

The scalar exclusive operator *ʔut* in ʔayʔajuθəm: ‘No more than’ and no exceptions!*

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Abstract: ʔayʔajuθəm is a critically endangered Central Salish language, traditionally spoken in the Tla’amin, Homalco, Klahoose, and Comox First Nation communities. *ʔut*, a second-position clitic in ʔayʔajuθəm, occurs frequently, often without an obvious effect on the English translation. Based on original fieldwork, I propose that *ʔut* is best analyzed as a scalar exclusive operator, roughly paraphrasable as ‘no more than’ (e.g. Coppock and Beaver 2014). It combines with lexical items involving universal quantification such as *ʔuwkʷ* ‘all’ and *paya* ‘always’, however, which is initially puzzling (what does ‘no more than all’ mean?). In these environments, I propose that its function is to produce an effect of domain widening (e.g. Kadmon and Landman 1993; Shank 2004).

Keywords: Salish, ʔayʔajuθəm, scalar exclusive, domain widening

1 Introduction

In this paper, I examine the semantic contribution of the operator *ʔut* in ʔayʔajuθəm, a critically endangered Central Salish language traditionally spoken in the Tla’amin (ʔaʔamin), Homalco (ʔop), Klahoose (ʔoqʷ), and Comox (komoks) First Nation communities. *ʔut* is one of a number of second-position clitics that appear following the first prosodic word of the clause (Kroeber 2002; Watanabe 2003). The initial word, its host, may belong to a number of different morpho-syntactic categories (cf. Montler 2003), including adverbs (1a), verbal auxiliaries (1b), and predicates (1c).¹

- (1) a. *Context: This is repeated throughout a story where an increasing number of animals are trying to pull a big fish onto shore.*²

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¹ Watanabe (2003:514) notes that *ʔut* does occasionally appear in positions other than following the initial word.

² Each example has an orthographic representation as the first line, a phonemic representation with morpheme breaks in the second line, the corresponding gloss in the third line and the English translation as the fourth line. In addition, many examples are preceded by the context for which the example was suggested or volunteered and some examples are also followed by consultant comments. I provide initials of consultants next to the forms they produced. ‘vf’ is used as an abbreviation for ‘volunteered form’, a form produced by the consultant either spontaneously, in a storyboard context, or as a translation of an English form. A ‘suggested form’ is one which the author constructed in order to ask whether it is a possible utterance in the given context. The list of glosses used in this paper is:

namał **ʔot** tayq
 namał=**ʔut** tayq
 little.bit=EXCL move
 ‘It only moved a little.’ vf HF, EF

- b. *Context: This sentence is from a storyboard where a chipmunk is inviting a squirrel to join his family for a feast.*

q^wolčex^w **ʔot** ʔeltən hotk^wa (na) χawχagał
 q^wəl=čəx^w=**ʔut** ʔiltən hutk^wa na χawχagał
 come=2SG.SBJ=EXCL eat say FILL.PRT chipmunk
 ‘‘You just come and eat’’, said the chipmunk.’ vf MH

- c. *Context: This sentence is from a storyboard where the character was supposed to be picking berries, but was lazy and didn’t fill his basket.*

tinač k^wa **ʔot** tə nəpamens
 tinač=k^wa=**ʔut** tə nəpamin-s
 empty=RPT=EXCL DET container-3POSS
 ‘His container was empty.’ vf EP

ʔut appears in a wide range of semantic environments and it is not straightforward to identify what is common to these utterances. In (1a), *ʔut* gets the translation ‘only’ and appears to contribute a limiting or exclusive meaning. With the other examples, however, there is no clear contribution of *ʔut* in the English translation. Moreover, *ʔut* appears with lexical items contributing universal quantification over entities or events, such as *uk^w* ‘all’ (2a) and *paya* ‘always’ (2b). In these environments there is nothing to exclude (we are already referring to all entities/events), so if *ʔut* is contributing an exclusive meaning, its presence here is puzzling.

- (2) a. *Context: You went to the store with a shopping list. The last couple times you’ve gone, you’ve forgotten eggs. When you get home, you say:*

ʔuk^w **ʔot** tam yeχətən s t⁰ok^w
 ʔuwk^w=**ʔut** tam yay-at-an s t⁰uk^w
 all=EXCL thing remember-CTR-1SG.ERG NMLZ day
 ‘I remembered everything today.’ –suggested form BW
Consultant’s comment: You’re really emphasizing that you got everything.

- b. *Context: This sentence is from a storyboard where the main character is being described as very industrious.*

payε k^wa **ʔot** x^wtx^wipomix^w
 paya=k^wa=**ʔut** x^wi•x^wipumix^w
 always=RPT=EXCL IMPF•sweep
 ‘He was always sweeping.’ vf EP

ʔut also appears in additive contexts (3a), another challenge for analyzing *ʔut* as contributing an exclusive meaning.

- (3) a. *Context: This is from a storyboard where there is a squirrel getting ready for winter. He gathers a variety of different food and crowns his achievement with finding a chocolate*

bar
 miə k^hwa ʔot tikqeten-s maʔax^wəs čaklet wa
 mi=k^hwa=ʔut tig-qin-tən-s maʔ-əx^w-as čaklət wa
 also=RPT=EXCL sweet.food-3POSS get-NCTR-3ERG chocolate bar
 ‘He even got a chocolate bar for dessert.’ vf EP

Indeed, Watanabe (2003:514) writes that ‘the identification of its function is quite problematic’, while Davis (2012:40-41) notes in passing that *ʔut* ‘can sometimes be approximately translated as “even” or “just”’. The problem, of course, is that while both *just* and *even* are scalar particles, *just* is exclusive while *even* is additive, so their contribution is quite different. In this paper, I argue that *ʔut* is a scalar exclusive operator. In what follows, I first show that *ʔut* behaves as a scalar exclusive operator with respect to the predictions of a scalar exclusive analysis Section 2. I then argue that the use of *ʔut* in environments involving universal quantification is compatible with a scalar exclusive analysis and that *ʔut* contributes an effect of domain widening in these environments Section 3. Finally, I examine additive environments with *ʔut*, arguing that these are also compatible with the analysis.

2 *ʔut* is a scalar exclusive operator

Exclusive operators in English, particularly *only*, have received extensive analysis in the literature. The general consensus for English *only* is that it excludes alternatives to the focused element it associates with – its restrictor.³ This derives the truth-conditional differences between (4) and (5). In these examples, all alternatives to the focused element are ruled out, so following with a sentence intended to include one of these alternatives (in the first case to *Mary* and in the second case to *book*) is infelicitous.

- (4) John only gave MARY a book.
 a. #He gave MARTIN a book too.
 b. He also gave her SOCKS.
- (5) John only gave Mary a BOOK.
 a. He gave MARTIN a book too.
 b. #He also gave her SOCKS.

Coppock and Beaver (2014) give *only*, *just* and other exclusives in English a uniform scalar analysis. They argue that all exclusive readings can be analyzed as scalar, quantifying over ranked alternatives. In (6a), for instance, *only* has a reading where it is not excluding all alternatives to being a graduate student (e.g. being a musician), but only alternatives that are higher on the scale of academic hierarchy (e.g. being a professor). The use of *only* in (6b) is less obviously scalar. Here *only* seems to involve excluding alternatives to the individual *John* (giving a ‘no one other than’ reading, rather than a ‘no more than’ reading) but not necessarily referencing a scale. Nevertheless, Coppock and Beaver (2014) point that these exclusive readings are also compatible with a scalar

³ This analysis assumes that focus involves the introduction of alternatives to the focused element (e.g. Rooth 1985).

analysis if we conceptualize the alternatives as a boolean lattice with a single individual like *John* at the bottom of the scale and answers with increasing numbers of conjoined individuals higher on the scale (e.g. ‘John and Mary’ is higher on the scale than ‘John’).

- (6) a. John is only a graduate student (Coppock and Beaver 2014:379)
 b. I only invited John_F. (Coppock and Beaver 2014:377)

In contexts with numbers, *ɳut* has a clear scalar exclusive (‘no more than’) contribution comparable to the scalar exclusives discussed by Coppock and Beaver (2014) (7). In (7b), the speaker specifies that she has two eggs and can follow this with *qaχ x^wax^wit χaλəs qəji* ‘There are lots if you want more’. When *ɳut* combines with *saʔa x^wax^wit* ‘two eggs’, however, it contributes a ‘no more than (two eggs)’ meaning that excludes alternatives where the speaker has more eggs, ruling out a continuation which asserts that the speaker has more than two eggs.

- (7) a. *Context: I’m making a cake and I run out of eggs.*
 čum χanaθəx^w saʔa χ^waχ^wit? ʔuk^wənʔəmč k^wa
 čəm χan-aθ-ax^w saʔa χ^waχ^wit? ʔuwk^w-ən-ʔəm=č=k^wa
 MOD give-CTR.1SG.OBJ-2SG.ERG two egg all-?-ACT.INTR=1SG.SBJ=CL.DEM
 ‘Can I borrow two eggs? I ran out.’ vf JF
- b. ʔeʔ, saʔa χ^waχ^wit nisx^wən. qaχ χ^waχ^wit gaθ χaλəs.
 ʔiʔ saʔa χ^waχ^wit ni-sx^w-an. qəχ χ^waχ^wit ga=θ χaλ=as.
 yes two egg here-CAUS-1SG.ERG many egg if=2SG.POSS want=3CNJ
 ‘Yes, I have two eggs. There are lots more if you want them.’ vf JF
- c. saʔa ʔot χ^waχ^wit nisx^wən. #qaχ k^wot⁰ χ^waχ^wit gaθ
 saʔa=ʔut χ^waχ^wit ni-sx^w-an. #qəχ k^w=ət⁰ χ^waχ^wit ga=θ
 two=EXCL egg here-CAUS-1SG.ERG lots DET=1SG.POSS eggs if=2SG.POSS
 χaλəs qəji.
 χaλ=as qəji.
 want=3CNJ still
 ‘I have just just two eggs left. #There are lots of eggs if you want them.’ –suggested form JF

ɳut also excludes higher alternatives on a wide range of other contextually and lexically supplied scales, as expected under a scalar exclusive analysis. In (8a), the scale is a scale of activity, provided by the contrasting pictures, with ‘sleeping’ lower on the scale, and ‘jumping’ higher on the scale. The scale in (8b) is one of unwellness, provided by world knowledge, with being cold less high on the scale than being actually sick.

- (8) a. *Context: This describes a picture where a frog is sleeping on a rock. The picture was contrasted with another picture where the frog was jumping up and down on the rock.*
 k^wot gi ta walθ hoy ʔot s λičt x^wa čem(əs) k^wit⁰əm
 k^wət=gi ta walθ huy=ʔut s λiyčt x^wa čam(=as) k^wit⁰-əm
 look-CTR=PRT DET frog finish=PRT NMLZ sleep<STAT> NEG MOD=3CNJ jump-MD
 ‘Look at the frog! He’s just sleeping. He won’t jump.’ vf JF

- b. *Context: Tony's sitting with a blanket around him. Art comes home and you tell him: He's just cold, he's not sick.*

hoy **ʔut** s č̣eč̣ums x^wa k^wuk^wtəməs
 huy=**ʔut** s č̣əč̣əms x^wa k^wə•k^wt-əm=as
 finish=EXCL NMLZ IMPF•cold-3POSS NEG IMPF•sick-MD=3CNI
 ‘He’s just cold. He’s not sick.’

vf JF

In light of the scalar exclusive contribution seen in these examples, I propose that the denotation of *ʔut* can be captured by a scalar exclusive analysis like that proposed for English *only* in Coppock and Beaver (2014:394) (9). In their analysis, the context *S* provides a current question (CQ) and answers to the CQ are ranked by strength (where stronger answers entail weaker answers). The MAX and MIN operators in the denotation quantify directly over the ranking of alternative propositions (the ranked answers to the CQ).⁴

$$(9) \llbracket \text{ʔut} \rrbracket^S = \lambda p . \lambda w : \text{MIN}_S(p)(w) . \text{MAX}_S(p)(w)$$

The ‘no more than’ reading for *ʔut* comes from the operator MAX. For $\text{MAX}(p)$ to be true, *p* must be the strongest answer to the CQ that holds in *w*.

$$(10) \text{MAX}_S(p) = \lambda w . \forall p' \in \text{CQ}_S [p'(w) \rightarrow p \geq_S p']$$

$\text{MIN}(p)$ is presupposed, meaning that there is a proposition as least as strong as *p* among the answers to CQ and this proposition is true in *w*.

$$(11) \text{MIN}_S(p) = \lambda w . \exists p' \in \text{CQ}_S [p'(w) \wedge p' \geq_S p]$$

In positive contexts, this proposition has to be equivalent to *p* (otherwise the asserted content is false); however, Coppock and Beaver (2014) show that this scalar presupposition is needed to account for effects of embedding *only* under negation. For instance, *He isn't just a student* (from Coppock and Beaver 2014:379), doesn't presuppose ‘he is a student’ (he may be a professor and no longer a student at all), but rather presupposes that the subject is something at least as high on the scale (in this case of academic achievement) as the point on the scale provided by the proposition.⁵

⁴ The denotation Coppock and Beaver (2014) give for scalar exclusives does not make direct reference to focus, but rather makes direct reference to the CQ. They argue that the CQ has a predictable effect on focus, through the Focus Principle, with the result that the *only* is focus sensitive.

(i) Focus Principle

- a. Some part of a declarative utterance should give an answer to the CQ.
- b. If *Q* is a set of Rooth-Hamblin alternatives, and *A* is a natural language expression, then *A* gives an answer to *Q* if the focus value of *A* is a subset of *Q*.

In this paper, I remain neutral with respect to whether it is focus that determines the alternatives that *ʔut* quantifies over. Eventually, this is should be explicitly investigated and the denotation adjusted if necessary. See the beginning of next section for a brief discussion.

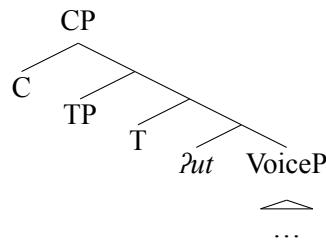
⁵ For now, I adopt the formula as presented in Coppock and Beaver (2014), but the effects of embedding under negation should be tested for *ʔut*. In *ʔayʔajuθəm*, negation is going to be in a higher clause that takes the clause with *ʔut* as its complement (c.f. Davis 2005), so the paraphrase will likely run: “it is not the case that *x* is ‘no more than *p*’” where *x* is the subject and *p* is the predicate. The question is whether this allows *x* to be ‘not *p*’ at all (but something ‘more than *p*’), or whether it means that *x* is *p* and more besides.

Applied to *ʔut*, this analysis makes several straightforward predictions: 1) *ʔut* should associate with the answer to the CQ, 2) *ʔut* should not be compatible with a situation in which stronger alternatives to the proposition are not ruled out (e.g. in a context where an ‘at least’ meaning is intended), 3) *ʔut* should not be compatible with an environment where there is no scale. In the beginning of the next section, I provide some background on the syntax of *ʔut*, as well as a preliminary discussion of prediction 1 (leaving a full exploration of prediction 1 for further research). In the remainder of the next section, I focus on the other two predictions.

2.1 *ʔut* as a scalar exclusive operator

ʔut occurs at the end of a second-position clitic string, which is comprised of a series strictly ordered elements that follow the initial prosodic word in the clause (prosodic factors are likely involved in inverting the initial prosodic word with the clitic string (c.f. Huijsmans 2015)). In the default case, *ʔut* associates with the verb phrase (12).⁶

(12)



When it associates with a DP, the DP is clefted (at least in volunteered examples) and *ʔut* attaches to the clefting particle *huy* and takes the following DP as its restriction (Koch 2008:229–235). In (13), for instance, *ʔut* follows *huy* and its restriction is DP $\chi^w a \chi^w a y \dot{a} m$ ‘flies’. $m \dot{a} m k^w t \dot{a} m$ ‘the frog eats’ is the remnant clause. As reflected in the gloss, *huy* translates as ‘finish’ when used as the main predicate. Its contribution in DP clefts is not entirely clear, but it regularly occurs as the clefting particle in exclusive clefts. This needs further investigation in future research.

(13) *Context: In a storyboard, a squirrel is trying to figure out who took his food...*

hoy **ʔot** k^w $\chi^w a \chi^w a y \dot{a} m$ $m \dot{a} m k^w t \dot{a} m$ $w a l \theta$.

huy=**ʔut** k^w $\chi^w a \chi^w a y \dot{a} m$ $m \dot{a} \cdot m k^w - t - \dot{a} m$ $w a l \theta$

finish=EXCL DET flies IMPF•eat-CTR-PASS frog

‘Frog only eats flies.’

vf MH

If we take clefts to mark DP focus and default word order to mark VP focus in $\lambda a y \lambda a j u \theta \dot{a} m$ (as in $N l \dot{e} \lambda k e p m x c i n$ (Koch 2008)), it would appear that *ʔut* associates with a focused constituent (in the

⁶ The issue of whether *ʔut* is merged above or below Voice is not entirely clear. The passive suffix, which I take to occupy Voice, occurs at the end of the predicate and precedes the clitic string. Unlike the 2PCs, the passive morpheme obeys the mirror principle like other suffixes on the predicate, suggesting that they are joined with the predicate via head movement. If an auxiliary precedes the predicate, the auxiliary precedes the entire 2PC string, while the predicate (including the passive suffix, if present) will follow it. If *ʔut* was merged lower than Voice, we might expect it to always follow the predicate, regardless of whether there is an auxiliary. This assumes that the predicate head-moves to Voice, however. There is some evidence that the predicate does not head move higher than *v* in $S t' a t' i m c e t s$ (Davis 2013), so this requires further investigation.

framework of Coppock and Beaver (2014), the answer to the CQ) as English *only* does. However, there is another possible interpretation of the distribution of *ʔut* (Henry Davis, p.c., 2016). If Coppock and Beaver (2014) are correct in proposing that focus (or, more specifically, the CQ) introduces ranked alternatives, *ʔut* may co-occur with focused constituents because the ranked alternatives to the focus provide a scale for *ʔut* to quantify over. In this case, it may not be directly focus-sensitive and may be able to associate with an element that is not focused, provided this object is clearly scalar. I will not attempt to disambiguate this question in this paper, but leave this for future research.

As noted in the previous section, if *ʔut* is an exclusive operator, it should be incompatible with an environment where an ‘at least’ reading is intended. This seems to be true. To describe the situation in (14) below, (14a) was volunteered. When asked if (14b) could describe the situation, my consultant said that it only worked for the days where he caught two fish.

- (14) *Context: My brother goes fishing every day and gets at least two fish. (Picture on whiteboard: Monday – my brother with two fish, Tuesday – my brother with three fish, Wednesday – my brother with four fish, Thursday – my brother with two fish, Friday – my brother with three fish)*

a. payɛ saʔa ʃɛnx^w maʔax^wəs θahəs θaθi⁰ʔəm
 paya saʔa ʃanx^w maʔ-əx^w-as θa-h=as θə•θi⁰-ʔəm
 always two fish get-NCTR-3ERG go-EPEN=3CNJ IMPF•jig-ACT.INTR
 ‘He always gets two fish if/when he goes fishing.’ vf JF

b. #saʔa ʔot ʃɛnx^w maʔax^wəs θahəs θaθi⁰ʔəm
 saʔa=ʔut ʃanx^w maʔ-əx^w-as θa-h=as θə•θi⁰-ʔəm
 two=EXCL fish get-NCTR-3ERG go-EPEN=3CNJ IMPF•jig-ACT.INTR
 ‘He just gets two fish if/when he goes fishing.’ –suggested form JF

Consultant’s comment: You can say that for Monday or Thursday.

If *ʔut* is a scalar operator, it should also not be able to appear where there is no scale available, as in the following examples. In the first case, breaking a glass usually only involves one person, so no scale is implicated (there is no boolean lattice involved in calculating the answer to the CQ). As predicted, (15c) is infelicitous, while an answer where the DP is clefted with the default clefting auxiliary *hit* is felicitous.⁷

- (15) *Context: You find a broken glass on the ground and you ask:*

a. ɡit k^w yeɸox^woɭ k^wasta?
 ɡət k^w yeɸ-əx^w-uɭ k^wasta?
 who COMP break-NCTR-PST glass
 ‘Who broke the glass?’ vf JF

b. *One child blames the other...*

⁷ There is a confound with these examples and (16) as well, however. The infelicitous examples may be ruled out by use of *huy* instead of *heɭ*, rather than by the presence of *ʔut*. In future research, I plan to test for similar effects where there is a nominal predicate, rather than a cleft, so that the issue of clefting particle can be avoided. Thanks to Henry Davis for drawing my attention to the confound and means of avoiding it.

hɛl Erin yɛp̚oxʷol.
 hiɫ Erin yəp̚-əxʷ-ul
 be Erin break-NCTR-PST
 ‘It was Erin that broke it.’ vf JF

- c. #hoy **ʔot** Erin yɛp̚oxʷol.
 huy=**ʔut** Erin yəp̚-əxʷ-ul
 finish=EXCL Erin break-NCTR-PST
 Intended: ‘It was just Erin that broke it.’ –suggested form JF

Similarly, in (16a), there are no contextually salient alternatives to the speaker’s mother, so again the context does not support a scalar reading. Where the answer refers to a sibling, however, the use of *ʔut* is felicitous, since it is possible that more than one sibling could have been present (thanks to Henry Davis for suggesting this contrast).

(16) *There’s a big gathering and an acquaintance is trying to figure out who you are related to...*

- a. gət kʷoθ tan?
 gət kʷ-əθ tan?
 who COMP-2SG.POSS mother
 ‘Who is your mother?’ vf JF

- b. hɛl tita (t⁰) tan.
 hiɫ tyta t⁰ tan
 be that 1SG.POSS mother
 ‘That (person) is my mother.’ –suggested form JF

- c. #hoy=**ʔot** tita (t⁰) tan.
 huy=**ʔut** tyta t⁰ tan
 finish=EXCL that 1SG.POSS mother
 Intended: ‘Only that (person) is my mother.’ –suggested form JF

- d. *Context: There’s a big gathering and an acquaintance is trying to figure out who you are related to. Only one of your brothers is there:*

gət kʷoθ qɛχ?
 gət kʷ-əθ qiχ?
 who COMP-2SG.POSS younger.sibling
 ‘Who are your younger siblings?’ –suggested form JF

- e. *Context: You have only one relative at the gathering and it’s your younger brother:*

hoy **ʔot** tita tumiš t⁰ qɛχ
 huy=**ʔut** tyta tumiš t⁰ qiχ
 finish=EXCL that man 1SG.POSS younger.sibling
 ‘Just that guy is my brother.’ vf JF

So far, *ʔut* appears to pattern as a scalar exclusive operator. If it is, indeed, a scalar exclusive operator, however, we need to account for its occurrence with lexical items involving universal quantification and in additive contexts, environments that do not seem to support a scalar exclusive reading.

3 *ʔut* and domain widening

ʔut can combine with the universal quantifier *ʔuk^w* ‘all’, which picks out every individual in a set, and the adverb *paya* ‘always’, which I take to express universal quantification over a contextually given set of events, following analyses of English ‘always’ (e.g. Beaver and Clark 2003, 2008; von Stechow 1994), both lexical items that pick out the maximum point of a scale. Here, its contribution is initially puzzling. Note that its denotation does not rule out combining with an alternative at the top of a scale; so long as the utterance is the strongest true alternative, MAX is satisfied, and if *p* is at the top of the scale, it is certainly the strongest alternative. The question, then, is why *ʔut* would combine with these lexical items, since it seems that its contribution should be vacuous if there are no stronger alternatives to rule out.

- (17) a. *Context: You went to the store with a shopping list. The last couple times you’ve gone, you’ve forgotten eggs. When you get home, you say:*
ʔuk^w ʔot tam yeχetən s tok^w
ʔuwk^w=ʔut tam yaχ-at-an s tuk^w
 all=EXCL thing remember-CTR-1SG.ERG NMLZ day
 ‘I remembered everything today.’ –suggested form BW
Consultant’s comment: You’re really emphasizing that you got everything.
- b. *Context: This sentence is from a storyboard where the main character is being described as very industrious.*
payε k^wa ʔot x^wix^wipomix^w.
paya=k^wa=ʔut x^wi•x^wipumix^w
 always=RPT=EXCL IMPF•sweep
 ‘He was always sweeping.’ vf EP

I propose that *ʔut* is involved in domain widening in these environments (e.g. Kadmon and Landman 1993) (thanks to Lisa Matthewson, p.c., 2016 for suggesting this line of analysis). Domain widening involves expanding the domain of quantification to include more marginal cases which could otherwise count as outside the domain of quantification; this results in a decreased tolerance for exceptions (e.g. Kadmon and Landman 1993; Shank 2004). The following example from Kadmon and Landman (1993:359) illustrates the effect of domain widening with an English noun phrase preceded by *any*. The speaker can utter (18a) in a context where there is an insufficient quantity of potatoes for some current purpose; in this case, some insignificant quantity of potatoes is considered not to count for the assertion *We don’t have potatoes*, which means that the assertion can be followed by *at least not enough*. However, in (18b), the use of *any* means that the speaker cannot discount even an insignificant amount of potatoes. Kadmon and Landman (1993) claim that this is because the domain of potatoes is widened by the use of *any*. While use of the indefinite *potatoes* allows exceptions – certain marginal cases are considered outside of the domain of consideration – *any potatoes* does not allow these exceptions.

- (18) a. We don’t have potatoes, or at least not enough.
 b. #We don’t have any potatoes, or at least not enough.

Shank (2004) argues that focus on universal quantifiers can also be used for domain widening (cf. Kadmon and Landman 1993). He proposes that universal quantifiers involve a contextual domain variable (following e.g. von Stechow (1994)), and that alternate indexings of this variable can be evoked by focus on the quantifier. This results in a set of scalar alternatives ranked according to the size of the domain of the quantifier. In (19), for instance, Teacher B utters *everybody* intending the resource domain for the quantifier to include both students and parent chaperones. Teacher A understands the universal quantifier in Teacher B's utterance as having the set of students at the dance as its resource domain. Teacher B corrects Teacher A's assumption by focusing the quantifier, 'widening' the resource domain to include parent chaperones.

- (19) a. A: I hear that the school dance was a success.
 b. B: Yeah, everybody had a good time.
 c. A: I just hope that the parent chaperones were able to relax and enjoy themselves a little. The grade 10 class can be a handful.
 d. B: Oh, don't worry about it – EVERYbody had a good time. The bad seeds in that class didn't bother showing up and nobody snuck in anything illegal.
 (Shank 2004:123)

- (20) a. Teacher A is thinking: $\llbracket C_1 \rrbracket = \{x \mid x \text{ is a student} \}$
 b. Teacher B is thinking: $\llbracket C_2 \rrbracket = \{x \mid x \text{ is a student, a chaperone} \}$
 (Shank 2004:124)

When the scalar exclusive operator *just* combines with universals in English, it also seems to have an effect of domain widening. While it is possible to exclude something from the domain *everything* quantifies over using an except phrase (21b), exceptions are dispreferred with *just everything* (21c). If the use of the scalar exclusive triggers an expansion of the resource domain of the quantifier, the reduced tolerance of exceptions is predicted.

- (21) *Context: A kid has a long Christmas list. His dad goes out and buys everything on the list. His mother is a bit exasperated and says:*
- a. He bought just everything!
 b. He bought everything except the train!
 c. #He bought just everything except the train!

There seem to be parallel effects with *always*. In (22a), certain events can be excluded from the domain of events *always* quantifies over. In this case, the following sentence explicitly excludes events of arriving where the person being discussed has no control over his time of arrival.

- (22) *Context: An employer and manager discussing a particularly reliable summer student employee who has gone back to university.*

- a. He always showed up on time. {Only/just} occasionally he'd be late if the bus didn't come.
- b. He just always showed up on time. ??{Only/just} occasionally he'd be late if the bus didn't come.}

In *ʔayʔajuθəm*, the combination of *ʔut* with *ʔukʷ* 'all' also results in decreased tolerance of exceptions. In (23a), the universal quantifier *ʔukʷ* 'all' tolerates exceptions. When *ʔukʷ* is followed by *ʔut* (23b), introducing exceptions is dispreferred (note that *ʔukʷ=ʔut tam yaχətən* 'I remembered everything' is possible on its own (17a) – it is the introduction of exceptions that is infelicitous).

- (23) a. *Context: You went to the store with a shopping list. When you get home, you say:*
- | | | | | | | |
|--------------|------------|----------------------|----------------|-----------|----------------|---------------------|
| <i>ʔukʷ</i> | <i>tam</i> | <i>yεχətən</i> | <i>hoy ʔot</i> | <i>kʷ</i> | <i>χʷaχʷit</i> | <i>niyuxʷən</i> |
| <i>ʔuwkʷ</i> | <i>tam</i> | <i>yaχ-at-an</i> | <i>huy=ʔut</i> | <i>kʷ</i> | <i>χʷaχʷit</i> | <i>niy-əxʷ-an</i> |
| all | thing | remember-CTR-1SG.ERG | only=EXCL | DET | egg | forget-NCTR-1SG.ERG |
- 'I remembered everything except I forgot the eggs.' vf BW
- b.
- | | | | | | |
|------------------|------------|----------------------|-----------------|-----------|----------------|
| <i>ʔukʷ ʔot</i> | <i>tam</i> | <i>yεχətən</i> | <i>#hoy ʔot</i> | <i>kʷ</i> | <i>xʷaxʷit</i> |
| <i>ʔuwkʷ=ʔut</i> | <i>tam</i> | <i>yaχ-at-an</i> | <i>#huy=ʔut</i> | <i>kʷ</i> | <i>χʷaχʷit</i> |
| all=EXCL | thing | remember-CTR-1SG.ERG | only=EXCL | DET | egg |
- niyəxʷən*
niy-əxʷ-an
forget-NCTR-1SG.ERG
- Intended: #'I just remembered everything except I forgot the eggs.' –suggested form BW

With *paya*, the evidence is not conclusive, but consultants' comments are quite informative. Speakers generally have an intuition that *ʔut* is used for emphasis and this speaker's comment suggests that she also has an intuition that it involves excluding exceptions. However, combining *ʔut* with a VP beginning with *paya* does not seem to rule out except phrases (24b).

- (24) *Context: Discussing a friend who always walks about the reserve every day and checks in on everyone.*
- a.
- | | | |
|-----------------|------------------|-------|
| <i>payε ʔot</i> | <i>ʔəmʔemiš</i> | Dave. |
| <i>paya=ʔut</i> | <i>ʔəm•ʔimaš</i> | Dave |
| always=EXCL | PL•walk | Dave |
- 'Dave is always walking.' –suggested form BW
- Consultant's comment: You're emphasizing that there's really none [no days] missing.*
- b.
- | | | | | | |
|-----------------|------------------|------|----------------|--------------------|-------------------|
| <i>paya ʔot</i> | <i>ʔəmʔemiš</i> | Dave | <i>hoyʔot</i> | <i>ga čičləs</i> | <i>xʷa čəməs</i> |
| <i>paya=ʔut</i> | <i>ʔəm•ʔimaš</i> | Dave | <i>huy=ʔut</i> | <i>ga čə•čt=as</i> | <i>xʷa čam=as</i> |
| always=EXCL | PL•walk | Dave | finish=EXCL | if IMPF•rain=3CNJ | NEG MOD=3CNJ |
- θo ʔəq*
θo ʔəq
go go.outside
- 'Dave always walks except if it's raining he doesn't go out.' vf BW

I think the reason that *ɔut* does not rule out an except phrase is that the restriction of *paya* like English *always* is a free variable constrained by the context. The truth conditions given by Beaver and Clark (2003:349) for *always* involve the function σ , which is determined by the context and sets the domain of events that *always* quantifies over (25).⁸ The truth conditions state that every event in the set picked out by σ is an event of q , the proposition. Speakers are good at accommodating the domain σ to whatever situation is provided. When an except phrase is provided, the domain is set more narrowly to exclude the exceptions.

- (25) Truth conditions for ‘NP always VP’
 $\forall e \sigma(e) \rightarrow \exists e' \rho(e, e') \wedge q(e')$
 (Beaver and Clark 2003:349)

This requires further investigation, however, since the domain of a universal quantifier like *ɔuk^w* is also partially contextually determined, as noted above (e.g. Shank 2004). The difference between an adverb with universal quantification like *paya* or *always* and a universal quantifier like *ɔuk^w* or *all/every* is that the restriction of the adverb is often entirely given by context, whereas the restriction of the DP is always partly lexically specified. In further research, I plan to make the restriction of the adverb lexically explicit using a conditional clause (e.g. von Stechow 1994) to see whether this allows a more robust domain widening effect.

This leaves us with a question, though. Why should scalar exclusives like *just* in English and *ɔut* in *ɔayɔajuθəm* have domain widening effects in combination with universal quantifiers? As noted above, the asserted content of scalar exclusives, the ‘no more than’ contribution, is essentially vacuous in combination with a universal quantifier (though not in principle incompatible with it). I propose that the purpose of the scalar exclusive in these contexts is to imply the presence of scalar alternatives in order to facilitate an effect of domain widening.

This brings us to a broader question. If evoking interpretations of universal quantifiers with different resource domains allows adjustment of the resource domain, why does this widen the domain and not narrow the domain? I propose (following a similar proposal in Shank (2004)) that adjusting the domain of quantification can only take place when it results in a stronger statement (assuming the same definition of strength adopted earlier where stronger propositions entail weaker ones).⁹ In (26), for instance, Teacher B cannot use focus on the quantifier to correct Teacher A’s wider interpretation of the resource domain of the quantifier (including both students and chaperones) to a narrower domain (of only students).

- (26) a. A: I hear the school dance was a success.
 b. B: Yah, everyone had a good time.
 c. A: Well that’s good. In the past parent chaperones have been pretty grumpy.
 d. B: #EVERY-body had a good time. The chaperones were complaining about the kids’ antics all night and the strobe lights made some of them dizzy.
 (Shank 2004:144)

⁸ For our purposes, we can consider ρ the identity relation (see Beaver and Clark (2003) for further discussion).

⁹ Rather than relying on proposition strength to predict where domain widening is possible, Shank (2004) accounts for this in terms of the Difference Set Hypothesis. I do not adopt this approach because the notion of proposition strength is adequate for my analysis and allows a simpler argumentation.

In (26), the proposition with the narrower resource domain for the universal does not entail the proposition with a wider resource domain for the universal and domain narrowing is infelicitous. That is, if everyone from the resource domain of students had a good time, this does not entail that everyone from the resource domain of chaperones and students had a good time.

Under negation, the entailments are reversed and then domain narrowing is possible. In (28), Teacher B is thinking of the students at the dance when uttering *everyone*. Teacher A interprets *everyone* to include the parent chaperones. Teacher B corrects Teacher A's interpretation of the proposition to the narrower domain of students. In this case, the proposition where the quantifier is interpreted with a narrower domain entails the proposition where the quantifier is interpreted with a wider domain: if not everyone in the set of students had a good time, then not everyone at the dance had a good time.

- (27) a. A: I heard the school dance was good.
b. B: Really? From what I saw, not everyone was having a good time.
c. A: Well, I don't think you can count the chaperones. It's always hard on them.
d. B: Yah, but not EVERY-one had a good time. Lots of the students looked pretty miserable.

On the other hand, under negation the proposition where the quantifier is interpreted with a wider domain including both chaperones and students does not entail the proposition where the quantifier is interpreted with the narrower domain including only students: if only chaperones did not have a good time, for instance, the proposition with the wider interpretation of the quantifier is true (not everyone in the resource domain of parent chaperones and students had a good time), but the interpretation with the narrower interpretation of the quantifier is false (all the students did have a good time). Because of this, domain widening under negation is infelicitous.

- (28) a. A: I heard the school dance was good.
b. B: Yah, though not everyone had a good time.
c. A: I guess the gr. 8 students tend to plague each other at any social event.
d. B: #No, not EVERY-one had a good time. The parent chaperones were miserable, but I think the students were all happy.

Returning to the main point of this section, I propose that the purpose of combining a scalar exclusive with a universal quantifier is to imply (or presuppose (e.g. Rooth 1992)) scalar alternative propositions varying according to the interpretation of the resource domain of the quantifier. In a positive context, any alternatives to the asserted proposition must involve an interpretation of the quantifier with a narrower resource domain than in the assertion, so that the assertion is the strongest proposition, otherwise adjusting the resource domain is infelicitous. The contrast between the asserted proposition where the quantifier has a wider resource domain with alternative propositions where the interpretation of the quantifier involves narrower resource domains gives the effect of domain widening.

4 *ʔut* and ‘even’-type readings

ʔut can also show up with ‘also’ and ‘even’ readings. In these cases, it combines with an auxiliary *miə* ‘also/too’. This seems strange if we take ‘even’, since it is additive, to be removing the upper bound of a scale and ‘only’ to be putting an upper bound on the scale. But, notice that in scalar contexts ‘even’ is removing the upper bound of a likelihood scale (Karttunen and Peters 1979), but not the upper bound of the lexically supplied scale. For instance, *I only made it to Victoria* states that I made it ‘no further than’ Victoria on some scale of distance and *I even made it to Victoria* also implies that I made it to Victoria but not further. The likelihood scale is reversed though. With *only*, the distance is contrasted with further distances which were expected or more likely, while with *even*, the distance to Victoria is contrasted with shorter distances that were expected or more likely. I hypothesize that there is not the same likelihood scale at play in *ʔayʔajuθəm*, so *ʔut* is specifically contributing quantification over the contextually or lexically specified scale. Because of this, its contribution ‘no more than x’ on the scale is compatible with both environments.

If *ʔut* is contributing a scalar exclusive meaning in these environments, it should rule out alternatives with stronger contributions to the proposition introduced with *miə* ‘also/too’. This seems to be true. Example (29a) is good where *miə=ʔut* is used to introduce an additional item to what was bought – something not on the original list. Adding another item after this is infelicitous (29b) – *ʔut* has already contributed a ‘no more than’ reading ruling out alternatives higher in the boolean semilattice (including more items beyond those on the shopping list and the flowers).

(29) *Your friend goes shopping and she gets everything on her list and even flowers which are not on her list. She even got eggs, which she normally forgets.*

- a. $\begin{array}{llllll} \text{ʔuk}^w & \text{tam} & \text{yɛχatəs.} & & \text{miyə } \mathbf{ʔot} & \text{q}^w\text{asəm } \text{yɛqtəs} & \text{hega } \text{k}^w \\ \text{ʔuwk}^w & \text{tam} & \text{yix-at-as} & & \text{miyə}=\mathbf{ʔut} & \text{q}^w\text{asəm } \text{yəq-t-as} & \text{higa } \text{k}^w \\ \text{all} & \text{thing} & \text{remember-CTR-3ERG} & & \text{also}=\text{EXCL} & \text{flowers } \text{buy-CTR-3ERG} & \text{CONJ } \text{DET} \end{array}$
 $\begin{array}{l} \chi^w\text{a}\chi^w\text{it } (\text{yəqtəs}). \\ \chi^w\text{a}\chi^w\text{it } (\text{yəq-t-əs}) \\ \text{eggs } (\text{buy-CTR-3ERG}) \end{array}$
‘She remembered everything and she even bought flowers and eggs.’ vf BW
- b. $\begin{array}{llllll} \text{ʔuk}^w & \text{tam} & \text{yɛχatəs.} & & \text{miyə } \mathbf{ʔot} & \text{q}^w\text{asəm } \text{yɛqtəs} & \#\text{miyə}=\mathbf{ʔot} \\ \text{ʔuwk}^w & \text{tam} & \text{yix-at-as} & & \text{miyə}=\mathbf{ʔut} & \text{q}^w\text{asəm } \text{yəq-t-as} & \#\text{miyə}=\mathbf{ʔut} \\ \text{all} & \text{thing} & \text{remember-CTR-3ERG} & & \text{also}=\text{EXCL} & \text{flowers } \text{buy-CTR-3ERG} & \text{also}=\text{EXCL} \end{array}$
 $\begin{array}{l} \chi^w\text{a}\chi^w\text{it.} \\ \chi^w\text{a}\chi^w\text{it} \\ \text{eggs} \end{array}$
‘She remembered everything, she even bought flowers and she even bought eggs.’
Consultant’s comment: It sounds like too much emphasis. –suggested form BW

5 Conclusion

In this paper, I have argued that *ʔut* is a scalar exclusive particle, contributing a ‘no more than x’ meaning for some contextually or lexically specified scale. I have first explored the core predictions

of the analysis to show that *?ut* functions to exclude stronger alternatives and so is infelicitous in an environment where an ‘at least’ reading is intended or where there is no scale for it to quantify over. I then attempted to explain its contribution where it appears with lexical items involving universal quantification. I proposed that *?ut* facilitates domain widening in these contexts and then examined evidence that shows that the predictions of the analysis seem to be accurate. Finally, I discuss additive contexts that *?ut* is found in, showing that these are also compatible with the analysis of *?ut* as a scalar exclusive operator, so long as we take the scale that *?ut* quantifies over to be a scale of proposition strength, rather than likelihood.

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