

LANGTIME CHAT

EPISODE 34

KEZHWA

PAPER GIRLS

THE COMIC BOOKS



Created by Brian K.
Vaughan & Cliff Chiang



Published 30 issues

THE COMIC BOOKS



Four newspaper-delivering
teenage girls

THE COMIC BOOKS



Four newspaper-delivering
teenage girls



Oh, and time travelers



THE CIPHER



It was an intentional use of a cipher.



They wanted readers to be able to break it and read the dialogue.

AMAZON'S

PAPER GIRLS

KEZHWA

LANGUAGE

THE LANGUAGE



Time traveling speakers

THE LANGUAGE



Time traveling speakers



Spirit of original cipher
in novels

OUR VISION



Worldwide creole of sorts

OUR VISION



Worldwide creole of sorts



Unique phonological and
grammatical systems as
base of the conlang

BORROWINGS



From any language at any time
in history

BORROWINGS



From any language at any time
in history



Filtered through the conlang's
phonological system

BORROWINGS



From any language at any time
in history



Filtered through the conlang's
phonological system



Semantically “coded”

KEZHWA
SOUNDS

	Labial	Dent.	Alv.	Pal.	Velar	Glott.
Stops	p/b		t/d		k/g	ʔ
Fric.	f/v	θ/ð	s/z	ʃ/ʒ		
App.	w		l, r	j		
Nasal	m		n		(ŋ)	

	Front	Central	Back
High	i		u
Mid	e~ɛ	ə	o~ɔ
Low		a	

KEZHWA STRESS



Basic: penultimate syllable



Borrowed words may differ

SHOYÁ

“to follow”

GENZHÍN

“to track”

KEZHWA STRESS



Stays on root when suffixes
added

KEZHWA STRESS



Stays on root when suffixes added



Cannot fall beyond antepenultimate syllable

KEWI

“to help”

KÉWIGA

“help”

AKWAT

“to know”

AKWÁDEGA

“knowledge”

KEZHWA SYLLABLES



CCVC





C₂ in clusters restricted to
approximants

BORROWING



How would non-native speakers hear this word?

BORROWING

-  How would non-native speakers hear this word?
-  How does that perceived unit shift to fit Kezhwa phonology?

SEMANTICS & BORROWINGS

saga



English *it's all good*

[Itsalgʊd]

saga



English *it's all good*

[Itsa|gʊd]

saga



English *it's all good*

[ɪsagʊd]

saga



English *it's all good*

[Isagʊd]

saga



English *it's all good*

[sagʊd]

saga



English *it's all good*

[sagʊd]

saga



English *it's all good*



Kezhwa *saga* [sagə]

*unstressed vowels are
often schwas in Kezhwa*

saga



English *it's all good*



Kezhwa *saga* [sagə] “it’s okay,
it’s alright”

semantic gist retained

datep



English *duct tape*

[də^kteɪp ~ də[?]teɪp]

datep



English *duct tape*



Kezhwa *datep* [datɛp]

*Any schwa-like sound is
[a] in a stressed syllable.*

datep



English *duct tape*



Kezhwa *datep* [datεp]

[e > ε] in closed syllable

datep



English *duct tape*



Kezhwa *datep* [datɛp] “to repair, to fix, to patch up, to heal, to ameliorate”

datep

*“Duct tape
can fix
anything.”*



English *duct tape*



Kezhwa *datep* [datep] “to
repair, to fix, to patch up, to
heal, to ameliorate”

duma



Swahili *duma* “cheetah”



Kezhwa *duma* [dumə]

duma *If you move
like a cheetah,
you're hustling!*



Swahili *duma* “cheetah”



Kezhwa *duma* [dumə] “to
hurry, to hustle”

tika



Finnish *ti**kk**a* “dart”



Kezhwa *ti**k**a* [tikə]

tika



Finnish *tikka* “dart”



Kezhwa *tika* [tikə] “to try”

*Trying something is like throwing
a dart at a dartboard.*

genzhín

 Mandarin *gēn* “to follow”

 Czech *stín* “shadow”

 Kezhwa *genzhín* [gɛn₃in]

genzhín

 Mandarin *gēn* “to follow”

 Czech *stín* “shadow”

 Kezhwa *genzhín* [gɛn₃in]

only allowed clusters with approximants

genzhín

 Mandarin *gēn* “to follow”

 Czech *stín* “shadow”

 Kezhwa *genzhín* [gɛn³in]

[n] caused voicing of following [ʃ]

genzhín

 Mandarin *gēn* “to follow”

 Czech *stín* “shadow”

 Kezhwa *genzhín* [gɛnʒin] “to track”

KEZHWA

GRAMMAR

KEZHWA GRAMMAR



SVO



Prepositions



Aj N



N RelCl

KEZHWA NOUNS

	C-Initial		V-Initial		I-Initial	
	Singular	Plural	Singular	Plural	Singular	Plural
Definite	<i>tamagó</i>	<i>an damagó</i>	<i>ala</i>	<i>an ala</i>	<i>iga</i>	<i>an iga</i>
Indefinite	<i>i-damagó</i>		<i>y-ala</i>		<i>zh-iga</i>	

kid

walkie talkie

target

KEZHWA NOUNS

Demonstratives	C-Final	V-Final
Proximal	<i>yambwazagí</i>	<i>alagí</i>
Distal	<i>yambwazayá</i>	<i>alayá</i>

foot

walkie talkie

KEZHWA VERBS

V-Initial	Plain	Present	Non-Present	Imperative	
				Singular	Plural
Positive	<i>akwat</i>	<i>imakwat</i>	<i>lakwat</i>	<i>akwad-a</i>	<i>akwat-u</i>
Negative	<i>'akwat</i>	<i>i'akwat</i>	<i>la'akwat</i>	<i>'akwad-a</i>	<i>'akwat-u</i>

to know

KEZHWA VERBS

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**ima* 'now'

**la* 'then'

to know

KEZHWA VERBS

C-Initial	Plain	Present	Non-Present	Imperative	
				Singular	Plural
Positive	<i>kewi</i>	<i>igewi</i>	<i>lagewi</i>	<i>kewi-na</i>	<i>kewi-zu</i>
Negative	<i>'agewi</i>	<i>i'agewi</i>	<i>la agewi</i>	<i>'agewi-na</i>	<i>'agewi-zu</i>

**ima* 'now'

**la* 'then'

to help

KEZHWA VERBS

V-Initial	Plain	Present	Non-Present	Imperative	
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Positive	<i>akwat</i>	<i>iakwat</i>	<i>lakwat</i>	<i>akwad-a</i>	<i>akwat-u</i>
Negative	<i>'akwat</i>	<i>i'akwat</i>	<i>la'akwat</i>	<i>'akwad-a</i>	<i>'akwat-u</i>

**ha* 'not'

to know

KEZHWA VERBS

C-Initial	Plain	Present	Non-Present	Imperative	
				Singular	Plural
Positive	<i>kewi</i>	<i>igewi</i>	<i>lagewi</i>	<i>kewi-na</i>	<i>kewi-zu</i>
Negative	<i>'agewi</i>	<i>i'agewi</i>	<i>la'agewi</i>	<i>'agewi-na</i>	<i>'agewi-zu</i>

**ha* 'not'

to help

KEZHWA VERBS

inená 'to breathe'



i'inená 'don't breathe'

KEZHWA VERBS

inená 'to breathe'



i'inená 'don't breathe'

KEZHWA VERBS

inená 'to breathe'



e'inená 'don't breathe'

KEZHWA VERBS

inená 'to breathe'



e'inená 'don't breathe'

KEZHWA VERBS

V-Initial	Plain	Present	Non-Presen	Imperative	
				Singular	Plural
Positive	<i>akwat</i>	<i>imakwat</i>	<i>lakwat</i>	<i>akwad-a</i>	<i>akwat-u</i>
Negative	<i>'akwat</i>	<i>i'akwat</i>	<i>la'akwat</i>	<i>'akwad-a</i>	<i>'akwat-u</i>

na 'you (sg)'

su 'you (pl)'

to know

KEZHWA VERBS

C-Initial	Plain	Present	Non-Present	Imperative	
				Singular	Plural
Positive	<i>kewi</i>	<i>igewi</i>	<i>lagewi</i>	<i>kewi-na</i>	<i>kewi-zu</i>
Negative	<i>'agewi</i>	<i>i'agewi</i>	<i>la'agewi</i>	<i>'agewi-na</i>	<i>'agewi-zu</i>

na 'you (sg)'

su 'you (pl)'

to help

KEZHWA

SENTENCES

KEZHWA SENTENCES



Era idanagí.



“They are coming.”

KEZHWA SENTENCES



Era idanagí.



“They are coming.”

KEZHWA SENTENCES



Era idanagí.



“They are coming.”

KEZHWA SENTENCES



Era idanagí.



“They are coming.”

Swahili *tanga* ‘to wander’

Spanish *aquí*

KEZHWA SENTENCES



Ozu lamaba Gami si
memesis.



“We have located the
Folding to 2019.”

KEZHWA SENTENCES



Ozu lamaba Gami si
memesis.



“We have located the
Folding to 2019.”

KEZHWA SENTENCES



Ozu lamaba Gami si
memesis.



“We have located the
Folding to 2019.”

KEZHWA SENTENCES



Ozu lamaba Gami si

memesis.

Spanish *mapa*



“We have located the

Folding to 2019.”

KEZHWA SENTENCES



Ozu lamaba **Gami** si
memesis.



“We have located the
Folding to 2019.”

KEZHWA SENTENCES



Ozu lamaba **Gami** si

memesis.

Japanese origami



“We have located the

Folding to 2019.”

KEZHWA SENTENCES



Ozu lamaba Gami **si**
memesis.



“We have located the
Folding **to** 2019.”

KEZHWA SENTENCES



Ozu lamaba Gami si

memesis.



“We have located the

Folding to 2019.”

KEZHWA DATES



Convert to Roman numerals



Convert Roman numerals to
sounds

KEZHWA DATES



I



V



X



L



C



D



M

KEZHWA DATES



I > [i]



V > [v]



X



L > [l]



C



D > [d]



M > [m]

KEZHWA DATES



I > [i]



V > [v]



X > [s]



L > [l]



C > [k]



D > [d]



M > [m]

KEZHWA DATES



Epenthetic [e] breaks clusters



Epenthetic [ʔ] breaks [ii] segments



[iii] > [iji] > [izhi]



[s] voices when preceding [v]

KEZHWA DATES



2019 >> MMXIX

KEZHWA DATES



2019 >> MMXIX



MeSIS

KEZHWA DATES



2019 >> MMXIX



MeMeSIS

KEZHWA DATES



2019 >> MMXIX



MeMeSIS



memesis

KEZHWA DATES



1988 >> MCMLXXXVIII

KEZHWA DATES



1988 >> MCMXXXVIII



MKMLeSVIII

KEZHWA DATES



1988 >> MCMLXXXVIII



MeKMeLSSeSVIII

KEZHWA DATES



1988 >> MCMLXXXVIII



MeKMeLSesSVIzhI

KEZHWA DATES



1988 >> MCMLXXXVIII



MeKMeLSeSezVIzhI

KEZHWA DATES



1988 >> MCMLXXXVIII



MeKMeLSeSezVIzhI



mekmelsesezvizhi

KEZHWA... A

TON OF FUN!

KOPE!

"THANK YOU"