

Grapheme-to-Phoneme rules to perform Mexbet T29 transcriptions by Carlos Mena

This document shows the phonologic rules of the Mexbet phonetic alphabet. The rules consist of a set of text transformations from graphemes to phonemes, allowing users to perform accurate transcription algorithms. The // denote phonemes as well as transcriptions in the T29 level of Mexbet. The " " denote the graphemes as well as the words to be transcribed. The dots in transcriptions denote the syllabification.

In the transcription examples one can see two things in bold: the first one is the grapheme indicated by the rule. The second one is how this grapheme is transformed into a phoneme in the T29 level.

Consonants

1. / p /

"p" changes to / p /:

"antec**op**retérito" - / a n . t e . k o . **p** r (e . t e _ 7 . r (i . t o /

"paleontología" - / p a . l e . o n . t o . l o . x i _ 7 . A /

2. / t /

"t" changes to / t /:

"teledetección" - / t e . l e . d e . t e k . s i o _ 7 n /

"confrontación" - / k o n . f r (o n . t a . s i o _ 7 n /

3. / k /

"k" changes to / k /:

"kilómetro" - / k i . l o _ 7 . m e . t r (o /

"kilo" - / k i _ 7 . l o /

"ca", "co" and "cu" changes to / ka /, / ko / and / ku /:

"característicamente" - / **k a** . r (a k . t e . r (i _ 7 s . t i . k a . m e _ 7 n . t e /

"compresibilidad" - / **k o** m . p r (e . s i . b i . l i . d a _ 7 d /

"cuestionamiento" - / **k u** e . s . t i o . n a . m i e _ 7 n . t o /

"qui" and "que" changes to / ki / and / ke /:

"quiropático" - / **k i** . r (o . p r (a _ 7 k . t i . k o /

"quetzalcóatl" - / **k e** t . s a l . k o _ 7 . a . t l /

4. / b /

"b" changes to / b /:

"brillantemente" - / b r(i . Z a_7 n . t e . m e_7 n . t e /

"bioestadística" - / b i o . e s . t a . d i_7 s . t i . k a /

"v" changes to / b /:

"volumétricamente" - / b o . l u . m e_7 . t r(i . k a . m e_7 n . t e /

"vulcanización" - / b u l . k a . n i . s a . s i o_7 n /

5. / d /

"d" changes to / d /:

"irremediablemente" - / i . r e . m e . d i a_7 . b l e . m e_7 n . t e /

"descalcificación" - / d e s . k a l . s i . f i . k a . s i o_7 n /

6. / g /

"ga", "go" and "gu" changes to / ga /, / go / and / gu /:

"gastroenteritis" - / g a s . t r(o . e n . t e . r(i_7 . t i s /

"renegociación" - / r e . n e . g o . s i a . s i o_7 n /

"gusano" - / g u . s a_7 . n o /

"gui", and "gue" changes to / gi / and / gue /:

"sanguinolento" - / s a n . g i . n o . l e_7 n . t o /

"guerrerenses" - / g e . r e . r(e_7 n . s e s /

"güi", and "güe" changes to / gui / and / gue /:

"pingüino" - / p i n . g u i . n o_7 . t e /

"güerito" - / g u e . r(i_7 . t o /

7. / tS /

"ch" changes to / tS /:

"chicomecóatl" - / tS i . k o . m e . k o_7 . a . t l /

"lonchería" - / l o n . tS e . r(i_7 . A /

8. / f /

"f" changes to / f /:

"falsificadores" - / f a l . s i . f i . k a . d o _ 7 . r (e s /

"fortificación" - / f o r (. t i . f i . k a . s i o _ 7 n /

9. / s /

"s" changes to / s /:

"sensacionalista" - / s e n . s a . s i o . n a . l i _ 7 s . t a /

"sincronización" - / s i n . k r (o . n i . s a . s i o _ 7 n /

"z" changes to / s /:

"metastatizarse" - / m e . t a . s . t a . t i . s a _ 7 r (. s e /

"liberalización" - / l i . b e . r (a . l i . s a . s i o _ 7 n /

"ce", and "ci" changes to / se / and / si /:

"centroamericano" - / s e n . t r (o . a . m e . r (i . k a _ 7 . n o /

"circunferencia" - / s i r (. k u n . f e . r (e _ 7 n . s i a /

if "ps" is at word beginning, then it changes to / s /:

"neuropsiquiatría" - / n e u . r (o . s i . k i a . t r (i _ 7 . A / (This is a very rare exception)

"psicométricas" - / s i . k o . m e _ 7 . t r (i . k a s /

"psicoanálisis" - / s i . k o . a . n a _ 7 . l i . s i s /

"sci" and "sce" changes to / si / and / se /:

"inconscientemente" - / i n . k o n . s i e _ 7 n . t e . m e _ 7 n . t e /

"imprescindible" - / i m . p r (e . s i n . d i _ 7 . b l e /

"escenografía" - / e . s e . n o . g r (a . f i _ 7 . A /

"escepticismo" - / e . s e p . t i . s i _ 7 s . m o /

Sometimes "xce" changes to / se /:

"excepcionalmente" - / e . s e p . s i o . n a _ 7 l . m e _ 7 n . t e /

"excéntrico" - / e k . s e _ 7 n . t r (i . k o / (This rule does not apply to the word "excéntrico")

"excepción" - / e . s e p . s i o _ 7 n /

"x" sometimes changes to / s /:

"malinalxóchitl" - / m a . l i . n a l . s o _ 7 . t S i . t l /

"xochimilco" - / s o . t S i . m i _ 7 l . k o /

10. / S /

"sh" changes to / S /:

"marshall" - / m a _ 7 r (. S a l /

"sharon" - / S a _ 7 . r (o n /

"x" sometimes changes to / S /:

"xicoténcatl" - / S i . k o . t e _ 7 n . k a . t l /

"xucaneb" - / S u . k a . n e _ 7 b /

11. / x /

"j" changes to / x /:

"paradójicamente" - / p a . r (a . d o _ 7 . x i . k a . m e n . t e /

"ventajosamente" - / b e n . t a . x o _ 7 . s a . m e _ 7 n . t e /

"guadalajareño" - / g u a . d a . l a . x a . r (e _ 7 . n ~ o /

"ge" and "gi" change to / xe / and / xi /:

"congestionamiento" - / k o n . x e s . t i o . n a . m i e _ 7 n . t o /

"cronológicamente" - / k r (o . n o . l o _ 7 . x i . k a . m e n . t e /

"x" sometimes changes to / x /:

"mexicanización" - / m e . x i . k a . n i . s a . s i o _ 7 n /

"xavier" - / x a . b i e _ 7 r (/

12. / Z /

"ll" changes to / Z /:

"detalladamente" - / d e . t a . Z a _ 7 . d a . m e _ 7 n . t e /

"desarrollarán" - / d e . s a . r o . Z a . r (a _ 7 n /

if "y" is not at word ending, then it changes to / Z /:

"yuxtaposición" - / Z u k s . t a . p o . s i . s i o _ 7 n /

"distribuyen" - / d i s . t r (i . b u _ 7 . Z e n /

13. / m /

"m" changes to / m /:

"matemáticamente" - / m a . t e . m a _ 7 . t i . k a . m e _ 7 n . t e /

"melodramático" - / m e . l o . d r (a . m a _ 7 . t i . k o /

14. / n /

"n" changes to / n /:

"neocolonialismo" - / n e . o . k o . l o . n i a . l i _ 7 s . m o /

"norteamericano" - / n o r (. t e . a . m e . r (i . k a _ 7 . n o /

15. / n~ /

"ñ" changes to / n~ /:

"cariñosamente" - / k a . r (i . n ~ o _ 7 . s a . m e _ 7 n . t e /

"empequeñecer" - / e m . p e . k e . n ~ e . s e _ 7 r (/

16. / r /

"rr" changes to / r /:

"incorrectamente" - / i n . k o . r e _ 7 k . t a . m e _ 7 n . t e /

"ininterrumpido" - / i . n i n . t e . r u m . p i _ 7 . d o /

"r" changes to / r / at word or syllable beginning:

"reconfortante" - / r e . k o n . f o r (. t a _ 7 n . t e /

"umrika" - / u m . r i . k a _ 7 /

"r" changes to / r / after "l", "n" and "s":

"alrededor" - / a l . r e . d e . d o _ 7 r (/

"enrutar" - / e n . r u . t a _ 7 r (/

"israel" - / i s . r a . e _ 7 l /

17. / r(/

if "r" is not at beginning of word or after "s", "l" or "n", then it changes to / r(/:

"apresuradamente" - / a . p r (e . s u . r (a _ 7 . d a . m e _ 7 n . t e /

"circunscripción" - / s i r (. k u n s . k r (i p . s i o _ 7 n /

18. / l /

"l" changes to / l /:

"universalmente" - / u . n i . b e r (. s a _ 7 l . m e _ 7 n . t e /

"telesecundaria" - / t e . l e . s e . k u n . d a _ 7 . r (i a /

"ll" sometimes changes to / l / (it usually happens just in proper names):

"yolloxóchitl" - / Z o . l o . s o _ 7 . t S i . t l /

"allyn" - / a . l i _ 7 n /

19. / t l /

"tl" changes to / t l / just at absolute word ending:

"iztaccenteotl" - / i s . t a k . s e n . t e _ 7 . o . t l /

"citlaltépetl" - / s i . t l a l . t e _ 7 . p e . t l /

Vowels

20. / i /

if "i" is not the stressed vowel, then it changes to / i /:

"impermeabilizar" - / i m . p e r (. m e . a . b i . l n . s a _ 7 r (/

"indiscriminado" - / i n . d i s . k r (i . m i . n a _ 7 . d o /

if "y" is at word ending, then it changes to / i /:

"mangachapuy" - / m a n . g a . t S a . p u _ 7 i /

"muy" - / m u _ 7 i /

21. / e /

if "e" is not the stressed vowel, then it changes to / e /:

"enorgullecerse" - / e . n o r (. g u . Z e . s e _ 7 r (. s e /

"enfrentamiento" - / e n . f r (e n . t a . m i e _ 7 n . t o /

22. / a /

if "a" is not the stressed vowel, then it changes to / a /:

"automáticamente" - / a u . t o . m a _ 7 . t i . k a . m e _ 7 n . t e /

"administrativas" - / a d . m i . n i s . t r (a . t i _ 7 . b a s /

23. / o /

if "o" is not the stressed vowel, then it changes to / o /:

"otorrinolaringológico" - / o . t o . r i . n o . l a . r (i n . g o . l o _ 7 . x i . k o /

"oceanográfico" - / o . s e . a . n o . g r (a _ 7 . f i . k o /

24. / u /

if "u" is not the stressed vowel, then it changes to / u /:

"ultimadamente" - / u l . t i . m a _ 7 . d a . m e _ 7 n . t e /

"universitarias" - / u . n i . b e r (. s i . t a _ 7 . r i a s /

Stressed Vowels

In Spanish, when a word has an accent mark above one of its vowels, that vowel is the stressed vowel. As a rule of thumb, when there is no accent mark, the stressed vowel is on the penultimate syllable of the word, except when the word ends in a consonant different to "n" or "s". In that case, the stressed vowel is on the last syllable.

25. / i _ 7 /

"í" changes to / i _ 7 /:

"recíprocamente" - / r e . s i _ 7 . p r (o . k a . m e n . t e /

"paralelepípedo" - / p a . r (a . l e . l e . p i _ 7 . p e . d o /

if "i" is the stressed vowel, then it changes to / i _ 7 /:

"preestablecido" - / p r (e . e s . t a . b l e . s i _ 7 . d o /

"escondidillas" - / e s . k o n . d i . d i _ 7 . Z a s /

26. / e _ 7 /

"é" changes to / e _ 7 /:

"electrodoméstico" - / e . l e k . t r (o . d o . m e _ 7 s . t i . k o /

"latinoamérica" - / l a . t i . n o . a . m e _ 7 . r (i . k a /

if "e" is the stressed vowel, then it changes to / e _ 7 /:

"absolutamente" - / a b . s o . l u _ 7 . t a . m e _ 7 n . t e /

"cero" - / s e _ 7 . r (o /

27. / a _ 7 /

"á" changes to / a _ 7 /:

"antidemocrático" - / a n . t i . d e . m o . k r (a _ 7 . t i . k o /

"intensificará" - / i n . t e n . s i . f i . k a . r (a _ 7 /

if "a" is the stressed vowel, then it changes to / a 7 /:

"multitudinario" - / m u l . t i . t u . d i . n a _ 7 . r (i o /

"interactividad" - / i n . t e . r (a k . t i . b i . d a _ 7 d /

28. / o _ 7 /

"ó" changes to / o 7 /:

"informatización" - / i n . f o r (. m a . t i . s a . s i o _ 7 n /

"sedimentación" - / s e . d i . m e n . t a . s i o _ 7 n /

if "o" is the stressed vowel, then it changes to / o 7 /:

"representaciones" - / r e . p r (e . s e n . t a . s i o _ 7 . n e s /

"subdesarrollo" - / s u b . d e . s a . r o _ 7 . Z o /

29. / u _ 7 /

"ú" changes to / u 7 /:

"inútilmente" - / i . n u _ 7 . t i l . m e _ 7 n . t e /

"translúcido" - / t r (a n . s l u _ 7 . s i . d o /

if "u" is the stressed vowel, then it changes to / u 7 /:

"desembocadura" - / d e . s e m . b o . k a . d u _ 7 . r (a /

"arseniuro" - / a r (. s e . n i u _ 7 . r (o /

Special Cases

Grapheme "h"

In spanish, the grapheme "h" has no sound, except when it is placed after a "c" or "s", that is "ch" and "sh":

"huixtocihuatl" - / u i k s . t o . s i . u a _ 7 . t l /

"chalchihuitl" - / t S a l . t S i . u i _ 7 . T l /

"chihuahua" - / t S i . u a _ 7 . u a /

"shantAl" - / S a n . t a _ 7 l /

"mishel" - / m i . S e _ 7 l /

Grapheme "cc"

"cc" changes to / ks /:

"insatisfacción" - / in . s a . t i s . f a **k** . s i o _ 7 n /

"jurisdiccional" - / x u . r (i s . d i **k** . s i o . n a _ 7 l /

Grapheme "zz"

"zz" changes to / ts /:

"pizzero" - / p i t . s e _ 7 . r (o /

"pizza" - / p i _ 7 t . s a /

The grapheme "x"

As you may noticed in the examples above, in Mexican Spanish, the grapheme "x" have four sounds associated.

"x" changes to / ks / (by far, this is the most common case):

"aproximadamente" - / a . p r (o **k** . s i . m a _ 7 . d a . m e _ 7 n . t e /

"experimentación" - / e **k** s . p e . r (i . m e n . t a . s i o _ 7 n /

"existencialismo" - / e **k** . s i s . t e n . s i a . l i _ 7 s . m o /

"extrañamente" - / e **k** s . t r (a _ 7 . n ~ a . m e _ 7 n . t e /

"x" changes to / x /:

"mexicanización" - / m e . **x** i . k a . n i . s a . s i o _ 7 n /

"méxico" - / m e _ 7 . **x** i . k o /

"x" changes to / s /:

"xochimilco" - / s o . t s i . m i _ 7 l . k o /

"taxqueña" - / t a s . k e _ 7 . n ~ a /

"taxco" - / t a _ 7 s . k o /

"x" changes to / S /:

"xolotlán" - / S o . l o . t l a _ 7 n /

"xólotl" - / S o _ 7 . l o . t l /

"xolos" - / S o _ 7 . l o s /