Universal quantifiers, focus, and grammatical relations in Besemah

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This article describes adverbial universal quantification in Besemah, a little-described Malayic language of southwest Sumatra, and how the syntactic position of the quantifier relates to grammatical relations and information structure. Given previous descriptions of the relationship between quantifiers and grammatical relations, especially in western Austronesian languages (e.g., Kroeger 1993; Musgrave 2001), Besemah presents a unique system of universal quantification wherein adverbial universal quantifiers place severe restrictions on which arguments can be quantified. I argue that these restrictions are fundamentally different than those described as 'quantifier float' in other languages, but they are not incidental. Instead, these restrictions can be explained by the fact that the adverbial universal quantifier also marks focus in Besemah.

Keywords: symmetrical voice, universal quantifiers, grammatical relations, information structure, Austronesian

1. Introduction

A number of functional-typological studies have demonstrated that grammatical relations are both language- and construction-specific (see e.g., Comrie 1978; Dryer 1997; Croft 2001), which has culminated in a typologically-grounded framework that accounts for variation in grammatical relations (Bickel 2010; Witzlack-Makarevich 2010, 2019). This framework emphasizes the construction-specific nature of grammatical relations by appealing to the notion of **argument selectors**, which refer to "any morphosyntactic structure, process, rule, constraint or construction that selects a subset of arguments (and non-arguments) and treats them differently from other arguments (or non-arguments) of the clause" (Witzlack-Makarevich 2019: 15). They encompass a wide-range of phenomena along several overlapping dimensions, including coding (e.g., case, agreement)

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and behavioral argument selectors (e.g., diathesis alternations), role-related (e.g., control constructions) and reference-related argument selectors (e.g., relativization, raising constructions), mono-clausal (e.g., quantifier float) and cross-clausal argument selectors (e.g., conjunction reduction), among others. While the vast majority of these argument selectors have a relatively long history in the study of grammatical relations, the recognition that grammatical relations are construction-specific allows descriptive linguists to accurately uncover patterns of grammatical relations without having to decide that a language has a (single) subject or object grammatical relation (if any at all). And, in fact, descriptions of individual languages are increasingly better at describing grammatical relations with respect to particular argument selectors (see Witzlack-Makarevich 2019: 4).

Beyond better descriptions, in-depth studies of many of the argument selectors mentioned above have led to important insights that help explain how and why certain patterns of grammatical relations arise either in individual languages or cross-linguistically (e.g., Keenan & Comrie 1977; Iemmolo 2010; Bickel et al. 2014; Zúñiga 2018). However, for other less common argument selectors, there have been far fewer attempts to provide functional explanations. One such case is so-called 'quantifier float' phenomena, which has been shown to be an argument selector in a diverse group of languages (Whaley 2001). Typically, quantifier float specifies that while quantifiers may occur within the NP that they are modifying, they may also 'float' to other – usually adverbial – positions within the clause but are nevertheless able to quantify a specified set of arguments. Languages vary in their ability to float quantifiers, but for those that can, they vary as to which quantifiers can float and – most importantly for this article – which arguments can be targeted by these floated quantifiers. For some languages, only the subject argument can be quantified by a floated quantifier. For others, it is the absolutive argument, and for yet others, it is core arguments (see Section 2 below).

Besemah, an under-described Malayic language of Indonesia, presents a particularly interesting case of this type of argument selector. More specifically, Adverbial Universal Quantifier (AUQ) constructions in Besemah, while similar to quantifier float constructions in other languages, demonstrate several related but unexpected properties. First, the basic means of expressing universal quantification in Besemah is achieved through an adverbial quantifier outside of the NP it quantifies, as is the case in a number of other languages (see Jelinek 1993). In this way, the AUQ construction in Besemah differs from so-called quantifier float constructions mentioned above because it is not a determinative quantifier that is floated, but an adverbial quantifier that occurs in various positions within the clause (see Section 5 below for details). Second, despite the fact that the quantifier is not floated in the same way, Besemah severely restricts the arguments that can be quantified by an AUQ: only the privileged syntactic argument – what Indone-

sianists refer to as the subject, but I refer to as the Primary Argument – may be quantified even when the AUQ appears in positions closer to other arguments in the clause. That is, while many languages restrict which arguments can 'launch' so-called 'floated quantifiers' (see Donohue 2004; Whaley 2001), core arguments other than the privileged syntactic argument in Besemah – what Indonesianists refer to as non-subject arguments, but I refer to as Secondary Arguments – cannot be universally quantified. Finally, AUQs have an unexpected shift from the default interpretation 'all' to an exhaustive interpretation 'only' when the quantifier directly follows the Primary Argument. In this paper, I describe these properties of AUQ constructions in Besemah, demonstrating that while they are similar to quantifier float constructions, this argument selector operates in fundamentally different ways. In particular, I argue that the observed restrictions and unexpected semantic and pragmatic effects on a set of arguments can be explained by information structural properties of AUQ constructions, namely that the AUQ marks focus in Besemah.

This paper is organized as follows. Section 2 describes how quantifier float constructions act as argument selectors for different grammatical relations in several languages, focusing on western Austronesian languages. Section 3 presents the Besemah data used in this paper. Section 4 presents an overview of Besemah voice and grammatical relations, based upon McDonnell (2016). Section 5 presents an overview of the expression of universal quantification in Besemah, and Section 6 describes its relationship to grammatical relations. Then, Section 7 discusses the informational structural properties of AUQs as marking a focus domain with evidence from conversation. Section 8 concludes.

2. Quantifier float as an argument selector

In addition to being expressed within the NP they modify, quantifiers in many languages may also quantify an NP even when they occur in an adverbial position outside of the NP they are quantifying (Whaley 2001).[1] Quantifiers that occur in adverbial positions have been considered by many to be 'floating quantifiers', and the NP that is the target of this floated quantifier is said to have 'launched' the quantifier. Languages differ as to which arguments have the ability to 'launch'

1. A number of linguists have proposed that quantifiers occur within the quantifier phrase (e.g., Sportiche 1988). Therefore, the quantifier would not be within the NP, but adjacent to it. I make no such distinction between NP, Quantifier Phrase (QP), or even Determiner Phrase (DP) here.

floating quantifiers.[2] Many languages (e.g., Spanish, Kashmiri) allow only subject arguments to 'launch' floated quantifiers, while other languages (e.g., Korean, Lakhota) also allow objects to 'launch' floated quantifiers (Whaley 2001: 9). See Bickel (2010: Section 4.8) for a summary of this line of research.

In western Austronesian languages, the same patterns emerge, and many linguists use 'quantifier float' as an argument selector for subject or core arguments (Riesberg 2014). For example, Schachter (1976, 1977) and Kroeger (1993) use quantifier float as a selector of a subject grammatical relation in Tagalog. Both propose that only subject arguments (i.e, for them, arguments preceded by the *ang* phrase marking clitic) can 'launch floating quantifiers'. This means that for the non-subject argument to be quantified, the quantifier must occur within the NP. The examples in (1) exemplify these phenomena in Tagalog. In (1a), the universal quantifier *lahat* 'all' occurs within the NP marked by the ang nom case marker (in brackets). In the transitive clause in (1b), *lahat* 'all' occurs after the predicate but only quantifies the *ang* NOM case-marked NP (underlined).

(1) a. *B<um>a-basa* [*ang* ***lahat*** *ng* *mga bata*] *ng* *mga libro.*[3]
<AV>RDP-read NOM all GEN PL child GEN PL book
'All (the) children are reading some books.'
(Riesberg 2014: 52; Original source Schachter 1977: 287)

b. *S<in>u-sulat-ø* ***lahat*** *ng* *mga bata* *ang* *mga* *liham*.
<RLS>RDP-write-PV all GEN PL child NOM PL book
'The children are writing all the books.'
(Riesberg 2014, 52; Original source Schachter 1976, 501)

In Balinese and Standard Indonesian, it is core arguments that can 'launch floating quantifiers' (Arka 2008; Arka & Simpson 2008 for Balinese; Musgrave 2000, 2001 for Standard Indonesian). The examples from Standard Indonesian in (2) demonstrate that the universal quantifier *semua* 'all' can occur outside of the NP

2. This terminology originated in early generative accounts (Kayne 1969, 1975) and continues to this day. Debates surrounding quantifier float – primarily from a generative perspective – have basically taken two positions. The first is that constructions where the quantifier is within the NP are related to (i.e., has the same underlying structure as) constructions where the quantifier is floated. The difference in the position of the quantifier, then, is explained by transformation in early work and by movement in more recent work. The second position is that floated quantifiers are in fact adverbs. Thus, the two constructions are not related in this way (i.e., they do not have the same underlying form). While I do not take a generative perspective in this paper, I am sympathetic to the latter perspective. For Besemah, this distinction makes little difference because the basic form of the universal quantifier is an adverb and only derived forms can occur within the NP (see Section 5 for details.)

3. The glossing in these examples has been slightly altered to reflect the Leipzig Glossing Rules.

but only have scope over core arguments. In (2a), the quantifier *semua* 'all' precedes the noun it is quantifying within the NP (in brackets). In (2b), only the single core argument can be quantified by the floating quantifier but not the PP oblique, as the starred second free translation shows. According to Musgrave (2001) and Arka (2005), both core arguments in a transitive clause can be quantified. Thus, in (2c), there are two possible meanings, one in which *anak-anak* 'children' is quantified (marked by α) and another in which *kami* 1PL.EXCL is quantified (marked by *β*).

(2) a. [***Semua*** *pemain musik*] *pulang pagi.*
all player music go.home morning
'All the musicians left early.' (Musgrave 2001: 26)

b. *Orang-orang Sasak datang dengan anak-anak* ***semua=nya.***
people-RDP S. come with child-RDP all=3SG
'All the Sasak people came with their children.'
*'The Sasak people came with all their children.' (Musgrave 2001: 69)

c. *anak-anak*$_{\alpha}$ *kami*$_{\beta}$ *pukul kemarin* ***semua=nya.***
child-RDP 1PL.EXCL PV.hit yesterday all=3SG
α 'All the children were hit by us, yesterday.'
β 'The children were hit by all of us, yesterday.' (Riesberg 2014: 56)

This short illustration demonstrates the basic relationship between 'quantifier float' and an argument's status as a subject or core argument. (See Riesberg 2014 for a concise overview of all the factors at play, especially how quantifier float interacts with different voice constructions.) It is noteworthy, however, that all of these instances of quantifier float are not the preferred means of universal quantification in any of these languages. In some cases, constructions where the quantifier floats are strongly dispreferred or even unnatural (see Riesberg 2014: 59–60, on Balinese). In all cases, determinative universal quantification within the NP is preferred. As we shall see below, this is **not** the case in Besemah where adverbial universal quantification is strongly preferred to determinative quantification. Against the backdrop of widely discussed examples in western Austronesian languages, this paper demonstrates that universal quantifiers in Besemah operate quite differently. It begs the question whether the Besemah case should even be considered an instance of quantifier float at all. This topic is taken up in Section 5. The next two sections describe the data in this paper and basics of voice and grammatical relations in Besemah.

3. Data

The Besemah data in this paper come from two sources: (i) face-to-face everyday conversations between native speakers of Besemah and (ii) elicitation sessions between me and several native speakers of Besemah. These conversations and elicitation sessions are drawn from the documentation of Besemah, which is currently archived at the Pacific and Regional Archive for Digital Sources in Endangered Cultures (PARADISEC). Each example in Besemah has been given a citation and can be accessed in the PARADISEC collection (McDonnell 2008). For an overview of the documentation of Besemah, see McDonnell (2016).

The examples from conversations that are used in this paper were audio recorded and transcribed by me with the help of several native speaking language consultants. They were transcribed following a limited set of the conventions from Du Bois et al. (1993). In this transcription system, each line represents an Intonation Unit (Chafe 1994) with punctuation representing a meaningful intonation contour: a comma (,) represents a 'continuing contour', a period (.) represents a 'final contour', and a question mark (?) represents an 'appeal contour'. Other conventions in the transcription system include a colon (:) for lengthening, a dash – for truncated word, among a handful of other symbols. For a complete list of symbols, see Appendix B, which lists the conventions that are used in this paper.

Understanding the often nuanced meanings of clauses with universal quantifiers – even with relatively straightforward constructions – presents a number of challenges. In McDonnell (2016), I sought to solve this issue by presenting video stimuli of a small group of people preforming simple tasks. This proved useful not as a type of experimental stimulus but as a way to discuss universal quantification more concretely. However, these discussions resulted in a limited set of clauses with universal quantification. Thus, in working together with Besemah consultants as a part of this study, we decided on an alternative strategy to elicit the nuances of universal quantifiers in Besemah. The strategy was to create mini-dialogues and sentence completion tasks that highlighted the meanings of the universal quantifiers. In so doing, our aim was to pinpoint which argument is being quantified in a given construction and the constraints on the default and exhaustive interpretations. These dialogues were created by either me or a native speaker of Besemah, and discussed between us during recorded elicitation sessions. Having spent over two years living in the Besemah highlands, I speak Besemah with a fairly high-level of fluency, certainly enough to create the simple examples in this paper. These data were collected over seven elicitation sessions with a total of

seven different speakers of Besemah ranging in age from 18 to 43 years old.[4] I consulted more closely with one participant, Hendi Feriza, than the others to develop and check the examples in this paper. Having worked together since 2008, we have developed a good working relationship. His insights into AUQ constructions have proven invaluable.

4. Voice and grammatical relations

Besemah is similar in many respects to varieties of Malay and Indonesian (Ewing 2005; Conners et al. 2015). Arguments of the verb are commonly unrealized. Intransitive verbal predicates are either unaffixed or occur with one of several prefixes (e.g., the non-volitional *te-* NVOL, the middle *be-* MID), and it has a symmetrical voice system with a two-way alternation between A-oriented and P-oriented constructions. These constructions show little difference in terms of morphosyntactic complexity and syntactic transitivity. The former, referred to as A-Voice (AV), privileges an A argument, while the latter, referred to as P-Voice (PV), privileges the P argument (see McDonnell 2016 for a fuller description of these aspects of the language, especially the symmetrical voice system and the nature of grammatical relations).

Taking a perspective that grammatical relations are construction-specific, I do not assume a 'subject' and/or 'object' grammatical relation in Besemah. And by surveying a variety of diagnostics for grammatical relations in McDonnell (2016), I show that such labels are not justified for Besemah, especially if one subscribes to the notion that the use of 'subject' and 'object' implies some resemblance to 'subject' and 'object' in other languages, where they are robust categories (Comrie 1989; LaPolla 1993). I instead employ the label **Primary Argument** – analogous to what many Indonesianists call 'subject' – to refer to the privileged syntactic argument in most verbal constructions (Van Valin & LaPolla 1997; see below for further explanation of what this means). The other core argument in a transitive construction (i.e., the argument that is not the Primary Argument) does not form a coherent class across the different voices. Nevertheless, it is sometimes useful to refer to these arguments. Thus, I employ the label **Secondary Argument** – analogous to what many Indonesianists call 'non-subject' (Arka 2003; Arka & Manning 2008; Arka 2008; Musgrave 2000, 2001; Riesberg 2014). The remainder of this section

4. The elicitation sessions are found in the Besemah collection at PARADISEC (https://catalog.paradisec.org.au/collections/BJM01, last access 4 April 2022) under the following session titles: BJM01-128, BJM01-146, BJM01-147, BJM01-152, BJM01-159, BJM01-160, BJM01-161, BJM01-162.

reviews major features of voice and grammatical relations in Besemah, summarizing some of the findings in McDonnell (2016).

As mentioned above, verbal predicates in intransitive constructions are unaffixed or prefixed with of small set of prefixes. The single S argument canonically occurs pre-verbally, and before any TAM particles, as in (3). S arguments may also occur post-verbally.

(3) Intransitive
die la duduk.
3 PFV sit
'she already sat down.' (McDonnell, Sawia, et al. 2009: 00:26:41–00:26:42)

Transitive verbs with the exception of a small closed class of verbs (e.g., *ade* 'have', *ghulih* 'get') are obligatorily marked as either AV or PV. In the AV construction, as in (4) below, the verb is marked by the homorganic nasal prefix (*me*)*N-* AV; the A argument canonically occurs pre-verbally (and before any TAM particles), while the P argument occurs post-verbally. The A argument may also occur after what I call the **predicate complex**, which includes both the verbal predicate and any Secondary Argument.

(4) A-voice
Rafles la udim n-(t)etak-i puntung.
R. PFV finish AV-chop-LOC.APPL firewood
'Rafles already chopped the firewood.'
(McDonnell, Agusman, et al. 2018: BJM01-160-02, 00:21:29–00:21:44)

PV constructions are a bit more complicated and their structures depend upon the person of the A argument. However, in all PV constructions the P argument canonically occurs pre-verbally but may also occur after the predicate complex, which in this case includes the verb and the A argument. When A is in the third person, the verb is optionally prefixed with *di-* PV and A occurs directly after the verb either as an NP, as in (5a), or an enclitic, as in (5b). When A is in the first or second person, it directly precedes the verb. In the case of the first person singular pronoun, it is cliticized to the verb, as in (5c).

(5) P-voice
a. *puntung la udim (di-)tetak-i Rafles.*
firewood PFV finish PV-chop-LOC.APPL Rafles
'Rafles already chopped the firewood.'
b. *puntung la udim (di-)tetak-i=nye (li Rafles).*
firewood PFV finish PV-chop- LOC.APPL=3 by Rafles
'(Rafles)/he already chopped the firewood.'

c. *puntung la udim ku=tetak-i.*
firewood PFV finish 1SG=PV.chop-LOC.APPL
'I already chopped the firewood.'
(McDonnell, Agusman, et al. 2018: BJM01-160-02, 00:21:45–00:30:36)

In order to discuss the grammatical relations and syntactic alignment in Besemah, I use a slightly modified version of the macro-role labels S, A, and P (Comrie 1978). The single argument of the intransitive, S, remains the same. However, the arguments in transitive clauses are further subcategorized according to the voice construction in which they appear. That is, A and P in AV constructions are represented as A_{AV} and P_{AV}, respectively. Likewise, A and P in PV constructions are represented as A_{PV} and P_{PV}, respectively.

Utilizing these labels, McDonnell (2016) demonstrates that there are two patterns of syntactic alignment, based on a limited number of argument selectors, exemplified in Figure 1.

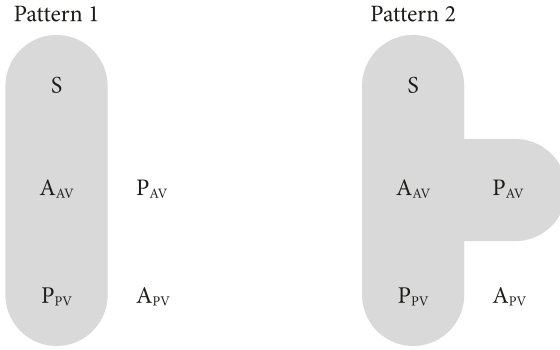

Figure 1. Two patterns of syntactic alignment in Besemah

Pattern 1 groups together S, A_{AV}, and P_{PV} and provides the basis for the notion of Primary Argument. This pattern is based on the relative freedom that each argument has within the clause (i.e., word order), such that S, A_{AV}, and P_{PV} (i.e., the Primary Argument) are free to occur before or after the predicate complex and optionally after any oblique arguments. P_{AV} and A_{PV} are more tightly constrained but not necessarily to the same degree. A_{PV} arguments must occur next to the verb. As we saw above, if A_{PV} is in the first or second person, it directly precedes the verb, but if it is in the third person, it occurs directly after the verb. P_{AV} arguments almost always occur directly after the verb, but it is possible in some cases for an adverb to intervene between the verb and the P_{AV} argument. McDonnell (2016) provides further evidence for Pattern 1 from restrictions in AUQ constructions,

loosely based on previous analyses of 'quantifier float' in Tagalog (Schachter 1976, 1977; Kroeger 1993).[5] In Section 6 below, I present further evidence that AUQ constructions select Primary Arguments and present new data that complicates the analysis I presented in McDonnell (2016).

Pattern 2 groups together S, A_{AV}, P_{PV}, and P_{AV}. It is based on evidence from the behavior of co-referential arguments and 'extraction' patterns in Noun Modifying Constructions in Besemah, what many Indonesianists have analyzed as Relative Clauses (McDonnell 2020). It is unclear exactly what to make of this pattern. It may be tempting to conclude that S, A_{AV}, P_{PV}, and P_{AV} represent core arguments, while A_{PV} is an oblique argument. However, this analysis flies in the face about what we know of the core-oblique distinction in the languages of the world (Thompson 1997). First, A_{PV} arguments are unmarked, and in the case of first singular and third person pronouns, they cliticize to the verb. Second, the information flow status of A_{PV} arguments in discourse is consistent with core arguments in other languages (i.e., they are given, tracked, and identifiable). As Chen & McDonnell (2019) and Riesberg (2014) have argued the Apv argument falls on a cline from core to oblique with some arguments being semi-core, depending on the form of the argument (see also Arka 2005). The significance of Pattern 2 is not straightforward, but I return to potential explanations for it in Section 6.

McDonnell (2016) further demonstrates that a number of the argument selectors that have been used by others (e.g., Arka 2003; Arka & Manning 2008; Riesberg 2014) are problematic in Besemah. In some cases, the argument selector itself is called into question. For example, I question whether the apparent reflexive pronoun in binding constructions is indeed a reflexive pronoun.[6] In other cases, the argument selector is restricted to a single transitive voice. For example, certain control constructions are restricted to take AV complements, so it would not be possible to say something about the alignment of S and P_{PV} (see chapters in Part 2 of McDonnell 2016 for detailed arguments). To summarize, Besemah shows weak evidence for any grammatical relations, but there are restrictions in word order patterns and AUQ constructions that show how Primary Arguments pattern together.

5. McDonnell (2016) explains why the term 'quantifier float' is inappropriate, using the term **quantifiability** instead. In this paper, I avoid both terms when describing adverbial universal quantification.

6. An anonymous reviewer points out that while reflexive binding may not be a good argument selector, quantificational binding may be a promising line of enquiry (see Legate 2012).

5. Universal quantification

This section describes universal quantifiers in Besemah, demonstrating how they differ in significant ways from other western Austronesian languages, as in the Standard Indonesian and Tagalog examples presented in Section 2. First, Besemah universal quantifiers occur in several forms. The Adverbial Universal Quantifier (AUQ) *gale* 'all' occurs in various positions within a clause and does not have any morphological marking. It most frequently follows the predicate (or predicate complex in transitive constructions), as in (6). In this case and all others in this section, *gale* 'all' quantifies the Primary Argument, which is highlighted in gray. The significance of this fact will be discussed in the next section.

(6) Post-predicate AUQ position
E: *jeme jungut itu ji=ku,*
people corner DEM.DIST QUOT=1SG
'people on that corner, I said,'
→ *la ng-(k)icik-ka die* ***gale.***
PFV AV-talk-CAUS/APPL 3 all
'all talked about her.' (McDonnell, Emi et al. 2009: 00:22:34–00:22:36)

The AUQ may also occur between an auxiliary verb and the predicate, as in (7), or after an oblique PP, as in (8). These constructions feature AUQs in positions which appear far less frequently in the corpus (see below).

(7) Pre-predicate AUQ position
bujangan galak ***gale*** *ny-(s)akat.*
bachelors want all AV-annoy
'bachelors all want to bother (others).'
(McDonnell, Jamisah, et al. 2009: 00:26:15–00:26:16)

(8) Post-oblique AUQ position
ramu-an=anye cabi cung kapuh,
prepare-NMLZ=3 pepper tomato etcetera
'the ingredients, peppers, tomatoes and the like,'
→ *laju di-batak ke ghumah Santo* ***gale.***
then PV-bring to house S. all
'then were all brought to Santo's house.'
(McDonnell, Sawia et al. 2009: 00:13:48–00:13:51)

Finally, the AUQ also occurs directly after the Primary Argument, as in (9). However, in this position, *gale* shifts its meaning from the universal meaning 'all' to an exhaustive meaning 'only'. This meaning difference is robust and easily elicited with consistent results across speakers (see Section 6 below).

(9) Post-Primary Argument AUQ position
temasuk kabah,
include 2SG
'including you,'
Kudar,
K.
'Kudar,'
.. *kaman endung Peringkik kapuh tu.*
group mother P. etcetera that
'Peringkik's mom's group and the like,'
→ *aku* ***gale*** *ji=ku m-(m)asuk-i=nye,*
1SG all QUOT=1SG AV-enter- LOC.APPL=3
'it was only me that enrolled them (into the farmer's co-op),'
(McDonnell, Emi, et al. 2009: 00:05:55–00:05:59)

The pre-nominal universal quantifier occurs in two forms. It is prefixed with the numeral prefix *se-* 'one', as in (10), or the partially reduplicated prefix *ge-* RDP.CV.

(10) Pre-nominal universal quantifier
se-gale be- jeme la tipu-ka=nye,
one-all HES people PFV PV.deceive-CAUS/APPL=3
'he tricked all the people,' (McDonnell & Karim 2009: 00:00:33–00:00:35)

Note that there are no examples in the Besemah corpus of the universal quantifier with the partially reduplicated prefix *ge-* RDP.CV, and elicitation sessions with five Besemah speakers reveal that there is some disagreement among speakers about which forms are acceptable and which are not.[7] There are, however, some salient properties that were fairly consistent across speakers. For example, in the constructed examples in (11), it is possible to universally quantify the head noun *dakecik* 'children' with either form with the exception of one speaker who does not accept the example in (11a).

7. This disagreement was unexpected and did not play a significant role in elicitation sessions, so there are still unanswered questions. The elicitation sessions focused on the AUQ, since it is far more frequent (see Table 1 below) and plays a much larger role in the grammar of the language. Given how infrequent the pre-nominal forms are in the corpus, it may not be too surprising that there is disagreement among speakers.

(11) Pre-nominal universal quantifier *segale* and *ge gale* 'all'
a. *se-gale dakecik m-beli deghian tadi.*
one-all children AV-buy durian earlier
'all the children bought durian earlier.'
b. *ge-gale dakecik m-beli deghian tadi.*
RDP.CV-all children AV-buy durian earlier
'all the children bought durian earlier.'
(McDonnell, Neti et al. 2018: BJM01-152-02, 00:20:17–00:22:14)

However, there are cases where *segale* can only quantify nouns that can take a distributive meaning, e.g., 'all kinds of'. Consider the examples in (12).

(12) Pre-nominal universal quantifier *segale* 'all'
a. *aku ng-(k)ecap se-gale pisang.*
1SG AV-eat one-all banana
'I ate all (different types of) bananas.'
b. **aku ng-(k)ecap se-gale apokat.*
1SG AV-eat one-all avocado
'I ate all (different types of) avocados.'
(McDonnell, Neti, et al. 2018: BJM01-152-02, 00:22:19–00:23:41)

The reason that (12a) is acceptable and (12b) is not has to do with the nouns *pisang* 'banana' and *apokat* 'avocado'. In the Besemah highlands, there are many different species of banana but only one species of avocado. This same pattern holds for other nouns, and *segale* can be used with *buah* 'fruit' and *cabi* 'peppers' but not with *atah* 'rice husks' or *kawe* 'coffee'.

When the universal quantifier is used pronominally (i.e., meaning 'everything'), the root *gale* 'all' is prefixed with *se-* 'one' or *ge-* RDP.CV and encliticized with the third person pronoun *=nye* 3, as in (13). Again, there were no examples of the partially reduplicated prefix *ge-* RDP.CV.

(13) Pronominal universal quantifier *segalenye* 'all'
mak ini mahal gale mak ini,
NOW DEM.PROX expensive all NOW DEM.PROX
'nowadays, all (the vegetables) are expensive,'
(1.2)
se-gale=nye.
one-all=3.
'everything (is expensive).' (McDonnell et al. 2008: 00:29:19–00:29:22)

This brings us to a second distinguishing property of universal quantifiers in Besemah. While 'floating' the universal quantifier is exceptional in both Standard Indonesian and Tagalog, AUQs are the norm in Besemah. McDonnell (2016)

reports the following frequencies for universal quantifiers in Table 1 from a subset of the Besemah corpus that is approximately 50,000 words.

Table 1. Universal quantifiers in 50,000-word Besemah corpus ($n = 250$; McDonnell 2016)

Adverbial	Prenominal	Pronominal
238 (95%)	11 (4%)	1 (< 1%)

This reveals that AUQs are by far the most frequent with the other forms being relatively infrequent. Further, the fact that the AUQ is morphologically less complex and far more frequent provides solid evidence that the adverbial form of the universal quantifier is more or less the basic means of universal quantification. This raises some interesting questions about the nature of universal quantifiers along the lines of Jelinek (1993). It is noteworthy that other quantifiers (e.g., *banyak* 'many', *bilang* 'every') and numerals occur within the NP. The AUQ patterns more closely with other adverbs like *saje* 'only' and *baih* 'just'. Thus, the difference between *gale* 'all' and other quantifiers appears to be one of word class.

This section has shown how universal quantification differs from descriptions of other western Austronesian languages: adverbial forms of the universal quantifier are far more frequent and are less complex morphologically than pre-nominal forms. Furthermore, as alluded to above in the examples from the corpus, AUQs exclusively target Primary Arguments. While McDonnell (2016) proposed that only Primary Arguments could be universally quantified, further elicitation reveals that a more nuanced description is necessary to account for elicited sentences where P_{AV} Secondary Arguments and oblique arguments can be targeted by AUQs under very limited circumstances and may only receive the exhaustive 'only' interpretation. At the same time, I show that the A_{PV} Secondary Argument may not be quantified at all with the AUQ. The next section demonstrates these restrictions on adverbial universal quantification drawing from elicited data.

6. Restrictions on adverbial universal quantifiers

This section describes argument selection in AUQ constructions in Besemah, demonstrating that the AUQ exclusively targets the Primary Argument when receiving the default interpretation 'all'. However, new data show that it is possible under very strict conditions to elicit examples where P_{AV} Secondary Arguments or obliques are targeted by AUQs. This characterization diverges somewhat from McDonnell (2016), in which I propose that AUQs can **only** quantify Primary Arguments. Targeting the P_{AV} Secondary Argument and obliques requires that

the A_{AV} Primary Argument be singular (e.g., a person's name or singular pronoun), and thus it cannot be quantified. Furthermore, in all of these cases, the quantified P_{AV} Secondary Argument or oblique must directly precede the AUQ and receives the exhaustive interpretation. Therefore, the characterization of the AUQ argument selector must be updated to state that the AUQ exclusively targets the Primary Argument when receiving the default interpretation. P_{AV} Secondary Arguments or obliques may also be targeted by the AUQ, but they must directly precede the AUQ and receive the exhaustive interpretation.

As we will see below, not all arguments are able to be targeted by the AUQ, even when the exhaustive interpretation is considered. That is, A_{PV} Secondary Arguments cannot be targeted by an AUQ. If the same strict conditions are imposed on the Primary Argument in PV (i.e., the P_{PV} Primary Argument is singular and thus cannot be quantified), the A_{PV} Secondary Argument cannot be targeted and the clause is deemed unacceptable. Tables 2 and 3 summarize these patterns and different interpretation in AV and PV, respectively.

Table 2. Universal quantifier positions and their interpretations in AV

A-Voice											
A	*gale*	AUX		V		P		OBL		=	'only' A
A		AUX	*gale*	V		P		OBL		=	'all' A
A		AUX		V	*gale*	P		OBL		=	'all' A
A		AUX		V		P	*gale*	OBL		=	'all' A
A		AUX		V		P		OBL		=	'all' A 'only' P (A must be singular)
A		AUX		V		P		OBL	*gale*	=	'all' A[a] 'only' OBL (A & P must be singular)

a. 'all' P is only very marginally acceptable to a minority of participants when A is singular.

The patterns in the Tables 2 and 3 can be summarized as follows:

1. *gale* is able to universally quantify any non-contiguous Primary Argument it follows.
2. when *gale* contiguously follows A_{AV}, P_{PV}, or P_{AV} arguments or even an oblique, it results in an exhaustive interpretation, i.e., 'only' NP.

The remainder of this section unpacks this description of the AUQ argument selector, providing examples for each of these restrictions. Potential explanations for these restrictions are provided in Section 6.1 and Section 7.

Table 3. Universal quantifier positions and their interpretations in PV

P-Voice											
P	*gale*	AUX		V		A		OBL		=	'only' P
P		AUX	*gale*	V		A		OBL		=	'all' P
P		AUX		V	*gale*	A		OBL		=	'all' P
P		AUX		V		A	gale	OBL		=	'all' P[a]
P		AUX		V		A		OBL	*gale*	=	'all' P[b]
											'only' OBL (P must be singular)

a. 'only' A is not possible. b. 'all' A is not possible.

This section relies exclusively on elicited examples. As mentioned in Section 3, they were elicited during seven separate elicitation sessions with seven different speakers of Besemah. In these sessions, I sought to pin down the argument (or set of arguments) that was targeted by the AUQ and the constraints on the default and exhaustive interpretations. Because quantification is very tricky to elicit, we found that creating mini-dialogues were most helpful to understand different meanings of the AUQ constructions. My current understanding of the AUQ argument selector developed over the course of these sessions. The examples cited in this section primarily come from a final elicitation session wherein I organized the data I had collected in previous sessions, made some of them more consistent and clearer, and checked all of them once more with Hendi Feriza, a Besemah speaker with whom I work closely. Intuitions about AUQ constructions were extremely similar across participants, and below I note that they really only differ in rare constructions that quantify Secondary Arguments.

The mini-dialogues are set up as dyads between speakers that I label as A and B. In most cases, speaker A says the first two lines, followed by a clarifying question from speaker B in line 3 and a response from speaker A in line 4. The first line in these examples provides a bit of context. (In Examples (22)–(25), this first line is not necessary and thus excluded.) The second line contains the target clause with the AUQ. The clarifying question in line 3 asks a yes/no question about either the A or P argument, and line 4 is a response. These clarifying questions are crucial and help us to determine (i) which argument is being quantified and (ii) whether it has the default interpretation 'all' or the exhaustive interpretation 'only'.

As mentioned above, only Primary Arguments can be quantified by an AUQ. The examples in (14)–(15) show that the Primary Argument is the target of the AUQ. In (14), the P_{PV} Primary Argument is targeted in line 2, and so asking if one of the participants bought the durian fruit is perfectly acceptable.

(14) P_{PV} Primary Argument with default interpretation
A: *bik Refki bik Yut aku ke warung Miko tadi,*
aunt R. aunt Y. 1SG to store M. earlier
'auntie Refki, auntie Yut, and I went to Miko's store earlier,'
→ *deghian=(ny)e kami beli* ***gale*** *di situ.*
durian=3 1PL.EXCL PV.buy all LOC there
'we bought all the durian there.'
B: *bik Refki m-beli?*
aunt R. AV-buy
'(did) auntie Refki buy (some)?'
A: *dide, kami nga bik Yut baih mbeli.*
no 1PL.EXCL with aunt Y. just AV-buy
'no, just auntie Yut and I bought (some).'
(McDonnell & Feriza 2020: BJM01-162-01, 00:02:30–00:04:35)

However, in the mini-dialogue in (15), it is not acceptable to ask who bought the durian fruit in line 4, which is therefore marked by #, because (as I argue in this article) the Primary Argument *kami* 1PL.EXCL is being targeted by the AUQ.

(15) A_{AV} Primary Argument with default interpretation
A: *bik Refki bik Yut aku ke warung Miko tadi,*
aunt R. aunt Y. 1SG to store M. earlier
'auntie Refki, auntie Yut, and I went to Miko's store earlier,'
→ *kami m-beli deghian* ***gale*** *di situ.*
1PL.EXCL AV-buy durian all LOC there
'we all bought durian there.'
B:# *bik Refki m-beli?*
aunt R. AV-buy
'(did) auntie Refki buy (some)?'
A:# *dide, kami nga bik Yut baih m-beli.*
no 1PL.EXCL with aunt Y. just AV-buy
'no, just auntie Yut and I bought some.'
(McDonnell & Feriza 2020: BJM01-162-01, 00:04:39–00:05:41)

A mini-dialogue where the follow up question in line 3 asks about the durian fruit and not the participants reveals the inverse. The P_{AV} Secondary Argument can be questioned because it is not universally quantified with the AUQ *gale* in (16).

(16) A_{AV} Primary Argument with default interpretation
A: *bik Refki bik Yut aku ke warung Miko tadi,*
aunt R. aunt Y. 1SG to store M. earlier
'auntie Refki, auntie Yut, and I went to Miko's store earlier,'
→ *kami m-beli deghian* ***gale*** *di situ.*
1PL.EXCL AV-buy durian all LOC there
'we all bought durian there.'
B: *masih ade (deghian) di situ?*
still exist durian LOC there
'is there still durian there?'
A: *ui au.*
EXCL yes
'oh yes.' (McDonnell & Feriza 2020: BJM01-162-01, 00:05:43–00:06:10)

However, the same is not true of the P_{PV} Primary Argument in (17). It is not acceptable to question this argument because it is being targeted by the AUQ.

(17) P_{PV} Primary Argument with default interpretation
A: *bik Refki bik Yut aku ke warung Miko tadi,*
aunt R. aunt Y. 1SG to store M. earlier
'auntie Refki, auntie Yut, and I went to Miko's store earlier,'
→ *deghian=(ny)e kami beli* ***gale*** *di situ.*
durian=3 1PL.EXCL PV.buy all LOC there
'we bought all the durian there.'
B: #*masih ade (deghian) di situ?*
still exist durian LOC there
'is there still durian there?'
A: #*ui au.*
EXCL yes
'oh yes.' (McDonnell & Feriza 2020: BJM01-162-01, 00:06:22–00:07:44)

Taken together, these four examples demonstrate that with the default interpretation (i) Primary Arguments are targeted by the AUQ *gale* 'all', and (ii) Secondary Arguments are not targeted by the AUQ.

As shown in Section 5 above, the AUQ *gale* has an unexpected exhaustive interpretation 'only' when it immediately follows Primary Arguments. Compare the examples in (18), in which the AUQ occurs after the verb and P_{AV} Secondary Argument, and (19), in which the AUQ occurs directly after the Primary Argument. In the prior example, the Primary Argument is quantified with the default

interpretation 'all', but in the latter the Primary Argument is quantified with the exhaustive interpretation 'only'.

(18) A_{AV} Primary Argument with default interpretation
A: *bik Refki bik Yut aku ke warung Miko tadi,*
aunt R. aunt Y. 1SG to store M. earlier
'auntie Refki, auntie Yut, and I went to Miko's store earlier,'
→ *kami m-beli deghian* ***gale*** *di situ.*
1PL.EXCL AV-buy durian all LOC there
'we all bought durian there.'
B: *kamu m-beli pisang pule?*
2PL AV-buy banana also
'did you all also buy bananas?'
A: *au.*
yes
'yes.' (McDonnell & Feriza 2020: BJM01-162-01, 00:08:05–00:08:33)

(19) P_{PV} Primary Argument with exhaustive interpretation
A: *bik Refki bik Yut aku ke warung Miko tadi,*
aunt R. aunt Y. 1SG to store M. earlier
'auntie Refki, auntie Yut, and I went to Miko's store earlier,'
→ *deghian* ***gale*** *kami beli di situ.*
durian all 1PL.EXCL PV.buy LOC there
'we bought only durian there.'
B: #*kamu m-beli pisang pule?*
2PL AV-buy banana also
'did you all also buy bananas?'
A: #*au.*
yes
'yes.' (McDonnell & Feriza 2020: BJM01-162-01, 00:09:33–10:10:11)

This pair of examples shows that the exhaustive interpretation is not possible when the universal quantifier follows the P_{AV} Secondary Argument, as in (18), but when the universal quantifier directly follows the P_{PV} Primary Argument it is possible, as in (19). For completeness, the examples in (20)–(21) below demonstrate the inverse, wherein the A argument is being questioned in the follow up question in line 3.

(20) P_{PV} Primary Argument with default interpretation
A: *bik Refki bik Yut aku ke warung Miko tadi,*
aunt R. aunt Y. 1SG to store M. earlier
'auntie Refki, auntie Yut, and I went to Miko's store earlier,'
→ *deghian=(ny)e kami beli* ***gale*** *di situ.*
durian=3 1PL.EXCL PV.buy all LOC there
'we bought all the durian there.'
B: bik Rafles m-beli pule?
aunt R. AV-buy also
'did auntie Rafles also buy (some)?'
A: au.
yes
'yes.' (McDonnell & Feriza 2020: BJM01-162-02, 00:03:05–00:03:28)

(21) A_{AV} Primary Argument with exhaustive interpretation
A: *bik Refki bik Yut aku ke warung Miko tadi,*
aunt R. aunt Y. 1SG to store M. earlier
'auntie Refki, auntie Yut, and I went to Miko s store earlier,'
→ *kami* ***gale*** *m-beli deghian di situ.*
1PL.EXCL all AV-buy durian LOC there
'(it was) only us (that) bought durian there.'
B: *#bik Rafles m-beli pule?*
aunt R. AV-buy also
'(did) auntie Rafles buy (some) also?'
A: *#au.*
yes
'yes.' (McDonnell & Feriza 2020: BJM01-162-02, 00:03:33–00:04:49)

Thus far, the AUQ *gale* has targeted Primary Arguments; Secondary Arguments are neither universally quantified nor do they take an exhaustive interpretation when the AUQ directly follows it. However, if the A_{AV} Primary Argument is singular, i.e., *aku* 1SG or a proper noun with singular reference, it is possible to receive the exhaustive interpretation of the P_{AV} argument, when the AUQ directly follows it, as in (22)–(23). Note that the target AUQ construction is in line 1. Since the Primary Argument is *aku* 1SG, we no longer need to provide contextual information about the referents of the A argument.[8]

8. It is noteworthy that the A_{AV} Primary Argument cannot be targeted if it is singular. If the AUQ occurs before the P_{AV} Secondary Argument, as in (i) below, the construction is not possible because the Primary Argument is singular.

(22) P_{AV} Secondary Argument with exhaustive interpretation
A: → *aku m-beli deghian gale di warung Miko tadi.*
1SG AV-buy durian all LOC store M. earlier
'I bought only durian at Miko s store earlier.'
#'I bought all the durian at Miko's store earlier.'
B: *masih ade (deghian) di situ?*
still exist durian LOC there
'is there still durian there?'
A: *au.*
yes
'yes.' (McDonnell & Feriza 2020: BJM01-162-01, 00:21:22–00:22:12)

(23) P_{AV} Secondary Argument with exhaustive interpretation
A: → *aku m-beli deghian gale di warung Miko tadi.*
1SG AV-buy durian all LOC store M. earlier
'I bought only durian at Miko's store earlier.'
#'I bought all the durian at Miko's store earlier.'
B: #*kabah m-beli jajan-an pule?*
2SG AV-buy snack-NMLZ also
'did you buy snacks also?'
A: #*dide.*
no
'no.' (McDonnell & Feriza 2020: BJM01-162-01, 00:22:17–00:22:38)

The example in (22) demonstrates that the default interpretation of the P_{AV} Secondary Argument is not available since it is okay to ask if there are any durian fruit left in line 3. The example in (23) demonstrates that the exhaustive interpretation of the Pav Secondary Argument is available when the A_{AV} Primary Argument is singular.

When the AUQ *gale* occurs after an oblique PP, participants' intuitions are far less clear. These examples took some time for each participant to interpret. Two participants thought that it was marginally acceptable for the P_{AV} argument to be quantified with the default interpretation. For the rest, it is not possible, as the

(i) **aku m-beli gale deghian di warung Miko tadi.*
1SG AV-buy all durian LOC store M. earlier
'I bought all the durian at Miko's store earlier.'
(McDonnell & Feriza 2020: BJM01-162-01, 00:33:44–00:33:59)

example in (24) shows. Instead, the only interpretation appears to be the exhaustive meaning is on the oblique *warung Miko* 'Miko's store'.[9]

(24) Oblique with exhaustive interpretation
A: → *aku tadi m-beli deghian di warung Miko **gale**.*
1SG earlier AV-buy durian LOC store M. all
'I bought durian at only Miko's store earlier.'
?#'I bought all the durian at Miko's store earlier.'
B: *masih ade (deghian) di situ?*
still exist durian LOC there
'is there still durian there?'
A: *au.*
yes
'yes.' (McDonnell & Feriza 2020: BJM01-162-01, 00:22:43–00:24:01)

An example that better demonstrates the exhaustive meaning is found in (25) below. In this example, the AUQ *gale* occurs after the oblique PP and targets the oblique *Pasar*, which is the name of the capital of the Besemah highlands officially known as Pagaralam. The fact that lines 3 and 4 are not considered acceptable shows the AUQ is receiving an exhaustive interpretation.

(25) Oblique PP with exhaustive interpretation
A: *aku tadi be-ghusik ngah Magui, Rafles, Dian,*
1SG earlier MID-visit with M. R. D.
'I visted Magui, Rafles, and Dian earlier,'

---

9. An anonymous reviewer points out that it may be possible that the AUQ targets the entire predicate complex. However, the example in (ii) demonstrates that it is acceptable to ask about buying something else. If the entire predicate complex were targeted, we would expect this follow up question to be infelicitous.

(ii) Oblique with exhaustive interpretation
A: → *aku tadi m-beli deghian di warung Miko gale.*
1SG earlier AV-buy durian LOC store M. all
'I bought durian at only Miko's store earlier.'
B: *masih ade deghian di situ?*
still exist durian LOC there
'is there still durian there?'
A: *au.*
yes
'yes.' (McDonnell & Feriza 2020: BJM01-162-01, 00:26:33–00:29:09)

→ *Dian n-(t)unde-ka kami ke <u>Pasar</u> **gale**.*
D. AV-bring-CAUS/APPL 1PL.EXCL to P. all
'Dian brought us only to Pagaralam.'
B#? di-tunde-ka=nye ke badah lain?
PV-pick.up-CAUS/APPL=3 to place other
'did he take (you) to another place?'
A#? ke Pagah Diwe pule.
to P. D. also
'also to Pagah Diwe.'
(McDonnell & Feriza 2020: BJM01-162-01, 01:00:14–01:00:42)

At this point, it is important to note that examples in (22)–(25) where the A_{AV} Primary Argument is singular and the P_{AV} Secondary Argument or an oblique PP is targeted by the AUQ are not attested in the Besemah corpus. Furthermore, it took the participants some time to interpret these examples.

Finally, there is a striking asymmetry between Secondary Arguments in AV and those in PV. As we saw above, it is possible for a P_{AV} Secondary Argument to be targeted by the AUQ but only with the exhaustive interpretation. The same is **not** true for Secondary Arguments in PV constructions: the example in (26) demonstrates that it is not possible for the AUQ to target A_{PV} arguments with either interpretation.

(26) **aku di-pantau <u>dakecik</u> **gale**.*
1SG PV-call children all
Intended: 'only the children called for me.'
'all the children called for me.'

For completeness, the examples in (27) show that all other arguments of this same clause can be quantified as expected.

(27) a. *<u>dakecik</u> tadi m-(p)antau aku **gale**.*
children earlier AV-call 1SG all
'all the children called for me earlier.'
b. *<u>dakecik</u> **gale** m-(p)antau aku.*
children all AV-call 1SG
'only the children called for me.'
c. *<u>aku</u> **gale** di-pantau dakecik.*
1SG all PV-call children
'the children called for only me.'
(McDonnell, Agusman, et al. 2018: BJM01-160-01, 00:03:06–00:08:08)

To summarize, this section described argument selection in AUQ constructions in Besemah. It showed that the AUQ exclusively targets the Primary Argument when receiving the default interpretation. Targeting P_{AV} Secondary Argument and obliques is possible but requires that the A_{AV} Primary Argument be singular and appears to only receive the exhaustive interpretation. There is, however, an asymmetry between Secondary Arguments in AV and PV constructions. While it is possible for the AUQ to target a P_{AV} Secondary Argument, it is not possible for the AUQ to target the A_{PV} Secondary Argument. Before attempting to explain how the Primary Argument restriction is related to information structural properties of the AUQ in Section 7, I discuss potential explanations for restrictions on the A_{PV} Secondary Argument in the next section.

6.1 Explaining the A_{PV} restriction on universal quantification

In Section 1, I set out to answer the question: what does adverbial universal quantification reveal about grammatical relations or the core-oblique status in Besemah? The data above show that the AUQ can target Primary Arguments (S, A_{AV}, P_{PV}) with the default or exhaustive interpretations **and** the P_{AV} Secondary Argument and obliques with the exhaustive interpretation. However, the AUQ cannot target A_{PV} Secondary Arguments. Given the descriptions of quantifier float in Tagalog, in which a floated quantifier can only target subject arguments, and Indonesian, in which a floated quantifier can target core arguments, the asymmetry between Secondary Arguments in Besemah is puzzling. On the one hand, the fact that the AUQ with the exhaustive interpretation is able to target both arguments in AV constructions means that it does not select a particular grammatical relation like Tagalog. On the other hand, the restriction on A_{PV} Secondary Argument being targeted by the AUQ alongside the fact that obliques can be targeted with an exhaustive interpretation means that the AUQ does not target core arguments.

What then explains the apparent structural restriction on A_{PV} arguments being targeted by the AUQ? The answer appears to lie in the fact that A_{PV} Secondary Argument positions are limited to clitic or full pronouns and nouns but not full lexical NPs. All other positions in the clause allow for full lexical NPs, including oblique positions marked by prepositions. Consider the examples in (28) from Besemah conversations. In each case, A_{PV} is restricted to a clitic pronoun (28a), an independent pronoun (28b), or a noun (28c.). Full NP A_{PV} Secondary Arguments are not possible in PV constructions.

(28) a. *aku di-renti-ka=nye kate=nye.*
1SG PV-stop-CAUS/APPL=3 QUOT=3
'she stopped me, she said.'
(McDonnell, Emi, et al. 2009: 00:03:46–00:03:48)

b. *budak tuk n-jual Jarum tadi,*
woman N.LI AV-sell J. earlier
'the girl, the one who sold Jarum (cigarettes) earlier,'
la kami garih-i.
PFV 1PL.EXCL PV.visit-LOC.APPL
'we visited (her),' (McDonnell, Feriza, et al. 2009: 00:49:06–00:49:11)

c. *ai tuape kawan di-kungkun-i jeme,*
EXCL what friend PV-visit-LOC.APPL people
'ah because someone visited (my) friend.'
(McDonnell, Sawia, et al. 2009: 00:05:59–00:06:01)

However, it is worth noting that P_{AV} Secondary Arguments in AV constructions freely allow full NPs. The full NP *empat ratus batang* 'four hundred trees' in (29) demonstrates this asymmetry in Secondary Arguments.

(29) *Duski n-(t)anam* [*empat ratus batang*] *di kebun sini.*
D. AV-plant four hundred tree LOC field here
'Duski planted four hundred trees in the field here.'
(McDonnell, Aripin, et al. 2009: 00:23:48–00:23:52)

It is possible for an A_{PV} third person pronoun to be co-referential with a full NP, and in such cases, the full NP appears in an oblique PP, as in the example in (30).

(30) *ade dide die di-pantau=(ny)e$_i$ agi li endung Erda$_i$?*
exist NEG 3 PV-call=3 again by mother E.
'was she (or was she) not called by Erda's mom?'
(McDonnell, Emi, et al. 2009: 00:19:53–00:19:55)

What is striking about examples like these is that it is possible for the AUQ to target the full NP inside of the oblique PP, as in the elicited example in (31). As we might expect, the full NP receives an exhaustive interpretation.

(31) *Refki tadi di-tunde-ka=nye li rumbungan Hendi gale.*
R. earlier PV-bring-CAUS/APPL=3 by group H. all
'only Hendi's group brought Refki.'
(McDonnell & Feriza 2018c: 01:20:01–01:21:24)

Thus, it appears that the AUQ with an exhaustive interpretation can target positions in the clause that allow for full NPs, which excludes the A_{PV} Secondary Argument position. The next section explains restrictions on the Primary Argu-

ment in AUQ constructions with a default interpretation by appealing to information structure.

7. Universal quantifiers as focus markers in Besemah

The data in the previous section show that when the AUQ argument selector has a default interpretation it only targets Primary Arguments (S, A_{AV}, P_{PV}), as in Pattern 1 in Figure 2. When the AUQ argument selector has an exhaustive interpretation, it targets not only Primary Arguments but also the Pav Secondary Argument and obliques but not the A_{PV} Secondary Argument. This pattern is exemplified as Pattern 3 in Figure 2. Pattern 2 still applies to other argument selectors in Besemah, such as co-referential arguments and noun-modifying clause constructions (McDonnell 2016).

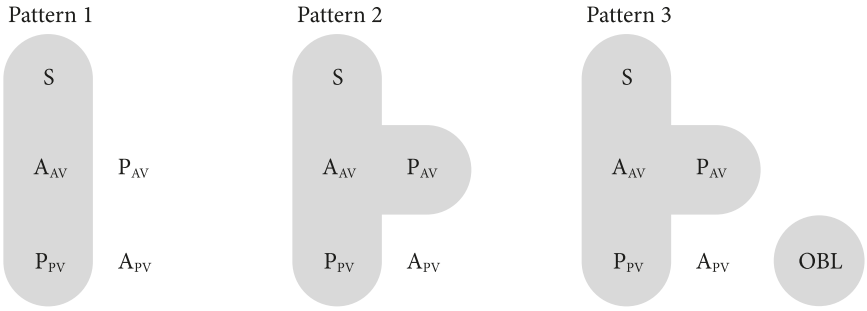

Figure 2. Three patterns of syntactic alignment in Besemah

In this section, I argue that Pattern 1 arises because a core function of the AUQ *gale* 'all' in Besemah is to mark the end of a focus domain (i.e., the part of the clause that expresses focus). In turn, the focus domain in such clauses is anchored to a topic expression, which in Besemah is by and large expressed as the Primary Argument. Thus, Pattern 1 arises from the fact that (1) the AUQ *gale* marks the end of a focus domain, and (2) this focus domain is tied to a topic expression, which is invariably the Primary Argument in Besemah. The idea that the Primary Argument in AUQ constructions is the topic expression follows from Chafe's (1976) metaphor for subjects in English acting as a hitching post for new information. This focus-marking function of the AUQ *gale* is further supported by the shift to an exhaustive interpretation when the AUQ takes narrow scope over a single argument, which is reminiscent of well-known semantic shifts in universal quantifiers in other languages (e.g., Beaver & Clark 2003). Drawing on data from everyday conversations in Besemah, this section demonstrates how AUQ constructions are

tied to information structure. Before presenting these data in Section 7.2, I briefly lay out the notions of information structure I adopt in this paper.

7.1 Information structure

The notion of information structure in this paper follows Lambrecht (1994) (see also Grundel & Thorstein 2004 and Van Valin & LaPolla 1997: Ch. 5). I adopt his definitions of Topic and Topic expression as well as Focus and Focus domain in (32) from Lambrecht (1994).

(32) a. Topic: "…the thing which the proposition expressed by the sentence is about" (118).
b. Topic expression: "A constituent is a topic expression if the proposition expressed by the clause with which it is associated is pragmatically construed as conveying information about the referent of the constituent" (131).
c. Focus: "The semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition" (213).
d. Focus domain: "The syntactic domain in a sentence which expresses the focus component of the pragmatically structured proposition" (214).

Lambrecht (1994) identifies three basic types of focus: predicate-focus, sentence-focus, and argument-focus. The first two are considered broad focus while the last one is narrow focus. Furthermore, predicate-focus, according to Lambrecht (1994), is the unmarked focus type, while argument- and sentence-focus are considered marked focus types. In this paper, I primarily discuss predicate-focus and touch upon argument-focus when discussing the exhaustive AUQ construction.

As many others have pointed out (see e.g., Grundel & Thorstein 2004), topic and focus do not simply map one-to-one directly onto particular constructions or constituents. Instead, there is often a many-to-many mapping among the morphology, syntax, and prosody in many constructions. There are, however, well-documented patterns for how information structure is encoded in clauses. For example, Van Valin & LaPolla (1997) (following work by Givón 1983) show that there are markedness clines for the expression of topic and focus. On one end of the cline, the least marked topics are "zero" (or unexpressed) followed by clitic or bound pronouns and then unstressed pronouns. On the other end of the cline, the least marked focus elements are indefinite NPs followed by definite NPs and then stressed pronouns.

Given the limited description of Besemah, the full range of focus-marking devices in the language is not yet known. As is the case with a number of other Malayo-Polynesian languages of the region (see Himmelmann 2018), prosody

appears to play a limited role in marking focus in Besemah. In fact, in an experiment on word stress and its interactions with focus and position in the phrase, McDonnell & Turnbull (2018) found that acoustic cues (intensity, f_0, duration) were not significantly different between words that were in-focus and out-of-focus. Instead, focus appears to be marked via morphosyntax, most commonly by "fronting" the part of the clause that is in-focus. The example in (33) demonstrates how a negator *dide* NEG and an auxiliary verb *galak* 'want' occur before the Primary Argument. Recall from Section 4, that the unmarked position for negators and auxiliary verbs is between the Primary Argument and the predicate complex.

(33) "Fronting" focus construction
1 J: *anye ame ne ujik galak n-(t)agih ni,*
but TOP N.LI motorcycle.taxi want AV-bill DEM.PROX
'but as for the motorcycle taxi drivers that like to ask for (the fare),'
2 → ***dide galak*** *aku n-(n)aik-i=nye,*
NEG want 1SG AV-rise-LOC.APPL=3
'I DON'T WANT to get on it,'
(McDonnell, Jamisah, et al. 2009: 00:23:43–00:23:48)

In this example from a conversation between three middle-aged women, Jamisah is discussing how she prefers to take motorcycle taxis rather than walk. However, when the driver asks for the taxi fare (line 1), which is something that she perceives to be rude, she does not want to ride those taxis (line 2). Thus, the pragmatically non-recoverable portion of the clause is *dide galak* 'not want', and by being "fronted" it is considered to be a part of the focus domain.

Now that we have a basic foundation for discussing information structure in Besemah, the next section discusses the relationship between AUQ constructions and information structure.

7.2 Focus-marking functions of the adverbial universal quantifier

In this section, I describe the information structural properties of AUQ constructions with the default interpretation. I argue that the AUQ *gale* marks the end of the focus domain, which expresses the pragmatically non-recoverable or unpredictable part of the proposition (Lambrecht 1994: 207). The focus domain, in turn, is "about" the topic expression. Thus, it follows that the AUQ as a focus-marker quantifies the topic expression. This proposal is schematized in (34).

(34) (Topic Expression) Focus Domain ***gale*** …

This schema also shows that anything that occurs after *gale* is not considered part of the focus domain, and the parentheses around topic expression express the fact that in many cases it is not expressed in discourse. With the default interpretation, the focus domain can include as little as a TAM marker or auxiliary verb and as much as the predicate complex with an additional oblique PP. McDonnell (2016) found that the overwhelming majority of AUQs occurred after the predicate complex. Table 4 presents the frequencies of AUQs in each position.

Table 4. Positions of AUQs in corpus of approximately 50,000 words ($n = 238$)

Post primary argument	Post auxiliary	Post predicate complex	Post oblique
4 (2%)	4 (2%)	227 (95%)	3 (1%)

If we adopt the analysis that AUQs indeed mark the end of a focus domain, we would expect that the unmarked position for predicate-focus is immediately after the predicate complex. And, indeed this is what the frequencies above show. AUQs occur after the predicate complex 95% of the time. An example of this type of AUQ construction with unmarked predicate-focus is found in the short excerpt in (35) below. This excerpt comes from a conversation between three friends, Emi, Kudar, and Ina. At this point in the conversation, Emi is relaying a conversation that she had with someone else.

(35) AUQ predicate-focus construction
1 E: *jeme jungut itu ji=ku,*
people corner DEM.DIST QUOT=1SG
'people on that corner, I said,'
2 → *la ng-icik-kah die* ***gale.***
PFV AV-talk-CAUS/APPL 3 all
'all TALKED ABOUT HER.'
(McDonnell, Emi, et al. 2009: 00:22:34–00:22:36)

In this example, the topic expression is the Primary Argument *jeme jungut itu* 'people on that corner' (lit. those corner people) in line 1. It is marked by the demonstrative determiner *itu* 'that' and occurs before the predicate complex, both of which set apart this NP as an expression of the topic. The focus domain includes the predicate complex, which I demarcate by double underlining each word in Besemah and all caps in the English free translation. In this case, the focus domain includes the pragmatically non-recoverable portion of the clause. The clause in (35) is a straightforward example of an unmarked topic-comment structure wherein the AUQ occurs after the comment and quantifies the topic with a default interpretation.

As mentioned above, the topic expression is typically unrealized, so a common example of the AUQ construction with predicate-focus is found in the excerpt in (36), which comes from a conversation between three women: Jamisah, Dewi, and Rili. In this portion of the the conversation, Jamisah and Dewi are telling Rili about a funny experience they had at the rice paddy. Dewi wanted to collect the snails she found so that she could use them in her cooking that evening. However, Jamisah kept tossing these snails aside because she did not think Dewi liked them.

(36) AUQ predicate-focus construction

1 J: *aku* [*dik*] [$_2$*pule keruan*],
1SG NEG also know
'I didn't know,'

2 R: [*a*][$_2$*u:*].
yes
'yes.'

3 D: [$_2$*nyela:h*].
EXCLAM
'that's right.'

4 J: *die ni* *galak anu* *ng-ambik-i=nye* [$_3$*kiung*].
3 DEM.PROX want umm AV-take-LOC.APPL=3 snail
'she wanted umm to take them, the snails.'

5 D: [$_3$*adak*] *di* *siring,*
but LOC stream
'but in the stream,'

6 → *masih* *ku=ambik* ***gale*** *di* *siring* *tu.*
still 1SG=PV.take all LOC stream DEM.DIST
'I STILL TOOK all (the snails) from the stream.'

(McDonnell, Jamisah, et al. 2009: 00:11:33–00:11:37)

In the final line of this example, Dewi uses the AUQ immediately after the PV predicate complex *ku=ambik* 'I took' but before the PP oblique *di siring tu* 'from the stream'. The Primary Argument is unexpressed but is clearly understood by participants to be *kiung* 'snails', which is mentioned in line 4 by Jamisah. In this case, it is also the topic. This example demonstrates how the AUQ both quantifies the unexpressed Primary Argument and marks the end of the focus domain. The placement of the AUQ after the predicate but before the PP is significant because, in line 5, Dewi already mentions the stream. Therefore, this PP is no longer pragmatically non-recoverable information and not part of the focus domain. Since the apparent unmarked position of predicate-focus is immediately after the pred-

icate complex, the focus structure in the examples above and others like it do not stand out. Examples where the focus domain is more marked either occurring before the predicate complex or after the predicate complex **and** an oblique PP do stand out and better demonstrate the marked functions of the AUQ *gale*.

The excerpt in (37) presents a case where the AUQ occurs before the AV predicate complex but after an auxiliary verb. Out of the 238 AUQ constructions in the corpus, examples like this only occurred four times, but as we will see in the example below, it clearly shows the focus-marking function of the AUQ. This excerpt comes from the same conversation as the previous example. In this excerpt, Jamisah is complaining about how the young unmarried men (i.e., bachelors) of a certain village are *penyakat* 'bullies' (lit. annoyers) in lines 1 and 2. In line 4, she states that it is nothing special because everywhere (line 6) bachelors **want** to bully people (line 9).

(37) AUQ post-auxiliary focus construction

1 J: *bujang Pelajaran ni,*
bachelor P. this,
'Bachelors from the village of Pelajaran,'

2 *kate-nye* [*bungkah peny-(s)a*]*kat.*
say-3 chunk NMLZ-annoy
'they say are a bunch of bullies.'

3 D: [*peny-(s)akat*].
NMLZ-annoy
'(they are) bullies.'

4 J: [$_2$*jiku*] *pegi,*
say-1SG go
'I said it's nothing,'

5 D: [$_2$*au*].
yes
'yes.'

6 J: *di mane* [$_3$*ki*][$_4$*nah*],
LOC where ever
'wherever it is,'

7 R: [$_3$*nye*][$_4$*lah*].
EXCLAM
'that's right.'

8 D: [$_4$*a*][$_5$*u die*].
yes INTENS
'yes.'

9 J: [$_5$*bujangan galak*] ***gale*** *ny-(s)akat.*
bachelors want all AV-annoy
'bachelors all WANT to bother (women).'
(McDonnell, Jamisah, et al. 2009: 00:26:10–00:26:16)

What is striking about the AUQ construction in line 9 is that *gale* 'all' occurs after the auxiliary verb *galak* 'want' but before the AV predicate *nyakat* 'bully'. We can explain that this is because both *bujangan* 'bachelors' and *penyakat* 'bullies' have already been introduced in the conversation and are a part of the presupposition. Thus, the portion of the clause that expresses the pragmatically non-recoverable information is the auxiliary verb *galak* 'want'. It is not that all of the bachelors are bullying but that all of them **want** to bully. Thus, the AUQ gale occurs after the auxiliary verb but before the AV verb *nyakat* 'bully', marking a shorter focus domain.

Finally, the AUQ may also encompass a longer focus domain that includes oblique PPs. Consider the excerpt in (38) from a conversation between two older women: Rumsiah and Sawia. In this part of the conversation, Rumsiah is telling Sawia about a hectic event in the village during her childhood. Everyone in the village was preparing for a wedding for Minu's family, but then Santo passed away, so they took all of the food at the wedding and brought it to the funeral.

(38) AUQ post-oblique focus construction
1 R: *ji=ku umak aku ka ke iligh,*
QUOT=1SG mother 1SG FUT to downriver
'I said, mother, I'm going downriver,'
2 *ji=ku Santo matik.*
QUOT=1SG S. die
'I said, Santo died.'
3 *ta*[*ghik=(ny)e ak*]*u,*
PV.pull=3 1SG
'I was taken by her (i.e., mother),'
4 S: [*mhmm*].
mhmm
'mhmm.'
(0.4)
5 R: *ghumah Minu tu ka sedekah.*
house M that FUT wedding
'Minu's family (lit. house) was going to have a wedding.'

6 *ramu-an=anye cabi cung kapuh,*
prepare-NMLZ=3 pepper tomato etcetera
'the ingredients, peppers, tomatoes and the like,'
7 → *laju di-batak ke ghumah Santo* ***gale****.*
then PV-bring to house S all
'then were all BROUGHT TO SANTO'S HOUSE.'
(McDonnell, Sawia, et al. 2009: 00:13:40–00:13:55)

The AUQ construction in the last two lines of this example demonstrate a very similar topic-comment structure that we saw in the first example of this section in (35). In this case, the topic expression occurs in its own Intonation Unit in line 6 and the focus domain is expressed in line 7. What sets this example apart from the previous examples is the position of the AUQ after the predicate complex **and** an oblique PP *ke ghumah Santo* 'to Santo's house'. What explains the AUQ occurring in this position? In this case, Rumsiah is speaking of two different events at two different locations: Minu's family's wedding at Minu's house (line 4) and Santo's funeral at Santo's house (line 6). Therefore, the focus domain includes the oblique PP because it part of the pragmatically non-recoverable information that specifies where all of the food was brought. It is not just that the food was brought somewhere, but what is significant here is the fact that it was brought to Santo's house.

The examples in this section demonstrate the different possible positions of the AUQ in the corpus when it takes the default interpretation. I showed how the position of the AUQ is not incidental but is tied to the end of the focus domain. Conceptually, this focusing-marking function of the AUQ helps to explain the constraint on quantifying the Primary Argument. Primary Arguments express the topic expression in AUQ constructions, to which the focus domain **and** the AUQ *gale* are tied. The next section briefly discusses the exhaustive interpretation of the AUQ when it occurs directly after the Primary Argument.

7.3 Exhaustive interpretations as argument-focus

In previous sections, we saw that the exhaustive interpretation differs both in meaning (i.e., 'only' instead of 'all') and distribution (i.e., Pattern 3 instead of Pattern 1 in Figure 2). In this section, we have seen that the AUQ is used by speakers to mark the end of the focus domain within an AUQ construction. The analysis of the AUQ with a default interpretation could be extended to AUQ constructions with an exhaustive interpretation. The difference between these interpretations, then, is the type of focus that each of them mark: the default interpretation marks a type of predicate-focus while the exhaustive interpretation marks argument-focus. Consider the excerpt in (39), which comes from a conversation between

Emi, Kudar, and Ina. Emi is talking to Ina, relaying a conversation that she had with her neighbor. Emi is upset at this neighbor because Emi was kicked out of their farmer cooperative. In this excerpt, Emi is saying that her neighbor did not enroll in the group (line 1) nor did Kudar (line 2) nor did Peringkik's mom's group (line 3). Instead, it was Emi that enrolled them in the group (line 4); she was the one who asked them to join (line 5).

(39) AUQ argument-focus construction

1 E: *kabah tu dik masuk ji=ku,*
2SG that NEG enter QUOT=1SG,
'you didn't enroll (in the farmer's co-op) I said,'

2 *temasuk kabah Kudar,*
include 2SG K.
'including you, Kudar,'

3 *.. kaman endung Peringkik kapuh tu.*
group mother P. etcetera that
'Peringkik's mom's group and the like,'

4 → *aku **gale** ji=ku masuk-i=nye,*
1SG all QUOT=1SG AV.enter-LOC.APPL=3
'IT WAS ONLY ME that enrolled them (into the group),'

5 *n-(t)anye(gh)-i=nye ji=ku.*
AV-ask-LOC.APPL=3 QUOT=1SG
'(that) asked them, I said.'

(McDonnell, Emi, et al. 2009: 00:05:53–00:06:00)

In the AUQ construction in line 5, the focus domain is not the AV predicate *masuki=nye* 'enroll them', which was already mentioned line 1. Rather, the Primary Argument is the focus domain. And, as we saw in Section 6, when the AUQ occurs after an argument, it triggers a shift in meaning from 'all' to 'only'. Thus, I contend that argument-focus with the AUQ is at the same time an exhaustive focus. Aside from the meaning shift, the argument-focus AUQ construction differs in the fact that the argument it is targeting is a singular pronoun. In Section 6, I showed how the Primary Argument in the AUQ construction with a default interpretation cannot be a singular pronoun or proper name, but the example in (39) demonstrates that this is indeed possible in argument-focus AUQ constructions in Besemah. This analysis may also explain the restrictions on A_{PV} arguments discussed in Section 6.1. That is, the structural position of A_{PV} arguments may not be targeted by AUQs because they simply cannot be focused. In this case, the fact that AUQs cannot target A_{PV} arguments may have more to do with focus restrictions than restrictions on their status as full NPs.

To conclude, this section has shown how the AUQ *gale* in Besemah does double-duty: it acts as a universal quantifier **and** a focus-marker. I argue that it is this secondary focus-marking function that helps to explain the restriction on quantifying Primary Arguments. That is, the AUQ marks the focus domain, which expresses the pragmatically non-recoverable portion of the proposition. The focus domain is anchored to a topic expression (i.e., what the proposition is about), which is expressed by the Primary Argument.

8. Conclusion

This paper describes adverbial universal quantification in Besemah, an under-described Malayic language of Sumatra, Indonesia. It demonstrates how the system of universal quantification in Besemah differs from well-known examples in other western Austronesian languages, namely, Indonesian and Tagalog. That is, while so-called quantifier float constructions in Indonesian and Tagalog select core arguments and subjects, respectively, the AUQ in Besemah places severe restrictions on the argument it selects. When the AUQ construction takes the default interpretation it is only able to select the Primary Argument; Secondary Arguments do not appear to be able to be quantified by the AUQ when it has the default interpretation. When the AUQ occurs directly after an argument or oblique, it may take an exhaustive interpretation meaning 'only'. The AUQ construction with an exhaustive interpretation has less severe restrictions on the argument it selects, and the only argument that cannot be selected in this construction is the A_{PV} Secondary Argument. I show that this restriction is likely due to the fact that the A_{PV} Secondary Argument occupies a marked position in the clause that does not allow for full NP arguments. Further, it appears that AUQ constructions can only target positions in the clause that allow for full NPs. Finally, I show how the AUQ argument selector in Besemah is related to notions of topic and focus. That is, the AUQ *gale* acts as a focus-marker and marks the end of a focus domain in predicate-focus constructions, and the topic is expressed by the Primary Argument. Thus, I argue that the Primary Argument restriction in the AUQ constructions with a default interpretation arise from the fact that the AUQ delimits the focus domain, which is in turn anchored to a topic expression. AUQ constructions with an exhaustive interpretation are shown to be an instance of argument-focus.

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Abbreviations

1	first person
2	second person
3	third person
APPL	applicative
AV	A-voice
CAUS	causative
CV	open syllable
DEM	demonstrative
DIST	distal
EXCL	exclusive
EXCLAM	exclamative
FP	final particle
FUT	future
GEN	genitive
HES	hesitation
INTENS	intensifier
LI	light
LOC	locative
MID	middle voice
N	noun
NEG	negative particle
NMLZ	nominalizer
NOM	nominative
NVOL	non-volitional
PERS	persistive
PFV	perfective
PL	plural
PROX	proximal
PRT	particle
PV	P-voice
QUOT	quotative
RDP	reduplicant
RECIP	reciprocal
RLS	realis
SG	singular
TRUN	truncation

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Appendix B. Transcription and glossing conventions

Transcription conventions generally follow Du Bois et al. (1993) with some minor exceptions. Each line represents an intonation unit. Brackets represent the beginning '[' and end ']' of overlapping speech; the left bracket has been subscripted with corresponding numbers for ease of reading. End marks on each intonation unit represent different contours: a period '.' is a final contour, a comma ',' is a continuing contour, and question mark '?' is an appeal contour. A dash '-' represents a truncated word, and an em dash ' – ' represents a truncated intonation unit. A colon ':' represents lengthening. (H) represents an in-breath. @ represents a pulse of laughter, unless it is attached to a word in which case it represents laughter through the word. # represents unintelligible speech. Two periods '..' represent a short pause (less than 180 ms), and numbers in parentheses '(1.0)' represent longer pauses in seconds.

Glossing conventions generally follow the Leipzig Glossing Rules (https://www.eva.mpg.de/lingua/resources/glossing-rules.php, last access 1 June 2022)

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