## THE METRICS OF GALICIAN SONGS: SOME PRELIMINARY REMARKS<sup>1</sup>

# LA MÉTRICA DE LAS CANCIONES GALLEGAS: CONSIDERACIONES INICIALES

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**Resumen:** El presente artículo explora la métrica de una muestra de canciones tomadas del *Cancionero Gallego*, de Martínez Torner y Bal y Gay, con el objetivo de demostrar que para entender los mecanismos métricos que rigen la estructura de estas canciones es necesario analizar la métrica del texto en relación con los elementos musicales primordiales de la melodía correspondiente, como son el pulso, la duración y la altura de las notas. Dicho análisis puede redundar en una mejor comprensión de cuestiones referentes a la fonología de la lengua, tales como la duración vocálica y el acento léxico en gallego.

<sup>&</sup>lt;sup>1</sup> This paper has been written in the framework of the FFI2009-11274/FILO Project, funded by the Spanish Ministry of Science and Innovation.

**Abstract:** The present article analyses the metrics of a sample corpus of Galician songs extracted from Torner and Bal's *Cancionero Gallego*. This analysis aims to prove that, in order to fully understand the metrics of folksong, it is compelling to explore not only the metrics of the text, but also the key musical elements of the corresponding melody, namely beat strength, note duration and pitch. Such exploration may in turn shed some light on issues pertaining to the phonology of the language, such as the status of vowel duration and lexical stress in Galician.

**Palabras clave:** Métrica de formas populares. Literatura oral. Canción tradicional. Gallego. *Text-setting*.

**Key Words:** Metrics of traditional forms. Oral literature. Folksong. Galician. Text-setting.

#### 1. INTRODUCTION

## 1.1. Background and Objectives

Only rarely have songs been studied as integral objects comprising a musical element and a linguistic element which interact with each other in a relatively constrained manner. Until very recently, philological and linguistic research neglected the musical element in favour of the linguistic one; the analysis of the musical setting of a text was not considered significant for the study of the history of a language or of its prosodic characteristics. Ethnomusicological research has consistently highlighted the importance of song lyrics, to the point that some have questioned the musical quality of traditional songs maintaining that the tunes in those songs «are nearly always completely subservient to the story or emotion, rather than forming the basis of any great musical achievement.» (Kennedy, 1984: 10).

Contrary to such views, the present paper shows that an all-encompassing, interdisciplinary approach to the study of traditional song may facilitate the exploration of the relation between text and tune, thus allowing us to gain insight into the extent to which certain characteristics of a language and those of its musical setting might respond to a number of unique rhythmic criteria that presumably cannot be overridden. In other words, this study evinces that the metrics of traditional song are not defined by the way(s) in which a linguistic array is matched to a pre-existing pattern of prominent and non-prominent events; rather, the prosody of the linguistic material blends in with the rhythm of the musical material.

The paper is divided into four main sections. Section 2 explores the metrics of Galician folk texts and discusses a number of metrical characteristics which derive directly from the musical nature of those texts. Section 3 analyses the discrepancies between the metrics of texts and those of folk tunes, presenting some observations about the matching of beat, note duration and pitch, and stress/accent in Galician folksong; this section closes by pointing towards the implications of the study of text-setting in Galician song in the field of phonological investigation. Finally, section 4 offers some preliminary conclusions.

The observations made and the conclusions reached in this study are based on the metrical and melodic analysis of 29 songs recorded in the songbook *Cancionero Gallego* (henceforth CG). Given that Galician songbooks are not particularly well known among the linguistic community, the second part of this introduction supplies a succinct overlook of the history, authorship and contents of the CG.

# 1.2. The Cancionero Gallego: Authorship, Compilation Process and Contents

The Cancionero Gallego was compiled between 1928 and 1932 by the Galician researcher Jesús Bal y Gay and the Asturian musicologist Eduardo Martínez Torner. It was not edited until 1968, and it finally came out in two volumes in 1973. Curiously, Bal was not an ethnomusicologist, although he was well acquainted with the work of leading Spanish musicologists Felipe Pedrell and Adolfo Salazar. The CG was directly commissioned by the Galician intellectual Juan López Suárez, who prompted Bal to abandon his medical studies and devote himself to ethnomusicological inquiry. The young researcher was subsequently hired as Torner's assistant, as the latter was by then a reputed musicologist and folklorist working at the Centre of Historical Studies in Madrid.

Torner had firm ideas about the way in which ethnomusicological research should be carried out. As early as 1910, he had presented the methodological principles of his intended fieldwork projects. As can be observed in the following quotation (in Villanueva, 2007: 32, my translation), the young researcher was extremely aware of the methodological problems encountered by ethnomusicologists, in spite of which he openly took the position that faithfulness to the original was indeed essential:

The transcription of the melody must be rigorously accurate in order to faithfully reproduce the songs as the people perform them. The goal is to avoid at all costs the mistakes that most of the collectors of Spanish song make, such as assigning a strict bar division to the songs, thus changing their natural rhythm; introducing ornaments to arguably improve the original melodies; providing precise metronomic marks for songs which are actually performed at variable tempi; not using special symbols for certain sound inflections that cannot be signalled by means of conventional musical notation, and various other mistakes [...], not to speak about those collections where the songs have been harmonically arranged, which results in them losing all their scientific value<sup>2</sup>.

Torner (Ibid.) also focused on the methodological requirement to collect and write down all the variants of a given song in order to have as wide a view as possible:

[I]n order to map the songs to their territories and make sure that a collection provides a realistic account of the context in which the songs were found, it is necessary to gather all the variants of a given song and locate every single variant, preserving them all with their differences instead of arbitrarily choosing one version<sup>3</sup>.

The songs in the CG were gathered over five summer periods that Torner and Bal spent in Galicia. They wrote them all down with the corresponding texts. After such an extensive work, the written records were stored in the Centre of Historical Studies, and shortly after that, Torner and Bal abandoned the project. A few years later, it was the Catalan musicologist Higinio Anglés who rescued the files from negligence.

The songbook comprises 753 numbers, of which 59.89% were directly collected by Torner and Bal in 91 Galician boroughs. The authors arranged

<sup>&</sup>lt;sup>2</sup> I consider it helpful to provide Toner's original in Spanish: «La transcripción de la melodía ha de ser rigurosamente exacta, a fin de que reproduzca con toda fidelidad el canto tal como el pueblo lo expresa. Por tanto, evitar a toda costa los errores en que han caído la mayor parte de los coleccionadores de cantos españoles, como por ejemplo compasear los cantos sometiéndolos a un ritmo distinto del que en realidad tienen; introducir notas de adorno, con lo cual creen que arreglan las melodías desfigurándo-las más bien; marcar por medio del metrónomo el aire del cantar, que suele ofrecerse en realidad con muchas variaciones; no indicar por medio de signos especiales ciertas inflexiones de los sonidos que no pueden expresarse por medio de la notación musical, y otras muchas imperfecciones [...], para no hablar de aquellas otras en que los cantares aparecen armonizados y sin valor ninguno por tanto para su estudio científico.»

<sup>&</sup>lt;sup>3</sup> «Para fijar la geografía de la música popular y que la colección responda perfectamente a la realidad, es preciso recoger cuantas variantes aparezcan, conservándolas todas con sus vacilaciones y divergencias sin reducirlas a tipo único, tratando de localizar bien cada variante.»

the collection into eighteen subgroups according to their structure and function: Alalás (slow airs) (134), Aguinaldos (Christmas carols) (57), Bailes (ball songs) (15), Berces (lullabies) (32), Cantinelas (short love songs) (142), Ciegos (blind musicians' songs) (19), Danzas (dances) (21), Desafíos (challenges) (9), Diálogos (dialogues) (14), Enumerativas (enumerative songs) (5), Foliadas (ternary rhythm airs) (44), Instrumentales (instrumental pieces) (16), Labores y oficios (work songs) (49), Maios (May songs) (10), Muiñeiras (gigs) (47), Narrativas (narrative songs) (66), Pandeiradas (songs accompanied with a large tambourine) (53), and Religiosas (religious songs) (20)<sup>4</sup>.

For the purpose of the present study, 29 songs were selected at random, making sure that they represented most of the eighteen subgroups which make up the book. Given that this study focuses on the relation between Galician texts and tunes, two subgenres have been left out, namely *Danzas* – as none of the melodies has a text associated to it – and *Religiosas* – as most of their texts are in Latin or Greek.

## 2. THE METRICAL CHARACTERISTICS OF THE TEXTS

As pointed out in the introduction, traditional songs are often regarded as folk literature, which could be defined as the corpus of texts originally intended to be recited, chanted or sung that have been orally transmitted throughout the centuries within a cultural community<sup>5</sup>. Galician folk literature is particularly rich, as a vast number of song texts have survived in a historically rural community which was deeply rooted in the oral tradition until well into the 20th century. As Manzano Alonso observes, «[p]opular music of oral transmission is linked to the lives and costumes of mostly, though not exclusively, rural people.» (2001: 29).

Most songs in the CG and other Galician songbooks deal with social or family relations, work, festive occasions, nature, religion, and feelings in general. Given the functional dimension of the songs, a specific text was never executed twice in exactly the same way, as old songs were adapted to particular situations or audiences while new ones kept being invented.

<sup>&</sup>lt;sup>4</sup> For a detailed account of the geographic origin of the individual songs, see Villanueva (2007: 47-49).

<sup>&</sup>lt;sup>5</sup> A comprehensive report about the history and characteristics of Galician oral literature is provided in Blanco (2008: 95-99).

Improvisation was a key element, and the skill of the performers was judged against their capacity to spontaneously produce new verses. In this sense, both the individual's skill and the compliance of the community played a role in the preservation and transmission of the songs. As Lloyd (1967: 16) indicates.

in its natural state a folk song is poetry and music perpetuated by mouth-tomouth transmission not by print; it is founded on certain inflexible principles but subject to personal variation; its acceptance and survival depends on how well it accords with the tastes, views and experience of the community.

The 'inflexible principles' alluded to in Lloyd's quotation constitute what could be called the 'native grammar' of folksong composition. Given the oral quality of folksong and the ensuing requirement for the creation of forms which may be easily remembered, such grammar hinges on two basic principles: simplicity and brevity. Regarding the latter, it must be noted that, in folksong, brevity has to do with the melodic structures, which are normally repeated several times in the same song with many different texts. In fact, most of the melodies in the sample corpus analysed here are of the form A B or A A' B B'6. Texts are metrically, syntactically and lexically simple, and the use of linguistic formulae is pervading. Thus, in the corpus, a significant number of Christmas carols open with a San José e máis María («Saint Joseph and Mary») line, working songs often show a When Subject + Verb + Complement(s) type of formula, and most subgroups contain wellknown multi-purpose lines (often, non-word or ai la la types of line) which suit any type of composition and may serve as gap-fillers as well as pivotal points.

Linked to the brevity of forms are other structural characteristics of the analysed songs which have to do with the archaic character of their musical configuration (Manzano Alonso, 2001: 33-34). Firstly, they are composed according to modal melodic systems, and make use of a limited melodic range (usually a fifth or an octave) and narrow intervals (the most common interval is the second, followed by the third). Secondly, melodic instabilities and chromatic movements are common (the same musical phrase may vary with every repetition), which relates to a relative freedom in the development of the melodies. Thirdly, the rhythmic formulae are often irregular, which has evident metrical consequences.

<sup>&</sup>lt;sup>6</sup> See Table 1, where the melodic structures of the 29 CG songs are provided.

Most traditional songs are strophic, that is, they are organised into isosyllabic lines making up stanzas which share the same melodic contour and structure – often with a certain amount of variation – to which verbal material is set over and over again. In the corpus, the most common stanza type is the *copla*, a quatrain made up of pentasyllabic, hexasyllabic or octosyllabic lines where the even-numbered lines rhyme a b c b<sup>7</sup>. Out of the 29 songs which comprise the sample corpus, 27 (93.01 %) are made up of a variable number of *coplas*, ranging from one up to fourteen. A few songs contain a refrain, while a few others display an instrumental passage used to differentiate stanzas.

A song arranged in octosyllabic quatrains is provided in (1), which corresponds to CG 58:

(1)
San José e máis María,
eles van para Belén,
eles van cantal os Reises,
cantémolos nós tamén.

San José iba mui triste porqu'iba pol as montañas, e María mui alegre c'o seu Fillo n-as entrañas.

In the analysed sample, CG 447 is the only one exception to the prevalence of the octosyllabic quatrain. This is an enumerative song intended as a memory game and based on the progressive addition of lines to create a

Although the term «copla» refers to more than one type of stanza in different poetic traditions, the type of quatrain to which this paper refers undoubtedly constitutes the most common stanza form in Spanish and Galician folk poetry and song (for a thorough account of this question, see Domínguez Caparrós, 1993).

<sup>&</sup>lt;sup>8</sup> The songs are numbered in accordance to the figure given to them in the CG so as to facilitate access to the original documents (e.g. CG 5 stands for 'Cancionero Galego, song number 5'). Also, the texts are reproduced as the collectors transcribed them, which entails that the orthography does not always correspond to the current norms for written Galician. Bal and Torner's main goal as song transcribers was to remain faithful to the performers' use of language, which entailed a number of orthographic licences.

chain of consecutive events. As a result, stanzas do not have a fixed length and cannot, therefore, be ascribed to any particular stanza type. An illustrative fragment is reproduced in (2) below.

(2)

Estando o galo en seu lugar, Chaucharramáu,

Veu o zorro para o matar: [etc.]

O zorro no galo

I o galo na pita Estando o can en seu lugar,

I a pita na mora Veu o lobo para o matar:

I a mora na silva O lobo no can
I a silva no chau. I o can no zorro

I o zorro no galo

Chaucharramáu, I o galo na pita durmiréi sola, I a pita na mora solita estoy I a mora na silva picando na mora. I a silva no chau,

Estando o zorro en seu lugar, Chaucharramáu,

Veu o can para o matar: durmiréi sola,
O can no zorro solita estoy

I o zorro no galo picando na mora.

I o galo na pita

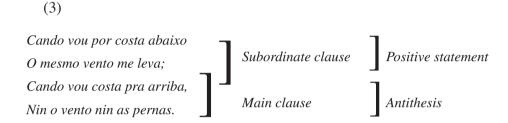
I a pita na mora Estando o oso en seu lugar,
I a mora na silva Veu a lanza para o matar:

I a silva no chau, [etc.]

Some stanzas present a binary structure, that is, they can be subdivided into two groups of two lines each where the first two-line group relates to the second two-line group by means of lexical and metrical parallelism as well as syntactic and/or semantic parallelism. Parallelism gives rise to a sense of formal cohesion, which in turn determines a fixed structural sequence. That

is to say, lines and stanzas do not appear at random, but follow a preestablished sequence where each repetition and variation has a specific position and an explicit discoursive function.

The first stanza of CG 283 illustrates internal parallelism, as the syntactic and semantic structure of lines 1-2 is mirrored in lines 3-4.



Conversely, stanzas 3-5 in CG 564 exemplify lexical, syntactic, semantic and metrical parallelism between successive quatrains.

(4)

Anque soy o Maio, también traigo botas; a mis compañeros los trato de pelotas.

Anque soy el Mayo, también traigo lentes; a mis compañeros los trato de valientes.

Anque soy el Mayo, también traigo rizos; a mis compañeros los trato de borricos. With regard to lexical parallelism, (4) shows a subtle variation principle which takes place at the very end of the second line by means of a change in the last word (botas, «boots» – lentes, «glasses» – rizos, «curls»). Such a change triggers off a parallel change in the last word of the second couplet (pelotas, «suck-ups» – valientes, «brave ones» – borricos, «silly ones»), which makes it possible to keep the rhyme scheme untouched. Syntactic parallelism goes hand in hand with semantic and lexical repetition, as can be observed in (4), where lines 1-2 make up a concessive clause + main clause type of structure («Although I am the Maio, I also bring [part of a costume]»), while lines 3-4 present an independent clause contrasting with the ones in 1-2 («I treat my fellows as [negative quality]».

In sum, we have observed that the texts in the sample favour a simple structure with a strong degree of regularity at every level. Nevertheless, folksong metrics are not at all straightforward, as they bear on the interaction between text and melody, which gives rise to many more irregularities than would be expected by looking at the texts alone.

For a start, in folksong the same text may appear with different melodies and a melody may be adapted to fit different texts. The only exceptions to the interchangeability of texts and melodies are refrains, which are usually less flexible than stanzas for two reasons: they have specific metrical structures, and they individualise each song from the rest (see Manzano Alonso, 2001: 67). In the sample, refrains tend to show a different metrical organisation to that of the stanzas, so that it is not rare to encounter one-line refrains in the context of four-line stanzas (CG 442), hexasyllabic refrains in the context of hendecasyllabic or octosyllabic lines (CG 41 and CG 216), and hendecasyllabic refrains preceded and followed by octosyllabic quatrains (CG 653). The latter is illustrated in (5), where the refrain is made up of four hendecasyllabic lines, while stanzas conform to the octosyllabic quatrain structure.

(5)

Elas eran tres comadres E d'un barrio todas tres; Trataron unha merenda Para ir o San Andrés. Pois xa que me qués con el perexil, Con dómine meu, con trispilistrís, Con dómine olá pola tua fe, No souto da vella con Xan Pirulé.

Unha puxo trinta ovos,
Para cada unha dez,
Outra puxo unha empanada
De tres codos en través.

Pois xa que...

The possibility of interchanging texts and melodies does not mean that none of the texts was created for a specific melody. By looking at the songs compiled in the CG, one could easily conclude that each text was originally associated with 'its tune'. Nevertheless, it seems correct to assume that, given the oral character of folksong, as time passed texts and melodies started to be dissociated and re-associated with new tunes and texts, until the original connection was completely lost. This relative freedom of association gives rise to a very singular relationship between text and tune, often comprising a series of frictions and lack of adjustments that popular music solves in very idiosyncratic manners. Some of those disadjustments pertain to the delimitation of syllabic prominence within the line, the couplet and the quatrain, which in song depends directly on the alignment between syllables and musical notes. The following section is devoted to the analysis of prominence in Galician songs.

# 3. DEGREES OF INTERACTION BETWEEN TEXT AND MELODY

Although song lyrics are more varied metrically than it is usually assumed by the studies about traditional verse, it is the musical rendition of those texts that enhances their interest, as the dialogue established between the metrics of the texts and the rhythm of the music does not necessarily entail a full agreement between them. In the case of traditional songs, the

potential disagreements will presumably be less marked than those which observed in art song due to two main reasons<sup>9</sup>: On the one hand, the simplicity of the texts in traditional song correlates with simple musical structures – as was explained in section 2, this is what makes it possible for texts and melodies to be interchanged. On the other hand, if traditional songs are to be remembered by the audience, the setting of a text to music will tend to follow a 'native grammar' of text-to-tune alignment which will sound natural to the speakers of the corresponding community.

Table 1 provides an overview of the metrical characteristics of the sample corpus. The first and second columns correspond to the number and subgenre of the song in question. An 'x' signals those lines which do not rhyme (as in 5x) as well as lines which show a variable number of syllables (as in xf xg xf xg). On the other hand, square brackets signal that a specific line or musical period is repeated a variable number of times (as in [6x]).

Columns three, four and five supply information about the number of lines in the song, the type of stanza and rhyme scheme, as well as the presence or absence of a refrain. The line number includes both strophic and refrain lines with as many repetitions as stated in the text.

Finally, column six contains melodic information. The first musical phrase or period always corresponds to A. A' (A") marks a slight rhythmic or melodic variation with regard to A, while B (C, D, E) signals the occurrence of a new musical period.

<sup>&</sup>lt;sup>9</sup> Rodríguez-Vázquez (2007) presents a thorough study of the agreements and mismatches between text and melody in English art song.

| CG# | Subgenre   | Lines | Syllables<br>& Rhyme          | Refrain                                | Melody         |
|-----|------------|-------|-------------------------------|--|----------------|
| 5   | Aguinaldos | 8     | 8a 8b 8c 8b                   | No                                     | AA             |
| 15  | Aguinaldos | 8     | 8a 8a 8b 8b                   | No                                     | A A'           |
| 16  | Aguinaldos | 18    | 8a 8b 8c 8b<br>(8d 8a)        | No                                     | AB             |
| 23  | Aguinaldos | 56    | 8a 8b 8c 8b                   | 8c 8b,<br>even-<br>numbered<br>stanzas | AB             |
| 41  | Aguinaldos | 12    | 8a 8b 8c 8b                   | 6a 6b 6c 6b                            | A A' B         |
| 76  | Alalás     | 5     | 8a 8b 8c (6x)<br>8b           | No                                     | AABCC'         |
| 83  | Alalás     | 4     | 8a 8b 8c<br>8b                | No                                     | A A'           |
| 102 | Alalás     | 4     | 8a 8b 8a<br>8b                | No                                     | A A' B B'      |
| 104 | Alalás     | 4     | 8a 8b 8c 8b                   | No                                     | A A'           |
| 119 | Alalás     | 4     | 8a 8b 8c 8b                   | No                                     | AB             |
| 130 | Alalás     | 4     | 8a 8b 8c 8b                   | No                                     | A A' B B'      |
| 152 | Alalás     | 10    | 8a 8b 8c (5x)<br>8b           | No                                     | A A' B B'      |
| 196 | Bailes     | 8     | 8a 8a 8b 8a<br>8c 8c<br>8d 8a | No                                     | ABA'B'<br>A'B' |
| 216 | Berces     | 12    | 11A11A                        | 3a 6a 6b 7b                            | AB             |
| 256 | Cantinelas | 4     | 8a 8b 8c 8b                   | No                                     | AABC           |
| 266 | Cantinelas | 8     | 8a 8b 8c 8b<br>8a 8a 8b 8b    | No                                     | A A' B<br>C C' |
| 283 | Cantinelas | 8     | 8a 8b 8c 8b                   | No                                     | A A' B B'      |

| 355       | Cantinelas     | 12            | 8a 8b 8c 8b   | 8a 8b            | AA' BB'         |
|-----------|----------------|---------------|---|------------------|-----------------|
|           |                |               |   | 8c 8b            |                 |
| 369       | Cantinelas     | 8             | 8a 8b 8c 8b   | No               | AABB'           |
| 396       | Ciegos         | 8             | 8a 8b 8c 8b   | No               | A A' A'' B C C' |
| 442       | Diálogos       | 25            | 8a 8b 8c 8b   | 7x               | AB AB'C         |
| 447       | Enumerativas   | 137           | 8a 8a [6x] 6c   | 5c 5d<br>5e 6d   | AB [C] DE       |
| 487       | Foliadas       | 8             | 8a 8b 8c 8b   | No               | A A' B B'       |
| 498       | Instrumentales | 4             | 8a 8b 8c 8b   | No               | A A' B B' C     |
| 549       | Labores        | 4             | 8a 8b 8c 8b   | No               | AABB            |
| 564       | Maios          | 31            | 9a 8a 4b 8b<br>8x 6x 7x<br>6c 6d 6e 6d<br>xf xg xf xg | No               | ABCD<br>DE      |
| 570       | Muiñeiras      | 4             | 11A11A<br>11B 11B                                     | No               | AB              |
| 653       | Narrativas     | 48            | 8a 8b 8c 8b   | 11A11A<br>11B11B | A A' B C        |
| 713       | Pandeiradas    | 5             | (8b) 8a 8b 8c 8b                                      | No               | ВАВС            |
| Total: 29 |                | Total:<br>471 |   |                  |                 |

Table 1: Metrical and melodic configuration of the Galician sample corpus

The initial hypothesis is that the main metrical characteristics of the texts in the corpus of Galician songs (structural parallelism, isosyllabism and consistent rhyme scheme) will be reinforced by the musical settings<sup>10</sup>.

I am aware that dealing with traditional song is particularly complex because transcriptions reflect the way in which a specific person performed a song at a specific moment, and traditional melodies only exist relating to the way of performing them of the individual whose singing is being transcribed. This study relies exclusively on the musical and textual transcriptions provided in the CG.

Music is isochronous by nature, that is, for any given composition there is a beat realised at roughly equal intervals. In order to represent the musical alignment of a given text, I will adopt the grid notation, where a number of x's are organised horizontally to represent the occurrence of syllables at specific temporal intervals, and vertically to represent beat prominence – the higher the column, the stronger the position. Thus, the first eight bars in Figure 1 correspond to the musical grid in  $(6)^{11}$ .



Figure 1: CG 5, first musical phrase

(6)

| D<br>e-                  | C<br>les                      | D<br>van                  |     |   |   |              | D  | C<br>ra |    | В  |   | C<br>Be      |              | D            | $\mathbf{E}$ | oD<br>lé     |        | C            |   |   |   |   |   |   |   | P |
|--------------------------|-------------------------------|---------------------------|-----|---|---|--------------|----|---------|----|----|---|--------------|--------------|--------------|--------------|--------------|--------|--------------|---|---|---|---|---|---|---|---|
| x x                      | X X                           | x x                       | X X | X | X | X            | X  | X       | X  | X  | X | X            | X            | X            | X            | X            | X      | X            | X | X | X | X | X | X | X | 0 |
| X                        | X                             | X                         | X   | X |   | X            |    | X       |    | X  |   | X            |              | X            |              | X            |        | X            |   | X |   | X |   | X |   | 1 |
| X                        |                               | X                         |     | X |   |              |    | X       |    |    |   | $\mathbf{X}$ |              |              |              | $\mathbf{X}$ |        |              |   | X |   |   |   | X |   | 2 |
|                          |                               | X                         |     |   |   |              |    | X       |    |    |   |              |              |              |              | x            |        |              |   |   |   |   |   | X |   | 3 |
| San                      | Jo-                           | sé                        |     |   |   | <u>e_</u>    | _  | ma      | !- | is |   | M            | a            |              | _            | rí           | -<br>- | a            |   |   |   |   |   |   |   | S |
| C                        | $\mathbf{C}$                  | $\mathbf{E}\mathbf{b}$    |     |   |   | $\mathbf{F}$ | El | oD      |    | В  |   | $\mathbf{C}$ |              | D            |              | В            |        | $\mathbf{C}$ |   |   |   |   |   |   |   | P |
| $\mathbf{x}  \mathbf{x}$ | $\mathbf{x} \cdot \mathbf{x}$ | $\mathbf{X} - \mathbf{X}$ | X X | X | X | X            | X  | X       | X  | X  | X | $\mathbf{X}$ | $\mathbf{x}$ | $\mathbf{x}$ | X            | X            | X      | X            | X |   |   |   |   |   |   | 0 |
| X                        | X                             | X                         | X   | X |   | X            |    | X       |    | X  |   | X            |              | X            |              | X            |        | X            |   |   |   |   |   |   |   | 1 |
| X                        |                               | X                         |     | X |   |              |    | X       |    |    |   | X            |              |              |              | X            |        |              |   |   |   |   |   |   |   | 2 |
|                          |                               | X                         |     |   |   |              |    | X       |    |    |   |              |              |              |              | X            |        |              |   |   |   |   |   |   |   | 3 |

In (6), the text is decomposed into S(yllables), which are made to correspond to musical P(itches). Long lines after a syllable indicate that the syllable in question is sung to more than one pitch (what is known as *melisma*).

<sup>&</sup>lt;sup>11</sup> For the sake of clarity, I have decided to organise the grids according to the verse lines provided in the songbook rather than to make each grid correspond to a musical period or phrase. All the musical scores are available in Martínez Torner & Bal y Gay (2007).

Every note is assigned a specific duration – the more horizontal crosses, the longer the note – as well as a specific metrical position – the more vertical crosses, the more prominent the note will be. The duration established in the metrical baseline (level 0) normally corresponds to the shortest value in a given song or song phrase – in this case, it corresponds to a semiquaver, as this value is used in the second bar<sup>12</sup>. Every level above level 0 corresponds to twice the duration of the level immediately below it – thus, in (6) above, level 1 corresponds to a quaver (two semiquavers), level 2 corresponds to a crotchet (two quavers), and level 3 corresponds to a minim (two crotchets).

Before going on, it must be observed that the metrical structure of a given song will easily override the metrical organisation of the text, as the distribution of strong and weak metrical positions is determined not by the prosodic makeup of a given line, but by the distribution of strong and weak musical beats to which the different syllables are made to correspond to.

Although it is true that the texts of traditional songs can be analysed separately, as partially shown in section 2, the conclusions reached will be clearly biased, for, as Hayes & Kaun (1996) note, in sung verse

the metricality of a line is not generally determinable simply from an inspection of its linguistic form. Rather, in order to establish metricality, one must know its actual rhythmic alignment with the grid; what in traditional terms is known as its text-setting. Strictly speaking, it is only text-settings that may be counted as metrical or unmetrical.

In this regard, I disagree with Hayes and Kaun's (1996) view that text-setting is a phenomenon independent of tune, as both metrical position and pitch play a role in the process of text-to-tune alignment. In fact, this study argues that metrical positions of a given text inherit not only the metrical strength of the note(s) to which a syllable is associated, but also the saliency associated with note pitch and duration. That is to say, syllables can be matched to notes with a specific strength and duration but no musical pitch (as is the case of rap and other spoken musical genres), to note pitches without a metrically determined duration (as in many solo vocal compositions), or notes with a relative duration and a pitch (as in most vocal compositions). The degree of correspondence between syllabic strength and note strength will render text-settings which show varying degrees of acceptability.

<sup>&</sup>lt;sup>12</sup> Any values below the semiquaver have been disregarded as ornaments and left out of the grid.

Up to the present, studies about text-setting have concentrated on discovering the constraints that rule the interaction between syllables and beats in different languages and musical genres (see Hayes & Kaun, 1996; Hayes & MacEachern, 1996, 1998; Kiparsky, 2006; Dell & Halle, 2009; Hayes, 2009; Rodríguez-Vázquez, 2010). An example of this type of interaction is illustrated in (7), which corresponds to CG 15<sup>13</sup>:

| ( | (7)                |              |                    |             |        |               |                           |              |                      |             |                          |                 |        |                       |
|---|--------------------|--------------|--------------------|-------------|--------|---------------|---------------------------|--------------|----------------------|-------------|--------------------------|-----------------|--------|-----------------------|
|   | x<br>x<br>A<br>.1- | x<br>Bb      | x<br>x<br>C<br>no- | x           | x<br>x | x<br>D        | x<br>x<br>Bb              | x            | x<br>A<br>nos        | x           | x<br>x<br>x<br>G<br>ven, | x               |        | 3<br>2<br>1<br>P<br>S |
|   | x<br>x<br>G        | x<br>A       | x<br>x<br>Bb       | x           | x<br>x | x<br>A        | x<br>x<br>G               | x            | x<br>x<br>A          | x           | x<br>x<br>G              | x               |        | 3<br>2<br>1<br>P      |
|   | Dios               | nol          | 0                  |             |        | trai-         | ga                        |              | con                  |             | ben.                     |                 |        | S                     |
|   | x<br>x<br>A        | x            | x<br>Bb            | x<br>x<br>C | x      | x<br>x        | x<br>D                    | x<br>x<br>Bb | x                    | x<br>x<br>A | x                        | x<br>x<br>G     | x<br>G | 3<br>2<br>1<br>P      |
|   | Dios               |              | nos                | dea         |        |               | tan-                      | tas          |                      | 0-          |                          | 1.6-            | llas   | s                     |
|   | x<br>x<br>G        | x<br>A<br>mo | x<br>x<br>Bb       | x           | x<br>x | x<br>A<br>ce- | x<br>x<br>X<br>G<br>o hai | x            | x<br>x<br>A<br>d'es- | x           | x<br>x<br>x<br>G         | x<br>G<br>laz.1 |        | 3<br>2<br>1<br>P<br>S |

The melody of CG 15 is made up of two musical phrases of six bars each (plus two incomplete bars before each phrase), which can be subdivided into two three-bar periods. In this song, the alignment between syllables and beats has been done so that most stressed syllables are matched to a strong beat<sup>14</sup>. The exceptions to this rule correspond to the second strong position in the grid, where the setting of the lexical words seems to contradict the

<sup>&</sup>lt;sup>13</sup> In the grids, syllables that have undergone synalepha are underlined.

<sup>&</sup>lt;sup>14</sup> In the most recent literature about text-setting, syllable-to-beat correspondence in different languages and vocal genres is measured against the metrical constraint MATCHSTRESS. Disagreements between syllable stress and metrical or musical strength qualify as 'MATCHSTRESS violations'. (see Hayes, 2009; Rodríguez-Vázquez, 2010, among others). For an in-depth analysis of stress-to-beat mismatch in English and Spanish folksong, see Rodríguez-Vázquez (2010).

metrical arrangement of the text. Thus, the paroxytone *tráiga* («may he bring») becomes an oxytone (*traigá*), and the same happens to *tántas* («as many») and *céo hai* «there is in the sky»), which become *tantás* and *ceó hai*. On top of that, the mismatched syllables fall on long note values (crotchets and dotted crotchets), which one again contributes to them being perceived as metrically salient.

Similarly, a small number of grammatical words which are neither phonologically stressed nor metrically promoted are set to strong musical beats. Such is the case of object pronoun  $Dios\ nol\ \emph{o}\ (\text{``God\ [gave]}\ it\ to\ us\)$  and contraction of preposition plus determiner  $como\ \emph{no}\ ceo\ hai\ (\text{``as\ [many\ as\ ]}\ there\ are\ in\ the\ sky\)$ 

In the 29 analysed songs, there are numberless examples of syllable-to-beat mismatch, all of which surface as lexical stress shifts or grammatical stress promotions<sup>15</sup>.

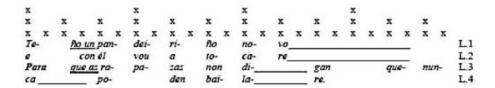
Although the analysis of beat-to-syllable and duration-to-syllable mismatches gives rise to valuable metrical observations about this song, the role of pitch cannot be neglected. The P row in (7) seems to neutralise the effects of both beat strength and note duration, as the mismatched syllables are set to pitches that are lower than those to which the stressed syllables are set: *trai-ga* and *ce-o hai* are set to an A-G (descending Major second) sequence, while *tan-tas* is set to a D-Bb (descending Major third) sequence.

In the case of grammatical mismatches, the two monosyllables are set to long notes which stand as the highest pitches in their musical periods (in both cases, B flat), so the mismatches between syllable and note are more salient in the case of grammatical words. In this regard, it has been observed that lexical mismatches are 'less acceptable' than grammatical mismatches in English, partially because the promotion of certain monosyllabic grammatical words does not entail the phonological reconfiguration of the words. If a polysyllabic lexical word is mismatched, a series of phonological processes that occur naturally in the language linked to stress assignment (particularly vowel reduction) have to be reversed, which entails what native speakers judge as an unacceptable text-setting. The phonology of Galician vowels is not as complex as that of English vowels, but it certainly is more so than the phonology of Spanish vowels — in Galician, mid vowels in stress-related positions are phonemically contrastive with regard to the open/close feature.

<sup>&</sup>lt;sup>15</sup> For reasons of space, I will not analyse any further particular cases, as the goal of the paper is to provide a general view of text-setting mechanisms with regard to Galician folk song.

Galician songs appear to set lexical words so as to avoid mismatches between syllable stress and note prominence. In those cases where a beat mismatch takes place – when the stressed syllable of a lexical word falls on a weak beat and one of the unstressed syllables in the same word falls on a strong beat –, note pitch and duration are displayed so as to minimise the effect of stress-to-beat mismatch. In the case of grammatical words, there is a higher degree of tolerance towards mismatches. However, the musical setting often forces the performer to put into practice linguistic mechanisms of vowel reduction that diminish the degree of prominence of musically prominent grammatical words. In (8), the first stanza of CG 396 is set to a ternary grid. The grammatical mismatches in this stanza consistently appear on the first word of lines 2 – conjunction e («and») – and 3 – preposition para («for»). The latter is particularly problematic, as it has an extra syllable which does not fit into the metrical grid. Galician solves the problem by means of syncope, whereby para becomes  $pra^{16}$ .

(8)



A further example is found in CG 570 (9), where there is syncope on the conjunction *pero* («but»), which becomes *pro*.

(9)



<sup>&</sup>lt;sup>16</sup> It might be argued that this is equivalent to Spanish pa, a colloquial shortening of para through the apocope of the last two sounds in the word. It must be noted that Galician shows a pervading tendency to reduce or delete unstressed vowels even in content words, i.e. A Coruña > A Curuña > A Cruña, while in Spanish, unstressed vowel reduction does not alter the quality of the original vowel (Castro, 2003: 44).

Cases such as those observed in (7), (8) and (9) are commonplace in the 29 songs of the sample corpus. Moreover, syllable-to-beat mismatches are a common practice in most folksong traditions, as has been confirmed by the above-mentioned studies about text-setting. What makes those traditions differ with regard to text-setting is the type of mismatches that different languages allow as well as the devices put into place to compensate for the often unavoidable discrepancies between prosody and melody. In the case of Galician, the close analysis of folksong points to a mixed type of rhythm in the language, where the existence of a limited number of syllable types together with phonological processes that simplify syllable structure (a characteristic of syllable-timed languages) coexists with the fact that unstressed vowels tend to have a reduced vowel system and be phonetically shorter or even absent (a characteristic of stress-timed languages). Galician shares this characteristic with European Portuguese, while this is one of the differences between Spanish and Galician.

### 4. CONCLUSIONS

The analysis of 29 traditional Galician songs from Torner and Bal's *Cancionero Gallego* shows that a full understanding of folksong metrics cannot leave aside the role of beat strength, note duration and pitch. The article has illustrated the discrepancies that arise between the metrics of folk texts when traditional songs are analysed as single objects composed of linguistic and musical elements. The intricate relation between beat, duration and pitch has been observed to bear an impact on the articulation of syllable prominence. The effect of phonological constraints on text-setting has been pointed out.

The initial hypothesis that the main metrical characteristics of the texts of Galician songs are reinforced by the musical setting of those texts has been partially confirmed, although more work needs to be done before reaching a final conclusion.

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Recibido el 16 de junio de 2012.

Aceptado el 17 de septiembre de 2012.