

Seri voiced labial fricative:
the fate of a phoneme

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19th century Seri word lists (Hernández 1904; Marlett 2010)

- Ramírez & Lavandera list (1850) 11 words, highly unreliable
- Bartlett list (1852) [B] ~ 170 words
- Tenochio list (1860) [T] ~ 90 words
- Pinart list (1879) [Pt] ~ 600 words
- Peñafiel list (1885) [Pf] ~ 70 words
- Loustaunau list (1887 or 1885?) [L] ~ 250 words
- McGee list (1894) [Mc] ~ 200 words
- I am deeply grateful to Stephen Marlett for providing me with copies of the Bartlett and Pinart lists.

Modern Seri phonology: no /β/, /v/ or /w/!

p	t			k	k ^w			ʔ
φ	s	ʃ		x	x ^w	χ	χ ^w	
	ʈ							
m	n							
			j					
	(l)							
	(r)							
i		o						
ε		a						

19th century lists contain a sound written as <v> or

• Modern Seri	<i>áfox</i> 'star'	<i>itóaa</i> 'leg, foot'
• B	va-soh	i-tó-va
• T	bassojh	itoba
• Pt	vašox	ittovax
• Pf	Vashój	
• L	Vassoglh	Itobbaá
• Mc	ashshok	at tâa

Gursky 1988: 24-25

Se /ʔait/ (Moser und Moser), aʋat (Pinart), âv't (Bartlett). Offenbar ist in dem von Moser und Moser aufgezeichneten Seri-Dialekt ein intervokalisches -v- geschwunden, das in älteren Vokabularien, die wahrscheinlich andere Dialekte repräsentieren, noch erscheint. Vgl etwa ʔóee (Moser und Moser), ove (Pinart) baby, ʔii (Moser und Moser) bzw. hio (Pinart), îve (Bartlett) bzw. ib, ip (Pimentel) father, /ʔái/ (Moser Moser) mit avü (Pinart) und âve (Bartlett) wind, /ʔée/ (Moser und Moser) mit hevve (Pinart) bzw. ebe (Pimentel) hare, und /káay/ horse (Moser und Moser) mit der von Pinart aufgezeichneten Form kavai. Das letztere Beispiel ist dabei besonders überzeugend, da es sich ja offensichtlich um eine Entlehnung aus dem Spanischen (caballo) handelt. Der Verlust des intervokalisches -v- muß also eine verhältnismäßig rezente Entwicklung sein.

/β/ in loanwords

- *éenim* ‘metal, iron; knife’ ~ B *bé-no*, *bên-nom*; Pt *vennom*; L *Bennom* < O’odham *wainomi* ‘metal, knife’
- *káar* ‘sheep’ ~ Pt *kava* < Spanish *cabra* ‘goat’
- *káaj* ‘horse’ ~ Pt *kavai*; L *Cabay* < Spanish *caballo* ‘horse’
- *ifáajo* ‘Saturday’ ~ Pf *Shabayo* < Spanish *sábado* ‘Saturday’
- *tóo* ‘turkey’ ~ T *toobo*; Pt *touo*; L *Tobbo* < O’odham *tohwa* ‘turkey’
- *ʔáaonam* ‘hat’ ~ Pt *avonnam* < O’odham *wonami* ‘hat’
- *séaato* ‘goat’ ~ Pt *sivato*; L *Sibathectt* ‘ciervo’ < Spanish *chivato* ‘little goat’

Word-initially, $\beta > \emptyset$ or ?

- *ák* ‘canvasback (a kind of duck)’ ~ Pt **v**ak; L **B**ack
- *áfox*, pl. *áf+k* ‘star; planet’ ~ B **va**-soh; T **b**assojh; Pt **v**astlk, **va**šox-; Pf **V**ashój; L **V**assoglh
- *énim* ‘metal, iron; knife’ ~ B **b**é-no, **b**ên-nom; Pt **v**ennom; L **B**ennom
- *óot* ‘organ pipe cactus’ ~ Pt **b**ooxl
- *óot* ‘coyote’ ~ T **b**oot; Pt **v**ootth; L **B**ott
- *oták* ‘frog, toad’ ~ Pt **v**otak; L **B**otacc
- *áf* ~ *ʔáf* ‘what?, who?’ ~ Pt **va**š
- *ʔáaka* ‘white crucillo, lotebush’ ~ Pt **v**akka
- *ʔápχ^wt* ‘corn, maize’ ~ T **b**apute; Pt **v**apxoŋx; L **V**appoléj
- *ʔápχα* ‘cotton-tail rabbit’ ~ Pt **v**apx’a; L **B**apjáa
- *ʔámox* ‘Gambel’s quail’ ~ Pt **v**ammox
- *ʔáχ* ‘arrow point’ ~ Pt **v**ax’

Intervocally, $\beta > \emptyset$

- *inoʔjáapχ^wt* ‘forearm’ ~ Pt inoliavap’xa ‘muñeca’
- *káax^w* ‘seep willow’ ~ Pt kavax’x’ue
- *káar* ‘sheep’ ~ Pt kava
- *káj* ‘horse’ ~ Pt kavai; L Cabay
- *-itaʔáa*, pl. *-itaʔáax^w* ‘to buy’ ~ Pt sital’avaxx’o ‘comprar’; mesital’avaxx’o ‘vender’
- *íikp -áanim* ‘to forget’ ~ Pt ikpex’avannom
- *ifáajo* ‘Saturday’ ~ Pf Shabayo
- *tóo* ‘turkey’ ~ T toobo; Pt touo; L Tobbo
- *ʔéen* ‘cow; cattle’ ~ B é-ven; Pt hevv’en; L Eheveen
- *χéen* ‘raccoon’ ~ Pt xevven; L Jeveen
- *ʔéε* ‘antelope jackrabbit’ ~ T ebe; Pt hevve
- *jáoto* ‘base of neck at the top of the spinal column’ ~ Pt iavotto

Intervocally, $\beta > \emptyset$

- *jáao* ‘track (of animal)’ ~ Pt *iavo* (in month names)
- *ʔáaonam* ‘hat’ ~ Pt *avonnam*
- *komkáii* ‘elderly woman’ ~ T *konkabre*
- *síip* ‘boy, young man’, *káii* ‘grown, mature, older [person]’ ~ L *Sippcabeé* ‘joven’
- *itóaa* ‘leg and foot’ ~ B *i-tó-va* ‘my foot’, T *itoba*, Pt *ittovax*, L *Itobbaá*
- *ʔant koáaxox* ‘regal horned lizard’ ~ Pt *amtkovax’x’olx*
- *koáantla* ‘desert tarantula’ ~ Pt *kovantla*
- *koáafx* ‘centipede’ ~ Pt *kovaštl*
- *ikoáanx* ‘poisonous sap’ ~ Pt *ikovannĩl*
- *koáatx^w* ‘sweet’ ~ Pt *kovattxűě*
- *k^wkakóaat* ‘to teach’ ~ Pf *Cuicacovát*
- *ʔoéε* ‘newborn baby’ ~ Pt *ove*; L *Ovéd*

Intervocally, $\beta > \emptyset$

- *inoʈ km^oiix* ‘palm of hand excluding the fingers’ ~ Pt inol’km^ovelx
- *ko^oij íime* ‘funnel-shaped spider web’ ~ Pt k^oviš imme
- *ko^oiimax* ‘coachwhip, whipsnake’ ~ B ko-^{vé}-mach; T ka^obimaj, ka^obimay; Pt ko^ovimax’-; L Co^obbimaglj
- *ʔamkan^oiin* ‘pot’ ~ Pt amkan^ovin; L Amcann^ovin
- *ks^ooi kʔánt* ‘nine’ ~ T ks^oobbe-joaul; Pt ks^oovikanlx’; Pf So^ovicautlj; L So^ovécandlg
- *ʔimkoi* ‘those (far off)’ ~ Pt imk^ove
- *é^omx^w* ‘sheet lightning’ ~ B i-^{vám}-qua; Pt i^ovamxö; L I^obamgeg
- *sé^oa* ‘teddybear cholla’ ~ Pt si^ovva
- *sé^oaato* ‘goat’ ~ Pt si^ovato; L Si^obathectt ‘ciervo’

Preconsonantly, $\beta > i$

- *ʔáait* 'blood' ~ B *avt*; Pt *aǎat*; L *Aabvt*
- *páaix* 'Goodding willow' ~ Pt *paux'ě*
- *áno jáait* 'afternoon' ~ B *a-na-yâuet* 'evening'; Pt *anoiaot*; Pf *Anoyavt*; L *Anollabt*
- *χ^wáitom* 'five (in the old counting system)' ~ B *hua-va-t'hom*; Pt *kuaitom*
- *-máaitx* 'soft, tender' ~ Pt *x'omautx'*
- *káait* 'dry lake, playa, large and typically dry desert basin, sand flat, mud flat' ~ B *ka-vilch-k'milcht* 'valley'; Pt *kaǎyx'l* 'llano'
- *ʃíix imáaitom* 'mute (person)' ~ Pt *šixxemaotom*
- *ʔánt jáait* 'tender plant, vegetation' ~ T *amptyubl*
- *ʔéʔε jáait* 'young green branch' ~ L *Eeyaugl* 'Yerba'

Preconsonantally, $\beta > i$ (\emptyset after ε)

- *ináit* ‘bark’ ~ B i-na-olch
- *ʔéʔε ináit* ‘green bark’ ~ L Eheyngaugl
- *káaiχax* ‘strong’ ~ B ka-vo-hách ‘strong’; i-p’ka-ka-ko-kuk ‘rain’; Pt hipka kauxal’x ‘aguacero’; L Cabjacgl
- *kʔéεt* ‘red’ ~ B ke-vilch ‘red’; ha-sho-kévlch ‘wolf’; T kebls; Pt kevex’l; L Quebelg ‘Colorado’; Bennomquevelg ‘Cobre’
- *kóoitom* ‘five’ ~ T kouton; Pt kooxtom; Pf Covtóm; L Coytom
- *íisax ʔánt -óoit* ‘(to be) happy, content’ ~ Pf Isaj amtjuavt ‘Estoy contento’
- *kóoit* ‘blue, green’ ~ B ko-vilch; T kobslh; Pt kovylx’
- *-óoit* ‘to dance’ ~ Pt aǎyt; Pf lcouvt; L lcoott

Word-finally, $\beta > i$ (\emptyset after ε)

- *χα β άι* ‘windstorm’ ~ Pt xax’au
- *ῥάι* ‘wind’ ~ B â-ve; T abb; Pt авы; L Abb
- *χνάι* ‘south wind’ ~ Pt x’nau
- *κοjáι* ‘to make war’ ~ Pt koiav ‘guerra’
- -*mάι* ‘(to be) quiet [person or animal]’ ~ Pf Mav ‘silencio’ [interjection]
- *imokέ* ‘deaf’ ~ Pt imokev
- *kokέ* ‘chili’ ~ T kokeb; L Cocquebb
- *ῥίι* ‘my father’ (*άι* ‘his father’) ~ B îve; T ib, ip; Pt hiv; L lbb-ya
- -*sίι* ‘to smell’ ~ T sibb
- *ῥánt -φίι* ‘to be morning’ ~ B ampt-poher ‘tomorrow’; L Amtépoffb ‘mañana’, Ampoffb ‘mañana (el día de)’
- *ῥánt ιφίι* ‘morning’ ~ B am-ti-fev’r ‘day’; L Amtiffibb ‘día’

Syllable-final /β/ [β] ~ [βə] (ə = Pt <ыI>);
this [ə] is reflected as modern /i/

- *ʔáait* 'blood' ~ B avt; Pt aǎat; L Aabvt
- *áno jáait* 'afternoon' ~ B a-na-yâuet 'evening'; Pt anoiaot; Pf Anoyavt; L Anollabt
- *χ^wáitom* 'five (in the old counting system)' ~ B hua-va-t'hom; Pt kuaotom
- *káait* 'dry lake, playa, large and typically dry desert basin, sand flat, mud flat' ~ B ka-vilch-k'milcht 'valley'; Pt kaǎыix'I 'llano'
- *kʔéet* 'red' ~ B ke-vilch 'red'; ha-sho-kévlch 'wolf'; T kebls; Pt kevex'I; L Quebelg 'Colorado'; Bennomquevelg 'Cobre'
- *kóoit* 'blue, green' ~ B ko-vilch; T kobslh; Pt kovыlx'
- *-óoit* 'to dance' ~ Pt aǎыit; Pf lcouvt; L lcoott
- *ʔái* 'wind' ~ B â-ve; T abb; Pt avыǎ; L Abb
- *ʔíi* 'my father' (*ái* 'his father') ~ B îve; T ib, ip; Pt hiv; L lbb-ya

Verb stems beginning with empty consonant

- A number of verbs in Seri begin with an “empty consonant” morphophoneme, which assimilates completely to a preceding consonant, but is deleted intervocalically:

Mood	-káp 'to fly'	-Cá? 'to vocalize'
Realis-t	t-káp	t-tá?
Subjunctive irrealis	tom-káp	tom-má?
Dependent irrealis	po-káp	po-áa?
Realis-jo	jo-káp	jo-áa?
Emphatic realis	χo-káp	χo-áa?
Independent irrealis	s-káp	s-sá?
Realis-mi	(i)m-káp	im-má?

“Empty consonant” goes back to β

- 1) *fíix* -*Cáktim* ‘(to be) busy doing something’ ~ Pt šex’e *svaktomo* ‘tengo que hacer’ (= independent irrealis *fíix i-s-sáktim*)
- 2) -*Cámx^w* ‘(to be) shiny’, derived noun *εámx^w* ‘sheet lightning’ ~ B i-*vám*-qua; Pt *ivamxö*; L *lbamgeg*
- 3) -*Cáfox*, pl. -*Cáftk* in *tóii* -*Cáfox* ‘to have a hole, (be) perforated’ is related to *áfox*, pl. *áftk* ‘star; planet’ ~ B *va*-soh; T *bassojh*; Pt *vastlk*, *vašox-*; Pf *Vashój*; L *Vassoglh*.
- The connection between ‘star’ and ‘hole’ is found in other languages (e.g., Kolyma and Tundra Yukaghir. Cf. the folklore motif “stars are holes in the sky” (I55 in Berezkin’s catalogue: <https://www.ruthenia.ru/folklore/berezkin/>).

Vowel clusters

- Apart from short and long vowels, modern Seri has numerous vowel clusters:
- ai, ao, ea, oa, oe, oi
- aai, aao, eeo, iio, ooi
- aii, eaa, eii, oaa, oee, oii
- aaa, eee, ooo, iii
- Whenever a Seri word with a vowel cluster is attested in 19th century word lists, it invariably has intervocalic or syllable-final /β/
- We can be reasonably certain that practically all modern vowel clusters result from the disappearance of /β/ (some may result from compounding or borrowing)

Syncope

- A vowel in a syllable immediately after the stressed syllable alternates with zero under morphological conditions: singular vs. plural in nouns and verbs, perfective vs. imperfective (\approx plural action) in verbs.
- *ín~~o~~†* ‘hand, arm’, pl. *ín†*
- *téεp~~o~~†* ‘black-tailed jackrabbit’, pl. *téεp†ox*
- *ῥást* ‘stone’, pl. *ῥás~~a~~†ox*

Syncope

- A vowel in a syllable immediately after the stressed syllable alternates with zero under morphological conditions: singular vs. plural in nouns and verbs, perfective vs. imperfective (\approx plural action) in verbs. This does not happen in stems with vowel clusters, which have instead a variety of vowel alternations:
- *itóaa* ‘leg and foot’, pl. *itóoit*
- *káait* ‘dry lake, playa, large and typically dry desert basin, sand flat, mud flat’, pl. *káaax*
- *ináait* ‘bark’, pl. *ináaax*

Syncope

- These alternations result from the loss of /β/. Before this change, the stems in question had regular alternation of vowel and zero.
- *itóaa*, pl. *itóoit* < *itó(o)βa, pl. *itó(o)βt
- *káait*, pl. *káaax* < *káαβt, pl. *káαβax
- *ináait*, pl. *ináaax* < *ináαβt, pl. *ináαβax
- cf.
- *íno*t, pl. *ín*t
- *téep*ot, pl. *téep*tox
- *ῥást*, pl. *ῥás*atox

Syncope

- These alternations result from the loss of /β/. Before this change, the stems in question had regular alternation of vowel and zero.
- cf. related forms with attested /β/:
- jáao ‘track (of animal)’ ~ Pt iavo (in month names)
- káaiχax ‘strong’ ~ B ka-vo-hách ‘strong’; i-p’ka-kaokuk ‘rain’; Pt hipka kauxal’x ‘aguacero’; L Cabjacgl

	sg. perf.	sg. impf.	pl. perf.	pl. impf.
-áao ‘pass (by)’	itáao	itáaotim	itáait	itáaito†ka
-áaiχax ‘strong’	táaiχax	táii†χim	táailaxk	táailax†ka
*-á:βo ‘pass (by)’	*itáaβo	*itáaβotim	*itáaβt	*itáaβto†ka
*-áβχax ‘strong’	*táβχax	*táβi†χim	*táβlaxk	*táβlax†ka

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