

Abstract

Unangam tunuu is on the verge of extinction. If a new generation of speakers does not emerge soon, the Aleut language will fade away. There are fewer than 100 proficient speakers today. Aleutian Pribilof Islands Association, Inc. (APIA) will partner with Thornton Media, Inc. (TMI) to develop two mobile apps teaching Unangam tunuu in both Eastern and Western dialects. The apps will serve to revitalize interest and increase the number of low-novice speakers in the language. This project will give Unangan/Unangas (Aleuts) an approachable and effective way learn their traditional language.

Communities in the Aleut region have long felt the effects of a fading cultural identity. Intuitive language and culture apps will help to rejuvenate Unangam tunuu and create of a pool of novice level speakers. The intended audience are the Unangax people, with enhanced focus on youth who use mobile apps on a regular basis.

Specific program activities include the hiring of Unangam tunuu advisors who will create a list of 500 phrases in each dialect and who will work with Thornton Media, Inc. to select historical images with descriptions, record 10 traditional songs with written lyrics in each dialect, and record a short video in each dialect.

Thornton Media, Inc. consultants will travel to the Aleutian Islands to gather culturally relevant photos of our community members, the environment our region, and to record additional speakers. All of the material will be reviewed and edited by the Unangam tunuu advisors. The final versions will be used to create and publish the Unangam tunuu apps in the Eastern and Western dialects in iOS and Android platforms for publication.

The objectives are to produce and distribute smartphone apps teaching Eastern and Western dialects of Unangam tunuu on iTunes and Google Play platforms, and to form and execute an advertising campaign to increase awareness of apps to Aleut tribal members and others.

Intended benefits include greater connection with Aleut culture and preservation of an endangered language. Intended benefits of behavior are more people feeling comfortable speaking Unangam tunuu in social and professional settings, and displaying public pride in having the capability to speak the ancient tongue of Unangax ancestors.

Results will be an increase in the number of fluent Unangam tunuu speakers and modern techniques for learning an ancient language.

Executive Summary: Unangam tunuu (the Aleut language) is highly endangered. With fewer than 100 fluent speakers, the indigenous Aleut language faces virtual extinction within a generation if youth don't take an active interest in preserving the voice of their culture. Frequent in person language instruction is effective, but can be cost prohibitive in the remote Aleutian region of Alaska. Current language materials are in increasingly outdated formats such as audio cassette, CD, and VHS. Pew Research estimates 90% of 18-49 year olds in the US own a smartphone. Observations in travel throughout the region support this estimate. The Aleutian Pribilof Islands Association, Inc. (APIA) will revitalize and increase interest in the Unangam tunuu by developing and marketing an intuitive smartphone app to teach basic vocabulary and usage.

Statement of Need

Population Profile

Roughly 9,100 people are dispersed throughout thirteen communities in the Aleutians/Pribilofs, of which 3,531 are enrolled members of thirteen tribes located within the region (BIA, 2014). Aleuts (Unangax) also reside in other towns or villages within Alaska, as well as other states and countries. Over half of the APIA service population live in Anchorage. In addition, each community represented by the agency has a local APIA office with staff employed to deliver services to members.

Location

The Aleutian Pribilof Islands region encompasses a diverse group of islands and the west end of the Alaska Peninsula in southwest Alaska. The area spans approximately 100,000 square miles across the Aleutian Chain and Pribilof Islands, an area larger than the state of Oregon. Bordered by the Bering Sea to the north and the Pacific Ocean to the south, the region is known for high winds and rough seas. The Aleutian and Pribilof Islands are the traditional lands of the Aleut people. The region spans such a large geographic area that providing services, such as Unangam tunuu instruction, through creative means a necessity.

Economy

Unangax people traditionally relied heavily upon a maritime environment wealthy in fish (salmon, halibut, cod), sea mammals (seals, sea otter, sea lion, and whales), and birds (cormorants, puffins, ducks, and geese). Today, Unangax people commercial fish; work for village, tribal, or government organizations (local, state, or federal), work in the tourism industry, live a subsistence lifestyle, or some combination of the above.

Cost of living in the region is high. Communities are accessible only by sea or air, often with only one air transportation carrier. Roundtrip airfare between Anchorage and the region can exceed \$1,200. Air travel between communities may involve connecting through Anchorage. Prices for consumer goods in rural areas are often double or triple the cost of the same items purchased in Anchorage. Basic products like milk are over \$6 for a half gallon. Gasoline or home heating oil can be in excess of \$10 per gallon. These inflated costs are always factor when delivering services to the region.

Education Levels

Across the Aleutians, 82.9% of those above 25 years old are high school graduates or higher and 14.4% have a Bachelor's degree or higher.

Culture

Culture plays a large part of everyday life for Aleuts in the region. Aleuts have lived in the Aleutian Islands for at least 10,000 years. The Unangax people lived in semi-subterranean dwellings with walls and roof made of driftwood or whale ribs, covered with grass and then insulated with dirt. Traditionally Unangax women made clothing from sea mammal hides or intestines (rain coats) and wove fine baskets from beach grass; whereas Unangax men utilized skin-on-frame sea kayaks for fishing, hunting, and protecting the community.

Today, the Unangax culture is carried on by culture camps, week-long events in which elders teach youth traditional skills such as language, dance, drumming, subsistence foods, kayak construction, basket weaving, skin sewing, and beading. June 2017 will mark the 10th annual Urban Unangax Culture Camp organized and hosted by the Cultural Heritage Department at APIA's Anchorage headquarters. The camp naturally increases awareness and access to Native culture and art through the activities offered. Camp participation has grown from under 100 in the first year to 230 adults and children in 2016. The camp has gained international attention as well. The Canadian Department of Foreign Affairs featured the camp in a short 2015 documentary as an example of best practices of a project preserving and promoting traditional ways of life.

Aleut Heritage Library and Archive

In 1998 APIA formally established the Cultural Heritage Department (CHD) in recognition of the critical role that culture plays in the wellbeing of our people. The Aleut Heritage Library and Archive (AHLA) was formed within CHD shortly thereafter and is a fortunate recipient of IMLS Native American Library Services, Basic Grant funding. The AHLA is located on the first floor of our Anchorage headquarters. Library space spans multiple areas such as the art studio and archives. The AHLA is staffed by APIA's Cultural Heritage Director, Cultural Heritage Coordinator, and two (2) part-time Library Technicians. The hours of operation are Monday-Friday from 8 am to 4:30 pm. On occasion, the AHLA is opened during the evening for community classes, events, and workshops (e.g., language, dancing, drumming, sewing, and weaving).

AHLA houses various types of literature, audio-visual, and archival material including: WWII Evacuation and Repatriation documents, photos, slides, audio and videotape; Lydia T. Black Research archival documents; Aleut language material and resources including audio and video recordings; Oral History documentation including audio and video recordings; photographs and photographic slides of APIA regional communities; text, including anthropological papers, dissertations, thesis', class lecture notes, research notes, research materials and correspondence; books; reference materials; maps; archaeological artifacts donated to APIA; ethnographic items donated to and purchased by APIA; museum NAGPRA Inventory files; APIA newsletter archives; and vertical files with miscellaneous content (APIA community member obituaries, documents on cultural and historic events, newsletters, newspapers, etc.).

Current State of Unangam tunuu

Today, *Unangam Tunuu* has retained two major dialects that have fluent Elder speakers. The Eastern Dialect, or *Unangan*, has 45 fluent speakers; the Western Dialect, or *Unangas*, has 46 fluent speakers (please see Figure 1 which delineates locations of Western and Eastern language dialects). The table below, prepared from work by Dr. Michael Krauss of the Alaska Native Language Center and survey work performed by APIA, the Atka IRA Council, and the Aleut Community of St. Paul Island in 2009 through 2016, demonstrates that since 1980 when there were 700 fluent *Unangam tunuu* speakers, fluency has rapidly declined to just 91 speakers today.

This represents a staggering loss of 87% in 37 years of those fluent in Unangam tunuu and demonstrates that if the region does not move NOW to engage new learners, the language will be all but lost to the next generation!

Table of # of Fluent Elder Speakers			
Year	Source	Number of Fluent Speakers	Loss
1980	A	700	
1984	A	340	360
2009	B	146	194
2012	B	109	37
2014	B	97	12
2016	B	91	6
Total Loss			609
Percent Loss			87%
A	<i>Dr. Michael Krauss, Alaska Native Language Center</i>		
B	<i>APIA Language Surveys</i>		

Historically, there were over 25,000 fluent language speakers, but the number of speakers declined shortly after Russian and European explorers arrived in the region in 1741 (Veniaminov, [1830] 1984, p. 246). By 1820 the population had been reduced to 1,474. In the 20th century, people wrote about the “inevitable extinction” of Unangax traditions: “traditional skills have passed from the picture of contemporary Aleut life” (Shapsnikoff & Hudson, 1973, pp. 43-48). According to a list compiled by local Tribal Councils in 2014, there are currently fewer than 100 speakers, many of whom are in their 70s and 80s. Only eight fluent speakers are also proficient at reading and writing Unangam tunuu. Three of these eight have been identified and will be heavily involved in this project. The fourth member of the speaker team is under recruitment.

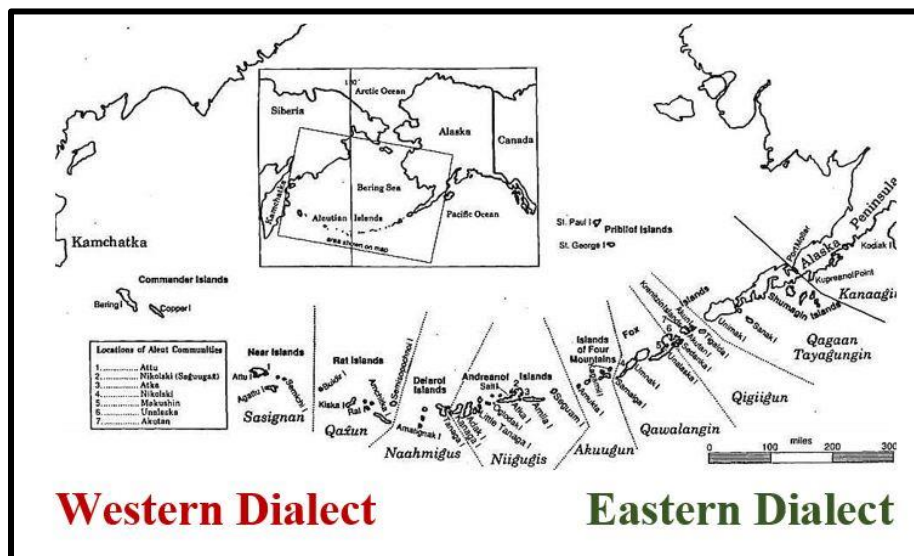


Figure 1 Western & Eastern Language Dialects (www.alaskool.org)

Unangax are passionate about learning Unangam tunuu:

I am Kdam Idigaa, aka Crystal (Swetsof) Dushkin, from Atka, Alaska. My mother Sally (Snigaroff) Swetsof was born and raised here, as was her mother, Clara Snigaroff, before her, and her father before her, etc. I grew up hearing our beautiful language in our home, spoken by my mom, my Gram and other family; it was always an integral, organic part of my childhood environment. Alas, while I have always heard our language spoken around me, as a child it was not spoken to me and so I can understand it but did not grow up speaking it. I am like so many others who are passionate about my language, have a heart-felt desire to speak it, and have made many efforts over the years to do so. (Dushkin, 2016).

Existing language delivery options of instruction in Unangam tunuu include traditional face-to-face instruction, book and CD (such as *How the Atkans Talk* by Anna Berge and Moses Dirks), cassette tapes, online digitized resources (e.g., Glossary of Unangam tunuu at www.apiai.org), and VHS tapes. The number of people who have devices to play CDs, cassette tapes or VHS tapes has declined significantly over the past ten years. There is a growing population of younger Aleuts who use mobile devices (smart phones, tablets) and want to learn how to speak their traditional language and find current methods and material dated and unappealing. The current approach of Unangam tunuu instruction is out of date and behind the technology trend. This project is intended to reverse that trend.

Assessment

In May 2015, the Aleut Heritage Library and Archive surveyed participants of Aleut-L ListServ, an email list-serve hosted by the University of Alaska Anchorage intended to facilitate exchange among people interested in history and culture of the Aleut people. When asked to rate the importance of making Unangam tunuu available online, 88% gave the response “very important.” Wi-fi and internet access is available and affordable throughout Aleutian communities, albeit a little slower than urban areas.

Tribal councils assessed the number of fluent speakers in 2011, identifying 125 people, but that number has fallen to 91. This number will be used as baseline data to assess any changes in the near future. Many scholarly research articles have been published concerning the effectiveness of language apps in rejuvenating indigenous languages. For example, Begay (2013) reported the results summarized in the table below:

Authors	Year	Area	Age	Results
Kim	2008	Latin America	9 - 13	“Interesting, fun, easy to use”
Kim	2008	Latin America	9 – 13	Jump start on reading proficiency
Godwin-Jones	2011	Global	n/a	Smartphones Proven Game-Changer
Begay	2013	Navajo	Youth	Apps an “Effective and Successful Way to Engage the Youth” (p. 80).

Begay stated that mobile apps are a “type of technology that youth are more inclined to using,” but also encouraged the inclusion of traditional face-to-face language instruction. Thus, we believe that the development of language apps in Western and Eastern dialects is an important element in meeting the needs of the target audience. To our knowledge, this would be the first mobile app focused on language instruction funded by IMLS.

1. Project Design

Project Goals

- Increase the number of novice-low speakers according to the ACTFL (American Council on the Teaching of Foreign Languages) proficiency guidelines.
- Revitalize interest among Unangax youth to learn the language of their ancestors.

Objectives

- Produce and distribute smartphone apps teaching Eastern and Western dialects of Unangam tunuu on iTunes and Google Play platforms.
- Form and execute an advertising campaign to increase awareness of apps to Aleut tribal members and others.

Activities

- Engage fluent or proficient Aleut speakers and potential users for input
- Retain Thornton Media, Inc. (TMI) to assist in the creation of the language apps
- Collect audio recordings, photographs, and video of language and related content
- Create and review prototypes of the language apps
- Revise and publish apps
- Design and execute awareness campaign to increase distribution and usage of apps
- Travel to six Aleutian communities to introduce app
- Culture Camp breakout session to assess app
- Observe and record download and usage data of apps
- Assess number of novice-low speakers on ACTFL scale
- Report findings to IMLS, Board of Directors, tribal communities, and other stakeholders
- Share lessons learned and best practices with other Alaska Native and American Indian groups

The project is designed to enhance the learning of Unangam tunuu, particularly among younger Aleuts living in rural and metropolitan areas who use mobile apps on a regular basis. AHLA has been involved with a language program entitled “Where Are My Keys?” that has provided access to both proficient Unangam tunuu speakers and those wishing to learn. These resources will be leveraged in producing the mobile apps. The AHLA staff, four Unangam tunuu Advisors, Thornton Media, Inc. (TMI), 25 youth and young adults in the Unangax Dance Group and willing speakers in the community will be involved with content creation and product testing throughout the project period.

IMLS staff and proficient speakers will create a 500-entry word and phrase list with Unangam tunuu spelling, as well as curating 10 songs, 50 historical images, and a five-minute video of Unangax cultural activities for a Cultural Notes section of the app. Once the entry list is created, Thornton Media Inc (TMI) will travel to one of the ten Aleutian communities served by AHLA to take over 100 custom photographs for use in the apps. These photographs will be of two types: Home page photographs such as full body images of tribal members in modern and traditional regalia; and entry photographs depicting images related to the words. For example, if the Unangax word is “Aang!” there will be a photograph or drawing related to “Hello!” When the photographs are complete, TMI will record audio of the Unangam tunuu speakers. Application programming will follow and result in a draft app. The APIA team will have a minimum of 30 days to review and make edits before the apps are published to iTunes and Google Play stores.

This project proposes no deviation from accepted practices. Project test procedures will be TMI creating a prototype language app which will be tested and viewed by Unangax language experts who will provide feedback. If any improvements or editing needs to be made, the Project Director will work with TMI to make certain that the needed changes are accomplished.

About Thornton Media, Inc. (TMI)

Thornton Media, Inc. (TMI) has been creating indigenous language apps for over two decades. Don (Cherokee) founded Thornton Media in 1995 and has since worked with more than 200 tribes and First Nations creating custom language tools. TMI's mission is to bring the "latest and most useful language revitalization technology to Indian Country to make learning FUN!" An Excerpt from the TMI working guide (attached):

"We have simplified the process of building a language app for clients. Using our '4-Step Process' we can build a highly customized language learning app in just one visit to your community. This page is a quick overview what we need from the client to build an app.

*You will select a **list of 500 entries** (words/phrases) to go onto your app. We must have this list 30 days in advance in order to schedule our 4-Day On-site visit. We will provide you a sample "500" list if requested. The client is responsible for language knowledge.*

*Please also assemble and email us your **Culture Notes** materials at least 2 weeks before we arrive. They consist of:*

- 1) 50 Historical Images (with descriptions)*
- 2) 10 songs (audio with written lyrics)*
- 3) 1 video (not to exceed 6 minutes)*

4-Day Onsite Schedule

1st Day - Photo Day (all photos will be taken today)

2nd Day - Recording Day (usually takes 1 or 2 days)

3rd Day - Programming

4th Day - Programming

*Our first day at your location is usually a Monday (**Photo Day**). We will arrive at 8:00 am to set up a photo backdrop and will be ready to begin shooting at 9:00 am. Please stagger the arrival of the photo subjects. We require the presence of a staff member whenever community members (especially minors) are present.*

We will need two rooms during our visit:

- 1) Photo Room (to set up a photo backdrop with lights on Day 1)*
- 2) Recording Room (a quiet place to record your language beginning Day 2)*

Please provide community members for these two types of photos:

- 1) Home Page Photos – 4 community members (full-body shots, often in regalia)*
- 2) Entry Photos – 100+ images to be used as entries within the app itself.*

The Categories we most commonly shoot Entry Photos for are:

- Family / Kinship (My Grandmother, My Grandfather)*
- Body Parts (My eyes, My arm)*
- Eating (I am hungry, Give me the beans)*
- Survival Phrases (What is your name? Say it again please)*

*Thornton Media retains **no ownership** over any cultural materials supplied for your app. Download and review any of the following apps from the App Store: Maskwacis Cree, Tolowa Dee-Ni, Speak Oneida, Mvskoke Creek, Tsuut'ina, Arikara, Chinuk Wawa.”*

3. Impact

Performance Goal

The goal is to revitalize interest in Unangax language and culture and to increase the number of Unangam tunuu speakers.

Results and Benefits

We believe the potential benefits greatly outweigh any risk in this project. Benefits include greater connection with Aleut culture and preservation of an endangered language. The greatest risk is the apps failing to be downloaded and utilized. Other expected results of the project include:

- Promotion of the community image of AHLA as a bridge between underserved rural communities and urban areas.
- Promotion of AHLA, Native American Library Services, and the Institute of Museum and Library Services as strong community anchors that enhance cultural opportunities in the APIA region.
- Making language, cultural, and historical information more accessible to a wider, more diverse population in remote regions.

Performance indicators will be measured through a task based assessment. A breakout group of the target audience at the annual Urban Unangax Culture Camp will take a pre-survey to gauge their proficiency and desire to learn Unangam tunuu (UT) on a scale of 1-5. Metrics will include the likelihood of using the app and likelihood to recommend to a friend, among others. In addition, in person and on-line surveys will be provided to users and community stake holders to record any positive impact (comprehension/enthusiasm about learning/pronunciation) on their language skills and average time spent using the app.

5. Communications Plan

The intended audience is Unangax youth and community members interested in learning the Aleut language and culture. We will reach the audience through an awareness campaign across multiple platforms and locations. We will collaborate with Unangam tunuu speakers and community members mentioned in the Project Design section to create the best product possible and maintain contact throughout the project to solicit possible improvements. Audience engagement will be measured by the number of stakeholders who participate in the design of the apps as well as the number of app downloads and user feedback.

APIA has established relationships and avenues of communication in the Aleutian region. Potential means for the awareness campaign include tribal and village corporation meetings, flyers on community bulletin boards, emails to tribal members, social media posts, APIA website, posters, and local radio spots. Locations will include Unangax culture camps in the Aleutian Islands (Atka, Unalaska, and Akutan); the Pribilof Islands (St. Paul and St. George); the Shumagin Islands (Sand Point); the Alaska Peninsula (King Cove; Cold Bay); and South Central Alaska (Urban Unangax; Alaska Native Heritage Center), as well as regular meetings and outreach efforts in Anchorage and the region.

Staff assignments for outreach, promotion, and dissemination will include all of the staff in the Cultural Heritage Department. Other departments within APIA will also advertise app availability during outreach efforts. Our plans for technical documentation will include any recommended by TMI. Success stories and lessons learned through this project will be made available on the APIA website and social media.

The project director will travel to at least five communities in the region to market the apps. Unalaska, Akutan, King Cove, Sand Point, and False Pass are all home to tribes for whom APIA receives represents for the IMLS Basic grant. The project director (PD) will meet with the tribal council in each community to introduce the app and demonstrate its functionality. The PD will also show the app at any community events taking place during her visit.

6. Sustainability

The annual user fee will be supported by APIA's administrative budget. Benefits of language and culture revitalization will continue far beyond the grant period. We anticipate the apps will be very popular during and after the grant period and will remain available on iTunes and for Androids as long as they are compatible with the operating systems. APIA will seek partners and new funding for updates and expansion beyond the IMLS grant period.

These language apps will lead to significant systematic change within APIA and AHLA by modernizing outreach efforts. AHLA staff will continue to get the word out that the language apps are available. Copies of the language apps will be filed in the Aleut Heritage Library and Archive. Copies of the digital recordings, digital photographs, and digital videos will also be archived at AHLA.

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