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How multiple past tenses divide the labor: The case of South Baffin Inuktitut

Abstract It is a common perception that in languages having multiple past tenses with different remoteness specifications, the past tenses cover the entire past without a gap or overlap. This paper demonstrates that this way of looking at multiple-past tense systems is not appropriate for the system in South Baffin Inuktitut (a variety of the Inuit language). The dialect has at least four past tenses: recent, hodiernal, pre-hodiernal, and distant. We argue that the relation between the four tenses cannot be represented by a simple linear scheme for two reasons. First, the pre-hodiernal past has a special status as the "conventionally designated alternative", which is chosen in cases of remoteness indeterminacy, analogous to, for example, the Russian masculine gender being used in cases of gender indeterminacy. Second, there is overlap in their coverage. The pre-hodiernal and hodiernal past tenses collectively cover the entire past and thus any past situation can be described with one of them. The other two provide means to make more fine-grained and subjective temporal specifications. Comparison will be made between the system in South Baffin Inuktitut and those in some Bantoid languages which have been pointed out in the literature to have a comparable layered system of tenses.

Keywords: South Baffin Inuktitut, multiple-past tense system, temporal remoteness, remoteness indeterminacy, layered tenses

1 Introduction

It is a widely known fact that some languages have multiple past (and future) tenses, which are associated with different degrees of remoteness (e.g., proximate past vs. distant past). The common perception is that multiple past tenses of a language divide up the past without a gap or overlap, as in the schemetic representation in Fig. 1 (taken from Dixon 2009). This paper demonstrates that this way of looking at multiple-past tense systems – which Botne and Kershner (2008) call the simple linear view – is too simplistic and inappropriate for South Baffin Inuktitut (henceforth, SB), a Canadian variety of the Inuit language. Section 2 presents a brief overview of the SB tense system, which includes four past tenses associated with different but overlapping temporal domains.

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¹ The Inuit language belongs to the Eskimo branch of the Eskimo-Aleut (or Eskaleut) language family.

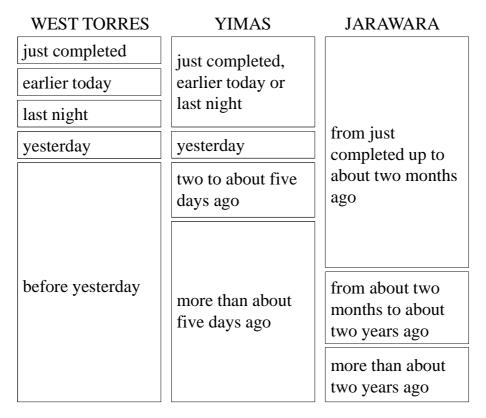


Fig. 1: Reference of tenses in multiple-past tense systems (Dixon 2009: 23)

In Section 3, we take up the two tenses marked by -qqau and -lauq, which occur far more frequently than the others. -qqau indicates a hodiernal past ("today" past), and is used to describe an eventuality in a past time within the day of utterance. -lauq indicates a pre-hodiernal past, and as a rule is used to describe an eventuality in a past time prior to the day of utterance. It will be pointed out that in cases where the temporal location of the described event cannot be ascertained to be within the day of utterance or not, -lauq has to be used. In other words, the tense marked by -lauq is a "conventionally designated alternative" for remoteness-neutral contexts, analogous to, e.g., the Russian masculine gender being used when the sex of the referent is unknown or unspecified.

In Section 4, we discuss two additional tenses. We suggest classifying SB past tenses into two "layers". The primary layer consists of the pre-hodiernal past (-lauq) and the hodiernal past (-qqau). The secondary layer includes the "recent past" indicated by -kainnaq/-rataaq and the "distant past" indicated by -lauqsima. The primary tenses collectively cover the entire past, and the coverage of one is the complement of the other; the availability of -lauq generally implies the unavailability of -qqau, and vice versa. Secondary tenses are used to make more fine-grained and subjective temporal specifications than the primary tenses alone can, but their availability does not block the use of a primary tense.

In Section 5, the two-layered system of SB will be compared with those in some Bantoid languages such as Basaa, which have been argued by Botne and Kershner (2008) and Botne (2012) to involve multiple-dimensional conceptualization of time.

Fig. 2 summarizes the layered nature of the SB past tense system and the remoteness specifications for its members to be discussed below; shaded areas represent segments within which the cut-off point may vary depending on the speaker's subjective perception, and the dotted area in the domain of *-lauq* represents its ability to refer to an eventually potentially or partly occurring within the day of utterance.

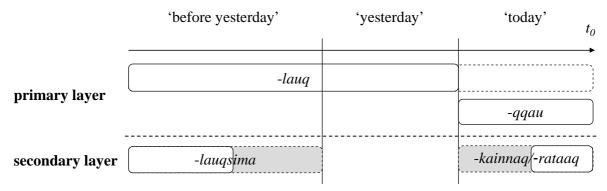


Fig. 2: The system of past tenses in South Baffin Inuktitut

Except where noted otherwise, data presented in the current work are all drawn from fieldwork conducted from September 2004 to September 2014. The primary method of data collection was face-to-face interviews with one native speaker of SB.² Correspondences by e-mail with the same consultant were also used as a supplementary method.

2 Overview of the SB tense system

2.1 Definition of tense

Tense has traditionally been understood as a grammatical means to locate the eventuality or situation described in a clause on the time line, relative to a temporal reference point (typically the utterance time; Comrie 1985: 14).

A commonly adopted criterion that distinguishes tense from other (non-grammatical) temporal expressions, such as temporal adverbials like *yesterday* and *formerly*, is its *obligatoriness* (Comrie 1985: 10; Shaer 2003: 144; Dahl and Velupillai 2005). That is, as long as a given language has a tense system, a finite clause in it generally must be tensed. Consider, for example, sentences (1a,b):

- (1) a. John left.
 - b. John left yesterday.

In (1a), the past tense on the verb (and nothing else) conveys the information that John's leaving takes place prior to the utterance time. In (1b), the same information is conveyed both by the past tense and the temporal adverb *yesterday*. In neither (1a) nor (1b), however, can one leave out the tense.³ Generally, a tense "is used not only where it is supplying [...] new information", but also "where this information has already been supplied, either explicitly or by the context" (Bybee et al. 1994: 8). Thus, a language with tense not only allows but forces the speaker to communicate the temporal information regarding the state of affairs described in an utterance.

In the literature, there has been extensive debate as to which languages count as tenseless (Shaer 2003; Bohnemeyer 2002, 2009; Smith et al. 2003; Matthewson 2003, 2006;

² She spent some formative years in Coral Harbor (on Southampton Island, a Kivalliq region), where SB is not spoken. The dialect spoken in this region and SB are closely related, both belonging to Eastern Canadian Inuktitut. Whether and how this affects her competence of SB is unknown, except that there are sometimes remnants of the dialect of Inuktitut spoken in this region in her speech.

³ In narrative contexts, one can say: "John leaves yesterday". In this case too, the predicate carries a tense, which is standardly understood to be the present tense receiving the "historical present" interpretation. One might alternatively treat it as a variety of past tense; this however does not imply that the clause/predicate is untensed.

Ritter and Wiltschko 2004; Smith and Erbaugh 2005; Lin 2006, 2012; Jóhannsdóttir and Matthewson 2007; Tonhauser 2006; Reis Silva and Matthewson 2007; Smith 2008, among others). Dialects of the Inuit language, most notably the West Greenlandic (Kalaallisut), have also recently attracted scholarly attention in relation to the question of whether they have tense or not, or in other words, whether "temporal suffixes" in these dialects mark tense or something else, such as aspect, modality, or mood (Swift 2000, 2004; Shaer 2003; Bittner 2005, 2011).

Following Hayashi (2011), we take the view that SB has a grammatical tense system, which will be briefly described in the next section. A major piece of evidence for the presence of past tenses in SB is that an independent SB clause describing a past situation must contain one, and at most one, of the past-marking suffixes (*-lauq*, *-qqau*, etc.).⁴

- (2) a. *jaan mumiq-tuq ippatsaq.
 John dance-Part.3s yesterday
 (John {danced/was dancing} yesterday.)
 - b. *jaan mumi-lauq-tuq ippatsaq*.John dance-*lauq*-Part.3s yesterday'John {danced/was dancing} yesterday.'

Apparent counterevidence to this supposition is zero-marked punctual verbs (achievement and semelfactive verbs without an explicit temporal marker), which are interpreted as describing a situation in the recent past.

- (3) a. *jaan tikit-tuq*.

 John arrive-Part.3s

 'John has (just) arrived.'
 - b. *jaan kapi-janga tuktu*.

 John spear-Part.3s/3s caribou

 'John has (just) speared the caribou.'

Sentences like (3a,b), however, are better understood as being present-tensed and receiving the aspectual interpretation of *perfect* (see below).

2.2 A sketch of the SB tense system

This section provides an overview of the SB tense system, summarizing some of the major findings in Hayashi (2011).

2.2.1 Present tense

A present-tensed verb does not contain an overt temporal morpheme, or in other words, the present tense is indicated by the absence of an explicit temporal morpheme. A verb without an explicit tense morpheme (i.e., a zero-marked verb) can be interpreted as referring either (i) to a state that holds or an event that is on-going at the utterance time, or (ii) to an event that

⁴ The abbreviations in the glosses are: 1 = first person; 2 = second person; 3 = third person; Abl = ablative; App = applicative mood; Caus = causative mood; D.Pst = distant past; Emp = emphatic; H.Future = hodiernal future; H.Pst = hodiernal past; Ind = indicative mood; Inst = instrumental; Int = interrogative mood; Neg = negation; Part = participial mood; Poss = possessum noun; PostH.Fut = post-hodiernal future; PreH.Pst = pre-hodiernal past; R.Pst = recent past; s = singular; / = transitive agreement (e.g., 1s/3s = first person singular subject/third person singular object) or possessive agreement (e.g., 1s/s = 1st person singular possessor/singular possessum).

has occurred in a recent past. The choice between these two interpretations hinges on the aspectual class of the verb. The former interpretation is available only with a durative (state, activity, or accomplishment) verb, and the second only with a punctual (achievement or semelfactive) verb.

Zero-marked state verbs receive a straightforward present interpretation.

```
(4) a.
          jaan taki-juq.
          John tall-Part.3s
          'John is tall.'
          (*'John {was/will be} tall.')
      b. jaan ilinniagti-u-juq.
          John student-be-Part.3s
          'John is a student.'
          (*'John {was/will be} a student.')
```

Zero-marked activity and accomplishment verbs receive an imperfective (progressive) interpretation.

```
(5)
     a. jaan mumiq-tuq.
         John dance-Part.3s
          'John is dancing.'
         (*'John {was/will be} dancing.')
     b. jaan iglu-liuq-tuq.
         John house-make-Part.3s
          'John is building a house.'
          (*'John {was/will be} building a house.')
```

Zero-marked punctual verbs, which are incompatible with an imperfective interpretation, receive an interpretation similar to that of the present perfect (rather than the simple past) in English.⁵ This is evidenced by the observation that zero-marked punctual verbs cannot occur with temporal adverbials referring to a past time, such as "yesterday" and "at 4:00 p.m.".

```
\{ippatsag/4-mit^6\}.
(6)
          *jaan tikit-tuq
     a.
          John arrive-Part.3s yesterday/4-Inst
          (John arrived {yesterday/at 4:00}.)
     b. *jaan kapi-janga
                                  tuktu
                                          \{ippatsaq/4-mit\}.
          John spear-Part.3s/3s caribou vesterday/4-Inst
          (John speared the caribou {yesterday/at 4:00}.)
                                 \{ippatsaq/4-mit\}.
     c. *jaan tagiuq-tuq
          John sneeze-Part.3s yesterday/4-Inst
          (John sneezed { yesterday/at 4:00}.)
```

⁵ The aspectual interpretation of a zero-marked SB verb is thus determined by the following algorithm: (i) assign to the verb the imperfective interpretation, if possible (i.e., if the verb is durative); otherwise (ii) assign to it the perfect interpretation.

⁶ In (contemporary) SB, the ablative and instrumental cases (the latter has also been labeled as modalis, comitative, or accusative) are marked by the same ending -mit (-nnit), whereas these cases are marked with different endings in neighboring varieties. This ending is also used for a temporal adverbial such as 4-mit 'at 4 o'clock' in (6), although in other varieties a locative ending is used for this purpose. In this paper, -mit (-nnit) in the temporal sense will be glossed as Inst(rumental).

They, on the other hand, are compatible with an adverb for the present time such as maanna 'now'.

- (7) jaan tikit-tuq maanna. John arrive-Part.3s now 'John has now arrived.'
 - b. jaan kapi-janga tuktu maanna. John spear-Part.3s/3s caribou now 'John has now speared the caribou.'
 - c. jaan tagiuq-tuq maanna. John sneeze-Part.3s now 'John has now sneezed.'

Present-tensed punctual verbs may refer to an event that is as temporally distant as about one week before the utterance time, and this appears to be the upper limit. The following sentence could be felicitous in a context where the moving took place a week before the utterance time, connoting subjective recency. It becomes increasingly less felicitous with a longer temporal distance.

(8) tamaunga nuut-tunga here move-Part.1s 'I have just moved in.'

Note that present perfect verbs in some Germanic languages including English and Mainland Scandinavian exhibit a similar pattern as SB present-tensed punctual verbs as to the compatibility with temporal adverbials. They cannot be used with an adverbial referring to a specific moment or interval in the past (e.g., yesterday) while being compatible with presentoriented adverbials like now and today (Comrie 1985; Giorgi and Pianesi 1997).

- (9) *John has arrived yesterday.
 - b. John has arrived now.

The fact that zero-marked punctual verbs are incompatible with an adverbial referring to a past time but are compatible with an adverbial referring to the present time indicates that the clause containing a zero-marked punctual verb refers to the present time, rather than the past.

2.2.2 Past tenses

Some languages have multiple past tenses that cover different temporal domains.⁷ Such languages are especially common in the Bantu family, the Native American languages, and the Trans-New Guinea languages (Comrie 1985; Botne 2012). When a language has two past tenses covering different temporal domains, the cut-off point (boundary) is most commonly placed between "today" and "before today", in which case the tenses can be labeled with Latinate terms as "hodiernal" and "pre-hodiernal" (Dahl 1983, 1985; Comrie 1985; Dahl and Velupillai 2005; Botne 2012). Cut-off points may also be placed between "yesterday" and "before yesterday", between "a few days ago" and "more than a few days ago", between "this year" and "before this year", etc.

⁷ Dahl and Vellupilai (2005) report that 40 out of their 222 sample languages exhibit remoteness distinctions in the past. These languages account for about one third of the 134 languages (in their sample) that have a past/non-past distinction at all.

As pointed out by Comrie (1985), boundaries between multiple tenses are sometimes rigid and sometimes fluid. Haya, for example, has three past tenses covering "today" (the hodiernal past), "yesterday" (the hesternal past), and "before yesterday" (the pre-hesternal past). Their boundaries are rigid, so that the hodiernal past can never be used to describe a situation in a time prior to the day of utterance. Sotho, in contrast, has the opposition of "recently" vs. "not recently", where the boundary is fluid in the sense that what counts as recent depends on the speaker's subjective impression; it is possible, thus, to describe an event that took place several years or decades ago with a recent past form, as long as the speaker intends to emphasize the subjective recency.

SB has at least four past tenses. The markers of the four past tenses are presented in (10), in the ascending order of temporal remoteness (it will be shown later, however, that this linear representation is only an approximation).⁸

- (10) (i) -kainnaq/-rataaq
 - (ii) -qqau
 - (iii) -lauq
 - (iv) -laugsima

These past markers have cognates with apparently similar, if not identical, meanings in closely related varieties, such as North Baffin (Harper 1979) and Tarramiut (Schneider 1979, Swift 2000, 2004). Swift states that the five past markers in Tarramiut: -kainnaq, -qqau, -lauq, -lauju, and -lauqsima cover different temporal domains in the way schemetized in Fig. 3 (Swift 2000: 96, 2004: 86):

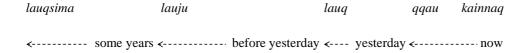


Fig. 3: Temporal domains of the past markers in Tarramiut (Swift 2004: 86)

We will point out below two problems with a linear scheme like Fig. 3. The first is concerned with cases of "remoteness indeterminacy", a similar issue of which has been discussed in the domain of grammatical gender ("gender indeterminacy"). The second is that (cases of remoteness indeterminacy put aside) the temporal distribution of -*kainnaq/-rataaq* is not complementary to but rather is subsumed by that of -*qqau*, and the temporal distribution of -*lauqsima* is not complementary to but rather is subsumed by that of -*lauq*.

In Section 3, we will take up the properties of -qqau and -lauq, which occur more frequently than the other markers, and demonstrate (i) that -qqau covers the past time within the day of utterance while -lauq covers the time prior to the day of the utterance, so that they collectively cover the entire past, and furthermore (ii) that in cases where the temporal location of the described event cannot be determined to be within the day of utterance or not ("remoteness indeterminacy"), -lauq has to be chosen.

In Section 4, we will extend the discussion to -kainnaq, -rataaq, and -lauqsima. To account for the distributions of the five tense markers, we will propose that the SB tenses are

⁸ There is another tense suffix, *-juu*, which has a similar, if not the same, distribution as *-lauq*. Its use is infrequent, and our consultant's judgments on its acceptability are unstable. There may be yet other tense suffixes; in particular, suffixes *-niq* and *-viniq* can be tense markers too. Their use is again infrequent, and their meanings are not clear to us at this point.

classified into two groups: *primary* and *secondary* tenses, where the latter function to make more fine-grained and subjective temporal specifications than the former alone can. In Section 5, we will present a summary and then discuss similarities and differences between the illustrated SB tense system and the systems in some Bantoid languages (e.g., Basaa), which have been pointed out by Botne and Kershner (2008) and Botne (2012) to be "multi-dimensional".

2.2.3 Future tenses

SB has (at least) three future tense markers, which are marked by the markers -laaq, -niaq, and -gumaaq. Although in this work we focus on the past tenses, many remarks that we will make about the past tenses apply equally to the future tenses. -laaq and -niaq are semantic mirror images of -lauq and -qqau on the future side, and they together form the primary layer of future tenses. -laaq marks a secondary tense and is used to describe an eventuality occurring at least several hours after the temporal reference point and is subjectively perceived to be temporally distant.

3 Primary tenses: -qqau and -lauq

3.1 Remoteness specifications of -qqau and -lauq

Cognates of -qqau have traditionally been referred to as markers of "past within today", and cognates of -lauq have traditionally been referred to as markers of "past earlier than today" (Harper 1979; Schneider 1979; Dorais 1988; Swift 2000, 2004). -qqau and -lauq in SB conform to these descriptions. Verbs with -qqau can co-occur with a temporal adverbial referring to a time within the day of utterance, such as *ullaaq* 'this morning', but not with a temporal adverbial referring to a time earlier than the day of utterance, such as *ippatsaq* 'yesterday'. ¹¹ (11) and (12) illustrate this point.

(11) a. *jaan tiki-qqau-juq ullaaq*. John arrive-qqau-Part.3s this.morning 'John arrived this morning.'

⁹ -langa, whose cognates have been referred to as a future marker (Harper 1979; Swift 2000, 2004), is better treated as a prospective aspect marker (Hayashi 2011:92–98).

(i) (Situation: John arrived the day before yesterday.)

*jaan tiki-qqau-juq pingasuarusingmit.

John arrive-qqau-Part.3s this.week

(John arrived this week.)

(ii) (**Situation**: John arrived two weeks ago.)

*jaan tiki-qqau-juq taqqigijattannit.

John arrive-qqau-Part.3s this.month
(John arrived this month.)

In this respect, *-qqau* contrasts with apparent hodiernal past tense markers in such languages as Chindali and Luwanga (both belong to the Bantu family; Botne 2012:541–544).

 $^{^{10}}$ One complication is that *-niaq* has a distinct use as a future-oriented epistemic necessity modal marker, which is not associated with a remoteness specification (Hayashi 2011:98–105).

¹¹ The temporal domain that *-qqau* covers is (the past time within) the day of utterance, and this time unit cannot be "scaled up" to the week, month, etc. of utterance, even with the presence of a temporal adverbial such as "this week".

- b. *jaan mumi-qqau-juq ullaaq*.

 John dance-qqau-Part.3s this.morning

 'John {danced/was dancing} this morning.'
- c. *jaan qamuti-liu-qqau-juq ullaaq*.

 John sled-make-*qqau*-Part.3s this.morning

 'John {made/was making} a sled this morning.'
- d. *jaan quviasu-qqau-juq ullaaq*. John be.happy-qqau-Part.3s this.morning 'John was happy this morning.'
- (12) a. *jaan tiki-qqau-juq ippatsaq.
 John arrive-qqau-Part.3s yesterday
 (John arrived yesterday.)
 - b. *jaan mumi-qqau-juq ippatsaq.
 John dance-qqau-Part.3s yesterday
 (John {danced/was dancing} yesterday.)
 - c. *jaan qamuti-liu-qqau-juq ippatsaq.

 John sled-make-qqau-Part.3s yesterday

 (John {made/was making} a sled yesterday.)
 - d. *jaan quviqasu-qqau-juq ippatsaq.
 John be.happy-qqau-Part.3s yesterday
 (John was happy yesterday.)

-lauq exhibits an opposite pattern. It can co-occur with a temporal adverbial referring to a past time earlier than the day of utterance, such as *ippatsaq* 'yesterday', but cannot co-occur with a temporal adverbial referring to a past time within the day of the utterance, such as *ullaaq* 'this morning'. (13) and (14) illustrate this point.

- (13) a. *jaan tiki-lauq-tuq ippatsaq*. John arrive-*lauq*-Part.3s yesterday 'John arrived yesterday.'
 - b. *jaan mumi-lauq-tuq ippatsaq*.

 John dance-*lauq*-Part.3s yesterday

 'John {danced/was dancing} yesterday.'
 - c. jaan qamuti-liu-lauq-tuq ippatsaq.
 John sled-make-lauq-Part.3s yesterday
 'John {made/was making} a sled yesterday.'
 - d. *jaan quviasu-lauq-tuq ippatsaq*.

 John be.happy-*lauq*-Part.3s yesterday

 'John was happy yesterday.'
- (14) a. *jaan tiki-lauq-tuq ullaaq.
 John arrive-lauq-Part.3s this.morning
 (John arrived this morning.)
 - b. *jaan mumi-lauq-tuq ullaaq.

 John dance-lauq-Part.3s this.morning

 (John {danced/was dancing} this morning.)
 - c. *jaan qamuti-liu-lauq-tuq ullaaq.

 John sled-make-lauq-Part.3s this.morning
 (John {made/was making} a sled this morning.)

d. *jaan quviasu-lauq-tuq ullaaq.
John be.happy-lauq-Part.3s this.morning
(John was happy this morning.)

-lauq can be used to describe a situation in a far past time, as shown in (15).

- (15) jaan aulla-lauq-tuq iqalu-nnit 20-arraagulauqsimajunnit.

 John leave-lauq-Part.3s Iqaluit-Abl 20-years.ago

 'John left Iqaluit 20 years ago.'
- (16) ataatatsia-ra inuu-lauq-tuq 1911-mit. grand.father-Poss.1s/s be.born-lauq-Part.3s 1911-Inst 'My grandfather was born in 1911.'
- (17) guti atami-mit ammalu eve-mit inuu-tit-si-lauq-puq.
 God Adam-Inst and Eve-Inst be.born-Caus-App-lauq-Ind.3s
 'God created Adam and Eve.'

In fact, -lauq can be used to refer to an eventuality in any past time prior to the day of utterance. As such, -qqau can appropriately be characterized as the marker of a hodiernal tense, and -lauq the marker of a pre-hodiernal tense. The cut-off point between the two tenses is rigid, in the sense that it cannot be shifted forward or backward. There are, however, two types of complications concerning the distributions -qqau and -lauq. The first involves negation and will be taken in Section 3.2. The second involves "remoteness indeterminacy", and will be discussed in Section 3.3.

3.2 Non-occurrence vs. incompletion

There is an exception in the described distributional pattern of *-qqau* and *-lauq*. Namely, in negative sentences stating that a certain eventuality has not yet happened, *-lauq* may occur even if it is clear from the context that the temporal setting is within the day of utterance.

(18) (**Situation:** You are at the airport waiting for your nephew to arrive. You just hear the announcement that says that the arrival of his plane is delayed. Your sister phones you on your cell phone.)

your sister: tiki-qqau-vaa?

arrive-qqau-Int.3s 'Has he arrived?'

you:

a. akkaa suli tiki-**lau-nngit**-tuq.

no still arrive-lauq-Neg-Part.3s

'No, he hasn't arrived yet.'

b. *akkaa suli tiki-qqau-nngit-tuq*. no still arrive-*qqau*-Neg-Part.3s

'No he heen't errived yet'

- 'No, he hasn't arrived yet.'
- (19) (**Situation:** Your husband is about to throw away today's newspaper. You want to tell him not to throw it away, because you have not read it.)
 - a. *suli uqalimaa-lau-nngit-tara*. still read-*lauq*-Neg-Part.1s/3s

'I haven't read it.'

b. *suli uqalimaa-qqau-nngit-tara*. still read-*qqau*-Neg-Part.1s/3s 'I haven't read it.'

- (20) (**Situation:** You ask Mary if she wants to go for lunch with you. Mary says, "I have eaten. Ask Amy. She hasn't had lunch yet".)
 - a. suli niri-lau-nngit-tuq. still eat-lauq-Neg-Part.3s 'She hasn't eaten yet.'
 - b. suli niri-qqau-nngit-tuq. still eat-qqau-Neg-Part.3s 'She hasn't eaten yet.'

In the contexts provided in (18), (19), and (20), the interlocutors clearly refer to a state of affairs on the day of the utterance, and thus *-qqau* would be predicted to be the only option. According to our consultant's judgments, however, the use of *-lauq* is acceptable, and is in fact even preferred to *-qqau*.

It is important to note that this anomaly is not attested in negative statements in general. Roughly speaking, when a negative statement can be naturally translated in English using a simple past tense ("X did not ..."), the selection of the past tense form conforms to the pattern in affirmative contexts, as shown in (21) and (22). However, when a negative statement can be naturally translated using a present perfect plus *yet* ("X has not yet ..."), the choice of *-lauq* is preferred, as in (18)–(20) above.

- (21) a. *jaan tiki-lau-nngit-tuq ullaaq.
 John arrive-lauq-Neg-Part.3s this.morning
 (John didn't arrive this morning.)
 - b. *jaan tiki-qqau-nngit-tuq ullaaq*. John arrive-*qqau*-Neg-Part.3s this.morning 'John didn't arrive this morning.'
- (22) a. *miali uvani-lau-nngit-tuq ullaaq.

 Mary be.here-lauq-Neg-Part.3s this.morning
 (Mary was not here this morning.)
 - b. *miali uvani-qqau-nngit-tuq ullaaq*.

 Mary be.here-*qqau*-Neg-Part.3s this.morning 'Mary was not here this morning.'

It is worth noting that in English too, it is common to code "non-occurrence of an event in the past" and "incompletion of an event" differently, using a simple past form for the former and a present perfect for the latter.

(23) a. I didn't eat my lunch.

(**Implicature:** I skipped a meal.)

b. I haven't (yet) eaten my lunch.

(**Implicatutre:** I will probably have a meal.)

We suggest that, in SB, the form: [verb + -lauq + negation] can be used to describe either (i) non-occurrence of an event in the pre-hodiernal past or (ii) incompletion of an

event. The first interpretation comes from the literal meanings of *-lauq* and negation, and the second comes from the idiomatic combination of the two.¹²

3.3 The problem of remoteness indeterminacy

An interesting question regarding tense systems with multiple past (or future) tenses is: What happens when the speaker cannot determine on which side of the temporal cut-off point the described eventuality is located?

An analogous issue has long been recognized in the domain of grammatical gender. Speakers of a language with the opposition of the masculine and feminine genders sometimes face situations where it is not immediately clear which gender is appropriate in referring to an individual. Corbett (1991: 218) lists three types of such situations. First, the speaker may not have information necessary to determine the gender appropriate for the referent – typically the sex (e.g., *In that case I'd like to speak to the manager and we'll see what he/she says*). Second, the referent may be non-specific, its domain including both males and females (e.g., *If a patient wishes to change doctors, he/she should advise the receptionist*). Third, the referent may be a group of people of both sexes (e.g., *villagers*; note that this can be a problem only for languages where plural pronouns or agreement forms retain gender distinction). Since gender, like tense, is a grammatical feature, it cannot simply be left out but has to be specified in one way or another.

Corbett (1991: 218–223) discusses four ways in which the problem of gender indeterminacy can be dealt with. First, one of the alternative genders may be chosen by convention, as the "designated alternative". In most reported cases (e.g., Russian) the designated gender is masculine, but in some languages it is feminine. In the following pair of questions in the Nilotic language Maasai, the first with the masculine form is used only when it is known that a male is involved, while the second with the feminine form is used both when it is known that a female is involved and when the sex is unknown.

(24) a. aiŋai o-ewuo?
it.is.who who.Masculine-has.come
'Who has come?'
(Corbett 1991: 220)
b. aiŋai na-ewuo?
it.is.who who.Feminine-has.come
'Who has come?'
(Corbett 1991: 220)

Second, some other gender (e.g., neuter, inanimate) may be chosen. Third, special forms, which occur only in the case of gender indeterminacy, may be used. Fourth, in some languages there is no set strategy favoring a particular gender.¹³

Speakers of SB may face an analogous problem of "remoteness indeterminacy", and the set strategy to deal with it is to use the pre-hodiernal tense indicated by *-lauq* as the designated alternative. ¹⁴ Corbett's three-way classification of gender indeterminacy carries

¹² The remaining question is: What is the exact semantic difference between (non-)occurrence and (in)completion? Here, we will not attempt to provide an answer.

 $^{^{13}}$ As widely recognized, English (especially its formal varieties) has underwent a considerable change in recent decades as to how it copes with gender indeterminacy. The status of its masculine gender as the designated alternative ("generic he") is much less secure than it used to be (Pauwels 2003: 563–565).

¹⁴ It is interesting to ask what other strategies natural languages with multiple past/future might use to deal with remoteness indeterminacy.

over to the domain of tense. First, the speaker may not know whether the described event happened before or within the day of utterance. When this is the case, *-lauq*, rather than *-qqau*, must be used, as shown in (25).

- (25) (**Situation:** You have been away from home since yesterday morning. You just come home, and notice that a message from John is left on your answering machine. You wonder when he phoned, but unfortunately, your answering machine does not tell you.)
 - a. *jaan uqaala-lauq-tuq*. John call-*lauq*-Part.3s 'John phoned.'
 - b. #jaan uqaala-**qqau**-juq. John call-**qqau**-Part.3s (John phoned.)

Contrary to what one might expect, in such a situation, it is not felicitous to say: "Either S-lauq or S-qqau".

(26) #jaan uqaala-**lauq**-tuq, uvvalunniit uqaala-**qqau**-juq.
John call-lauq-Part.3s or call-qqau-Part.3s
(John phoned sometime before today or he phoned today.)

It must be noted that, even if the speaker does not know when exactly the eventuality in question occurred, as long as she assumes that it occurred sometime within the day of utterance, she would use *-qqau*, as shown in (27):

- (27) (**Situation:** You were away from home since 7 a.m. today. You just come home, and notice that a message from John is left on your answering machine. You wonder what time he phoned, but unfortunately, your answering machine does not tell you.)
 - a. #jaan uqaala-lauq-tuq. John call-lauq-Part.3s (John phoned.)
 - b. *jaan uqaala-qqau-juq*. John call-*qqau*-Part.3s 'John phoned.'
- (28), where the speaker inquires about the time of an eventuality, illustrates the same point. Here, the use of *-lauq* does not imply that the speaker assumes that the eventuality in question occurred prior to the day of utterance.
- (28) (**Situation:** You are talking with your friend about John. You thought John was out of town, but she says that he is back. You have no idea when he came back, today or some time before. So you ask her when he came back.)
 - a. qanga tiki-lauq-paa? when arrive-lauq-Int.3s 'When did he arrive?'
 - b. #qanga tiki-qqau-vaa? when arrive-qqau-Int.3s (When did he arrive?)

Second, a speaker may want to describe a non-specific eventuality, leaving open whether it occurred within the day of utterance or prior to it. When this is the case, again -lauq must be chosen. Thus, a polar question (yes-no question) containing -lauq can be used to inquire whether a certain eventuality happened before or not, rather than whether it happened prior to the day of utterance or not.

- (29) (**Situation:** Amy is your friend. She left for Iqaluit a week ago. Your sister asks you whether you heard from her since.)
 - a. tusaq-vigi-lauq-piu-lii? hear-from-lauq-Int.2s/3s-Emp 'Did you hear from her?'
 - b. #tusaq-vigi-qqau-viu-lii? hear-from-qqau-Int.2s/3s-Emp (Did you hear from her?)

Third, a single verb/clause may refer to a collection of eventualities, some of which took place within the day of utterance and some of which took place prior to it. Here again, the appropriate choice is *-lauq*, rather than *-qqau*.

- (30) (Situation: Your friend, Mary, phoned you yesterday and today.)
 - a. *miali uqaala-lauq-tuq marruiq&uni.* 15 Mary call-*lauq-*Part.3s twice 'Mary phoned twice.'
 - b. #miali uqaala-qqau-juq marruiq&uni.
 Mary call-qqau-Part.3s twice
 (Mary phoned twice.)

In sum, the pre-hodiernal tense indicated by *-lauq* is also used in remoteness-neutral contexts, serving as the designated alternative analogous to the Russian masculine gender and the Maasai feminine gender.

3.4 A note on Hayashi's (2011) alternative account

Hayashi (2011) suggests a different account for the distributions of *-lauq* and *-qqau* illustrated above. She argues that *-lauq* is inherently not specified as to temporal remoteness, so that it is better characterized as the marker of a general past tense, and that the reason that the use of *-lauq* is blocked where *-qqau* is available can be attributed to scalar conversational implicature based on the Q-principle (Horn 1989; Levinson 2000). One problem with this line of analysis (mentioned in the same work) is that the speaker's intuition is quite clear that the use of *-lauq* in describing a hodiernal eventuality is utterly unacceptable, rather than merely misleading or awkward.

It is worth noting, however, that Hayashi's (2011) "conversational implicature" account is not necessarily incompatible with the "designated alternative" account in the current work, because it is sensible to consider that the representative status of a certain gender arises from a conversational implicature. A case can be made, for example, that the Russian "masculine" gender is actually a "general" gender, and it usually cannot be linked to a [+feminine] or [+neuter] referent/antecedent because of a Q-implicature.

¹⁵ "&" represents a voiceless lateral fricative sound (Spalding 1992).

3.5 A note on Cable (2013)

Cable (2013: 239–245 et passim) discusses data from Gĩkũyũ (Bantu family) that parallel our (25) and (28). He reports that, among the three past "temporal remoteness markers" in the language – (i) Current Past "within today", (ii) Near Past "recently but not today", and (iii) Remote Past "not recently" – Remote Past is the one chosen when it is not known whether the eventuality took place recently or not, and Near Past is used when it is known that the eventuality took place recently but it is not known whether it took place within "today" or not. Our interpretation of these observations is that in Gĩkũyũ, Remote Past has a privileged status (as a designated alternative) over the other two markers, and Near Past likewise has a privileged status over Current Past.

Cable (2013) takes the view that the three remoteness markers (and their counterparts in the future) differ in the specificity of temporal domains, and claims that the domain of Remote Past strictly subsumes those of Near Past/Current Past, and that the domain of Near Past strictly subsumes that of Current Past (Remote Past ⊃ Near Past ⊃ Current Past). To account for the near complementarity of the three remoteness markers, he considers the scalar implicature-based account, but rejects it for a reason similar to the one discussed in Section 3.4. Instead, he develops a formal semantic analysis that resorts to the general semantic/pragmatic principle called "Maximize Presupposition" (MP; Dvořák and Sauerland 2006; Sauerland 2008; Schlenker 2012, among others), which he takes to be distinct from Gricean implicature. His version of this principle is as follows.

(31) *Maximize Presupposition (MP)*

Suppose that the following holds:

- a. LF_1 and LF_2 are idential, except that LF_1 contains lexical item α where LF_2 contains lexical item β .
- b. The domain of $\llbracket \alpha \rrbracket$ is a strict subset of the domain of $\llbracket \beta \rrbracket$.
- c. A speech act using either LF₁ or LF₂ would be licit in context.

If all these conditions hold, then the speech act must be made with LF_1 , not LF_2 . (Cable 2013: 259)

It must be noted, however, that it is a matter of debate whether the MP principle can be reduced to scalar implicature or not (Schlenker 2012). Anyhow, Cable's MP-based analysis will be valid for the tense system of SB as well, as much as it is for that of Gikuyu (with the assumption that $-lauq \supset -qqau$). A question that is worth asking in this connection (and will be left open for future research) is whether the MP-based approach can be applied to gender indeterminacy (and the "designated alternative" strategy for it). As we have observed above, there is close similarity (on the surface, at least) between remoteness indeterminacy and gender indeterminacy. The MP-based analysis for the former will gain stronger ground if it can be shown that the MP-based analysis for the latter is adequate.

4 Secondary tenses

Varieties of the Inuit language, such as North Baffin (Harper 1979), Tarramiut (Schneider 1979; Swift 2000, 2004), Arctic Quebec (Dorais 1988), and West Greenlandic (Fortescue 1984), have been reported to have more than two past markers. SB too has past markers other than *-qqau* and *-lauq*, which include those listed in (32) with informal and approximate characterizations:

(32) (i) -kainnag: recent past

- (ii) -rataaq: recent past
- (iii) -lauqsima: long ago past

These past markers have cognates with apparently similar (if not identical) meanings in close relatives of SB, such as North Baffin and Tarramiut.

Harper (1979) on North Baffin states that the dialect has more than ten past markers. Besides *-qqau* and *-lauq*, he discusses *-rataaq* and *-juu* in some detail, and states that *-rataaq* is used to describe action occurring within the previous few minutes and *-juu* is used to describe action in the far past.

Swift (2000: 95–102, 2004: 72–92) mentions that Tarramiut has three past markers in addition to *-qqau* and *-lauq*: (i) *-kainnaq*, (ii) *-lauju*, and (iii) *-lauqsima*. She suggests that the five past markers cover different temporal domains in the past, as schemetized in Figure 3 (Swift 2000: 96, 2004: 86) and summarized in Table 1 (Swift 2004: 74; the original table includes four future temporal suffixes which likewise contrast in remoteness). ¹⁷

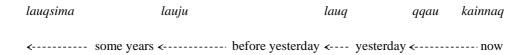


Fig. 3 (repeated): Temporal domains of the past markers in Tarramiut (Swift 2004: 86)

Table	1: '	The	Tarramiut r	ast remoteness	suffixes	(adapted	from	Swift 2	004	74)

REMOTENESS SUFFIX	TRANSLATION	LABEL
-kainnaq-	a moment ago	RECENT PAST
-qqau-	earlier (same day)	SAME DAY PAST
-lauq-	day before or earlier	YESTERDAY PAST
-lauju-	some time ago; used to	DISTANT PAST
-lauqsima-	a long time ago	LONG AGO

Swift (2004: 86) notes that some speakers accept -lauq for reference to the pre-hesternal past (the past time prior to "yesterday") – so that there is overlap between the domains of -lauq and -lauju – while others do not.

We have seen above that -lauq and -qqau (in SB) collectively cover the entire past. It will be demonstrated below that the temporal domains for the other three tense markers listed in (32) overlap with those of -lauq and -qqau. Thus the structure of the SB tense system is more complex than can be expressed by a simple linear scheme like Fig. 3.

The suffix *-rataaq*- is sometimes used as a marker of the immediate past, more recent than recent past *-kainnaq*- (Dorais 1988). It is omitted from the discussion here because in the available data, it is never used as a marker of temporal remoteness, but it sometimes appears in combination with recent past *-kainnaq*- with the sense 'a moment ago'. (Swift 2004: 73)

This description suggests that *-rataaq* in Tarramiut, unlike its cognate in SB, is not a genuine tense marker.

¹⁷ Schneider (1979) discusses some additional temporal affixes in Tarramiut, some of which occur only in narratives.

¹⁶ Swift (2004) also mentions the suffix -rataaq in a footnote.

4.1 Two layers of tenses

The three expressions listed in (32) – -kainnaq, -rataaq, and -lauqsima – can be regarded as past tense markers associated with specific temporal domains; as will be illustrated shortly, they can be used, in place of -qqau or -lauq, to make reference to a past situation. Their status, however, is different from that of -qqau and -lauq in two respects. First, their frequencies of occurrence are much lower than those of -qqau and -lauq. Second, they provide more specific temporal information than is minimally required by the grammar.

On these grounds, we suggest classifying SB past tenses into two layers. The first layer consists of two "primary" tenses: the hodiernal past indicated by *-qqau* and the pre-hodiernal past indicated by *-lauq*. The second layer includes two "secondary" tenses: recent past indicated by *-kainnaq/-rataaq* and distant past indicated by *-lauqsima*.

(33) primary tenses

- (i) -qqau: hodiernal past jaan tiki-qqau-juq. John arrive-qqau-Part.3s 'John arrived (today).'
- (ii) -lauq: pre-hodiernal past jaan tiki-lauq-tuq.John arrive-lauq-Part.3s'John arrived (yesterday or earlier).'

(34) secondary tenses

- (i) -kainnaq/-rataaq: recent past jaan tiki-{kainnaq/rataaq}-tuq. John arrive-kainnaq/rataaq-Part.3s 'John just arrived.'
- (ii) -lauqsima: distant past jaan tiki-lauqsima-juq. John arrive-lauqsima-Part.3s 'John arrived (a long time ago).'

The opposition in the first layer corresponds to the minimum degree of temporal granularity that must be expressed in a SB sentence referring to a past situation; a SB sentence describing a past eventuality as a rule must specify whether the described eventuality occurs within or beyond the day of the utterance. The primary past tenses collectively cover the entire past, so that any past situation can be referred to by a primary past tense.

Tenses in the second layer allow a speaker to make more fine-grained and subjective temporal specifications; -kainnaq, for example, indicates that the described eventuality occurs in a *recent* time within the day of the utterance. Some situations cannot be referred to by any of the secondary tenses, there being a gap in their collective coverage. In Sections 4.2 through 4.4, we will examine the meanings of three "secondary tense markers" in turn.

4.2 -kainnaq

-kainnaq is used to describe a situation in an immediate past. ¹⁸ Our consultant would often add a phrase like "a minute ago" and "just" to translations of sentences containing -kainnaq.

¹⁸ Apart from its use as a tense marker, -kainnaq has a use as a kind of durative aspect marker which roughly

```
(35) a. jaan mumi-kainnaq-tuq.
John dance-kainnaq-Part.3s
'John {danced/was dancing} a minute ago.'
b. jaan ani-kainnaq-tuq 4-mit.
John go.out-kainnaq-Part.3s 4-Inst
'John just went out at 4:00.'
```

One may hypothesize that -kainnaq is not a past tense marker, but an adverb meaning "just", and that sentences like (35a) and (35b) have a present perfect interpretation. This line of analysis, however, is not consistent with the fact mentioned in Section 2.2.1 that a present-tensed durative verb cannot be used to describe a situation in the past (compare (35a) and (36a)) and a present-tensed punctual verb cannot co-occur with an adverbial referring to a specific time in the past (compare (35b) and (36b)):

```
(36) a. jaan mumiq-tuq.

John dance-Part.3s

'John is dancing.' (Not: 'John {danced/was dancing}.')

b. *jaan ani-juq 4-mit.
```

indicates that the described eventuality or its resulting state lasts for a short duration (Hayashi 2011:63–64). -kainnaq in this aspectual use may co-occur with -qqau or -lauq within the same clause, as in (i) and (ii).

```
(i) jaan mumi-kainnaq-{qqau/lauq}-tuq.
John dance-kainnaq-{qqau/lauq}-Part.3s
'John was dancing for a bit."
```

(ii) jaan tiki-kainnaq-{qqau/lauq}-tuq.
John arrive-kainnaq-{qqau/lauq}-Part.3s
'John arrived and stayed for a very short while.'

Clauses that contain -kainnaq but no (other) overt tense marker are potentially ambiguous, due to the tense/aspect ambiguity of -kainnaq; i.e., such clauses could be either past-tensed (-kainnaq being the tense marker) or present-tensed (-kainnaq indicating an aspect).

```
    (iii) jaan ani-kainnaq-tuq.
    John go.out-kainnaq-Part.3s
    a. 'John just went out.' (-kainnaq marks a tense)
    b. 'John has been out, and the duration of his being out is short.' (-kainnaq marks an aspect)
```

Interestingly, however, when -kainnaq occurs with a durative predicate and no (other) overt tense marker, it is likely to receive the tense interpretation. For "jaan mumi-kainnaq-tuq", for example, the preferred interpretation is (iv-a), which parallels (iii-a), while the aspect interpretation (iv-b) is marginal.

```
(iv) jaan mumi-kainnaq-tuq.
John dance-kainnaq-Part.3s
a. 'John {was dancing/danced} a minute ago.'
b. ??'John has been dancing, and the duration of his dancing is short.'
```

An anonymous reviewer suggested to us that *-kainnaq* may invariably be an aspect marker and its single meaning, indication of a perspective on the event post-onset, would account for all instances of this marker. However, from the observation that sentences like (i) and (ii), where *-kainnaq* co-occurs with a past tense marker and thus itself cannot be a tense marker, allow only the "durative" interpretation and not the "recency (recent past)" interpretation (i.e., 'John had just danced', 'John had just arrived'), it can be concluded that it is genuinely ambiguous.

```
John go.out-Part.3s 4-Inst (John just left at 4:00.)
```

The temporal domain covered by -kainnaq is somewhat fluid. It can be used to describe an eventuality in a time as distant as several hours prior to the utterance time, as long as the speaker intends to present it as a recent one.

(37) (**Situation**: It is 4:00 p.m. now. John left at noon.) *jaan ani-kainnaq-tuq*. John go.out-*kainnaq*-Part.3s 'John (just) went out.'

Our consultant's intuition is clear, however, that *-kainnaq* cannot be used to describe an eventuality in a time prior to the day of utterance. Thus, *-kainnaq* cannot co-occur with *ippatsaq* 'yesterday'.

(38) *jaan tiki-kainnaq-tuq ippatsaq.
John arrive-kainnaq-Part.3s yesterday
(John arrived yesterday.)

The temporal domain for *-kainnaq* can thus be characterized as "a temporal segment that extends from the utterance time to at most several hours before the utterance time and is perceived as recent". The tense indicated by *-kainnaq* can be appropriately labeled as "recent past".

It is important to note that, although the meaning of -kainnaq is more specific than that of -qqau, the availability of the former does not block the use of the latter. Generally, -kainnaq can be replaced by -qqau in the same context; this point is illustrated in (39)–(41).

- (39) (**Situation:** John left {a minute ago / an hour ago}.)
 - a. *jaan ani-kainnaq-tuq*.
 John go.out-*kainnaq*-Part.3s
 'John just went out.'
 - b. *jaan ani-qqau-juq*.
 John go.out-H.Pst-Part.3s
 'John went out.'
- (40) (**Situation:** It is 4:00 now. John left at noon.)
 - a. *jaan ani-kainnaq-tuq*.

 John go.out-*kainnaq*-Part.3s

 'John just went out.'
 - b. *jaan ani-qqau-juq*.

 John go.out-H.Pst-Part.3s

 'John went out.'
- (41) (**Situation:** Mary is looking for John. You want to tell her that he just left.)
 - a. *jaan ani-kainnaq-tuq*. John go.out-*kainnaq*-part.3s 'John just went out.'
 - b. jaan ani-qqau-juq.

John go.out-H.Pst-Part.3s 'John went out.'

4.3 -*rataaq*

-rataaq, like -kainnaq, is used to describe an eventuality in the immediate past, and cannot be used to describe an eventuality prior to the day of utterance.¹⁹

(42) a. jaan mumi-**rataaq**-tuq.

John dance-rataaq-Part.3s

'John {danced/was dancing} a minute ago.'

- b. *jaan ani-rataaq-tuq* 4-mit. John go.out-*rataaq*-Part.3s 4-at 'John just left at 4:00.'
- (43) (**Situation:** It is 4:00 p.m. now. John left at noon.) *jaan ani-rataaq-tuq*.

 John go.out-*rataaq*-Part.3s

 'John just left.'
- (44) *jaan tiki-rataaq-tuq ippatsaq.
 John arrive-rataaq-Part.3s yesterday
 (John arrived yesterday.)

Indeed, it appears to us that the distribution and meaning of *-rataaq* are the same as those of *-kainnaq*. We thus suggest that *-rataaq* indicates the same tense as *-kainnaq*.

4.4 -laugsima

Our consultant remarks that *-lauqsima* is used to describe a situation in a far past time.²⁰

(45) jaan aulla-**lauqsima**-juq iqalu-nnit 20-arraagulauqsimajunit. John leave-lauqsima-Part.3s Iqaluit-Abl 20.years.ago 'John left Iqaluit 20 years ago.'

The availability of -lauqsima does not block the use of -lauq; in other words, -lauq too can be used to describe an eventuality in a far past time.

(46) (= (15)) jaan aulla-**lauq**-tuq iqalu-nnit 20-arraagulauqsimajunnit.

10

¹⁹ -rataaq appears to have a distinct use as an adverb that emphasizes the recency of an eventuality and roughly translates as "just" (Hayashi 2011:65–66).

²⁰ Harper (1979) characterizes *-lauqsima* in North Baffin as a "past indefinite morpheme", i.e., a past marker that is used to describe an eventuality whose temporal location is not specified. This characterization is not appropriate for *-lauqsima* in SB, as can be seen from data like the following.

⁽i) (Situation: You had a good friend named Mary when you lived in Iqaluit. She left Iqaluit 20 years ago on Christmas day and you have never met her since. You still clearly remember the day Mary left Iqaluit.) miali aulla-lauqsima-juq iqalu-nnit quviasukvi-mit 20-arraagulauqsimajunit. Mary leave-lauqsima-Part.3s Iqaluit-Abl Christmas-on 20-years.ago 'Mary left Iqlauit 20 years ago on Christmas.'

```
John leave-H.Pst-Part.3s Iqaluit-Abl 20-years.ago 'John left Iqaluit 20 years ago.'
```

Eventualities occurring one month or more prior to the day of utterance are generally regarded as far enough for the use of *-lauqsima* to be natural. For eventualities occurring one week or two days prior to the day of utterance, the use of *-lauqsima* is marginal (our consultant's judgments fluctuate), but not entirely blocked if the speaker intends to emphasize the remoteness of the eventuality; (47) illustrates this point.

(47) (**Situation**: It is May 5th. John arrived on May 3rd.)
(?) jaan tiki-lauqsima-juq (ippatsaani).
John arrive-lauqsima-Part.3s the.day.before.yesterday 'John arrived.'

To provide further illustration, (48)–(50) were judged as unnatural (but not entirely unacceptable) under the discourse setting where the described eventuality occurred the day before yesterday or one week ago, and as natural under the assumption that it occurred one month ago.

(48) (**Situation**: John participated in a dance competition) *jaan mumi-lauqsima-juq*.

John dance-**lauqsima**-Part.3s

'John danced.'

- (49) ataata-ga tuqu-lauqsima-juq. father-Gen.1s die-lauqsima-Part.3s 'My father died.'
- (50) *jaan niu-nga sura-lauqsima-juq*.

 John leg-Gen.3s be.hurt-*lauqsima*-Part.3s

 'John hurt his leg.'

-lauqsima cannot be used, on the other hand, to describe an eventuality within the day of utterance or the one immediately preceding it.

(51) a. *jaan tiki-lauqsima-juq ippatsaq.
jaan arrive-lauqsima-Part.3s yesterday
(John arrived yesterday.)
b. (Situation: It is May 18th today. John arrived yesterday, on May 17th.)

#jaan tiki-lauqsima-juq.

John arrive-lauqsima-Part.3s

'John arrived.'

The temporal domain for *-lauqsima*, thus, can be characterized as "a temporal segment that precedes the day immediately preceding the day of utterance and that is perceived as remote". We term the tense indicated by *-lauqsima* "distant past".

It is worth mentioning, finally, that *-lauqsima* tends to be associated with certain aspectual meanings; namely, a habit or experience in the past.

(52) *Habit in the past*

*miali mumi-lauqsima-juq.*Mary dance-*lauqsima*-Part.3s 'Mary used to dance.'

- (53) Experience in the past
 - a. *jaan japan-mii-lauqsima-juq*. John Japan-be.in-*lauqsima*-Part.3s 'John has been to Japan before.'
 - b. A: tarrija-lauqsima-viu atanarjuat? watch.movie-lauqsima-Int.2s Atanarjuat 'Have you seen (the movie) Atanarjuat?'
 - B: *ii, tautu-ani-lauqsima-jara atanarjuat.* yes watch-already-*lauqsima*-Part.3s/1s Atanarjuat 'Yes, I have already seen *Atanarjuat*.'

Based on this observation, one may hypothesize that *-lauqsima* has a use as an aspectual marker, apart from the use as a tense marker. There is, however, no clear evidence that this is the case; unlike aspectual markers such as the inceptive marker *-liq*, *-lauqsima* cannot cooccur with a tense marker like *-lauq*, *-qqau*, *-niaq* or *-laaq* (the last two being future tense markers; see Section 2.2.3).

(54) *jaan tiki-lauqsima{-qqau/-lauq/-niaq/-laaq}-tuq.

John arrive-lauqsima-{H.Pst/PreH.Pst/H.Fut/PostH.Fut}-Part.3s

5 Summary and Crosslinguistic Comparison

We have examined properties of and relations between four past tenses in SB. The "hodiernal past" indicated by *-qqau* and the "pre-hodiernal past" indicated by *-lauq* are grouped together as primary tenses. The former covers the past time within the day of utterance, and the latter covers the time prior to it. In situations where it cannot be decided on which side of the boundary the described eventuality is located, the pre-hodiernal past (*-lauq*) is chosen.

The "recent past" (-kainnaq/-rataaq) and "distant past" (-lauqsima) are grouped together as secondary tenses, which serve to provide more specific temporal information than the primary tenses alone can. A SB speaker can "get by" without -kainnaq, -rataaq or -lauqsima. -qqau and -lauq, on the other hand, are indispensable, as the lack of either would significantly compromise the expressive capacity of the language, making some situations impossible to describe.

The temporal domains associated with the four tenses, as well as the two-layered structure of the SB tense system, are schemetized in Fig. 2 repeated below; shaded areas represent segments within which the cut-off point may vary depending on the speaker's subjective perception, and the dotted area in the domain of *-lauq* represents its ability to refer to an eventually potentially or partly occurring within the day of utterance.

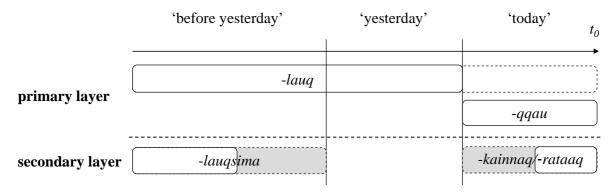


Fig. 2 (repeated): The system of the past tenses in South Baffin Inuktitut

The idea that multiple past/future tenses within a language have a multi-dimensional structure (contra a "simple linear scheme" view depicted in Section 1) is not entirely new. Drawing on data from Bantu/Bantoid languages, Botne and Kershner (2008) argue that there are two kinds of "cognitive domains", or "worlds", which reflect different ways of conceptualizing time, and individual tenses may belong to either of the two. The two kinds are labeled the "P-domain", where P stands for "primary/prevailing", and the "D-domains" (the past D-domain and the future D-domain), where D stands for "dissociated". Tenses in the P-domain refer to events in experiential past, present, and future, which form what they call the "contemporal" dimension/world. Tenses in a D-domain, on the other hand, locate the event in a mental domain (world) separate and distinct from the contemporal domain (Figure 4; UT = utterance time).

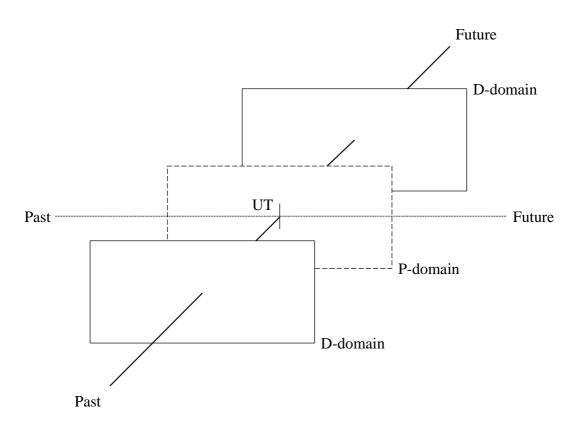


Fig. 4: The P-domain and D-domains (adapted from Botne 2012: 549)

Botne (2012: 550) states, "In the P-domain, we find a 'measured' (or metrical) proximity/remoteness in terms of temporal distance from the deictic center, while projection

of an event into a D-domain connotes an epistemic separation and subjective distance". Dissociation (separation) from the contemporality does not straightforwardly imply (long) temporal distance from the speech time (or some other relevant reference point) in absolute/objective terms. A case in point is Basaa (Bantu), where three past tenses and three non-past (present/future) tenses seemingly cover temporal intervals differing in (the direction and) distance from the utterance time.

(55) P3 (\varnothing): remote past

P2 (*bí*-): yesterday or earlier (pre-hodiernal)

P1 (*n*-): earlier today (hodiernal)

Pr/F1 (\acute{n} -): present or future today (hodiernal) F2 ($g\acute{a}$ -): tomorrow or later (post-hodiernal)

F3 (*a*-): remote future

There are, however, two "anomalies" that challenge the simple linear understanding of the system. First, P3 and F3 (remote future/past) may co-occur with the temporal adverbial *len* 'today', while P2 and F2 cannot. Second, P2 and P3, as well as F2 and F3, may overlap in use; for example, an eventuality occurring last month "could be marked with either of the past forms [= P2 and P3] depending on contextual factors" (Botne 2012: 547). To account for these descriptive facts, Botne and Kershner propose that P3 and F3 belong to a different cognitive domain – namely the D-domain – than the other four tenses, which belong to the P-domain (Figure 5).

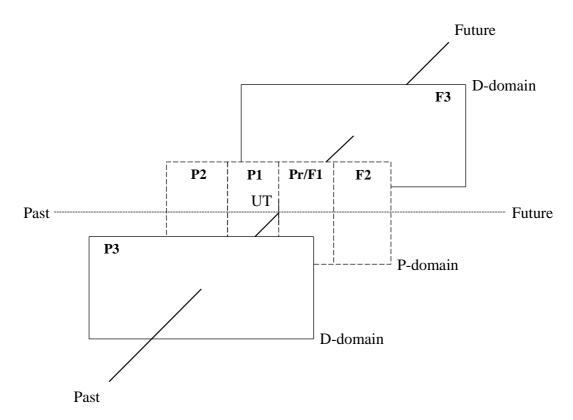


Fig. 5: The Basaa tenses mapped on the P/D-domains

For further illustration, consider the case of Babungo, which has four past tenses (hodiernal nii, hesternal si, pre-hesternal yaa, and remote naa; cf. Schaub 1985). The Babungo remote

past tense $(n \hat{a})$ exhibits a flexible distribution comparable to that of Basaa P3, "being used for events as recently as yesterday, hence overlapping in use with the pre-hodiernal tenses [= the hesternal and pre-hesternal tenses]" (Botne 2012: 549). Botne claims that the Babungo remote past belongs to the D-domain, while the other three past tenses belong to the P-domain.

Botne and Kershner's multi-domain model is quite similar to our two-layered scheme, the former involving more specific assumptions about conceptualization of time. We are hesitant to adopt their model for two reasons. First, while it is sensible to consider a tense referring to subjectively remote time to be "dissociated", it is counterintuitive to do the same with one referring to subjectively proximate time, which, if anything, appears to be more closely associated with the utterance time than other tenses. The SB recent past marked by -kainnag/-rataag thus does not easily fit in Botne and Kershner's model. Second, the distributions of some secondary tenses are partly constrained by the metrical divisions within the primary layer. The SB recent past tense always refers to a situation prior to the day of utterance, and the subjective perception of it as being recent cannot override this constraint. Likewise, the SB distant past tense cannot refer to a situation within the day of utterance, no matter what the speaker's subjective perception of it is; the same appears to hold for the Babungo remote past tense, judging from Botne's (2012) remarks. It is not clear how such constraints on secondary tenses can be dealt with within Botne and Kershner's model, where the P-domain and the D-domains are considered to be cognitively distinct, and the latter are considered to be not metrical/measured.

Considerable similarity, anyhow, can be found in the "structures" of past tenses of Basaa, Babungo, and SB Inuktitut. Figures 6 and 7 highlight this point; not knowing what happens in Basaa and Babungo in cases of remoteness indeterminacy, we tentatively assume that in these languages too, the "more remote" items in the primary layer have a privileged status over the "less remote" ones (so that, for example, P2 in Basaa may refer to an eventuality that may or may not have occurred within the day of utterance).

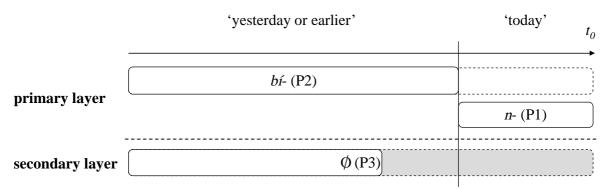


Fig. 6: The system of the past tenses in Basaa

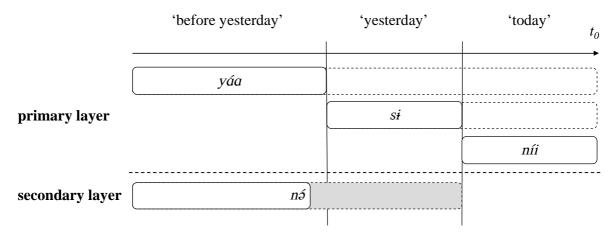


Fig. 7: The system of the past tenses in Babungo

In each system, there is one "saturated" layer, where the internal division(s) is (are) based on natural cycles (i.e., days). In addition to the tenses in this layer, the three languages have one or two additional tense whose domain is determined, at least partially, on a subjective basis (subjectively perceived as remote or proximate). Turning to the differences between the three systems, one particularly noteworthy point is that the Basaa P3 and Babungo remote past are *not* in the subsumption relation with a primary tense, contrasting with the two secondary tenses in SB. The patterns found in the three languages can be summarized as follows:

- (56) i. There is one layer of tenses, which is saturated and whose internal divisions have a fully objective basis.
 - ii. There is a second layer of tenses, which is not saturated (so that there are some situations that can be described by none of the members of this layer) and whose internal divisions have a (at least partially) subjective basis.
 - iii. The domain that a tense in the secondary layer covers may or may not be a subpart of the domain of some tense in the primary layer.

It is interesting to ask: (i) how robustly and commonly these patterns are found crosslinguistically, beyond the small sample at hand, and (ii) in what ways they should be modified or refined taking into consideration facts about (the tenses in) other languages. We may tentatively hypothesize that if a language has a two-layered system of tenses, the two layers always or typically have the properties described in (56-i,ii).²¹

Another important question concerning the typology of tense is how other languages/dialects other than SB (and Gĩkũyũ) that have multiple past (future) tenses deal with the problem of remoteness indeterminacy, discussed in Section 3. These questions will be left open for future investigations.

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²¹ If a language has a mono-layered tense system, on the other hand, the divisions within it may be determined either objectively or subjectively, or in a mixed way so that some divisions are fully objective while the others are not. The system in Mvskoke (Creek) described by Innes, Alexander, and Tilkens (2004), for example, seems to us to have a mono-layered system with both objective and subjective divisions within it.

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References

- Bittner, Maria. 2005. Future discourse in a tenseless language. *Journal of Semantics* 22(4). 339–387. doi:10.1093/jos/ffh029
- Bittner, Maria. 2011. Time and modality without tenses or modals. In Renate Musan & Monica Rathert (eds.), *Tense across languages*, 147–188. Berlin & New York: Mouton de Gruyter
- Bohnemeyer, Jürgen. 2002. The grammar of time Reference in Yucatec Maya. Munich: Lincom.
- Bohnemeyer, Jürgen. 2009. Temporal anaphora in a tenseless language. In Wolfgang Klein & Ping Li (eds.), *The expression of time*, 83–128. Berlin & New York: Mouton de Gruyter.
- Botne, Robert. 2012. Remoteness distinctions. In Robert I. Binnick (ed.), *The Oxford handbook and tense and aspect*, 536–562. Oxford: Oxford University Press.
- Botne, Robert & Tiffany L. Kershner. 2008. Tense and cognitive space: On the organization of tense/aspect systems in Bantu languages and beyond. *Cognitive Linguistics* 19(2). 145–218. doi:10.1515/COG.2008.008
- Bybee, Joan, Revere Perkins & William Pagliuca. 1994. *The evolution of grammar: Tense, aspect, and modality in the languages of the world.* Chicago: University of Chicago Press.
- Cable, Seth. 2013. Beyond the past, present, and future: Towards the semantics of 'graded tense' in Gîkûyû. *Natural Language Semantics* 21(3). 219–276. doi:10.1997/s11050-012-9092-3
- Comrie, Bernard. 1985. Tense. Cambridge: Cambridge University Press.
- Corbett, Greville. 1991. Gender. Cambridge: Cambridge University Press.
- Dahl, Östen. 1983. Temporal distance: remoteness distinctions in tense-aspect systems. Linguistics 21(1). 105–122. doi:10.1515/ling.1983.21.1.105
- Dahl, Östen. 1985. Tense and aspect systems. Oxford: Blackwell.
- Dahl, Östen & Viveka Velupillai. 2005. Tense and aspect. In Martin Haspelmath, Matthew Dryer, David Gil & Bernard Comrie (eds.), *World atlas of language structures*, 266–272. Oxford: Oxford University Press.
- Dixon, R. M. W. 2004. *The Jarawara language of southern Amazonia*. Oxford: Oxford University Press.
- Dixon, R. M. W. 2009. *Basic linguistic theory, volume 1: Methodology*. Oxford: Oxford University Press.
- Dorais, Louis-Jacques. 1988. *Tukilik: An Inuit grammar for all*. Québec: Association Inuksiutiit Katimajiit & Groupe d'Etudes Inuit et Circumpolaires, Université Laval.
- Dvořák, Boštjan & Uli Sauerland. 2006. The semantics of the Slovenian dual. In James Lavine, Steven L. Franks, Mila Tasseva-Kurktchieva & Hana Filip (eds.), *Formal approaches to Slavic linguistics* 14, 98–112. Ann Arbor, MI: Michigan Slavic Publications.
- Foley, William A. 1991. *The Yimas language of New Guinea*. Stanford: Stanford University Press.
- Fortescue, Michael D. 1984. West Greenlandic. London: Croom Helm.
- Giorgi, Alessandra & Fabio Pianesi. 1997. *Tense and aspect from semantics to morphosyntax*. Oxford: Oxford University Press.
- Harper, Kenn. 1979. Suffixes of the Eskimo dialects of Cumberland Peninsula and North Baffin Island (Mercury Series). Ottawa: National Museums of Canada.

- Hayashi, Midori. 2011. *The structure of multiple tenses in Inuktitut*. Toronto: University of Toronto dissertation.
- Horn, Laurence R. 1989. *A natural history of negation*. University of Chicago Press: Chicago.
- Hymes, Dell. 1975. From space to time in tenses in Kiksht. *International Journal of American Linguistics* 41. 313–329. doi:10.1086/465373
- Jóhannsdóttir, Kristín M. & Lisa Matthewson. 2007. Zero-marked tense: The case of Gitxsan. In Emily Elfner & Martin Walkow (eds.), *Proceedings of North East Linguistics Society* 37, 299–310.
- Innes, Pamela, Linda Alexander & Bertha Tilkens. 2004. *Beginning Creek*. Norman, OK: University of Oklahoma.
- Levinson, Stephen C. 2000. *Presumptive meanings: The theory of generalized conversational implicature*. Cambridge, MA: MIT Press.
- Lin, Jo-Wang. 2006. Time in a language without tense: The case of Chinese. *Journal of Semantics* 23(1). 1–53. doi:10.1093/jos/ffh033
- Lin, Jo-Wang. 2012. Tenselessness. In Robert I. Binnick (ed.), *The Oxford handbook and tense and aspect*, 669–695. Oxford: Oxford University Press.
- Matthewson, Lisa. 2003. An underspecified tense in St'át'imcets. In Paivi Koskinen (ed.), *Proceedings of Western Conference on Linguistics* 2002, 161–172.
- Matthewson, Lisa. 2006. Temporal semantics in a superficially tenseless language. *Linguistics and Philosophy* 29(6). 673–713. doi:10.1007/s10988-006-9010-6
- Mithun, Marianne. 1999. The status of tense within inflection. In Geert Booij & Jaap van Marle (eds.), *Yearbook of morphology 1998*, 23–44. Dordrecht: Kluwer.
- Pauwels, Anne. 2003. Linguistic sexism and feminist linguistic activism. In Janet Holmes & Miriam Meyerhoff (eds.), *The handbook of language and gender*, 550–570 Oxford: Blackwell.
- Reis Silva, Maria A. & Lisa Matthewson. 2007. An instantaneous present tense in Blackfoot. In Amy Rose Deal (ed.), *Proceedings of Semantics of Under-Represented Languages in the Americas 4*, 197–213. Amherst, MA: GLSA, University of Massachusetts.
- Ritter, Elizabeth & Martina Wiltschko. 2004. The lack of tense as a syntactic category: Evidence from Blackfoot and Halkomelem. In *Proceedings of the 39th International Conference on Sailish and Neighbouring Languages*, 341–370.
- Sauerland, Uli. 2008. Implicated presuppositions. In Anita Steube (ed.), *The discourse potential of underspecified structures*, 581–600. Berlin & New York: Mouton de Gruyter.
- Schwenter, Scott. 1998. Discontinuous remoteness in Dagaare. In Ian Maddieson & Thomas J. Hinnebusch (eds.), *Language history and linguistic description in Africa: Trends in African linguistics*, 87–93. Trenton, NJ: Africa World Press.
- Schlenker, Philippe. 2012. Maximize presupposition and Gricean reasoning. *Natural Language Semantics* 20(4). 391–429.
- Schneider, Lucien. 1973. *Dictionnaire des infixes de L'esquimeau de L'Ungava*. Québec: Ministère des Richesses Naturelles, Direction Générale du Nouveau-Québec.
- Shaer, Benjamin. 2003. Toward the tenseless analysis of a tenseless language. In Jan Anderssen, Paula Menéndez-Benito & Adam Werle (eds.), *Proceedings of Semantics of Under-Represented Languages in the Americas* 2, 139–156. Amherst, MA: GLSA, University of Massachusetts.
- Smith, Carlota & Mary Erbaugh. 2005. Temporal interpretation in Mandarin Chinese. *Linguistics* 43(4). 713–756. doi:10.1515/ling.2005.43.4.713
- Smith, Carlota, Ellavina Perkins & Theodore Fernald. 2003. Temporal interpretation in Navajo. In Jan Anderssen, Paula Menéndez-Benito & Adam Werle (eds.), *Proceedings*

- of Semantics of Under-Represented Languages in the Americas 2, 175–192. Amherst, MA: GLSA, University of Massachusetts.
- Smith, Carlota. 2008. Time with and without tense. In Jacqueline Guéron & Jacqueline Lecarme (eds.), *Time and modality*, 227–249. Berlin: Springer.
- Spalding, Alex. 1988. *Inuktitut: A multi-dialectal outline dictionary*. Iqaluit: Nunavut Arctic College.
- Swift, Mary D. 2000. *The development of temporal reference in Inuktitut child language*, Austin, TX: The University of Texas dissertation.
- Swift, Mary D. 2004. *Time in child Inuktitut: A developmental study of an Eskimo-Aleut language*. Berlin & New York: Mouton de Gruyter.
- Tonhauser, Judith. 2006. *The semantics of noun phrases: Evidence from Guarani*. Stanford, CA: Stanford University dissertation.