PST.3SG
 Intended: ‘Begimjan had Janara make Aselia clean the house.’

Now consider (51), 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, (51) was judged to be much better than the double causative with two causees in (50), which was clearly ungrammatical. In (51), the assistive is embedded by the causative, and both the causee (*Janara*) and the assistee (*Aselia*) are overt. The

¹⁷The cited literature is based on Turkish data. I found no difference between the Kyrgyz and the Turkish data in this respect. However, I note that Kyrgyz/Kazakh has two “default” causative exponents: in addition to *-t/-Dir* (morpho-phonologically determined), they also have a *-t/-KIz* causative exponent. There seems to be a meaning distinction between *-Dir* and *-KIz* causatives.

¹⁸This can be supported by eventhood diagnostics, such as different readings arising with *again*. Depending on the position of ‘again’ it can modify the first (in (i)) or the second causing event (in (ii)), or the embedded base event (in (iii)). These data support Nie’s finding that causative events can be iterated.

- (i) Begimĉan **kajradan** mugalim-ge Aselja-nu ƒurka-**t-tur**-du.
 Begimjan **again** teacher-DAT Aselia-ACC run-**CAUS-CAUS**-PST.3SG
 ‘Begimjan again had the teacher make Aselia run.’
- (ii) Begimĉan mugalim-ge **kajradan** Aselja-nu ƒurka-**t-tur**-du.
 Begimjan teacher-DAT **again** Aselia-ACC run-**CAUS-CAUS**-PST.3SG
 ‘Begimjan had the teacher again make Aselia run.’
- (iii) Begimĉan mugalim-ge Aselja-nu **kajradan** ƒurka-**t-tur**-du.
 Begimjan teacher-DAT Aselia-ACC **again** run-**CAUS-CAUS**-PST.3SG
 ‘Begimjan had the teacher make Aselia run again.’

causee, *Janara*, is in the accusative, dative marking results in ill-formedness.¹⁹ This shows that assistives do not pattern with causatives when embedded under another causative, suggesting that assistives are not causatives.

- (51)??*Begimçan Dzanara-nu/*ga Aselja-ga yj-dy çujna-f-tur-du.*
*Begimjan Janara-ACC/*DAT Aselia-DAT house-ACC clean-ASST-CAUS-PST.3SG*
 ‘*Begimjan had Janara help Aselia clean the house.*’²⁰

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.

3.3 The assistee is not an applied argument

Given the assistee’s beneficiary-like semantics, it would seem possible that the assistee is introduced by a type of applicative head. In §3.3.1 I first explore whether the assistee is introduced by the benefactive head, then in §3.3.2 I turn to other non-selected argument types, such as the Affected Experiencer and the Attitude holder (Bosse, Bruening, and Yamada 2012). The conclusion at the end of this section is that the assistee is not introduced by any of the investigated applicative heads.

3.3.1 The assistee is not introduced by the Benefactive

Following Bosse, Bruening, and Yamada 2012, I distinguish caused possession applicatives (same as Pylkkänen’s (2008) low applicatives) from the so-called non-selected arguments (Bosse and Bruening 2011, Bosse, Bruening, and Yamada 2012), which encompass a diverse set of applied arguments that denote a relation between the event and an individual. “Non-selected argument” is an umbrella term for participants introduced in external possessor constructions (the added argument is the possessor of the Theme), benefactives (which relate an event to a Beneficiary argument, identical to Pylkkänen’s (2008) high applicative), attitude holder and affected experiencer constructions (which add an attitude holder or Experiencer, which holds some mental state related to the event).

¹⁹Constructions such as (51) leave a lot of unanswered questions that this paper cannot attempt to account for: the assignment of accusative to the causee in (51) 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 buɸur-uf-tur-ul-du.*
 food Aselia-DAT cook-ASST-CAUS-PASS-PST.3SG
 ‘The food was such that someone had someone else help Aselia make it.’
 b. **Dzanara Aselja-ga tamak buɸur-uf-tur-ul-du.*
 Janara Aselia-DAT food cook-ASST-CAUS-PASS-PST.3SG
 Intended: ‘Janara was made to help Aselia cook food.’

²⁰Note that the only available meaning of this sentence is that Begimjan (the causer) made Janara perform an event. Crucially, this sentence cannot mean that Begimjan had Aselja perform an event.

I take caused possession applicatives to denote a transfer of possession between two individuals, whereas benefactives²¹ express a relation between an individual and an event. Given the semantic contribution of the caused possession applicative, I rule out the possibility that the assistee is introduced by a caused possession applicative head, as there is clearly no transfer of possession from the assister to the assistee. However, it might seem plausible that the assistee is a Beneficiary argument introduced by the benefactive, given that the assistee could be considered as beneficiary of an event performed by the assister. Despite this superficial similarity between benefactives and assistives, I rely on distributional data regarding the combination of caused possession applicatives and benefactives to demonstrate that the assistive is not a benefactive construction. I show that the iteration of (any type of) applicatives is banned, while the applicative can combine with the assistive, indicating that assistives do not involve an applicative construction.

To my knowledge, Kyrgyz applicatives have not been the topic of any study. Kyrgyz has a quite different applicative system than Turkish, a better studied Turkic language in this respect (Tonyalı 2015, Key 2022a, Key 2022b). In Kyrgyz, I distinguish caused possession applicatives and benefactives (McGinnis 2001, Pykkänen 2008, Bosse, Bruening, and Yamada 2012, Bruening 2018 i.a.). The caused possession applicative is not morphologically marked (rendered as “Ø” in the examples), and the applied argument is in the dative, shown in (52).²²

- (52) Begimçan Aselja-ga tamak çasa-Ø²⁴-du.
 Begimjan Aselia-DAT food make-L.APPL-PST.3SG
 ‘Begimjan made Aselia food.’

The benefactive exponent is /(I)p ber/, as in (53b), and the beneficiary argument is dative-marked.²⁵ (53a) demonstrates that the benefactive cannot remain morphologically unmarked, unlike the caused possession applicative.

²¹In what follows, I use the terms *low applicatives* and *caused possession applicatives* interchangeably, as do I with the terms *high applicative* and *benefactive*.

²²The benefactive 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 (52) and (i), but this overlap between the usage of the caused possession applicative and the benefactive seems to mirror the pattern attested in other languages such as English. Bruening (2018) notes that English benefactive *for*-phrases can be used in the caused-possession meaning in addition to the benefactive (the event is performed for the benefactive applied argument) and the proxy readings. Bruening’s explanation about this overlap is that the benefactive has a vague benefactive meaning, which is compatible with all the attested interpretations. Also see Bruening 2010, where Bruening argues that the difference between benefactives and caused possession applicatives can be captured by modelling the former with a recipient semantics, and the latter with possessive semantics. The overlap between the Kyrgyz caused possession applicative and benefactive can likely be captured along the lines of Bruening’s analysis.

- (i) Begimçan Aselja-ga tamak çasa-**p ber**-di.
 Begimjan Aselia-DAT food make-H.APPL-PST.3SG
 ‘Begimjan made food for Aselia.’

²⁴“Ø” indicates that the caused possession applicative is not morphologically marked. The sole purpose of this representation is to draw attention to the fact that the caused possession applicative is present in the structure.

²⁵The benefactive /(I)p ber/ can also combine with unergatives, further strengthening the claim that /(I)p ber/ can express meanings beyond caused possession. An illustrative example is given in (i), where /(I)p ber/ follows the unergative verb *dance*.

- (i) Aselja apa-suma bijle-**p ber**-di.
 Aselia mother-3POSS.DAT dance-H.APPL-PST.3SG
 ‘Aselia danced for her mother.’

- (53) $\text{ʔ?}/*\text{Begim}\check{\text{c}}\text{an Aselja-ga yj kraskala-}\emptyset\text{-du.}$
 Begimjan Aselia-DAT house paint-L.APPL-PST.3SG
 Intended: ‘Begimjan painted the house for Aselia.’
- b. $\text{Begim}\check{\text{c}}\text{an Aselja-ga yj kraskala-p ber-di.}$
 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 caused possession applicatives and benefactive to disallow “applicative iteration,” i.e., the co-occurrence of the caused possession applicative and the benefactive (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 caused possession and benefactive applicative heads²⁶ 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 caused possession applicative or the benefactive, but not both. Kyrgyz is a language that does not allow applicative iteration. (54a) 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 (54b), 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 (54b) is with a single applicative, given in (54c).

- (54) a. $*\text{Begim}\check{\text{c}}\text{an D}\check{\text{z}}\text{anara-ga Aselja-ga tamak }\check{\text{c}}\text{asa-}\emptyset\text{-p ber-di.}$
 Begimjan Janara-DAT Aselia-DAT food make-L.APPL-H.APPL-PST.3SG
 Intended: ‘Begimjan made food for Aselia, for Janara.’
- b. $*\text{Begim}\check{\text{c}}\text{an pro Aselja-ga tamak }\check{\text{c}}\text{asa-}\emptyset\text{-p ber-di.}$
 Begimjan pro Aselia-DAT food make-L.APPL-H.APPL-PST.3SG
 Intended: ‘Begimjan made food for Aselia, for her/him.’
- c. $\text{Begim}\check{\text{c}}\text{an Aselja-ga tamak }\check{\text{c}}\text{asa-p ber-di.}$
 Begimjan Aselia-DAT food make-H.APPL-PST.3SG
 ‘Begimjan made food for Aselia.’

Additionally, the iteration of the benefactive is strictly disallowed, shown in the ill-formed (55a), where there are two benefactives in / $(I)p\text{ ber}/$ following the verbal stem. In contrast, the benefactive may embed the assistive, as in the grammatical (55b). My consultants find that the assistive-benefactive construction is much better if one of the arguments is left implicit to avoid two consecutive dative-marked DPs. This said, they reluctantly accept (55c) with the overt beneficiary argument and assistee, adding that “there is no other way to say it [in a given context].” This further strengthens the claim that assistives are not benefactives, as they can co-occur with benefactives, a pattern which is not allowed for benefactives.

²⁶Nie refers to these as low and high applicatives.

- (55) a. *Begimçan Dzanara-ga Aselja-ga yj kraskala-p **ber-ip ber-di**.
 Begimjan Janara-DAT Aselia-DAT house paint-**H.APPL-H.APPL-PST.3SG**
 Intended: ‘Begimjan painted the house for Aselia, for Janara.’
- b. Begimçan Aselja_i-ga pro_i yj-dy çujna-**f-up ber-di**.
 Begimjan Aselia_i-DAT pro_i house-ACC clean-**ASST-H.APPL-PST.3SG**
 ‘Begimjan and Aselia_i cleaned the house together for her_i’.²⁷
- c. ??Begimçan Aselja-ga Dzanara-ga yj-dy çujna-**f-up ber-di**.
 Begimjan Aselia-DAT Janara-DAT house-ACC clean-**ASST-H.APPL-PST.3SG**
 ‘Begimjan and Janara cleaned the house together for Aselia.’

In conclusion, the assistive does not contain a benefactive head because the assistive can co-occur with the (canonical) benefactive in a language where the benefactive-iteration is otherwise disallowed. Consequently, the dative-marked assistee is not an benefactive argument.

3.3.2 Non-selected arguments and not-at-issue meanings

Another types of non-selected arguments include the attitude holder and the affected experiencer constructions, which add an attitude holder or an Experiencer, which holds a mental state related to the event. Work, such as Bosse and Bruening 2011, Bosse, 2011, Bosse, Bruening, and Yamada 2012, Bruening and Tran 2015, shows that these are argument introducing heads that contribute to the not-at-issue meaning (Potts 2005 and references therein). This subsection investigates two interconnected questions: (1) whether the dative-marked assistee is at-issue, and (2) whether the assistive has any meaning component that is not-at-issue.

One example where the contributed meaning is entirely not-at-issue is the German attitude holder construction (sometimes also called ethical dative (see e.g. Jouitteau and Rezac 2007, Bosse 2011)). Ethical datives express an individual’s attitude towards the proposition, illustrated by the German example in (56a). Bosse (2011) and Bosse, Bruening, and Yamada (2012) demonstrate that the dative-marked argument (*mir* ‘for me’ in (56a)) is not-at-issue, and the meaning contributed by the attitude holder construction (‘and I want this to happen’ in (56a)) also located at the not-at-issue tier.

If an argument is not projected at the at-issue tier, it is expected that (1) it cannot be questioned (by a *wh*-word), (2) it cannot participate in binding relations, (3) it cannot be contrastively negated. The question test is not applicable in such German examples because the attitude holder construction is only compatible with directives (imperatives or sentences with deontic force) (Bosse 2011). Bosse (2011) shows that the attitude holder cannot participate in binding, and it cannot be negated, the latter is illustrated in (56b). These diagnostics demonstrate that the dative attitude holder is located on the not-at-issue tier.

²⁷Other 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. Begimçan pro_j Aselja_i-ga yj-dy çujna-**f-up ber-di**.
 Begimjan pro_j Aselia_i-DAT house-ACC clean-**ASST-H.APPL-PST.3SG**
 ‘Begimjan and Aselia_i cleaned the house together for him/her_j’.
- b. Begimçan Aselja_i-ga pro_j yj-dy çujna-**f-up ber-di**.
 Begimjan Aselia_i-DAT pro_j house-ACC clean-**ASST-H.APPL-PST.3SG**
 ‘Begimjan and him/her_j cleaned the house together for Aselia_i.’

- (56) a. Du sollst **mir** dem Papa die Schuhe putzen.
 you shall **me.DAT** the.DAT dad the.ACC shoes clean
 ‘You shall clean the shoes for dad **and I want this to happen.**’
 GERMAN, Bosse 2011: 103, ex. (178)
- b. *Du sollst **nicht mir** (sondern Papa) pünktlich nach Hause kommen.
 you shall **not me.DAT (but dad.DAT)** on.time to home come
 Intended: ‘You shall come home on time **and not me (but your dad) wants this to happen.**’
 GERMAN, Bosse 2011: 107, ex. (187)

The Kyrgyz assistive contrasts with the German attitude holder construction in that it allows the assistee to be questioned by a *wh*-word, to participate in binding relations and to be contrastively negated. (57) shows that the assistee can be questioned by the *wh*-word *kimge* ‘to whom.’

- (57) Begimçan yj-dy **kim-ge** çuɯjna-f-tu?
 Begimjan house-ACC **who-DAT** clean-ASST-PST.3SG
 ‘To whom did Begimjan help clean the house?’

(58a) and (58b) demonstrate that the assistee can be contrastively negated.

- (58) a. Begimçan yj-dy **Aselja-ga** çuɯjna-f-pa-du, **Džanara-ga**
 Begimjan house-ACC **Aselia-DAT** clean-ASST-NEG-PST.3SG **Janara-DAT**
 çuɯjna-f-tu.
 clean-ASST-PST.3SG
 ‘Begimjan did not help Aselja clean the house, she helped Janara.’
- b. Begimçan yj-dy **Aselja-ga** emes, **Džanara-ga** çuɯjna-f-tu.
 Begimjan house-ACC **Aselia-DAT** NEG **Janara-DAT** clean-ASST-PST.3SG
 ‘Begimjan did not help Aselja clean the house, she helped Janara.’

(59a) offers an example where the assistee is the reciprocal anaphor, *biri-biri* ‘each other’ bound by the plural subject. This shows that the assistee can be a bound anaphor. Additionally, (59b) illustrates that the assistee can serve as an antecedent for anaphors, such as the *æzy* ‘self’ in the possessor’s position. Note that in (59b) both the assistee or some other argument (e.g., the assister) can serve as an antecedent for the anaphor.

- (59) a. Begimçan çana Aselja **biri-biri-ne** tamak çasa-f-tu.
 Begimjan and Aselia **each.other-DAT** food make-ASST-PST.3
 ‘Begimjan and Aselia helped each other make food.’ (Implies two separate occasions: one time Begimjan had to make food and Aselia helped her, the other time Aselia had to make food and Begimjan helped her.)
- b. Begimçan_j Aselja_i-ga **æzy_{j/i}-nyn** yj-yn çuɯjna-f-tu.
 Begimjan_j Aselia_i-DAT **self_{j/i}-GEN** house-POSS.3SG.ACC clean-ASST-PST.3SG
 ‘Begimjan_j helped Aselia_i clean herself’s_{j/i} house.’

The question, contrastive negation and binding facts clearly demonstrate that the assistee is part of the at-issue meaning. The next question is whether some meaning component of the assistive is not-at-issue. Bosse, Bruening, and Yamada (2012) apply question and negation tests

to probe if there is a meaning contribution that escapes the scope of these operators. If it does, it is plausible that that meaning component contributes to the not-at-issue tier. To illustrate how these diagnostics work, consider the German examples (60a) and (60b) containing an affected experiencer construction. The negation in (60a) cannot target the meaning supplied by the affected experiencer construction, ‘[the event] mattered to Chris,’ it can only scope over the event denoted by the predicate *break Ben’s vase*. Similarly, the polar question in (60b) cannot scope over the affectedness part, it can only question whether the main event took place. Bosse, Bruening, and Yamada (2012) argue that if the affected experiencer construction was at-issue, it could be targeted by the negative and question operators. As the meaning ‘[the event] matters to Chris’ cannot be under the scope of these operations, Bosse, Bruening, and Yamada (2012) conclude that it is not-at-issue.

- (60) a. Alex zerbrach Chris Bens Vase nicht.
 Alex broke Chris.DAT Ben’s Vase NEG
 Yes: ‘Alex **didn’t break** Ben’s vase (but if he had, it would have mattered to Chris).’
 Not: ‘Alex broke Ben’s vase, **but it didn’t matter to Chris.**’
- b. Zerbrach Alex Chris Bens Vase?
 broke Alex Chris.DAT Ben’s vase
 Yes: ‘Did Alex break Ben’s vase on Chris? (If Alex broke it, it would matter to Chris).’
 Not: ‘Did it matter to Chris whether Alex broke Ben’s vase.’
- GERMAN, Bosse, Bruening, and Yamada 2012: 1198-99, ex. (30a) and (31a)

Turning back to the Kyrgyz assistive construction, it was demonstrated in §2.5 that negation and questioning can only scope over the subevent carried out by the assister. The relevant data is repeated in (61a) and (61b).

- (61) a. Begimɟan Aselja-ga yj ɟʉjna-f-pa-du.
 Begimjan Aselia-DAT house clean-ASST-NEG-PST.3SG
 Only available: ‘Begimjan didn’t help Aselia clean the house.’ (Begimjan didn’t clean, Aselia cleaned.)
- b. Begimɟan Aselja-ga yj ɟʉjna-f-tu-bu?
 Begimjan Aselia-DAT house clean-ASST-PST.3SG-Q
 Only available: ‘Did Begimjan help Aselia clean the house?’ (Did Begimjan clean?)

Given that certain parts of the meaning escape the scope of negation and questioning, one might wonder if the assistive is a category similar the German affected experiencer construction, which (partially) contributes to the not-at-issue tier of meaning. I submit that there are two important properties that set affected experiencers and assistives apart: (1) the thematic role of the introduced argument, and (2) the exact nature of the meaning parts that escape the negation and question operators’ scope.

An obvious difference between the affected experiencer construction (and in fact, all non-selected argument types) and the assistive is the thematic role of the introduced argument. Non-selected arguments are either Experiencers or Attitude Holders; in contrast, §2.3.2 showed that the assistee cannot be an Experiencer, the only possible θ -role for the assistee is the Agent role.

The second difference between the affected experiencer construction and the assistive lies in the nature of the meaning component that escapes the scope of the negative and question operator. In the German example (60a) the negation scopes over the embedded event *break Ben’s vase* and the affected experiencer’s relation to this event, *this event matters to Chris*, is outside the scope if the

negation. In contrast, the negation cannot target the embedded event *clean in house* in the assistive (61a); the negation can only scope over a subevent of the *house cleaning* event. This suggests that the assistive’s contribution is entirely at-issue, as it asserts the existence of an event partition and returns a subevent of this partition. This subevent can be targeted by negation or questioning. In §4.3, I suggest that the assistive shares some similarities with causatives with respect to the scope of negation and questioning, where the embedded (caused) event cannot be targeted by negation and the question operator. The proposal in §4.3 accounts for these facts by arguing that these event parts are under the scope of an existential quantifier.

This section offered a detailed discussion of non-selected argument types and argued that the assistive is unlike any of the discussed non-selected argument introducing categories.

3.4 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 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 (62), 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 2022).

- (62) Kemal sa buay 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 2022: 315, ex. (50b))

Such ambiguity is not available in assistives. In (63), 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.

- (63) Begimçan Aselja-ga **pil’esos menen** yj-dy çujna-f-tu.
 Begimjan Aselia-DAT **vacuum INSTR** house-ACC clean-**ASST**-PST.3SG
 Yes: ‘Begimjan, with the vacuum cleaner, helped Aselia clean the house.’²⁸
 Not: ‘Begimjan helped Aselia clean the house with the vacuum cleaner (where only Aselia used the vacuum cleaner).’

²⁸A better translation would be: ‘Begimjan, with the vacuum cleaner, did some of the house cleaning, and Aselia did the rest of the house cleaning.’ The instrumental (and all the other adjuncts discussed in this section) can only modify the subevent that the assister performs. That is, (63) cannot have the interpretation ‘Begimjan did some of the house cleaning, and Aselia, with the vacuum cleaner, did the rest of the house cleaning.’

Comitative phrases behave identically to instrumentals. The comitative phrase *with the neighbor* in (64) can only be associated with the assister, *Begimjan*, but not with the assistee, *Aselia*. Thus, the only available reading of the assistive construction in (64) 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 available.

- (64) Begimɕan Aselja-ga **kofuna menen** yj-dy ɕujna-f-tu.
 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).’

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).²⁹ 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 (65) 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.³⁰

- (65) Begimɕan Aselja-ga **saburduuluk menen** yj-dy ɕujna-f-tu.
 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.)

²⁹Note that ‘deliberately’-type adverbs have been argued to pattern differently from agent-oriented and mental-attitude adverbs in that *deliberately* associates with the highest argument irrespective of its thematic role (Bruening and Tran 2015). In the discussion below I focus on canonical agent-oriented and mental-attitude adverbs.

³⁰The position of the adverbs in (63), (64) and (65) has no impact on which participant the adverb associates with. In the following examples, the adverbs’ positions were changed compared to (63)-(65), but the adverbs still modify the event performed by the assister.

- (i) a. Begimɕan (**pil’esos menen**) Aselja-ga yj-dy **pil’esos menen** ɕujna-f-tu.
 Begimjan (**vacuum INSTR**) Aselia-DAT house-ACC **vacuum INSTR** clean-ASST-PST.3SG
 Yes: ‘Begimjan, with the vacuum cleaner, helped Aselia clean the house.’
 Not: ‘Begimjan helped Aselia clean the house with the vacuum cleaner (where only Aselia used the vacuum cleaner).’
- b. Begimɕan (**kofuna menen**) Aselja-ga yj-dy **kofuna menen** ɕujna-f-tu.
 Begimjan (**neighbor INSTR**) Aselia-DAT house-ACC **neighbor INSTR** 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).’
- c. Begimɕan (**saburduuluk menen**) Aselja-ga yj-dy **saburduuluk menen** ɕujna-f-tu.
 Begimjan (**patience INSTR**) Aselia-DAT house-ACC **patience INSTR** 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.)

3.5 Morphosyntax of the assistive-marked verb

Before turning to the discussion of the analysis, 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 can precede it.

The assistive can embed vPs, as it can follow overt verbalizers. In (66), 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/.³¹

- (66) Begimɕan Aselja-ga karagat taza-**la-f**-tu.
 Begimjan Aselia-DAT blackcurrant \sqrt{clean} -**v-ASST**-PST.3SG
 'Begimjan helped Aselia clean blackcurrants.'

In contrast, CauseP and VoiceP cannot be embedded by the assistive. The assistive cannot follow the causative allomorph /t/ in (67a) regardless of whether the causee is overt or not, or whether it is accusative or dative marked.³² Similarly, the passive /(I)l/ cannot be followed by the assistive in (67b). Note that active Voice is phonologically zero (but see Key (accepted) for a more nuanced view for Turkish). The table in (68) offers a summary.

- (67) a. *Begimɕan Aselja-ga (Dʒanara-ga/nuu) yj-dy ɕujna-**t-uf**-tu.
 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 ɕujna-**l-uf**-tu.
 House Aselia-DAT clean-**PASS-ASST**-PST.3SG
 Intended: 'The house was such that it was helped clean for Aselia.'

³¹It is unclear if the assistive can embed the caused possession applicative or the benefactive. Speakers do not accept L.APPL-ASST in (i) with two dative arguments, they note that one of the dative noun phrases should be dropped.

(i) *Begimɕan Dʒanara-ga Aselja-ga tamak ɕasa-**Ø-f**-tu.
 Begimjan Janara-DAT Aselia-DAT food make-**L.APPL-ASST**-PST.3SG
 Intended: 'Begimjan helped Janara make food for Aselia.'

/(I)p ber/ followed by the assistive, as in (ii), was also a very difficult judgement for speakers. One of my Kyrgyz consultants accepted it with some hesitation, the other rejected it, my Kazakh consultant also expressed that it "doesn't sound so good" and that "I've not heard it before but it might be possible in some situations."

(ii) Begimɕan Dʒanara-ga (Aselja-ga) kœjnœk tig-**ip ber-ij**-ti.
 Begimjan Janara-DAT (Aselia-DAT) dress sew-**APPL-ASST**-PST.3SG
 Intended: 'Begimjan helped Janara make a dress from Aselia.'

³²It might be the case that the assistive is only banned after certain types of causatives. For instance, the assistive is acceptable after *œl-tyr*- 'die-CAUS, i.e., kill', where [tyr] is a causative suffix. The difference between the example in (i) and the one in (67a) seems to be that the *causing* event is performed via a speech event. This type of *causing* event cannot be partitioned between multiple Agents, therefore the assistive is incompatible with the causative in (67a).

(i) Bilal ata-sun-a on kifi œl-**tyr-yf**-ty.
 Bilal father-POSS.SG3-DAT ten person die-**CAUS-ASST**-PST.3SG
 'Bilal helped his father kill ten people.'

(68) Categories embedded by the assistive

vP	Asst	✓
CauseP	Asst	×
VoiceP	Asst	×

As for verbal categories selecting for the assistive, I have shown in (55b) that the applicative can embed the assistive, while the causative, as in (51), is only marginal with the it. Additionally, active or passive Voice can also follow the assistive, shown with the passive in (69a).³³ Two assistives cannot co-occur, as in (69b). A summary of these patterns is given in the table in (70).

- (69) a. Aselja-ga yj ɕujna-**f-ɯl**-du.
 Aselia-DAT house clean-**ASST-PASS**-PST.3SG
 ‘The house was such that someone helped Aselia clean it.’
- b. *Beginɕan (Aselja-ga) Dʒanara-ga yj-dy ɕujna-**f-ɯf**-tu.
 Beginjan (Aselia-DAT) Janara-DAT house-ACC clean-**ASST-ASST**-PST.3SG
 Intended: ‘Beginjan helped Janara help (Aselia) clean the house.’

(70) Categories embedding the assistive

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

4 Analysis

This section presents an analysis that can account for the following properties of the assistive: (1) the assistive partitions the embedded event into subevents such that the subevents are carried out by the assister and the assistee and the event in the denotation of the embedded predicate is the sum of these subevents (division requirement); (2) only the subevent performed by the assister can be under the scope of negation and question operators; (3) the assistive introduces a dative-marked Agent argument, the assistee, which is not added into the structure by any of the well-known argument introducing heads.

4.1 Event plurality

One way to think about the assistive is that it denotes event plurality, or pluractionality: an event performed by the assister and an event performed by the assistee. That is, in the assistive sentence (71) there are multiple *driving* events: a *driving* event performed by the assister, another carried out by the assistee.

- (71) Kanukej Azim-ge mafina ajda-**f**-tu.
 Kanykei Azim-DAT car drive-**ASST**-PST.3SG
 ‘Kanykei helped Azim drive the car.’

³³I should point out that my consultants had a hard time judging (69a). Although they accept such sentences, they point out that the ASST-PASS is an “unusual” or “rare” form.

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. This subsection starts investigating how the assistive defines event plurality.

As observed in §2.2, the participation requirement cannot account for the full range of data because the assistive does not simply require the plurality of the base event. If this was the case, the assistive would be felicitous in the contexts in (72), repeated from §2.2, where both the assister and the assistee perform the base event side-by-side or consecutively. In (72a), *Kanykei* and *Azim* drove their cars side-by-side, in (72b) *Kanykei* shows *Azim* how to drive before *Azim* sets out to drive. In both of these contexts, the assister and the assistee perform the event in the denotation of the base predicate, satisfying the participation requirement. Yet the assistive is not felicitous in these contexts.

- (72) a. Azim is a new to off-road driving, so he asked Kanykei to help him the first time. Kanykei drives her own car in front of Azim’s car to show him what is the best course to take on the difficult terrain.
- b. Kanykei showed Azim how to drive the car (by driving it) before Azim drove the car.
 #Kanutkej Azim-ge mafina ajda-**f**-tuu.
 Kanykei Azim-DAT car drive-**ASST**-PST.3SG
 Intended: ‘Kanykei helped Azim drive the car.’

That is, simultaneous or consecutive, but unrelated, events of the same kind do not license the assistive. To put it differently, (73a) and (73b) do not entail the assistive in (73c).

- (73) a. Kanutkej mafina ajda-duu.
 Kanykei car drive-PST.3SG
 ‘Kanykei drove the car.’
- b. Azim mafina ajda-duu.
 Azim car drive-PST.3SG
 ‘Azim drove the car.’
- c. ≠Kanutkej Azim-ge mafina ajda-**f**-tuu.
 Kanykei Azim-DAT car drive-**ASST**-PST.3SG
 ‘Kanykei helped Azim drive the car.’

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 *drive the car*, when they take plural arguments (Sternefeld 1998, Krifka 1992, Kratzer 2005 inter alia; for an overview see Champollion

2019).³⁴ The predicate *run* in (74c) combines with the plural (external) argument *Kanykei and Azim*, the *-operator distributes the *car driving* event over the mereological sum of *Kanykei and Azim*.³⁵ Cumulatively closed predicates satisfy the entailment relation in (74). As the assistive in (73c) does not satisfy this entailment, the event plurality effects observed with the assistive cannot be attributed to the algebraic closure.

- (74) a. Kanukej mafina ajda-duu.
 Kanykei car drive-PST.3SG
 ‘Kanykei drove the car.’
- b. Azim mafina ajda-duu.
 Azim car drive-PST.3SG
 ‘Azim drove the car.’
- c. |=Kanukej qana Azim mafina ajda-f-tuu.
 Kanykei and Azim car drive-PL³⁷-PST.3
 ‘Kanykei and Azim drove the car/cars.’

Then, how does the assistive define event plurality? Consider once again sentence (75) and the context it can be felicitously uttered. In (75), the *car driving* event from Bishkek to Osh is divided into subevents where some of the distance (e.g., from Bishkek to Jalal-Abad) is driven by Azim and the rest is driven by Kanykei (e.g., from Jalal-Abad to Osh). This condition on the assistive’s use was called the division requirement.

- (75) Azim had to drive from Bishkek to Osh and asked Kanykei help him. Kanykei drove some of the distance, Azim did the rest.
 Kanukej Azim-ge (Bifkek-ten Of-ko tfejın) mafina ajda-f-tuu.
 Kanykei Azim-DAT (Bishkek-ABL Osh-DAT to) car drive-ASST-PST.3SG
 ‘Kanykei helped Azim drive the car (from Bishkek to Osh).’

The division requirement says that the assistive takes an event ($e = \textit{car driving from Bishkek to Osh}$), and breaks it down into subevents ($\textit{subevent}_1 = \textit{car driving from Bishkek to Jalal-Abad}$, $\textit{subevent}_2 = \textit{car driving from Jalal-Abad to Osh}$) such as the sum of the subevents add up to the embedded event ($\textit{subevent}_1 + \textit{subevent}_2 = e$). This suggests that the assistive defines event plurality at the level of subevents. The following sections are concerned with providing a formal analysis of the (sub)event plurality defined by the assistive and its connection to introducing the Agent (assistee) argument.³⁸

³⁴The same claim would extend to other potential distributive operators, such as Link’s VP-attaching D-operator (Link 1987).

³⁵Following Sternefeld (1998) the definition of algebraic closure is the following.

For any set P, *P is the smallest set such that:

(a) $P \subseteq *P$, and
 (b) if $a \in *P$ and $b \in *P$, then $a \oplus b \in *P$.

³⁷The suffix /*(I)j/* does not spell out the assistive in this example, but the [-singular] agreement feature. For more details see fn.38.

³⁸Syncretism attested with the exponent /*(I)j/* further strengthens the pluractional analysis of the assistive. The Kyrgyz /*(I)j/* suffix is used as the spell-out of [-singular] features (for the binary representation of person and number features see Noyer 1992, Bobaljik 2008, Nevins 2007) on verbal predicates to indicate agreement with 3PL subjects (Hebert and Poppe 1963: 19, Abduvaliev 2015: 191-192, 201-205, Nedjalkov 2003). (i) offers an illustrative example, where the second /*(I)j/* spells out the [-singular] agreement features. This example also demonstrates that the [-singular] /*(I)j/* can co-occur with the assistive /*(I)j/*. The co-occurrence of these markers suggests that these are

4.2 Defining event plurality at the level of subevents

Not every pluractional requires the event cardinality to be bigger than one, event plurality can be defined in other ways. Consider the Kaqchikel (Mayan) *-la'*-pluractionals in (76): the *-la'*-marked predicate 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 (Henderson 2012). 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 (76), the *hugging* subevents are mapped by the Theme thematic role onto atomic members of the set *children*.

- (76) 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, ex. (350))

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.³⁹ (77) 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.

distinct syntactic nodes realized by the same vocabulary item.

- (i) Baldar Azim-ge tamak çasa-**f-tu**-tu.
 child.PL Azim-DAT food make-**ASST-PL-PST.3**
 'The children helped Azim make food.'

Another syncretic use of the Vocabulary Item $/\langle I \rangle f/$ is commonly referred to as the "reciprocal" (see Nedjalkov 2003 for a descriptive look at Kyrgyz reciprocals, and Nedjalkov 2006 for Turkic reciprocals). These Kyrgyz-style verbal reciprocals are probably more commonly encountered cross-linguistically than assistives (Dimitriadis 2004, Bruening 2006, Faller 2007, Moyses-Faurie et al. 2008, Yamada 2010, Siloni 2012, inter alia). Key and Ótrott-Kovács (submitted) argues that the similar Turkish reciprocals constitute another type of argument introducing pluractionals, although with somewhat different semantics than what the proposal is for the Kyrgyz assistive in (78).

- (ii) Men Azim menen mufta-**f-tu-m**.
 I Azim INSTR punch-**REC-PST-1SG**
 'Me and Azim punched each other.'

The syncretism between the assistive, reciprocal and plural agreement $/\langle I \rangle f/$ 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, 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 Vocabulary Item 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 $/\langle I \rangle f/$ to be specified for [-singular] (in the context of verbs), which allows it to be inserted into a terminal that has the [-singular] feature (i.e., the assistive, reciprocal and plural agreement nodes). The upshot of this is that the assistive $/\langle I \rangle f/$ 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).

³⁹Note 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 and Henderson 2014. The motivation for this approach is that *-la'* can license dependent indefinites, which are quantifiers that require co-variation. An illustrative example is given in (i): this sentence would be ungrammatical without the pluractional in *-la'*, as the singular subject could otherwise not license co-variation with the dependent indefinite *ox-ox* 'three-three'.

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.

$$(77) \quad \exists e[*\text{HUG}(e) \wedge |e| > n \wedge \forall e' \leq e[\text{atom}(e') \rightarrow \text{atom}(\text{th}(e'))]]$$

The following section builds on Henderson’s account on pluractionals and argues that Kyrgyz assistives are similar to Kacchikel distributive pluractionals in that they both define event plurality at the level of subevents.

4.3 Proposal

The proposal in (78)⁴⁰ builds on the intuition that the assistive-pluractional defines two subevent sets that add up to the event in the denotation of the embedded predicate. The proposed denotation says that the assistive-pluractional takes a predicate of events (λV) and an individual y (λy), which is the assistee, and it returns event e such that there exist event e' and e'' , where event e'' is in the denotation of the embedded predicate V ($V(e'')$), and event e'' is the sum of events e and e' . The Agent of event e' is y (the assistee). This means that the assistive-pluractional is responsible for introducing the assistee, which it defines as an Agent of subevent e' . The assistive-pluractional assigns its argument the (lexical) dative case.

$$(78) \quad \llbracket \text{PLRC} \rrbracket = \lambda V. \lambda y. \lambda e. \exists e', e'' [(V(e'')) \wedge e + e' = e'' \wedge \text{Agent}(e') = y]$$

(80) shows how the proposed analysis derives the verb phrase in sentence (79) compositionally. The assistive-pluractional in $/(\text{I})\text{f}/$ composes with the verb phrase *clean the house* and an individual y . The assistive returns an event e , such that there are events e' and e'' , where e'' is in the denotation of the embedded base predicate (*clean the house*) and e'' is the sum of events e and e' . The pluractional introduces the new argument y , the assistee, which it defines as the Agent of event e' . When Voice is merged into the structure, it adds the Agent (the assister) for event e . As a result, we derive a VoiceP, which denotes an event e such that there exist events e' and e'' , where e'' is in the denotation of the embedded base predicate (*clean the house*) and e'' is the sum of events e and e' . The Agent of (sub)event e' is *Azim* (the assistee) and the Agent of (sub)event e is *Kanykei* (the assister).

- (79) Kanukej Azim-ge yj-dy ǧuɯjna-ǧ-tuu.
 Kanykei Azim-DAT house-ACC clean-**ASST**-PST.3SG
 ‘Kanykei helped Azim clean the house.’

-
- (i) X-e'-in-q'ete-**la'** **ox-ox** ak'wal-a'.
 COM-A3p-E1s-hug-**PLRC** **three-three** child-PL
 ‘I hugged the children in the groups of three.’

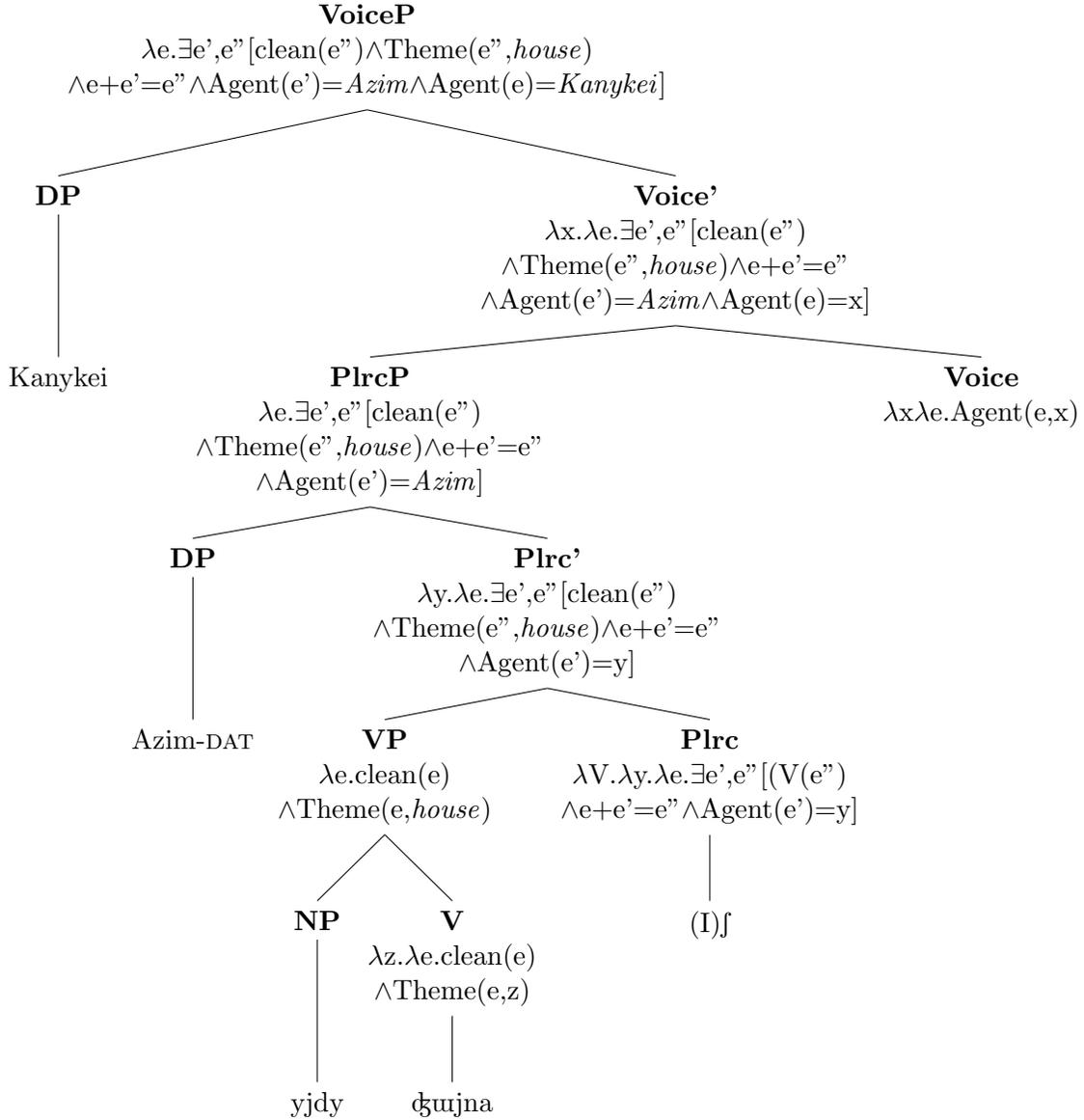
(KAQCHIKEL, Henderson 2012: 233, ex. (473))

Kyrgyz forms dependent indefinites by marking the ablative on the numeral, e.g. *ytf-tæn* ‘three-ABL’ in (iia). The dependent indefinite in (iia) is acceptable as it can establish co-variation with the variable introduced by the subject ‘every child.’ In contrast, the assistive cannot license the dependent indefinite *ytf-tæn* in (iib).

- (ii) a. Ar bala **ytf-tæn** terek kuɯj-tuu.
 every child **three-ABL** tree cut.down-PST.3SG
 ‘Every child cut down three trees each.’
 b. *Kanukej Bektur-ga **ytf-tæn** terek kuɯj-**uɯf**-tuu.
 Kanykei Bektur-DAT **three-ABL** tree cut.down-**ASST**-PST.3SG
 Intended: ‘Kanykei helped Bektur cut down three trees each.’

⁴⁰I am very grateful to an anonymous reviewer for their useful suggestions in developing the assistive’s denotation.

(80)



The proposed analysis in (78) accounts for the “participation requirement” by defining two (sub)events (e and e') that constitute event e'' , which is the event in the denotation of the base predicate, and by defining the assister and the assistee as Agents of (sub)events e and e' , respectively. That is, the assister and the assistee perform subevents that make up the event in the denotation of the base predicate. This can successfully explain why the assistive is infelicitous in contexts where the assister performs an event that is perceived as helping the assistee in some sense but it is not in the denotation of the base predicate (see (7)). As the analysis says that the assister performs a subevent of the base event, such “helping” scenarios can be straightforwardly ruled out, as these *helping* events cannot be conceptualized as subevents of the base event. At the same time, the proposal is flexible enough to permit the assister and the assistee to perform events that do not strictly obey the mapping-to-objects principle but which can be considered subevents of the scenario denoted the predicate (see §2.2.2). (78) does not rule out such scenarios, as long as the events performed by the assister and the assistee can be considered parts of the embedded event.

(78) can also account for the “division requirement” by requiring the event in the denotation of the base predicate (i.e., event e) to be the sum of events e and e' , which are the events that the assister and the assistee perform. If the embedded predicate is, for instance, *cut down seven trees* the pluractional defines two subevent sets that make up this event (e.g., a subevent set of *cutting down 3 trees* and a subevent set of *cutting down 4 trees*). Predicates where the denoted cannot be split between multiple participants (see §2.3) are naturally disqualified from composing with the assistive because the assistive requires the event to be divisible into two subevents that are performed by different Agents. For instance, a *sleeping* event (as in (23a)) cannot be split between two participants such that one participant performs part of the *sleeping* event and the other participant does the rest of sleeping.

Additionally, (78) can also explain why negation and question operators can only scope over the event performed by the assister but not by the assistee, or the event in the denotation of the base predicate (for the relevant data see (36) and (37) in §2.5). The analysis submits that the assistive returns event e , which is a subevent of the embedded base event e'' , and at the end of the derivation the Agent of event e is defined as the external argument (i.e., the assister). Subevent e' , whose Agent is the assistee, and the base event e'' are under the existential quantifier, and the existentially quantified events cannot be targeted by negation and the question operator. Existentially quantified event variables escaping the scope of operators is a well-attested phenomenon in, for instance, causatives, where the embedded event is usually taken to be under the existential quantifier (see e.g., Pylkkänen 2008: §3), and therefore not being able to be targeted by negation or question

operators (see Bosse, Bruening, and Yamada 2012, fn. 18).⁴¹ Thus, the proposed analysis can also account for the negation and question facts presented in §2.5.

4.4 An amendment: Adding “help”

One shortcoming of the proposal in (78) is that it defines an event partition, but it has nothing to say about where the “help” meaning component comes from. As discussed in §2.1, the assistive does not contain a *helping* event. §2.4 addressed the intuition that the assistee either wants or has to perform the embedded event. In other words, the assistee is responsible for the completion of the embedded event.

I represent this intuition by defining the assistee as the Initiator of event *e*”, that is, the event in the denotation of the base predicate. This reflects the idea that the assistee wants or needs to carry out this event, but it is not the Doer of the entire event (for the Doer and Initiator roles see Lundin 2003 and Sigurdsson and J. Wood 2021). (81) offers the updated proposal for the semantic denotation of the Kyrgyz assistive.

$$(81) \quad \llbracket \text{PLRC} \rrbracket = \lambda V. \lambda y. \lambda e. \exists e', e'' [(V(e'')) \wedge e + e' = e'' \wedge \text{Agent}(e') = y \wedge \text{Initiator}(e'') = y]$$

The English translation with “help” is probably an attempt to reflect this meaning component: if performing the entire event is the assistee’s responsibility and the assister does some of the job

⁴¹An illustrative example comes from Hungarian affixal causatives. In (ia) the scope of negation can only target the *causing* event but not the embedded *cleaning* event. Similarly, the question operator in (ib) can only scope over the *causing* event but not the *cleaning* event. The question in (ib) cannot be answered by ‘No, Peter didn’t clean the house.’

- (i) a. Anna nem takarít-tat-ta ki a ház-at Péter-rel.
 Anna NEG clean-CAUS-PST.3SG PRTL the house-ACC Peter-INST
 Yes: ‘Anna didn’t make Peter clean the house.’
 Not: ‘Anna made Peter not clean the house.’
- b. Anna ki-takarít-tat-ta a ház-at Péter-rel?
 Anna PRTL-clean-CAUS-PST.3SG the house-ACC Peter-INST
 Yes: ‘Did Anna make Peter clean the house?’ (Did the causing event take place?)
 Not: ‘Did Peter clean the house (such that Anna made him)?’

(HUNGARIAN)

It should be noted that Kyrgyz affixal causatives pattern the same way as Hungarian with respect to questions (see (iib)), but not with respect to negation. The negation in Kyrgyz can seemingly target both the causing event and the embedded event, shown in (iia). The same pattern is attested in Turkish (Kural 1996, Kural 1997). I assume, following Kural’s (1997) analysis for Turkish, that the scope facts attested in the case of the Kyrgyz causative can be derived from the two readings of the causative: *make*-causative and *let*-causative. Kural argues that negation always takes scopes over the *causing* event, but the causative can be ambiguous between the *make* and *let* causative readings. The NEG>LET configuration is logically equivalent to MAKE>NEG, giving rise to the low scope interpretation. Crucially, this interpretation does not arise from the negation taking scope over the embedded event, but from a different meaning contribution of the causative itself. One piece of corroborating evidence in favor of this approach is that the Hungarian causative lacks *let*-readings, and for this reason it also lacks the (apparent) low scoping negation with causatives. This suggests that the different causative readings and scope facts correlate with each other.

- (ii) a. Begimđan Aselja-ga yj-dy đıujna-t-pa-duı.
 Begimjan Aselia-DAT house-ACC clean-CAUS-NEG-PST.3SG
 Yes: ‘Begimjan didn’t make Aselia clean the house.’
 Yes: ‘Begimjan made Aselia not clean the house.’ (‘Begimjan didn’t let Aselia clean the house.’)
- b. Begimđan Aselja-ga yj-dy đıujna-t-tuı-buı?
 Begimjan Aselia-DAT house-ACC clean-CAUS-PST.3SG-Q
 Yes: ‘Did Begimjan make Aselia clean the house?’
 Not: ‘Did Aselia clean the house (such that Begimjan made her)?’

that the assistee is supposed to do, the assister’s contribution can be easily conceived as helping the assistee.⁴²

4.5 The assistive and other verbal categories

The proposal in (81) can also account for the meanings that arise when the assistive combines with other verbal categories (such as the causative (with marginal acceptability), the applicative and the passive). The attested combinations with other verbal categories embedding the assistive are given in (82).

(82) Categories embedding the assistive

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

Recall that when the assistive is followed by the causative (see (51), repeated below as (83)), the only available meaning is that the *causing* event ranges over the event performed by the assister, *Janara*. The *causing* event cannot range over the whole predicate or the event performed by the assistee, *Aselia*. (81) can account for this meaning by defining the assistive’s denotation in such a way that it returns event *e* (to be performed by the assister), which is a subevent of the event in the denotation of the base predicate (event *e*’). When the causative merges, it can only range over event *e*, as events *e*’ and *e*” are under the existential quantifier. Thus the unavailability of meanings where the causative ranges over the event in the denotation of the base predicate (event *e*”) and the subevent performed by the assistee (event *e*’) is correctly predicted by the proposed analysis.

⁴²Given that the assistee is defined as the Initiator of the embedded event, one might wonder if it is necessary to also define the assistee as the Agent of subevent *e*’, especially in light of data given in fn.6 and repeated in (i). In (ia), the assistee ends up not doing dishes due to some legitimate reason (such as a sudden illness). Consequently, it might seem that it is not imperative for the assistee to be defined as an Agent. I argue that this is not the case. (1) If the Agent role is not mandatory with the assistive it is not clear why the assistee cannot be, for instance, an Experiencer (see (28a) and (28b)). (2) If the assistee is not an Agent, it is unclear why the assistive is infelicitous in the context in (ib), where the assistee is not present while the *dish washing* event is being carried out. I assume that the assistee is still an Agent in (ia); in this context the assistee had every intention to perform a subevent but he was prevented to do so. But he still needs to be present, ready to potentially perform some of the *dish washing* if the assister cannot do it. I speculate that this counts as performing the relevant subevent.

- (i) a. Azim had to do the dishes but he couldn’t come in contact with water due to a sudden flare-up of a skin infection. Kanykei did the dishes for him. Azim was there while Kanykei did the dishes.

Kanukej Azim-ge idif-ter-di ɕuu-ʃ-tu.

Kanykei Azim-DAT dish-PL-ACC wash-**ASST**-PST.3SG

‘Kanykei helped Azim do the dishes.’

- b. Azim had to do the dishes but he can’t come in contact with water due to a sudden flare-up of a skin infection, so Kanykei did the dishes for him. Azim was resting in the living room while Kanykei did the dishes in the kitchen.

#Kanukej Azim-ge idif-ter-di ɕuu-ʃ-tu.

Kanykei Azim-DAT dish-PL-ACC wash-**ASST**-PST.3SG

Intended: ‘Kanykei helped Azim do the dishes.’

- (83)?? Begimçan Džanara-nu Aselja-ga yj-dy çujna-**f-tur**-du.
 Begimjan Janara-ACC Aselia-DAT house-ACC clean-**ASST-CAUS-PST.3SG**
 Yes: ‘Begimjan had Janara help Aselia clean the house.’
 Not: ‘Begimjan had Janara and Aselia clean the house together.’
 Not: ‘Begimjan had Aselia clean the house (and Janara helped Aselia clean).’

The same explanation can be applied for the assistive-benefactive (high applicative) and the assistive-passive combinations. When the benefactive embeds the assistive (see (55b)-(55c), the latter repeated as (84)⁴³) the external argument, *Begimjan* is performing subevent *e* for the benefactor, *Janara*. *Begimjan* cannot perform event *e'* or *e''*, which would benefit either the assistee, *Aselia*, or both *Janara* and *Aselia*.

- (84)?? Begimçan Džanara-ga Aselja-ga yj-dy çujna-**f-urp ber**-di.
 Begimjan Janara-DAT Aselia-DAT house-ACC clean-**ASST-H.APPL-PST.3SG**
 Yes: ‘Begimjan cleaned (a house-part) for Janara; Janara was supposed to help Aselia clean the house.’
 Not: ‘Begimjan cleaned (a house-part) for Aselia (but not for Janara).’
 Not: ‘Begimjan cleaned the house for Janara and Aselia.’

Similarly, when the assistive is followed by the passive, the event passivized is not the one in the denotation of the base predicate (*e''*) or the one performed by the assistee (*e'*), but event *e*. This is shown in (85) (repeated from (69a)).

- (85) Aselja-ga yj çujna-**f-ul**-du.
 Aselia-DAT house clean-**ASST-PASS-PST.3SG**
 Yes: ‘The house was such that someone helped Aselia clean (part of) it.’
 Not: ‘The house was was cleaned (for Aselja).’

Finally, some explanation is due regarding the unavailability of the assistive-assistive sequence, given in (86) (repeated from (69b)). My tentative proposal is that this combination is blocked due to the contradiction in relation to the Initiator roles that arises when two assistives combine with each other.

- (86) *Begimçan Aselja-ga /pro Džanara-ga yj-dy çujna-**f-urp-tu**.
 Begimjan Aselia-DAT /pro Janara-DAT house-ACC clean-**ASST-ASST-PST.3SG**
 Intended: ‘Begimjan helped Aselia/him/her/them help Janara clean the house.’

In this configuration the second assistive takes the output of the first assistive (subevent *e*) as its input and defines an event partition of subevent *e*. In theory, this should be an available construction. I propose that the reason why this is ill-formed is related to the Initiators defined by the two assistives.

In this configuration, shown in (87), the first assistive returns event e_1 such that there exist e'_1 and e''_1 and e''_1 is the sum of e_1 and e'_1 . The Initiator of the sum event e''_1 is Janara. The second assistive takes event e_1 (i.e., the subevent performed by the (first) assister, *Aselia*) and returns e_2 such that there exist e'_2 and e''_2 and e''_2 is the sum of e_2 and e'_2 . Notice that e''_2 is e_1 , i.e., a subevent of the (original) embedded predicate e''_1 . The second assistive defines *Janara* as the

⁴³This sentence is marked with “??” because speakers find the two dative-marked DPs awkward. If one dative argument is a *pro*, the sentence is grammatical, shown in (55b).

Initiator of the sum event e''_2 . I propose that at this point a contradiction arises between the two Initiators, *Janara* and *Aselia*. The first assistive defines *Janara* as the Initiator of the entire *house cleaning* event, whereas the second assistive says that *Aselia* is the Initiator of a subset of the *house cleaning* event (i.e., $e''_2=e_1$). That is, for the two assistives make contradicting assertions about the Initiator of a *house cleaning* subevent (about $e''_2=e_1$): the first assistive says that *Janara* is its Initiator, while the second assistive asserts that *Aselia* is its Initiator. This contradiction leads to the unacceptability of the assistive-assistive sequence.

- (87) (1) 1st ASST: $\lambda e_1.\exists e'_1,e''_1[e_1+e'_1=e''_1 \wedge \text{Agent}(e'_1) = \text{Janara} \wedge \mathbf{Initiator}(e''_1) = \mathbf{Janara}]$
 (2) 2nd ASST: $\lambda e_2.\exists e'_2,e''_2[e_2+e'_2=e''_2(=e_1) \wedge \text{Agent}(e'_2) = \text{Aselia} \wedge \mathbf{Initiator}(e''_2(=e_1)) = \mathbf{Aselia}]$

4.6 Extending the analysis: Kinande “sociative causative”

Kyrgyz and Kazakh are not the only languages that have a pluractional with a semantic contribution similar to the one outlined in the proposal in (81). Kinande, a Bantu language spoken in the Democratic Republic of the Congo, has a verbal category that has an almost identical denotation to the Kyrgyz and Kazakh assistive. This Kinande construction is referred to as the “sociative causative” by Schneider-Zioga and Mutaka (2019) and Irimia and Schneider-Zioga (2023), and it is spelt out by the exponent *-ik-/-ek-*. The following discussion of the Kinande sociative causative is based on data and empirical generalizations in Schneider-Zioga and Mutaka 2019 and Irimia and Schneider-Zioga 2023.

The *-ik-/-ek-*-marked predicate introduces a new argument, *Magulú* in (88), which does not bear any overt morphological marker, and the construction conveys an assistive-like meaning. The Kinande “sociative causative” requires the co-participation of the “assister” and the “assiste” (my terms) in the event the same way the Kyrgyz assistive does (Schneider-Zioga and Mutaka 2019 and Irimia and Schneider-Zioga 2023). That is, the assister in (88), *Kámbale*, carries some of the planks (and thereby helps *Magulú*), and *Magulú* carries the remaining planks. Further shared properties between the Kyrgyz assistive and Kinande include the “sociative causative” being monoeventive (adverbs such as *quickly* can only modify the event performed by the assister), and that it only includes one Voice projection (adverbs such as *enthusiastically* are not amiguous with the sociative causative, they can only modify the assister’s event) (Schneider-Zioga and Mutaka 2019: 283-285).

- (88) *Kámbale* a-hek-**ek**-a-y-a *Magulú* y' **ɔkɔ**-mbágɔ.
 1Kambale 3SG-carry-**soC**-TAM-TR-FV 1Magulu 1LK' **17LoC**-10plank
 ‘Kambale helped Magulu carry the planks.’
 (KINANDE, Irimia and Schneider-Zioga 2023, ex. (14))

If the Kinande “sociative causative” is identical to the Kyrgyz assistive, *-ik-/-ek-* is expected to be incompatible with the same types of predicates that are disallowed with the Kyrgyz assistive (§2.3). This is indeed what we see. Schneider-Zioga and Mutaka (2019: 281-297) list a number of base predicates that cannot compose with *-ik-/-ek-*: “verbs of internal cognitive states” (*believe, think*) and unaccusative (achievement) verbs (*die, arrive, fall*). The explanation that they offer for the unacceptability of these predicates is that the participants cannot partitively perform these events. This is exactly what ruled out the assistive with these and similar base predicates discussed in §2.3. A particularly revealing Kinande example with the base predicate *cross the road* is given in (89). Although (89) is not judged ungrammatical, it is considered “pragmatically bizarre” by

predicate of events (λV) and an individual (λy), the assistee, and it returns event e , such that event e is in the denotation of the embedded predicate V and there exist event e' and e'' such that e'' equals the sum of e and e' and the Agent of e' is y . Just as in the case of the Kyrgyz assistive, the Agent of event e is supplied by the Voice (Irimia and Schneider-Zioga (2023) identify the [y] affix, glossed as TR, as the spell-out of the Voice head).⁴⁷

(93) Proposed analysis of the Kinande construction:

$$\llbracket \text{PLRC} \rrbracket = \lambda V. \lambda y. \lambda e. V(e) \wedge \exists e', e'' [e + e' = e'' \wedge \text{Agent}(e') = y]$$

The only difference between the Kyrgyz and Kinande constructions is which event is defined as being in the denotation of the embedded predicate V . In Kyrgyz the entire (sum) event is in the denotation of the base predicate, whereas in Kinande it is the subevent carried out by the assister that is in the denotation of the base predicate. The embedded predicate in (88) is ‘carry some of the planks’ (expressed via the partitive marking on the object), which is equivalent to the assister’s contribution, i.e., event e . I submit that the source of the partitive marking on the object is the requirement for the embedded event to be equivalent to the assister’s contribution, i.e., event e .

The presented Kinande case study does not only illustrate that argument introducing pluractionals exist cross-linguistically, but also highlights that the proposed analysis, with some necessary modifications, is capable of accounting for the attested cross-linguistic variation.

5 Conclusion

This paper was devoted to the Kyrgyz and Kazakh assistive, an empirically and theoretically understudied verbal construction, which is usually rendered into English as ‘help someone do something’. A curious property of the assistive is that it co-occurs with a dative-marked Agent argument, the assistee, which was shown not to be introduced into the structure by the commonly known noncore argument introducing heads Cause, Applicative or Voice. The paper offered novel data showing that the assistive does not incorporate a verb expressing a *helping* meaning component, and argued that the assistive is a type of pluractional that define event plurality at the level of subevents (following Henderson 2012): the assistive takes a predicate of events and returns a subevent e , such that there exists a subevent e' and an event e'' , and subevents e and e' add up to e'' , which is the event in the denotation of the embedded predicate. Moreover, the assistive also combines with an individual (the assistee), which it defines as the Agent of subevent e' . Thus, the paper characterizes the assistive as a pluractional that can introduce an Agent argument, constituting a previously unidentified noncore argument introducing head. This way, the paper offers a contribution to the cross-linguistic inventory of argument introducing categories.

⁴⁷More Kinande data would be necessary to determine whether the assistee (y) is also the Initiator of event e'' . I leave this question open in this paper.

References

- Abduvaliev I., et al. (2015). *Azyrky kyrgyz tili: Morfologija*. International series of monographs on physics. Bishkek: Bijiktik pljus.
- Akkuş, Faruk (2021a). “(Implicit) argument introduction, voice and causatives”. PhD thesis. University of Pennsylvania.
- Akkuş, Faruk (2021b). “Variable embedded agent in Sason Arabic”. In: *Journal of Linguistics* 57.2, pp. 233–277.
- Akkuş, Faruk (2022). “On Causee in Sason Arabic”. In: *Syntax* 25.3, pp. 299–334.
- Alexiadou, Artemis, Elena Anagnostopoulou, and Florian Schäfer (2006). “The properties of anti-causatives crosslinguistically”. In: *Phases of interpretation* 91, pp. 187–211.
- Alexiadou, Artemis, Elena Anagnostopoulou, and Florian Schäfer (2015). *External arguments in transitivity alternations: A layering approach*. Vol. 55. Oxford: Oxford University Press.
- Arregi, Karlos and Andrew Nevins (2012). *Morphotactics: Basque auxiliaries and the structure of spellout*. Vol. 86. Dordrecht: Springer Science & Business Media.
- Bach, Emmon (1986). “The algebra of events”. In: *Linguistics and Philosophy* 9.1, pp. 5–16.
- Beard, Robert (1995). *Lexeme-morpheme base morphology: a general theory of inflection and word formation*. Albany: State University of New York Press.
- Beck, Sigrid (2005). “There and back again: A semantic analysis”. In: *Journal of semantics* 22.1, pp. 3–51.
- Bobaljik, Jonathan David (2008). “Missing persons: A case study in morphological universals”. In: *The Linguistic Review* 25.
- Bosse, Solveig (2011). “The syntax and semantics of applicative arguments in German and English”. PhD thesis. University of Delaware.
- Bosse, Solveig and Benjamin Bruening (2011). “Benefactive Versus Experiencer Datives”. In: *Proceedings of the 28th West Coast Conference on Formal Linguistics*. Cascadilla Proceedings Project Somerville, MA, pp. 69–77.
- Bosse, Solveig, Benjamin Bruening, and Masahiro Yamada (2012). “Affected experiencers”. In: *Natural Language & Linguistic Theory* 30.4, pp. 1185–1230.
- Bowers, John (1993). “The syntax of predication”. In: *Linguistic Inquiry* 24.4, pp. 591–656.
- Bruening, Benjamin (2006). *The Morphosyntax and Semantics of Verbal Reciprocals*. URL: <https://udel.edu/~bruening/Downloads/Reciprocals5.pdf>.
- Bruening, Benjamin (2010). “Ditransitive asymmetries and a theory of idiom formation”. In: *Linguistic Inquiry* 41.4, pp. 519–562.
- Bruening, Benjamin (2013). “By phrases in passives and nominals”. In: *Syntax* 16.1, pp. 1–41.
- Bruening, Benjamin (2018). “Double object constructions and prepositional dative constructions are distinct: A reply to Ormazabal and Romero 2012”. In: *Linguistic Inquiry* 49.1, pp. 123–150.
- Bruening, Benjamin and Thuan Tran (2015). “The nature of the passive, with an analysis of Vietnamese”. In: *Lingua* 165, pp. 133–172.
- Carlson, Greg (1984). “Thematic roles and their role in semantic interpretation”. In: *Linguistics* 22.
- Champollion, Lucas (2019). “Distributivity in formal semantics”. In: *Annual Review of Linguistics* 5, pp. 289–308.
- Cusic, David Dowell (1981). “Verbal plurality and aspect”. PhD thesis. Stanford University.
- Davidson, Donald (1967). “The logical form of action sentences”. In: *The logic of decision and action*. Ed. by Nicholas Rescher. Pittsburgh, PA: University of Pittsburgh Press, pp. 81–95.
- Dimitriadis, Alexis (2004). *Discontinuous reciprocals*. URL: <https://staticweb.hum.uu.nl/medewerkers/alexis.dimitriadis/papers/discon-long-ms04.pdf>.

- Dixon, Robert M (2000). “A typology of causatives: form, syntax and meaning”. In: *Changing valency: Case studies in transitivity*. Ed. by Robert MW Dixon and Alexandra Aikhenvald. Cambridge: Cambridge University Press, pp. 30–83.
- Dowty, David (1991). “Thematic proto-roles and argument selection”. In: *Language* 67.3, pp. 547–619.
- Embick, David and Rolf Noyer (2001). “Movement operations after syntax”. In: *Linguistic Inquiry* 32.4, pp. 555–595.
- Fabricius-Hansen, Catherine (2001). “Wi(e)der and again(st)”. In: *Audiatur Vox Sapientiae. A Festschrift for Arnim von Stechow*. Ed. by Caroline Féry and Wolfgang Sternefeld. Berlin: Akademie Verlag GmbH, pp. 101–130.
- Faller, Martina (2007). “The ingredients of Reciprocity in Cuzco Quechua”. In: *Journal of Semantics* 24.3, pp. 255–288.
- Garrett, Andrew (2001). “Reduplication and infixation in Yurok: Morphology, semantics, and diachrony”. In: *International Journal of American Linguistics* 67.3, pp. 264–312.
- Gribanova, Vera (2013). “Copular clauses, clefts, and putative sluicing in Uzbek”. In: *Language* 89.4, pp. 830–882.
- Halle, Morris and Alec Marantz (1993). “Distributed Morphology”. In: *The View from Building 20. Essays in Honor of Sylvain Bromberger*. Ed. by Kenneth Hale and Samuel Jay Keyser. Cambridge, MA: MIT Press, pp. 111–176.
- Harley, Heidi (2013). “External arguments and the Mirror Principle: On the distinctness of Voice and v”. In: *Lingua* 125, pp. 34–57.
- Harley, Heidi (2017). “The “bundling” hypothesis and the disparate functions of little v”. In: *The verbal domain*. Ed. by Roberta D’Alessandro, Irene Franco, and Ángel J Gallego. Oxford: Oxford University Press, pp. 3–28.
- Hebert, Raymond J and Nikolai Nikolaevich Poppe (1963). *Kirghiz manual*. Indiana University, Bloomington: Mouton & Co.
- Henderson, Robert (2012). “Ways of pluralizing events”. PhD thesis. University of California Santa Cruz.
- Henderson, Robert (2014). “Dependent indefinites and their post-suppositions”. In: *Semantics and Pragmatics* 7, pp. 1–58.
- Irimia, Monica Alexandrina and Patricia Schneider-Zioga (2023). “Partitive sharing—How to help in Kinande”. In: *Linguistic Variation* 23.1, pp. 190–216.
- Jouitteau, Mélanie and Milan Rezac (2007). “The French ethical dative, 13 syntactic tests”. In: *Bucharest Working Articles in Linguistics* 9, pp. 97–108.
- Key, Greg (2013). “The morphosyntax of the Turkish caustive construction”. PhD thesis. The University of Arizona.
- Key, Greg (2022a). “Figure and ground reflexives in Turkish”. In: *Proceedings of the Workshop on Turkic and Languages in Contact with Turkic*. Ed. by Songül Gündoğdu, Sahar Taghipour, and Andrew Peters. Vol. 6. 1, pp. 50–64.
- Key, Greg (2022b). “Low applicatives and affected applicatives in Turkish”. In: *Proceedings of the Workshop on Turkic and Languages in Contact with Turkic*. Ed. by Si Kai Lee, Sarah Asinari, and Sabine Laszakovits. Vol. 7. 1, pp. 46–59.
- Key, Greg (accepted). “The exponence of Voice in Turkish”. In: *Natural Language & Linguistic Theory*.
- Key, Greg and Eszter Ótrott-Kovács (submitted). *The Pluractional Marker in Turkish*. URL: https://eszterototkovacs.files.wordpress.com/2022/08/key-otott-kovacs-the-pluractional-marker_in_turkish.pdf.

- Kratzer, Angelika (1996). “Severing the external argument from its verb”. In: *Phrase Structure and the Lexicon*. Ed. by Johan Rooryck and Laurie Zaring. Dordrecht, Netherlands: Kluwer, pp. 109–137.
- Kratzer, Angelika (2005). “On the plurality of verbs”. In: *Event Structures in Linguistic Form and Interpretation*. Ed. by Johannes Dölling, Tatjana Heyde-Zybatow, and Martin Schäfer. Berlin: Mouton de Gruyter, pp. 269–300.
- Krifka, Manfred (1992). “Thematic relations as links between nominal reference and temporal constitution”. In: *Lexical matters*. Ed. by Ivan A Sag and Anna Szabolcsi. Stanford, CA: CSLI Publications, pp. 29–53.
- Krifka, Manfred (1998). “The origins of telicity”. In: *Events and grammar*. Ed. by Susan Rothstein. Dordrecht, Netherlands: Kluwer, pp. 197–235.
- Kulikov, Leonid I (1993). “The “second causative”: A typological sketch”. In: *Causatives and transitivity*. Ed. by Bernard Comrie and Maria Polinsky, pp. 121–154.
- Kural, Murat (1996). “Verb incorporation and elementary predicates”. PhD thesis. University of California, Los Angeles.
- Kural, Murat (1997). “Modality in causatives”. In: *Annual Meeting of the Berkeley Linguistics Society*. Vol. 23. 1, pp. 224–233.
- Laserson, Peter (1995). *Plurality, conjunction and events*. Dordrecht: Springer Science & Business Media.
- Legate, Julie Anne (2014). *Voice and v: Lessons from Acehnese*. Cambridge, MA: MIT Press.
- Legate, Julie Anne et al. (2020). “On passives of passives”. In: *Language* 96.4, pp. 771–818.
- Link, Godehard (1987). “Algebraic semantics of event structures”. In: *Proceedings of the sixth Amsterdam Colloquium*. Ed. by Jeroen Groenendijk, Martin Stokhof, and Frank Veltman. University of Amsterdam, Institute for Language, Logic, and Information. Amsterdam, pp. 243–262.
- Lundin, Katarina (2003). “Small clauses in Swedish: Towards a unified account”. PhD thesis. Lund University.
- Lyutikova, Ekaterina and Sergei Tatevosov (2018). “Event (de) composition and fake causativization”. In: *Proceedings of WAFL 10*. Cambridge, MA: Massachusetts Institute of Technology Working Papers in Linguistics, pp. 34–56.
- Marantz, Alec (1984). *On the nature of grammatical relations*. Cambridge, MA: MIT Press.
- Marantz, Alec (1993). “Implications of Asymmetries in Double Object Constructions”. In: *Theoretical aspects of Bantu grammar*. Ed. by Sam A Mchombo. Vol. 1. Stanford, CA: CSLI Publications, pp. 113–150.
- Matsuoka, Mikinari (2013). “On the notion of subject for subject-oriented adverbs”. In: *Language* 89.3, pp. 586–618.
- McGinnis, Martha (2001). “Phases and the syntax of applicatives”. In: *Proceedings of NELS 31*. Ed. by Min-Joo Kim and Uri Strauss. University of Massachusetts, Amherst: GLSA Publications, pp. 333–349.
- Moyse-Faurie, Claire, Ekkehard König, and Volker Gast (2008). *Reciprocals and Reflexives: Theoretical and Typological Explorations*. Berlin–New York: Mouton de Gruyter.
- Myler, Neil and Zoliswa O Mali (2021). “Two places for causees in productive isiXhosa morphological causatives”. In: *Syntax* 24.1, pp. 1–43.
- Nedjalkov, Vladimir P (2003). “Kirghiz reciprocals”. In: *Turkic Languages* 7, pp. 181–234.
- Nedjalkov, Vladimir P (2006). “Reciprocal constructions of Turkic Languages in the typological perspective”. In: *Turkic Languages* 10, pp. 3–46.
- Nevins, Andrew (2007). “The representation of third person and its consequences for person-case effects”. In: *Natural Language & Linguistic Theory* 25.2, pp. 273–313.
- Nie, Yining (2020). “Licensing arguments”. PhD thesis. New York University.

- Nie, Yining (2022). “Turkish Causatives Are Recursive: A Response to Key 2013”. In: *Linguistic Inquiry*, pp. 1–20.
- Noyer, Rolf (1992). “Features, positions and affixes in autonomous morphological structure”. PhD thesis. Massachusetts Institute of Technology.
- Parsons, Terence (1990). “Events in the semantics of English: A study in subatomic semantics”. In: Peterson, David A (2007). *Applicative constructions*. Oxford–New York: Oxford University Press.
- Potts, Christopher (2005). *The logic of conventional implicatures*. Oxford: Oxford University Press.
- Pylkkänen, Liina (2008). *Introducing arguments*. Cambridge, MA: MIT press.
- Rákosi, György (2003). “Comitative arguments in Hungarian”. In: *Uil-OTS yearbook*, pp. 47–57.
- Rákosi, György (2008). “The inherently reflexive and the inherently reciprocal predicate in Hungarian: Each to their own argument structure”. In: *Reciprocals and reflexives: theoretical and typological explorations*. Ed. by Ekkerhard König and Volker Gast. Berlin–New York: Mouton de Gruyter, pp. 411–450.
- Schneider-Zioga, Patricia and Philip Nguessimo Mutaka (2019). “The syntax and semantics of helping: Sociative causation in Kinande”. In: *Journal of African Languages and Linguistics* 40.2, pp. 271–310.
- Shibatani, Masayoshi and Prashant Pardeshi (2002). “The causative continuum”. In: *The grammar of causation and interpersonal manipulation*. Ed. by Masayoshi Shibatani. Amsterdam/Philadelphia: John Benjamins Publishing, pp. 85–126.
- Sigurdsson, Einar Freyr and Jim Wood (2021). “On the implicit argument of Icelandic indirect causatives”. In: *Linguistic Inquiry* 52.3, pp. 579–626.
- Siloni, Tal (2012). “Reciprocal verbs and symmetry”. In: *Natural Language & Linguistic Theory* 30.1, pp. 261–320.
- Stechow, Arnim von (1996). “The different readings of wieder ‘again’: A structural account”. In: *Journal of semantics* 13.2, pp. 87–138.
- Sternefeld, Wolfgang (1998). “Reciprocity and cumulative predication”. In: *Natural Language Semantics* 6.3, pp. 303–337.
- Tonyah, Nil (2015). “Non-structural datives in Turkish”. MA thesis. Istanbul: Boğaziçi University.
- Washington, Jonathan North (2017). “An investigation of vowel anteriority in three Turkic languages using ultrasound tongue imaging”. PhD thesis. Indiana University.
- Wood, Esther J (2007). “The semantic typology of pluractionality”. PhD thesis. University of California, Berkeley.
- Wood, Jim (2015). *Icelandic Morphosyntax and Argument Structure*. Dordrecht: Springer.
- Wood, Jim and Alec Marantz (2017). “The interpretation of external arguments”. In: *The verbal domain*. Ed. by Roberta D’Alessandro, Irene Franco, and Ángel J Gallego. Oxford: Oxford University Press, pp. 255–278.
- Yamada, Masahiro (2010). “Plurality, reciprocity, and plurality of reciprocity”. PhD thesis. University of Delaware.

A Kazakh data

- (2) a. I am a driving instructor, I explained Ainur how to drive.
 b. Ainur had to drive a long distance, she(=Ainur) asked me to ride with him in the car to entertain her during the long drive.
 c. Ainur had to drive a long distance, she(=Ainur) asked me to ride with her to help with the navigation.
 d. I showed Ainur how to drive the car before she drove the car.
 #Men Ainur-ga mafina ajda-s-tuu-m.
 I Ainur-DAT car drive-**ASST**-PST-1SG
 Intended: ‘I helped Ainur drive the car.’
- (3) Ainur had to drive from Astana to Almaty and asked me to help her. I drove some of the distance, Ainur did the rest.
 Men Ainur-ga mafina ajda-s-tuu-m.
 I Ainur-DAT car drive-**ASST**-PST-1SG
 ‘I helped Ainur drive the car.’
- (13) 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.
 #Ajfa Ajnur-ga zygir-is-ti.
 Aisha Ainur-DAT run-**ASST**-PST.3SG
 Intended: ‘Aisha helped Ainur run.’
- (14) 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.
 Ajfa Ajnur-ga zygir-is-ti.
 Aisha Ainur-DAT run-**ASST**-PST.3SG
 ‘Aihsa helped Ainur run.’
- (16) Ainur had to clean the house and she asked Aisha to help her. Ainur cleaned the bedrooms and the kitchen, and Aisha cleaned the bathroom and the living room. Because the kitchen did not seem clean enough after Ainur cleaned it, Aisha cleaned the kitchen, too.
 Ajfa Ajnur-ga yj-di tazala-s-tuu.
 Aisha Ainur-DAT house-ACC clean-**ASST**-PST.3SG
 ‘Aisha helped Ainur clean the house.’
- (17) Ainur had to clean the house and she asked Aisha to help her. Ainur cleaned the entire house, but it didn’t look clean enough to Aisha, so she cleaned the entire house, too.
 #Ajfa Ajnur-ga yj-di tazala-s-tuu.
 Aisha Ainur-DAT house-ACC clean-**ASST**-PST.3SG
 ‘Aisha helped Ainur clean the house.’
- (28a) Ainur was supposed to inspect a large house, she asked Aisha to help her. Aisha saw half of the house, and Ainur saw the other half.
 *Ajfa Ajnur-ga yj-di koer-is-ti.
 Aisha Ainur-DAT house-ACC see-**ASST**-PST.3SG
 Intended: ‘Aisha helped Ainur see the house.’

- (28b) There is a game where sounds are played, and the person who plays the game has to listen for specific notes (e.g., C5) and push a button when they hear them. Ainur played this game and asked Aisha to help her.
 *Ajfa Ajnur-ga muzikaluk nota-lar-duu esti-s-ti.
 Aisha Ainur-DAT musical note-PL-ACC hear-**ASST**-PST.3SG
 Intended: ‘Aisha helped Ainur hear the musical notes.’
- (36) Ajfa Ajnur-ga yj tazala-s-**pa**-duu.
 Aisha Ainur-DAT house clean-**ASST-NEG**-PST.3SG
 Only available: ‘Aisha didn’t help Ainur clean the house.’ (Aisha didn’t clean; Ainur may or may not have cleaned.)
- (37) Ajfa Ajnur-ga yj-di tazala-s-tuu ma?
 Aisha Ainur-DAT house-ACC clean-**ASST**-PST.3SG Q
 Only available: ‘Did Aisha help Ainur clean the house?’ (Did Aisha clean?)
- (40) A: What did you do yesterday?
 B:
 #Yj tazala-s-tuu-m.
 house clean-**ASST**-PST-1SG
 Intended: ‘I helped **someone** clean the house.’
 Only available: ‘I helped **him/her/them** clean the house.’
- (41) A: I helped my mother_i yesterday.
 B: What did you do? / How did you help her?
 A: **pro**_i Yj tazala-s-tuu-m.
pro_i house clean-**ASST**-PST-1SG
 ‘I helped **her**_i clean the house.’
- (43) A: I helped my mother_i yesterday.
 B: What did you do? / How did you help her?
 A:
pro_i (Yj-di) tazala-s-tuu-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.’
- (44a) [\emptyset _i Yj-di tazala-gan] (kisi) **Ahmet**_i edi.
 [\emptyset _i house-ACC clean-NF] (person) **Ahmet**_i COP.PST.3SG
 ‘It was **Ahmet** [who cleaned the house].’
- (44b) [Ajnur \emptyset _i sujluuk ber-gen] (kisi) **Ahmet**_i edi.
 [Ainur \emptyset _i gift give-NF] (person) **Ahmet**_i COP.PST.3SG
 ‘It was **Ahmet** [to whom Ainur gave a gift].’
- (45a) * [\emptyset _i Yj-di tazala-n-gan] (kisi) **Ahmet**_i edi.
 [\emptyset _i house-ACC clean-PASS-NF] (person) **Ahmet**_i COP.PST.3SG
 Intended: ‘It was **Ahmet** [by whom the house was cleaned].’

- (45b) **[Ajnur Ø_i meni [ajkur-gan] (waktu) kefe_i edi.*
[Ainur Ø_i I.ACC call-NF] (time) yesterday_i COP.PST.3SG
 Intended: ‘It was **yesterday** [when Ainur called me].’
- (46) *[Ajfa 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].’
- (48) Aisha had Ainur clean the house, but she (=Aisha) also offered to help Ainur.
 #*Ajfa Ajnur-ga yj-di tazala-s-tuu.*
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.’
- (50) **Ajfa Arajlum-ga/nuu Ajnur-ga yj-di tazala-t-tuur-duu.*
Aisha Arailym-DAT/ACC Ainur-DAT house-ACC clean-CAUS-CAUS-PST.3SG
 Intended: ‘Aisha had Arailym make Ainur clean the house.’
- (51)?? *Ajfa Arajlum-nuu/*ga Ajnur-ga yj-di tazala-s-tuur-duu.*
*Aisha Arailym-ACC/*DAT Ajnur-DAT house-ACC clean-ASST-CAUS-PST.3SG*
 ‘Aisha had Arailym help Ainur clean the house.’
- (52) *Ajfa Ajnur-ga tamak pisir-Ø-duu.*
Aisha Ainur-DAT food cook-L.APPL-PST.3SG
 ‘Aisha cooked food for Ainur.’
- (53a) **Ajfa Ajnur-ga yj boja-Ø-duu.*
Aisha Ainur-DAT house paint-L.APPL-PST.3SG
 Intended: ‘Aisha painted the house for Ainur.’
- (53b) *Ajfa Ajnur-ga yj boja-p ber-di.*
Aisha Ainur-DAT house paint-H.APPL-PST.3SG
 ‘Aisha painted the house for Ainur.’
- (54a) **Ajfa Arajlum-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.’
- (54b) **Ajfa 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.’
- (54c) *Ajfa Ajnur-ga tamak pisir-ip ber-di.*
Aisha Ainur-DAT food cook-H.APPL-PST.3SG
 ‘Aisha cooked food for Ainur.’
- (55b) *Ajfa Ajnur_i-ga pro_i yj-di tazala-s-uwip 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.’

- (55c)?? Ajfa Ajnur-ga Arajlum-ga yj-dy tazala-**s-uw** ber-di.
 Aisha Ainur-DAT Arailym-DAT house-ACC clean-**ASST-H.APPL**-PST.3SG
 ‘Aisha helped Arailym clean the house for Ainur.’
- (63) Ajfa Ajnur-ga yj-di **supurguŋ-pen** tazala-**s-tu**.
 Aisha Ainur-DAT house-ACC **broom-INTR** 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).’
- (64) Ajfa Ajnur-ga **kœrŋi-men** yj-di tazala-**s-tu**.
 Aisha Ainur-DAT **neighbor-INTR** 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).’
- (65) Ajfa Ajnur-ga **sabuur-men** yj-di tazala-**s-tu**.
 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.)
- (66) Ajfa Ajnur-ga yj-di **taza-la-s-tu**.
 Aisha Ainur-DAT house-ACC $\sqrt{\text{clean}}$ -**v-ASST**-PST.3SG
 ‘Aisha helped Ainur clean the house.’
- (67a) *Ajfa Ajnur-ga (Arajlum-ga/nũ) yj-di tazala-**t-uus-tu**.
 Aisha Ainur-DAT (Arailym-DAT/ACC) house-ACC clean-**CAUS-ASST**-PST.3SG
 Intended: ‘Aisha helped Ainur get (Arailym) clean the house.’
- (67b) *Yj Ajnur-ga tazala-**n-uus-tu**.
 House Ainur-DAT clean-**PASS-ASST**-PST.3SG
 Intended: ‘The house was such that it was helped clean for Ainur.’
- (69a) Yj Ajnur-ga tazala-**s-uw-du**.
 House Ainur-DAT clean-**ASST-PASS**-PST.3SG
 ‘The house was such that someone helped Ainur clean it.’
- (69b) *Ajfa (Arajlum-ga) Ajnur-ga yj-di tazala-**s-uus-tu**.
 Aisha (Aselia-DAT) Janara-DAT house-ACC clean-**ASST-ASST**-PST.3SG
 Intended: ‘Aisha helped Ainur help (Arailym) clean the house.’