

PRODUCING A TIMUCUA GRAMMAR FROM A CORPUS OF COLONIAL SPANISH MATERIAL

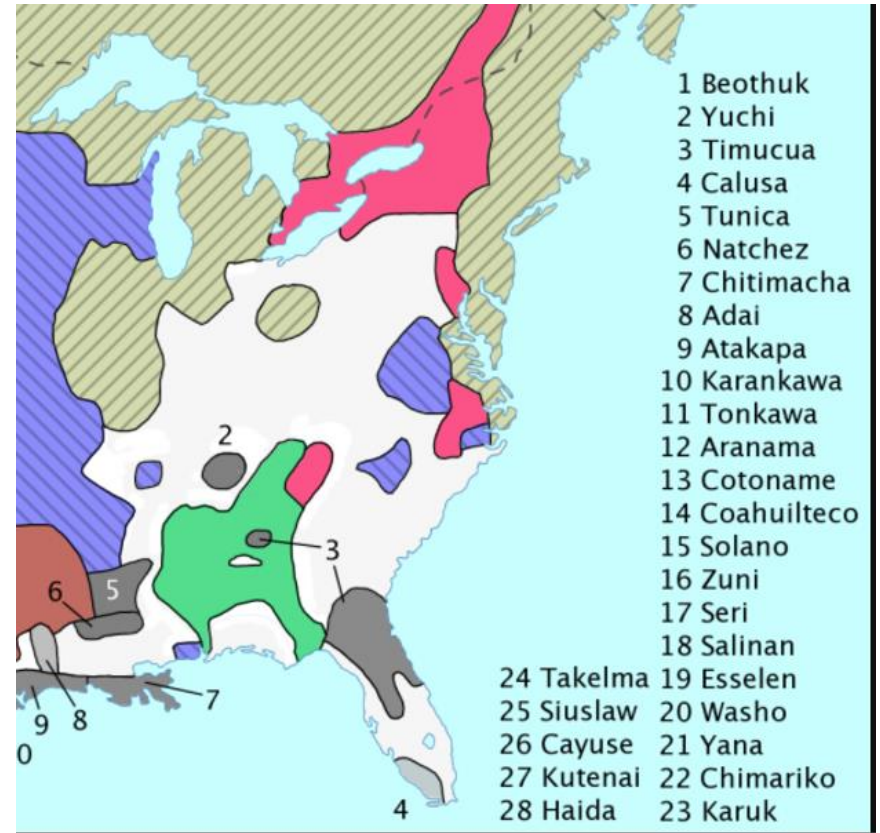
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THE TIMUCUA PEOPLE

- The Native people of most of North Central and Northeast Florida were the Timucua. Archaeologists estimate perhaps 100,000 people at the time of contact with Europeans (in the early 16th century).
- Due to war, disease, enslavement, and out-migration, the population fell drastically after about 1660.
- At the time of the Spanish departure from Florida (1763), there were about 200 Timucua people left, and they went with the Spanish to Havana, Cuba. Their descendants are probably still alive in Florida and Cuba, but Timucua no longer exists as a distinct tribal group.



EASTERN US NATIVE LANGUAGES



SIGNIFICANCE IN REGIONAL CONTEXT

Timucua is a language isolate. The dates of its attestation (1612-1688) put its documentation about 200 years before any other language of the Southeastern US.

Its range was adjacent to the Muskogean languages (Choctaw, Chickasaw, Creek, etc.)

Timucua shows many grammatical similarities to Muskogean. There are some possible cognates, but there is no well-established linguistic relationship. Similarities include

- Long agglutinative verbs with agreement for core and applicative arguments
- Switch-reference morphology

Are these similarities due to genetic relationship or to contact between the two groups?

TIMUCUA LANGUAGE AND LITERACY

- Franciscans began conversion and translation efforts in 1595. These included schools and instruction in literacy.
- Two priests, Francisco Pareja and Gregorio de Movilla produced
 - An *arte*, five catechisms, confessional, doctrina (other materials, including perhaps a dictionary has been lost).
 - Dates of publication 1612-1635. Published in Mexico City.
- There are also two letters written in the language, written by native speakers. They date from 1651 & 1688.
- In total there are about 2000 pages of bilingual Timucua-Spanish text.

STUDYING THE TIMUCUA LANGUAGE

- There is no reliable dictionary of the language. The *Arte* gives meanings for about 400 words, but the texts contain at least 2500 more, and the meanings have to be deduced from context.
- My method has been to build a database of Timucua texts. Currently the database contains 148,000 words, which contains all extant Timucua language text.
- (Thanks to a team of graduate and undergraduate students at Univ of Florida who worked for three years on transcribing all this material!)

1613 CONFESIONARIO

Confessionario, en lengua



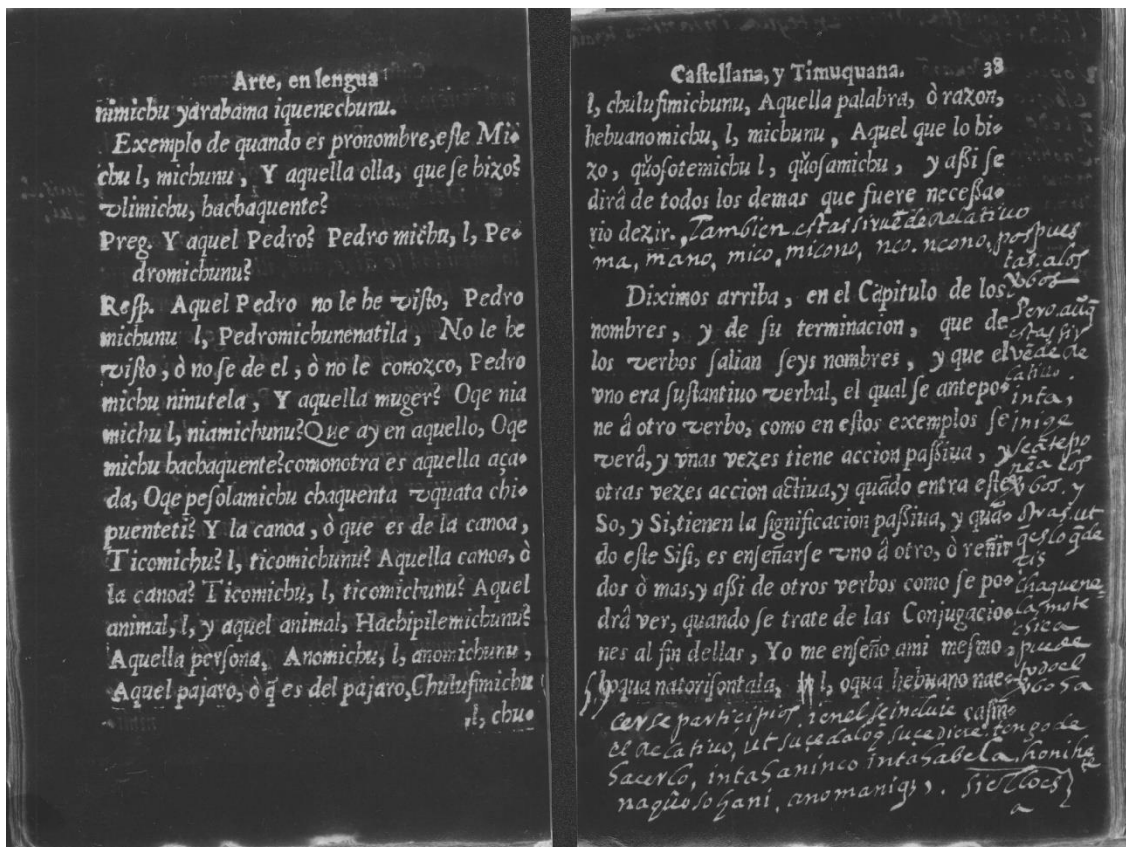
PREGUNTAS ANTES DE ENTRAR EN LA CONFESION.

P. Confessastete la Quaresma passada?
 R. Si dize que no, pues agora te confessaras, de todo lo del año pasado, y de este, y q̄daras libre de essa carga.
 P. Quetaneo a que te confessaste?
 P. Quaresma yo qua nupirama orobinibicho?
 R. Quenele heqeno iniheti ynino ynemi andaqua yninomate caq̄eroma yniheti ynino y nemima orobinta quosotachibalu hauele.
 P. Heq̄ bichi toomo puena orobini bicho?
 P. Cum.

Castellana, y Timuquana: 118

P. Cumpliste la penitencia de la cōfesion pasada?
 Si dize, que no, Pues cumplela.
 P. Por ventura dixote el confessor que restuyeses alguna cosa hurtada, y no la boluiste a su dueño?
 Si dize, no. Pues as lo de restituyr quando pudieros.
 P. Por ventura auias de restituyr la honrra a alguna persona, y no la has restituydo?
 Si dize que no. Pues as lo de restituyr para quedar libre de pecado.
 P. Oluidofete alguna
 P. Atichicoso orobini no inta nabalunu caq̄nta nabaluhachemonta nōco napicha sobicho?
 Napicha so hachehāni no lebitila.
 P. Hachi bueno nūque bilettechiqua hamiman coqua farisosi hache y timileno chimasiq̄ chifaribitilehecomobi?
 Quenele chiyatehāni maq̄na hamimācoqua farisosi hache.
 P. Anoco ynocoletani ma nūque sinochumofota hebuate chiqua canimala natenimani si chimasimoq̄ tachimobitile hecomobi?
 Quenele faritacanimobila natenimani si mo hache namota chibalu habele.
 P. Andaqua orobinima

1614 ARTE



STUDYING TIMUCUA FROM A CORPUS

- The corpus is analyzed in the Fieldworks program which allows a research to find all instances of particular sequence in Timucua or Spanish.
- Fieldworks also helps ensure consistency in analysis by remembering previous word analyses.
- Because we work as a team of linguists, the ability to share and synchronize this database has been quite important in our workflow.

THE TIMUCUA LANGUAGE PROJECT AT UNIVERSITY OF FLORIDA

- Our current Timucua dictionary version is online at timucua.webonary.org
- The current dictionary has about 3900 entries.
- Our team updates this several times a year as we find new words, better examples, and correct errors.
- We are also working on producing
 - a grammar of the Timucua language
 - translations of Timucua texts

PROBLEMS FOR GRAMMATICAL DESCRIPTION FROM A COLONIAL CORPUS

1. Constructing literal translations
2. Confidence ranking for lexical and inflectional morphology
3. Genre and grammar
4. Linguistics and history

THE PROBLEM WITH TRANSLATIONS

- An early pitfall in analysis of the corpus is assuming that the Timucua is a translation of the Spanish printed next to it.
- Instead it is best to think of the two as parallel texts, expressing approximately the same meaning.
 - Nevertheless, the Timucua frequently adds or omits content relative to the Spanish
 - There are several types of discrepancies
 - Simple errors of translation or understanding.
 - Paraphrases in order to make the content more understandable to a Native audience.
 - “Edits” of parts of the Spanish that seemed (to the Spanish or to their Timucua collaborators) irrelevant or offensive to a Native audience.
 - Cases where the Spanish is a mere summary and the Timucua is a significant elaboration on the material.
- We can understand many such discrepancies if we recognize that Pareja and Movilla worked extensively with literate Native converts. These converts were probably assigned sections of the Spanish to translate, and the results thus reflect Native authors’ “edits” of the texts. [Dubcovsky and Broadwell 2017, Broadwell 2018]

TRANSLATION DISCREPANCIES 1

Timucua: Nimota uquata
ituhuta honosoma enesota
onaquosta, ituhuta iquenihale
manda bohobi cho?

**Literal translation of
Timucua:** Did you believe
"Taking horns and praying, I
will see the deer and by doing
this, I will pray and kill it"?

Conf, f130

Spanish: Para cazar algun
venado as tomado las hastas
de otro venado, as le rezado
la ceremonia de el Demonio.

Translation of Spanish: In order
to hunt some deer did you take
the antlers of another deer and
pray over them the Demon's
ceremony?

TRANSLATION DISCREPANCIES 2

Timucua: Numa hebuama
bimetaqe ituhuta
iposibicho?

**Literal translation of
Timucua:** When the
heavens spoke, did you
blow and pray to
extinguish it?

Conf, f150

Spanish: Tronando, as
soplado asta el Cielo para
detener el nublado o agua
con tus rezos malos?

**Translation of
Spanish:** Thundering, have
you blown toward the
heavens in order to stop
the *clouds or water* with
your *evil* prayers?

CONSTRUCTING LITERAL TRANSLATIONS

Thus an initial problem for linguistic analysis is that we cannot be sure that Spanish text corresponds to the correct literal translation.

Each sentence needs to be carefully checked for discrepancies, using the corpus to compare other sentences for similar lexical and grammatical items.

The grammatical analysis must (of course) be based on a literal translation, but in the early stages, it is not clear what that is. All the data provides is a Spanish counterpart which expresses a mostly similar content.

LESSONS LEARNED

The translation discrepancies found in Timucua are not unusual in colonial texts. Similar differences have been discussed extensively in the Nahuatl corpus by scholars like Louise Burkhart.

Based on our experience, we advise any other linguist working on similar corpora to be prepared for such discrepancies.

2. CONFIDENCE RANKING IN GRAMMATICAL AND LEXICAL DESCRIPTION

- Confidence ranking of entries:
 - Confident/Probable/Tentative/Dubious/Hapax Legomenon
 - High confidence items are explicitly glossed by Pareja or 10+ clear uses in texts.
- Explicit mention of the source text for lexical entries
- Approximate definitions (e.g. 'type of bird', 'unknown verb') for some entries

SAMPLE ENTRIES

A a

aba [aba] *v* injure oneself | *herirse* *yahinococomaqua abala*. He injured himself with his own axe. | *con la propia hacha se hirió* [Pareja 1614:22 10.1](#)
ebuasoma abala He injured himself with the oar | *Con el remo se dió* [Status: Probable]

abaco *v* unknown verb, usually with applicative na-. Based on surrounding context, it probably has a semantics like 'help, sustain, support'
[Status: Tentative]

abagala [abagala] *v* paddle | *chapotear, remar* *Ibi abagalata nayeno ticoma piluabe tileqe ibinaqe elota piluhauetila manda bohota elofibi cho?* When you paddled in the water, did you whistle at it so that the canoe would not turn over, believing 'If one whistles at the wave, it will not turn'? In passing with the canoe a rock ledge (*barra ó vaya*) and there being a surging of the sea, did you whistle at it for not getting upset? | *Atravesando con la canoa alguna barra o vaya y aviendo mareta as la silbado creyendo que no se bolcara assi?* [f131](#); [g1 1.1](#) [Status: Probable]

abaqua dial. var. of **habaqua** later, at that time

abati [abati] *adj* near? [Occurs only once, but contrasted with **vio** 'far'.][Status: Hapax Legomenon]

abay [abai] *n* unknown water animal (possibly manatee) | *animal de agua desconocido (quizás manatí)* *heca, ninapichibota sontela caqi, ibine oyoma, cuyu, inereqeine homama, arecota, vchuco, siacatoco, ytorico chayoco, aquatiro l cunachuaco, chayoco abayco, caracasico, tanitoco, echacaco tococo*. He provides them for us and made each fish in the water, the whale, the siacato, the alligator, the chayoco, the aquatiro or cunachua, the chayoco, the abay, the corvina, the tanito, the mullet, and the toco. [no corresponding Spanish] [Pareja 1627:f26v-27r 1.3](#)
Acuco, vtinale, aparota, naqua, mostachiqe, chapico, cuiuco, abayco acunaqua mosta [Fol 15v] hachiqe, moqe hachipileco, utinalamoqe. the moon is Utina, and therefore they worship it, they say, the idol, the fish, the abay, are all [gods] they believe; they say [there should be?] ceremonies, and they say that an animal is Utina. [Pareja 1627a:f013r-15v 1.24](#) [This animal appears on a list of creatures that live in the water. The quote that discusses idolatry lists fish and abay separately, suggesting that the abay is not a fish, but another kind of animal. Archaeological considerations suggest manatee as a possibility.](sem. domains: 1.6.1.5 - Water animals.) [Status: Confident]

LESSONS LEARNED

I've been involved in dictionary projects for four modern Native American languages. None involve this confidence ranking system.

[But perhaps this would be good idea.]

But for a language like Timucua with a closed corpus and no speakers, a dictionary which shows degree of confidence allows the linguist and the users to understand which entries can be stated with high levels of confidence and which cannot.

3 GRAMMAR AND GENRE

- The text corpus is far from uniform and has multiple genres, including at least instruction, interrogation, explanation, and narration.
- Different genres have different grammatical properties.
 - Confessional interrogation has a predominance of 2nd person singular interrogative sentences. (E.g. 'Did you confess on Lent?' 'Did you eat meat on Friday?')
 - Instruction has many 3rd person indefinite subjects (E.g. 'One must receive the sacrament', 'One must fast during Lent'). Catechistic response has multiple question/answer pairs (E.g. 'Why does one make the sign of the cross? One makes the sign of the cross to show...')
 - Explanation shows abundant usage of reason clauses ('Because pagans go to Hell when they die, I want to be a Christian')
 - Narrative is one of the smaller genres in the Timucua corpus, but displays some of the most interesting grammatical properties.

NARRATIVES IN THE TIMUCUA CORPUS

- The Timucua corpus has about 50 exempla. Exempla are a genre of Christian folktale, and usually involve miraculous appearances of the saints, the Virgin Mary, powers of the eucharist, etc.
- The corpus also contains a long narrative of the Creation which does not correspond to any Spanish translation.
- These narratives are particularly interesting linguistically in that they have multiple characters who speak and interact with each other. These are best texts for observing topic continuity, definite and indefinite reference, clause chaining, and switch-reference.
- The narratives also have a wider range of subject marking and tense possibilities than other genres.

TENSE AND GENRE

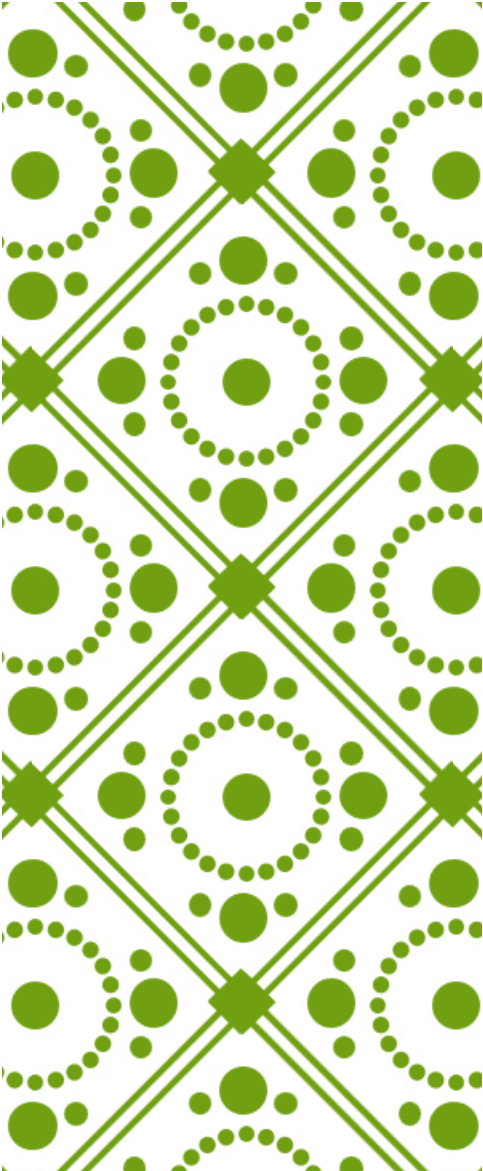
- Timucua appears to have the following tense system:
 - -te ‘default tense’ [present or past, depending on discourse context]
 - -bi ‘past’
 - -bile ‘prior past’
- However, the tenses have very different distributions in the corpus:
 - -te appears ca. 600 times
 - -bi appears ca. 2000 times
 - -bile appears ca 100 times
- Nearly all instances of –bile ‘prior past’ appear in narratives where events are described in temporal sequence. -bile appears on verbs that describe events prior to other past events.

LESSONS LEARNED

- When establishing a corpus, it is important to think about the different genres represented.
- Texts need to be tagged for genre so that the corpus can be filtered to compare properties of different genres (e.g. use of tenses/pronouns/definiteness in instruction vs narration)
- In early stages of corpus development, it is important to try to sample different genres. It is easy to form premature conclusions if the majority of the data comes from a single genre.

4. LINGUISTICS AND HISTORY

- The texts in the Timucua corpus are historical documents that reflect theological and political concerns of the 17th century.
- In particular, many of the texts involve content that is hard for most linguists to understand. These include
 - Theological debates about the nature of the eucharist
 - Latin prayers and references to papal indulgences and church law
 - Protests against mistreatment and arguments about land tenure
- In such cases, linguists need to rely on historians to help understand the content of the documents. I've collaborated extensively with
 - Alejandra Dubcovsky, Univ of California – Riverside Historian of colonial Spanish Florida
 - Timothy Johnson, Flager College Historian of 17th century Catholicism



Writing a grammar of a language based on a corpus of colonial texts requires a number of skills that are not in the standard “grammarian’s toolbox”.

These include

- Special attention to translation discrepancies and literal translations

- A need to recognize different levels of confidence in lexical and grammatical documentation

- A recognition of the importance of different genres in grammatical discovery, and the concomitant need to organize the corpus in a way that allows filters for genre.

- Understanding of the historical context in which the texts were created.

CONCLUSIONS

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REFERENCES

Adams, Lucien and Julien Vinson, eds. 1886. *Arte de la lengua timuquana, compuesto en 1614 por el padre Francisco Pareja, y publicado conforme al ejemplar original único*. Paris: Maisonneuve Frères et Ch. Leclerc.

Broadwell, George A. (2018). Shadow Authors: The Texts of the Earliest Indigenous Florida Writers. In *Franciscans and American Indians in Pan-Borderlands Perspective: Adaptation, Negotiation, and Resistance*, J. Burns, ed. Academy of American Franciscan History

Dubcovsky, Alejandra and George Aaron Broadwell. (2017). Writing Timucua: Recovering and Interrogating Indigenous Authorship. *Early American Studies* 15:409-441.

Gatschet, Albert. 1877. The Timucua language. *Proceedings of the American Philosophical Society* 16:1-17.

Gatschet, Albert. 1878. The Timucua language. *Proceedings of the American Philosophical Society* 17:490-504.

Gatschet, Albert. 1880. The Timucua language. *Proceedings of the American Philosophical Society* 18:465-502.

Granberry, Julian. 1993. *A Grammar and Dictionary of the Timucua Language*. Tuscaloosa, AL: University of Alabama Press.

Martin, Jack and Ann Reed. in preparation. edition of Pareja 1614. College of William and Mary Manuscript.

Milanich, Jerald and William Sturtevant. 1972. *Francisco Pareja 1613 Confessionario: A Documentary Source for Timucuan Ethnography*. Tallahassee, FL: Division of Archives, History, and Records Management, Florida Department of State.

Movilla, Gregorio de. 1635. *Explicacion de la Doctrina que compuso el cardenal Belarmino, por mandado del Señor Papa Clemente 8. Traducida en Lengua Florida: por el Padre Fr. Gregorio de Movilla*. Mexico: Imprenta de Iuan Ruyz.

REFERENCES

Pareja, Francisco. 1612a. *Cathecismo en lengua castellana, y Timuquana. En el qual se contiene lo que se les puede enseñar a los adultos que an de ser bautizados*. Mexico City: Impresa de la Viuda de Pedro Balli.

Pareja, Francisco. 1612b. *Catechismo y breve exposición de la doctrina christiana*. Mexico City: Casa de la viuda de Pedro Balli.

Pareja, Francisco. 1613. *Confessionario en lengua castellana y timuquana con unos consejos para animar al penitente*. Mexico City: Empronta de la viuda de Diego Lopez Daualos.

Pareja, Francisco. 1614. *Arte y Pronunciacion de la Lengua Timucvana y Castellana..* Mexico City: Empronta de Ioan Ruyz.

Worth, John E. 1992. *The Timucuan missions of Spanish Florida and the rebellion of 1656*. Ph.D. dissertation. (Gainesville, Fl). University of Florida.