Zaid "Carlos" Galvez
Collaborators: Drew Knochenhauer

A Metrical Analysis of Catalan Nicknames

Catalan is a Romance language spoken in Catalonia, in the southeastern region of Spain.
Detailed here is stress as it patterns in this language, especially according to metrical feet.
Investigated below is the nickname formation of Catalan names, and how they truncate
according footing and their unique behavior with stray syllables. Below are select names
from Catalan to demonstrate this behavior:

<Am>bros	<Re>mei	<Isa>bel
<An>ton	<Mi>quel	<Segi>mon
<Ar>nau	<Ra>mon	<Joa>quim
<Bar>tomeu	<Al>fonso	<Domingo
<Sal>vador	<Fran>cisco	<Clo>tilde
<Mont>serrat	<Rai>munda	<Jac>into
<Ig>nasi	<I>sidro	<Elizenda
<Cris>tina	<Gre>gori	<Leo>poldo
<Al>fredo	<Hi>lari	<Cala>manda
<Enri>queta	<Marga>lida	<Jose>fina
<Magda>lena	<Teo>dora	<Geno>veva

Catalan exhibits behaviors in accordance with the following metrical parameters:

- Foot-headedness: Moraic trochees
- Directionality: Right-to-left
- Word-headedness: Right
- Foot length: Prohibited
- Sensitivity: Quantity sensitive
- Iterativity: Iterative
- Extrametricality: None

Catalan follows a trochaic stress pattern, meaning all feet contain a stress on the first
element. These feet are moraic; a trochaic foot will not allow itself to be built across
more than two moras. Catalan builds these moraic trochees from right to left, where the
final syllable begins the initial foot. This language is right-headed, meaning the stress of
the rightmost trochee will be the main stress. Additionally, unary feet are not allowed to
be built over a single mora. Catalan is quantity sensitive, and accounts for moras when
assigning stress. It is also iterative, and will construct more than one foot per word.
Finally, Catalan demonstrates no extrametrical behavior.

It is important to notice the minimal and maximal syllable and mora structures of the
nicknames constructed from the base material. Compare: The name *Isidro* is truncated to
Sidro, comprised of two syllables of two moras; the name *Ambros* is truncated to *Bros*,
and is comprised of one syllable and two moras; the name *Elizenda* is truncated to *Zenda*

and is comprised of two syllables and three moras; the name *Bartomeu* may be truncated to *Meu*, comprised of two moras and one syllable. Catalan will consider these maximal and minimal structures when constructing nicknames.

Isidro	Sidro
Syl:	Syl:
Mora:	Mora:
OR:	OR:

Ambros	Bros
Syl:	Syl:
Mora:	Mora:
OR:	OR:

Elizenda	Zenda
Syl:	Syl:
Mora:	Mora:
OR:	OR:

Bartomeu	Meu
Syl:	Syl:
Mora:	Mora:
OR:	OR:

Nicknames in Catalan may have a maximum of two syllables and three moras, and a minimum of two moras and one syllable.

Catalan demonstrates trochaic behavior. This is best demonstrated in names containing only light syllables, such as *Teodora*, which is syllabified Te.o.dó.ra. If trochees are built from left to right, a stress would indeed fall on the penultimate syllable. If trochees are built from right to left, a stress would indeed again fall on the penultimate syllable. Iambs built in either direction would result in a stressed antepenultimate syllable and a stressed final syllable.

OR: Te.o.dó.ra	OR: *Te.ó.do.ra
Feet:	Feet:
Syl:	Syl:
Mora:	Mora:
OR:	OR:

Catalan exhibits right-to-left directionality. This can be seen in the lightly-syllabified name *Hilari*, which is syllabified Hi.lá.ri, If a trochee were built from left to right, a stress would be unable to fall on the second syllable; instead, it would fall on the initial syllable, rendering *Hí.la.ri. As it is built from right to left, it appropriately stresses the second syllable.

OR: Hi.lá.ri	OR: *Hí.la.ri
Feet:	Feet:
Syl:	Syl:
Mora:	Mora:
OR:	OR:

This language is quantity sensitive. This is best seen in names of two heavy syllables, such as *Anton*, which is syllabified An.tón. As the trochee is built from right to left, it is assigned across two moras rather than across two syllables. If Catalan were quantity insensitive, one trochee would be assigned to the entire name, thus leaving *Án.ton.

OR: An.tón	OR: *Án.ton
Feet:	Feet:
Syl:	Syl:
Mora:	Mora:
OR:	OR:

Notice that Catalan nicknames all conform to syllable and moraic maximality. As it develops trochees from right to left, it is the leftmost elements of the nicknames that are truncated. This truncation must adhere to Catalan's moraic maximality. Catalan will seek to optimize this truncation by attempting to delete only full feet at a time. In this, Catalan is determined to be iterative. Consider: *Ambros* will truncate to *Bros*, eliminating the initial bimoraic syllable, which can be considered a whole foot. *Bros* maintains one syllable and two moras. *Isabel* will truncate to *Bel*, eliminating the two initial monomoraic syllables that form an entire foot. *Bel* maintains one syllable and two moras. *Elizenda* will truncate to *Zenda*, eliminating the two initial monomoraic syllables that form an entire foot. *Zenda* maintains two syllables and three moras. *Alfonso* will truncate to *Fonso*, eliminating the initial bimoraic syllable, which can be considered a whole foot. *Fonso* maintains two syllables and three moras.

Also consider names such as *Remei*, which is truncated to *Mei*, where one syllable remains to the left of the stress. This syllable is eliminated.

If Catalan is iterative, then, its word-heads must occur at the right. Consider: Jo.se.fí.na contains its main stress on the right trochee, not the left. A left word-head would render *Jó.se.fi.na.

Whether or not the trochees are moraic or full comes into question when considering the name *Bartomeu*, which is syllabified Bar.to.meu. This name may truncate to both *Meu* and *Tomeu*. If the trochees assigned to this name are moraic, a foot may be assigned only to "meu" and "Bar." The trochee will seek to accommodate only two moras from right to left. "Bar" is then allowed to be eliminated as a leftmost foot, and "to" is also (optionally) removed as a stray.

If the trochees assigned are full, however, the foot will seek to satisfy itself with at least two moras, and may take three. The leftmost foot in *Bartomeu*, then, would be assigned to the initial two syllables. This foot would then be eliminated, forming *Meu*.

Notice that *Tomeu* is two syllables and three moras, and *Meu* is one syllable and two moras. Neither of these nicknames violate the restrictions Catalan places on nickname formation. However, the trochees built must be moraic. Consider: If the trochees were full, the name *Meu* would be mandatorily formed, and the form *Tomeu* would be prohibited. Moraic trochees, however, assign a foot only to the initial syllable, and leave behind the final two syllables. While *Tomeu*, syllabified To.meu, contains an initial stray syllable, it has three moras and two syllables; it thus remains within the maximal restrictions Catalan has placed on nickname formation. The language, then, may opt to keep the initial stray syllable or allow it to be dropped. In this way *Bartomeu* may be *Tomeu* or *Meu*, and *Montserrat* may be *Serrat* or *Rat*. Compare: *Enriqueta*, syllabified En.ri.qué.ta, may not be truncated to *Riqueta, as this contains three syllables. While the foot is assigned only to the initial syllable, the stray syllable must be dropped to maintain an appropriate shape for Catalan nickname formation.

OR: Bar.to.méu	OR: To.méu
Feet:	Feet:
Syl:	Syl:
Mora:	Mora:
OR:	OR:

OR: Meu	OR: En.ri.qué.ta
Feet:	Feet:
Syl:	Syl:
Mora:	Mora:
OR:	OR:

OR: *Ri.qué.ta	OR: Qué.ta
Feet:	Feet:
Syl:	Syl:
Mora:	Mora:
OR:	OR:

Catalan exhibits no sign of extrametricality, and is thus not considered to have this feature. This language does not exhibit any sign of unary feet, and is thus consider to prohibit them. As truncation is only done towards the left edge of names, stray syllables on the right cannot be dropped. Consider: Native speakers determine *Alfonso* cannot be truncated to *Fon. Catalan nicknames are thus only formed by truncating the leftmost foot. From there, a stray syllable is deleted if it exceeds a nickname's maximum amount of moras and syllables. If a stray foot remains within this amount, it may be deleted optionally.