Persistence of prosodic patterning in borrowed conjunctions:  
The case of staupi and pet'am

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1. Introduction

Previous research has found that prosodic features are more likely to converge in the course of language contact than segmental phonological ones (Matras, 2007:39). Additionally, Haspelmath (2007:7); Matras (1998, 2007) and Mithun (1988:351-352) have noted that subordinating and coordinating conjunctions are often borrowed from written languages, which signal the relationships between clauses via syndetic clause-combining strategies, to languages without writing systems, which accomplish this through prosody instead. This has been shown to occur in Eskimo-Aleut languages such as Siberian Yupik, which has borrowed many subordinating conjunctions from Chukchi (Vaxtin 2000:316), leading to the reduced use of postbases (de Reuse, 1994). In this preliminary analysis, I look at a similar phenomenon in the Northern style of Kodiak Alutiiq, an Eskimo-Aleut language that has borrowed several conjunctions from Russian throughout a century of contact with Russian fur traders, priests, and settlers. I identify two Russian loanwords, pet'am–pet'a ('and then'; 'and then'; borrowed from Russian чтобы) and staupi ('so that'; 'that'; borrowed from Russian чтобы), and explore their phonological forms, distribution, meanings, and prosodic patterning. I find that staupi, the rarer of the two conjunctions, corresponds closely with its Russian counterpart in phonological form, meaning, prosodic patterning as a function of whether it is used as a subordinating conjunction or as a complementizer, and its triggering of the past tense in the subordinate clause when it is used as a complementizer. Likewise, the more common pet'am–pet'a corresponds closely with its Russian counterpart in meaning and prosodic patterning, but has a slightly different, and sometimes reduced, pronunciation. While these results may simply reflect the relative recency of the borrowing of the loanwords, they also suggest that intricate prosodic alternations persist even when phonological forms are altered or eroded.

2. Background

2.1 Russian-Alutiiq Language Contact
Russian-Alutiiq language contact spans from the 1760s, when Russian fur traders first arrived to hunt sea otters, to the present day (Drabek, 2012). Currently, many Elders and several language learners have some degree of familiarity with Russian, especially through Russian Orthodox church services. Because the Russian presence was more extensive on the northern region of Kodiak Island, the influence of Russian on Alutiiq is more discernible in the Northern style (Counceller et al., 2012). This is reflected in the higher prevalence of loanwords in the Northern style than in the Southern style, as exemplified by the pairings saiRkalaq ('mirror' in the Northern style; from Russian зеркало) versus tangriu'utaq ('mirror' in the Southern style; literally 'thing to see things in') (Drabek et al., 2012). Additionally, while the Northern style makes considerable use of the borrowed conjunctions staupi and pet'am, no borrowed conjunctions are attested in the Southern style. Although Alutiiq language learners interact with speakers of both the Northern and the Southern style, and do use some Russian loanwords, there are no instances of learners using staupi or pet'am in the data considered in this analysis. It is also worthwhile to note that at least one Elder is aware that staupi is a Russian loanword (1):

(1) Arnaq. No. Tan'uraq. Tan'uraq staupi uh –
    The woman. No. The boy. So that the boy uh –

    Russian. 'Staupi' is a Russian.
    Russian. 'Staupi' is a Russian.

(2014 fieldwork)

2.2 staupi vs. чтобы, потом vs. pet'am: Phonological, Semantic, and Prosodic Similarities

Turning now to the origin of staupi and pet'am, phonological evidence suggests that they were borrowed from the Russian words чтобы and потом. The phonological differences between staupi and чтобы and pet'am and потом are slight, and have to do with consonant realization (e.g. Alutiiq /ʃ/ vs. Russian /ʂ/) and vowel quality (e.g. Alutiiq /i/ vs. Russian /ɨ/). (Table 1).

<table>
<thead>
<tr>
<th>Alutiiq word</th>
<th>Phonological form</th>
<th>Russian word</th>
<th>Phonological form</th>
</tr>
</thead>
<tbody>
<tr>
<td>staupi</td>
<td>ʃtopi</td>
<td>чтобы</td>
<td>ʂtobi</td>
</tr>
<tr>
<td>pet'am</td>
<td>ｐe'тoм</td>
<td>потом</td>
<td>ｐe'tom</td>
</tr>
<tr>
<td>~ pet'a</td>
<td>~ ｐe'to</td>
<td></td>
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</tr>
</tbody>
</table>

Table 1: Phonological differences between staupi and чтобы and pet'am and потом

In addition to these similarities in phonological form, the meanings of staupi and pet'am correspond closely to those of чтобы and потом. чтобы originally comes from a combination of что, 'what', and the subjunctive marker бы. It is used as a complementizer in non-factual clauses, such as clauses in the scope of negation or deontic modality and volitionals where the agent of the embedded clause is different from the matrix agent, and it is also used as a purpose marker in adverbial clauses (Hansen et al., forthcoming).

1 Although it is possible that pet'am was initially borrowed from the longer потом что and then reduced to pet'am, there is no reason to favor this more complicated hypothesis over the aforementioned one, especially since the meaning of pet'am corresponds more closely to that of потом than that of потом что.
Similarly, *staupi* may function as a subordinating conjunction meaning 'so that' (2), or as a complementizer meaning 'that' (3):

(2) Tan'ura-men naaquisuute-q mina-ru.
    boy-ALL book-3.ABS give-IMP.>3O

    'Give the boy the book.'

    Naaqi-ciq-uq staupi liit-ilria.
    read-FUT-3ABS so.that learn-PST.3.ABS

    'He will read so that he learns.'

2014 fieldwork

(3) Nallu-k'gka *staupi* uh,
    not.know-PST.1A>3O COMP uh,

    Spam-mek pingak-ta-n'ill-kii.
    Spam-ABL like-HAB-NEG.PST-PST.3A>3O

2016 fieldwork

The meanings of *pet'am* and *потом* are likewise similar. Both primarily function as coordinating conjunctions that mark a sequence of events (Wade, 2010:400), corresponding loosely to English 'and', 'and then'. In fact, one Elder translated *pet'am* with *and then* (4):

(4) Isumek, isumamek, payaliluteng.
    Out of raisins, out of raisins, they'd make pie.

    *Pet'am* uh, dried apple. Taugkut kiimi gui umyakenka.
    *And then* uh, dried apple. *Those are the only ones I remember.*

    U- isumat and then, dried apple.
    R- raisins and then, dried apple.

2014 fieldwork

Here, *pet'am* does not coordinate two verb phrases, but instead coordinates the ablative adjunct *isumamek* 'out of raisins' and the noun phrase *dried apple*. Analogously, *потом* may also be used to coordinate noun phrases, particularly sequentially related eventive ones like 'dinner' and 'dessert', e.g.:— Ужин, потом десерт, — ответил Alec, не сводя глаз с телевизора внутри заведения ('Dinner, and then dessert,' said Alec, not taking his eyes off the TV').

*Staupi* and *pet'am* are similar to their Russian counterparts not only in phonological form and meaning, but also in prosodic patterning, as I will show in more detail in section 5. Drawing on a small sample of data from the Russian National Corpus3, I find that both *потом* and *чтобы* typically occur Intonation Unit-initially within the same Intonation Unit (IU) as the second, coordinate or subordinate clause. This is the case for *потом* in 37 out of 50 tokens, and for *чтобы* in 44 out of 50 tokens. When *потом* does not occur in IU-initial position on the second, coordinate IU, it often occurs immediately after a pronoun

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2 http://www.rulit.me/books/cherv-read-384119-58.html
such as я ('I') in IU-initial position on the second IU; however, it can also occur IU-finally, in which case it means 'later; afterwards'. Of the 6 tokens in which чтобы occurs in a non-initial position, 4 are purposive constructions. In these purposive constructions, чтобы occurs very close to the beginning of the clause, but is preceded by words like просто ('just') or и ('and'). The remaining two tokens of чтобы are complementizers. One occurs IU-medially between the first clause (надо, 'it is necessary') and the second clause. The other occurs in the same IU as the second clause, and is preceded by всегда ('always'). It appears that потом and чтобы both tend to occur IU-initially in the second clause, but that this tendency is stronger for чтобы, except when чтобы is used as a complementizer. As I will show in section 5, this correlation between non-IU-initial position and complementization obtains for стаупи as well.

3. Data

Because neither Southern Elders nor language learners use pet'am and стаупи in the data under consideration, this analysis focuses on 13 fieldwork recordings with Northern Elders Clyda Christenson, Sophie Shepherd, and Kathryn Chichenoff. It is important to note that these Elders grew up in different villages, which may influence their use of стаупи and pet'am: Clyda and Kathryn grew up in Karluk, while Sophie grew up in Larsen Bay. One of the recordings comes from the Alutiiq Museum collection, features storytelling and conversation between Clyda and Sophie, and was collected in 2005 by learner, scholar, and language activist April Counceller. Seven of the recordings date from my 2014 fieldwork in Kodiak, and consist of one-on-one conversations with Sophie (5 recordings) and Kathryn (2 recordings). The remaining 5 recordings date from 2016, feature conversations between me, learner and teacher Peggy Azuyak, and Sophie (3 recordings) or Kathryn (2 recordings), and are accompanied by video data.

4. Methods

In order to determine how closely pet'am and стаупи correspond to their Russian counterparts, and to identify any innovations, I coded the syntactic function (subordinating conjunction, coordinating conjunction, or complementizer) and prosodic position of each token of pet'am and стаупи. Usually it was possible to infer the syntactic function from the surrounding discourse; ambiguous tokens were excluded from the analysis. When coding the prosodic position of each token, I considered whether the token occurred closer in time to the first clause or the second, and also whether there was an IU boundary between the token and the clause to which it was nearest (as determined by cues such as whether or not there was a pause, a breath, creak, or pitch reset). Additionally, for the tokens that were accompanied by video footage, I analyzed the interplay of gesture and gaze with the prosodic position and syntactic function of the token.

5. Results

Overall, there were 43 instances of pet'am (including its less common variant, pet'a) and 11 instances of стаупи in the 13 recordings under consideration. The prevalence of pet'am and стаупи is surprising given that Alutiiq has a plethora of other strategies to accomplish the coordinating, purposive, and complementizing functions of pet'am and стаупи, such as the coordinating conjunction cali, the use of subordinative markers such as luki in purposive constructions, the desiderative sge (which could replace a purposive construction), the complementizer elliin, the sequential coordinating conjunctions taumi, awai, and тавакен, the coordinating clitic ilu, and the coordinating postbase wag. Given
that Alutiiq has so many means of syndetic coordination, subordination and complementization, ranging from postbases to clitics to separate words, it is somewhat surprising that pet'am and staupi are as common as they are in the Northern style. Several of the standalone subordinators and coordinators (e.g. awa'i, taumi) remain prevalent as well, while the postbases wag and sge are rare. This suggests that isolating clause-combining strategies may not only be highly borrowable, but may also replace earlier polysynthetic strategies.

Aside from the overall prevalence of pet'am and staupi, it appears that some speakers favor one or both words more heavily than others. The counts of pet'am and staupi for each speaker can be summarized as follows (Table 1):

### Table 1: Frequency of staupi and pet'a – pet'am by speaker

<table>
<thead>
<tr>
<th>Lexeme</th>
<th>Speaker</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>pet'a</td>
<td>Clyda</td>
<td>9</td>
</tr>
<tr>
<td>pet'am</td>
<td>Clyda</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Sophie</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Kathryn</td>
<td>8</td>
</tr>
<tr>
<td>staupi</td>
<td>Clyda</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sophie</td>
<td>10</td>
</tr>
</tbody>
</table>

It is clear from this data that Clyda favors pet'am more than Sophie and Kathryn do, using it 23 times in one hour-long recording session while they each use it only once or twice per recording session. Additionally, Clyda is the only speaker in this sample with the pet'am–pet'a alternation. Because pet'am is more common in her speech than pet'a, and because neither Sophie nor Kathryn uses pet'a, I will treat pet'am as the unmarked variant. It also seems that Sophie favors staupi more than the other two speakers do, but this may be an effect of the data set including 8 recordings with Sophie as opposed to 4 recordings with Kathryn and only 1 with Clyda. Alternatively, it is possible that Sophie's more frequent use of staupi reflects her having grown up in Larsen Bay instead of Karluk.

### 5.1 Syntactic Functions of pet'am and staupi

Of the 43 tokens of pet'am–pet'a, most (36/43) function as sequential coordinating conjunctions meaning 'and then', as in the following excerpt from a story about two hunters happening on two sungcut, or little people (5):

(5)   "Ika'ut agciqukuk, takuluke kinkuk ukuk. Kinkuk ukuk su'uk."
      "We two will go there and see who these two are. Who these two people are."

      And– aglutet pet'a tawa'ut.
      And– and then the two of them went there.

      (Alutiiq Museum archives: AM_470_177)

The remaining 7 tokens of pet'am–pet'a also function as coordinating conjunctions, but they coordinate noun phrases instead of verb phrases or clauses (6):

(6)
Taugkuk mal'uk, gui–gui tamagt'a, respect-taarlukek.
Those two, I–I miss both of them, I respected them,
brother k'sakaqa, b– anngarpagpet pet'am, alqagpagpet.
I have one brother, b- our older brother and then, our older sister.

(Alutiiq Museum archives: AM_470_177)

Additionally, when pet'am-pet'a occurs IU-initially, it seems possible that it might serve a topicalizing function. Consider the following, excerpted from a discussion of masquerading traditions (7):

Iingalanek kawart's-kawiiluteng-kawirt'sluki. A'ia'ia.
Their eyes were red-red-they made them red. A'ia'ia.

Pet'am Old Year, angutguaq iterluni, uh, a'ia, taugna Old Year um, And then the Old Year, the old man would come in, uh, a'ia, that Old Year um,
atkusinaaneq aturluni, kesii caqit, iluat, imirluki, anglisinarluki.
he'd be dressed in a big garment, but with things inside it, to make it really big.

Pet'am New Year, um, New Year cali, atkugluku all white… And then the New Year, um, the New Year too, he'd be dressed in all white…

(2016 fieldwork)

Here, pet'am serves to move the flow of discourse from the traditions surrounding the Old Year in the masquerade to the traditions surrounding the New Year, using a parallel Pet'am…structure to do so. This can be seen as analogous to English, where, as the translations exemplify, And then... often serves a similar function.

Of the 11 tokens of staupi, 9 have a purposive function, meaning roughly 'so that' (8):

Nuuyanka, purple shampoo-nek aturtaanka.
My hair, I use purple shampoo on it.

Staupi, uh–uh, cestun a’i? So that, uh–uh, how do you say it?
Yellow-ningut, you know. So they weren’t yellow, you know.

(2016 fieldwork)

As in Russian, the subordinate clause following the purposive instances of staupi is in the past tense (here, yellow-ningut). This is the case for every purposive token of staupi.

The remaining 2 tokens of staupi function as complementizers, meaning approximately "that" (see Example 2). As is evident in this example, and as I will discuss further in the next section, the prosodic position of the complementizer tokens of staupi is different from the position of the subordinating, purposive tokens of staupi.

5.2 The Prosodic Patterning of pet'am
In general, *pet'am* tends to occur near the beginning of the second coordinate clause or noun phrase. Of the 43 examples of *pet'am–pet'a*, 33 occur nearer to the beginning of the second clause or noun phrase than to the end of the first clause or noun phrase. Twenty of these 33 tokens occur either IU-initially in the second clause or immediately before the second clause in a separate IU. The remaining 13 occur near the beginning of the IU, usually after a noun phrase. These 33 tokens of *pet'am* are roughly evenly split between being prosodically offset from the clause or noun phrase (9) or conjoined to it (10), with 18 being offset and 15 being conjoined:

(9) New Year cali, (H) atkugluku all white, um, suic'kaanek aturluteng. (H) uh taugna New Year guard-rluku… (H) uh they'd guard that New Year… (2016 fieldwork)

(10) Ciqlluam canianun, aipa aqum’tnguarluku. (H) *Pet'am* aipa cali canianun aqumluku, staupi katan’linguq. (Alutiiq Museum archives: AM470_177)

Four out of the 7 noun phrase-coordinating tokens of *pet'am* occurred immediately before the second noun phrase. Of these 4 tokens, 3 were prosodically conjoined to the second noun phrase (11):

(11) Kenai uh, ferry-gun agkut uh, Homer-men, ((hand pulse)) (Hx) (Hx) (2016 fieldwork)

Gaze and gesture also align with the prosodic patterning of *pet'am*. When *pet'am* is conjoined to the second noun phrase, as in (11), there is no gaze shift surrounding it. Additionally, in (11), the speaker uses gesture to iconically represent the spatiotemporal relationship between Homer and Kenai, pulsing once on *pet'am* and then smoothly, immediately moving laterally to pulse again on Kenai. This continuity of gesture mirrors the prosodic integration of *pet'am* with the second coordinated noun phrase, Kenai, as does the lack of a gaze shift.

In contrast, when *pet'am* coordinates two clauses and is prosodically offset from the second clause, the speaker's gaze shifts upwards on *pet'am* (12):

(12) ((gazing to the left)) Uh, hospital taatarngapiarluni, Uh, because the hospital was really full,
As mentioned previously, when pet'am coordinates clauses, it may also occur inside the second clause, usually after a clause-initial noun phrase such as wiinga ('her husband'), taugum ('that one'), or arnat ('the women'). It may also occur after a clause-initial coordinator such as awa'i ('now; and then') or tawaken ('after that'; 'because of that'), after a locative construction such as gwani ('here'), or after a clause such as aglutek ('they two went'). All 13 of these clause-internal examples are uttered by Clyda, and they comprise roughly half of her 25 tokens of pet'am–pet'a. Six are prosodically conjoined to the rest of the clause, while 7 are prosodically offset.

Noun phrase-coordinating pet'am–pet'a tokens can also occur midway between noun phrases rather than being closer to the second noun phrase (13):

(13) Uh,
tawa'i, (H)
brother,
brother [first name], (H)
[last name],
angagpallerpet.
(.)
Pet'am,
(.)
uyuraa [first name],
(Hx)(H)
alqallerpet,
tawa'i.

Alternately, noun phrase-coordinating pet'am–pet'a tokens may occur closer to–or even within the same IU as–the first noun phrase (14):

(14) Brother k'sakaqa, b-
-annargapgpet pet'am,
(H)
alqagpapet.

I have one brother, b-
your older brother and then,
(H)
your older sister.

(Alutiiq Museum archives: AM470_177)

There is also one instance of a clause-coordinating pet'am–pet'a token occurring IU-
finally after the second clause (15):

(15) Allrilumek peipingluni,
June month,
taugna tuqusagluni pet'am.

She had one baby,
June month,
and then she passed away.

(Alutiiq Museum archives: AM470_177)
5.3 The Prosodic Patterning of staupi

Like peta'm, staupi tends to immediately precede the second clause, but only when it is used as a subordinating conjunction. Eight out of the 9 tokens of staupi that function as subordinating conjunctions immediately precede the second, subordinate clause. Out of these 7 tokens, 4 are prosodically offset from the subordinate clause, as in Example 8. The remaining three subordinating staupi tokens that precede the subordinate clause are prosodically conjoined to it, occurring in the same IU (16):

(16) [Name]-rem ag'uusqaanga, (H)  staupi su’ut ikani,  agayuwik,  agayutet,  an’skait you know.  [Name] wants me to go, (H)  so people there,  the church,  the icons,  they got them out you know.  (2016 fieldwork)

In addition to the 8/9 subordinating conjunctions that immediately precede the subordinate clause, there is also one instance of staupi that occurs inside the subordinate clause within the same IU (17):


Because there are only two tokens of staupi functioning as a complementizer, and because both of those tokens were uttered by the same speaker (Sophie), it is difficult to make generalizations about the prosodic patterning of complementizer staupi. However, both of these two complementizer tokens occurred immediately after the matrix clause. One of them was prosodically offset from the matrix clause, and the other was prosodically conjoined to the matrix clause.

From this limited data, it appears that the prosodic patterning of staupi is similar to that of чтобы with respect to syntactic function: they both occur immediately before the subordinate clause when they serve a subordinating, purposive function, but when they are used as complementizers, they may occur in other positions. Specifically, complementizer чтобы occurs once IU-medially within the complementizer clause, and once IU-medially between the matrix and subordinate clause, while complementizer staupi occurs twice immediately after the matrix clause. Additionally, this complementizer function is rare for both staupi and чтобы.

6. Discussion

Taking into account phonological form, syntactic function, and prosodic patterning, staupi and pet'am generally behave similarly to their Russian counterparts. This similarity is likely to be due in part to the recency of the borrowing of staupi and pet'am from
Russian. However, *staupi* and *pet'am* are more similar to чтобы и потом in some respects than in others. While the vowel quality of *pet'am* and *staupi* differs from that of чтобы и потом, and *pet'am* is often reduced in the speech of one Elder to *pet'a*, the syntactic functions and prosodic patterning of *staupi* and *pet'am* adhere closely to that of чтобы и потом.

Two especially striking similarities are the use of past tense in the subordinate clause with both subordinative *staupi* and subordinative чтобы, and the preservation of the prosodic alternation of *staupi* when it is used as a subordinating conjunction versus when it is used as a complementizer. These similarities suggest that the phonological form of loanwords may change at a faster rate than their syntactic functions and prosodic patterning, which may be due to the relative inflexibility of phonological systems as opposed to syntactic and prosodic ones.

References


Drabek, A. 2012. Liitukut sugpiaqtun (We are learning how to be real people): Exploring Kodiak Alutiiq literature through core values. University of Alaska, Fairbanks: PhD Dissertation.


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