

## Body percussion and blues. A neuromotor approach through BAPNE method Percusión corporal y blues. Un acercamiento neuromotor a través del método BAPNE

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**Abstract.** The blues is a musical genre originating in African-American communities that over time became one of the most important influences of popular music in the United States. Its didactic application in various educational contexts allows for many pedagogical uses, which is why the BAPNE method structures and teaches it in a novel way through Neuromotricity. Throughout the years, the learning process of blues and jazz music has been based mostly on imitation with the objective of acquiring knowledge and skills for its correct execution. In this publication we creatively propose activities structured in a specific way to ensure the learning process through sequences that focus on the independence of the lower and upper limbs and the voice. For this reason, we offer in this article specific pedagogical resources to understand and work on the basics of this musical genre with multiple activities created from the 12-bar blues form based on coordination, dissociation and laterality processes among many other aspects.

**Keywords:** BAPNE method, Blues, Dual task, Bodypercussion, Creativity, Neuromotricity.

**Resumen.** El blues es un género musical originario de comunidades afroamericanas que se convirtió con el paso del tiempo en una de las influencias más importantes de la música popular en Estados Unidos. Su aplicación didáctica en diversos contextos educativos permite muchos usos pedagógicos, razón por la que el método BAPNE lo estructura y enseña de manera novedosa a través de la neuromotricidad. A lo largo de los años, el proceso de aprendizaje de la música blues y jazz se ha basado mayormente en la imitación con el objetivo de adquirir conocimientos y habilidades para su correcta ejecución. En esta publicación proponemos de manera creativa actividades estructuradas de forma específica para asegurar el proceso de aprendizaje a través de secuencias que se centran en la independencia de los miembros inferiores, superiores y la voz. Por este motivo, ofrecemos en este artículo recursos pedagógicos concretos para comprender y trabajar las bases de este género musical con múltiples actividades creadas a partir de la forma del blues de 12 compases basándose en procesos de coordinación, disociación y lateralidad entre otros muchos aspectos.

**Palabras clave:** Método BAPNE, Blues, Doble tarea, Bodypercussion, Creatividad, Neuromotricidad.

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### Introduction

The inclusion of movement in corporal expression and musical pedagogy is gaining more and more strength in educational plans. Neuroscience, sports, music and other fields are expanding into dual-task activities, rhythmic-motor activities that possibly stimulate both cognitive and executive functions. There is literature that shows very positive effects when implementing the dual task together with displacement, walking and movement activities, no matter if it is adults or young people, whether healthy or with certain conditions (Teixeira et al., 2013a, 2013b; Kim et al., 2017a, 2017b, 2020, 2022). Neuromotricity can be used with blues music as an excellent tool and through the BAPNE method, it is provided a specific plan of activities progressing in psychomotor difficulty that contributes to cognitive and socio-emotional stimulation.

In the learning process, the sequences are the steps to follow in order to accomplish our target, and in BAPNE every single activity is adequate to empower and increase the efficiency of this process. So, in pedagogy is a must to offer an attractive plan of activities but also dynamic and complete sessions (Romero-Naranjo, 2008, 2013a, 2013b, 2013c, 2014, 2017, 2019, 2020a, 2020b, 2020c, 2022a, 2022b), that's why this article aims to offer a selection of tools that can be helpful to teach blues music but also other music styles or even choreographic works. The BAPNE method has quite a number of high-impact publications, highlighting the articles on body percussion with the Cuban clave (González-Sánchez et al., 2021) and

on urban music (Romero-Naranjo & González-de-Benatuil, 2022) in the which the entire learning sequence of the rhythms it proposes is systematically described as we will do in a while.

This article aims to demonstrate the applicability of the BAPNE method through the study of the 12 bar blues structure, creating a sequence of activities in order to enhance student's rhythmic, harmonic and improvisation abilities.

### Literature review

There is a lot of literature on this subject that should be grouped by modules in order to divide the existing bibliography in a structured way. The following are the most relevant publications.

#### - Body percussion and ethnomusicology

There are no many publications that offers a detailed study related to body percussion, a few offers introductory studies (Di Russo & Romero-Naranjo, 2021a, 2021b; Kartomi, 2010; Ortiz-Fernández, 1951; Penalva-Martínez et al., 2024; Romero-Naranjo, 2008; Warner-Dietz & Olatunji, 1965) but "more precise studies are needed" (Di Russo & Romero-Naranjo, 2023) and even more in the jazz and blues studies area (Navarro-Maciá & Romero-Naranjo, 2023).

#### - Body percussion and musical language

Body percussion and musical language has been a target of University of Alicante but also the relationship between physical activity, sport and the learning of musical

language through neuromotricity. There is a whole project called “Cognitive Solfeo” that provides creative resources with the aim of bringing another vision to the learning of musical language (Romero-Naranjo, 2020). The new approach to learning musical concepts through neuromotricity using different manipulative materials, as cones, hoops, strings, etc. are some of the new propositions we can find on the method (Romero-Naranjo, 2020b) but also other proposals to work on most of the musical concepts needed in the learning of musical language. the incorporation of rhythm from important figures such as Bruno Mars (González de Benatuil et al., 2022) or from the perspective of musical language and singing (Romero-Naranjo & Arnau-Mollá & Di Russo et al., 2022).

- Body percussion in elementary school

The most significant research about movement and kids is provided by BAPNE research group (Romero-Naranjo, 2018a, 2018b, 2019a, 2019b, 2019c, 2019d, 2020a, 2020b, 2020c 2022a, 2022b), where a huge variety of activities and proposals about neuromotricity and kids are shown. These resources are properly sequenced by age groups.

- Body percussion and the sciences of physical activity and sport

The specific protocol develop by BAPNE in the physical activity and sport field seeks the necessity of offer a very unique process. The interdisciplinary has created his own identity, towards contributions in a very concrete line (Alonso-Marco & Romero-Naranjo, 2022; Romero-Naranjo, 2020a; Romero-Naranjo & González de Benatuil, 2022a; Romero-Naranjo & Llorca-Garnero, 2023). This line provides several resources that offers a new point of view about body percussion and the sciences of physical activity and sport.

- Body percussion and visual arts

There are several researches about body percussion and visual arts, that analyses body percussion on TV advertisements (Alonso-Sanz & Romero-Naranjo, 2014), but also in TV shows as Sesame Street (Romero-Naranjo & Alonso-Sanz, 2013) as a pedagogical tool in music education and another one that review the relationship between body and space in the music classroom (Alonso-Sanz & Romero-Naranjo, 2014b). Or even others that focus on visual artists and body percussion (Alonso-Sanz & Romero-Naranjo, 2015).

- Body percussion and Creativity

BAPNE research group has participated in several International Congresses exclusively dedicated to body percussion and creativity, always from an academic perspective. There's been diverse contributions from traditional dances (Arnau-Mollá & Asurmendi-Telleria et al., 2022), from the applicability of urban rhythms at any educational level (Arnau-Mollá, & Romero-Naranjo, 2022e), also from children's coordination clapping games (Romero-Naranjo & Arnau-Mollá & González de Benatuil et al., 2022); or even from traditional rhythms such as "Las Panaderas" (Di Russo et al., 2022).

- Body percussion and cognitive functions

There is an extensive bibliography on this subject in which dual tasks are of great interest (Mas-Mas et al., 2023). On its relationship with cognitive and executive functions there is literature by thematic areas (Romero-Naranjo, 2012, 2013a, 2013b; Fernández-Molina et al., 2020). The BAPNE method is the only exclusive research group on Neuromotricity with more than fifty publications in Web of Science. There is a scientific production that has focused on the study of cognitive and executive functions, especially focused on dual tasks (Kim et al., 2017; Romero-Naranjo & Sayago-Martínez et al., 2023; Romero-Naranjo et al., 2023). In the same way there are also investigations with control and experimental group analyses using validated tests, and with more than three months of intervention (Álvarez-Morales & Romero-Naranjo, 2019; Arnau-Mollá & Romero-Naranjo, 2020; Carretero-Martínez et al., 2014; Castelló-Juan et al., 2019; Cozzutti et al., 2017; González-Sánchez et al., 2019; Latre-Nava et al., 2019; Piqueres-Juan, et al., 2019; Romero-Naranjo, 2014c; Romero-Naranjo et al., 2022; Ros-Silla et al., 2019; Torró-Biosca et al., 2019).

- Body percussion and urban music

BAPNE method also has work on the incorporation of rhythm from important contemporary figures such as Bruno Mars (González de Benatuil et al., 2022) or from the perspective of musical language and singing (Romero-Naranjo & Arnau-Mollá & Di Russo et al., 2022) and now we are opening a new approach to the jazz and blues music pedagogy, through neuromotricity (Navarro-Maciá & Romero-Naranjo, 2023).

In the history of jazz and blues pedagogy there's been quite a number of pillars but J. Aebersold and D. Baker are probably two of the most influential. Aebersold deserves that first position because he is, probably, the most productive jazz education publisher, and Baker because he started the path of jazz education and has been one of the main influences (Fay, 2013).

Among the large number of publications, we need to point Aebersold's *Minor Blues in all keys* (1993), *Nothing but Blues* (2015), *Blues in all keys* (2015), and Dunscomb and Hill *Jazz Pedagogy: The Jazz Educator's Handbook and Resource Guide* (Dunscomb & Hill, 2002). As Fay proposed:

"While Baker's book can be applied more directly to college jazz programs, Dunscomb and Hill have written their book to be accessible and applicable to middle and high school programs" (Fay, 2013, p.11).

After Dunscomb and Hill, we can find *Beginning blues improvisation pedagogy for the non-jazz specialist educator* (Tomassetti, 2003), a publication with a very interesting proposal to work 12-bar blues phrase melodic resources where using original melodies from blues standards and exercises to help the students to improvise and trade.

Also, Doug Goodkin presented a proposal for blues music on his *Now's the time: Teaching jazz to all ages* (Goodkin, 2004) where body percussion is used as a musical instrument but not as a neuromotricity tool, as we propose

in this article. As we can see, all of the previous works remain in the same idea of teaching harmonically I – IV - V, applying scales over the chord changes and also with body percussion but this article aims to present a neuromotor approach to learn and practise the blues as a whole activity in order to prepare the students for the instrumental experience.

### Methodological justification

BAPNE is a method that uses body percussion based on neuromotricity, in order to improve cognitive and executive functions. The word BAPNE is an acronym for the five disciplines in which the methodology is based: Biomechanics, Anatomy, Psychology, Neuroscience and Ethnomusicology. Since its inception in 1998, to date it has more than 50 publications on Web of Science.

The target of this activities is to create a sequenced proposal to learn blues using specific musical-motor exercises incrementing the complexity both in cognitive and motor areas. Dual task is used as a tool to dissociate the upper and lower extremities and the voice as three different instruments due to the large quantity of articles and literature that proves the benefits in human health (Teixeira et al., 2013a, 2013b; Kim et al., 2017a, 2017b, 2020, 2022). And also there's a quite number of studies that have been conducted showing improvement in gait while performing rhythmic activities (Kim et al., 2017b, 2020; Montero-Odasso et al., 2014; Oh Shy et al., 2016; Patel et al., 2014; Schrodt et al., 2004). BAPNE method provides with hundreds of specific and sequenced activities to exercise the dual task through rhythm using various resources of displacement and motor movements (Alonso-Marco & Romero-Naranjo, 2022; Andreu-Cabrera & Romero-Naranjo, 2021; Arnau-Mollá & Romero-Naranjo, 2022a, 2022b; González-Sánchez et al., 2021; Mas-Mas, 2023; Romero-Naranjo & Sayago-Martínez, 2021a, 2021b; Romero-Naranjo, 2008, 2012, 2013a, 2013b, 2019a, 2019b, 2019c, 2019d, 2019e, 2019f, 2019g, 2019h, 2019i, 2019j, 2020a, 2020b).

### A proposal for sequencing activities according to BAPNE

Blues is one of the wide number of music styles that uses the imitation as a process of creating and learning. In this article, we are going to apply the process of learning blues music to body percussion, and students or session attendees not only imitate rhythmic patterns, but by internalising them and participating in improvisational or exploratory activities, they may be able to produce other structures and movements (Hervista & Masunah, 2020). Despite this, it is very important at the beginning of any activity to follow a proper sequence to ensure effective learning. In that sequenced process, the syncope becomes the biggest rhythmic challenge but also one of the most important elements of the blues feel.

In BAPNE the trainer is required to be adaptable to the

changing environment of the classroom and ensure that the sequences of the teaching proposal are followed. Due to the importance of the imitation in the method, the execution of the activities must be totally accurate and once its target is accomplished the open the door to improvisation and variation in order to avoid monotony and repetition. Variety and creativity are very welcome as an option to stimulate the improvisation process, even allowing the student to become teachers along the activity as a perfect way to relax and change roles.

The sequenced activities proposed to work on the twelve-bar blues is presented below structured in several parts:

#### 1. CINETICS.

The purpose of this sequence of the learning process is to introduce and practice the movements and rhythms of the whole exercise. The first part of the sequence focuses on making the student feel comfortable and confident with the second and fourth beat of the bar, where lays the most important part of the “swing feel”.

#### 2. BLUES CHANGE'S STRUCTURE

The purpose of the second part of the sequence aims to make the student familiar with the blues change's chord progression and practice the ear training to recognise and sing the whole structure.

#### 3. SCALES & IMPROVISATION.

The last part presents a practical approach to the structure and aims to introduce the student to practice improvisation and develop them through the presentation of the C pentatonic scale over the chord changes in the whole structure.

#### 1. CINETICS

a. SEQUENCE The teacher shows how to play and count in a 4/4 bar. (Figure 1)

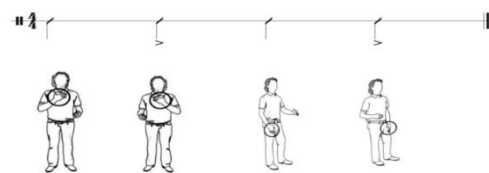


Figure 1. Accents on the weak beats

b. SEQUENCE The teacher repeats the same exercise and moves a step forward and on step backward only in the second beat in the 4/4 bar. They will begin with the right foot as shown in the image below. (Figure 2)

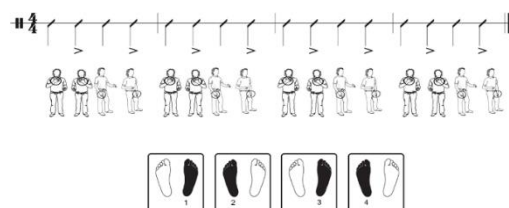


Figure 2. Accents on the weak beats and two step movement

c. SEQUENCE The teacher repeats the same exercise but now moves freely a step with every accent (second a fourth beat in every 4/4 bar). (Figure 3)

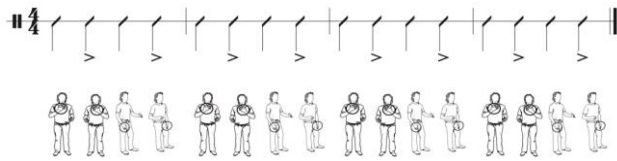


Figure 3. Accents on the weak beats and two step free movement

d. SEQUENCE The teacher presents the same exercise but now only moves with every accent in a four steps square form as shown below. (Figure 4)

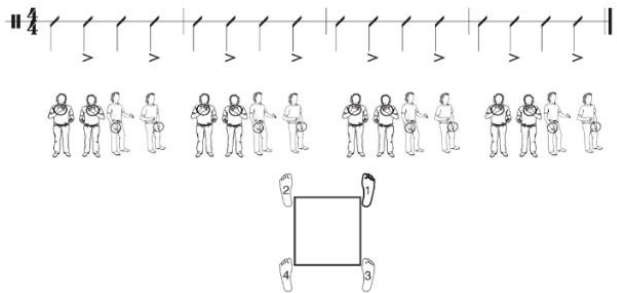


Figure 4. Accents on the weak beats and four step square movement

e. SEQUENCE The teacher presents words stressed on the last syllable in order to show where the accent is in the bar. (Figure 5)

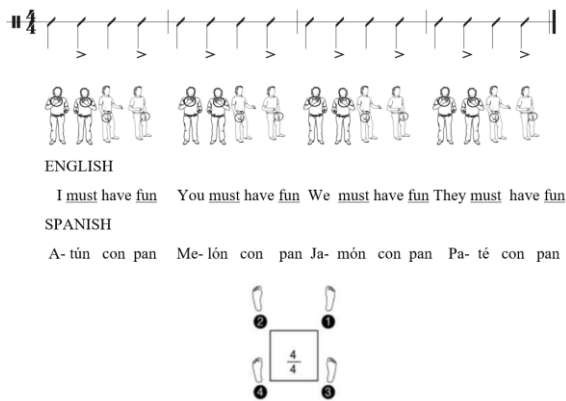


Figure 5. Accents on the weak beats and four step square movement vocalizing

## 2. BLUES CHANGE'S STRUCTURE

a. SEQUENCE Now the teacher uses three different words to concrete the 12 bar blues structure. (Figure 6)

## 12 BAR BLUES

BAPNE

A-tún con pan A-tún con pan A-tún con pan A-tún con pan  
I must have fun I must have fun I must have fun I must have fun

Ja-món con pan Ja-món con pan Ja-món con pan Ja-món con pan  
You must have fun You must have fun You must have fun You must have fun

Pa-té con pan Pa-té con pan Pa-té con pan Pa-té con pan  
We must have fun We must have fun We must have fun We must have fun

Figure 6. Accents on the weak beats and four step square movement vocalizing with structure

b. SEQUENCE Now the teacher uses three different words to concrete the 12 bar blues structure with a syncopated rhythm. (Figure 7)

## 12 BAR BLUES

BAPNE

Quie-roa-tún da-me pan Quie-roa-tún da-me pan  
I have fun I have fun I have fun I have fun

Y ja-món da-me pan Y ja-món da-me pan  
You have fun You have fun You have fun You have fun

Y pa-té da-me pan Y pa-té da-me pan  
We have fun We have fun We have fun We have fun

Figure 7. Syncopated accents and beats and four step square movement vocalizing with structure

c. SEQUENCE The teacher presents three notes of the C pentatonic scale for every chord. (Figure 8)

**VOCAL BLUES EXERCISE**

BAPNE

Figure 8. C pentatonic scale on weak beats and four step square movement

3. SCALES & IMPROVISATION

a. SEQUENCE The teacher, using the notes of the C pentatonic scale, conducts the group to do a canon starting in the second bar of the structure.

b. SEQUENCE Now the teacher explains the canon form and presents the same exercise but singing in canon, beginning the canon in the third tempo, performing the Cantabile ball change structure. (Romero-Naranjo, 2018)

d. SEQUENCE The teacher presents the notes of the C pentatonic scale while he plays the 12 bar blues form. (Figure 9)

**VOCAL BLUES EXERCISE**

BAPNE

Figure 9. C pentatonic scale on weak beats and four step square movement with structure

e. SEQUENCE After using the C pentatonic Scale with body percussion, the teacher prepares the students presenting three words (Atún, Jamón and Paté) that will help them to understand better the 12 bar blues structure. (Figure 10)

**VOCAL BLUES C SCALE EXERCISE**

BAPNE

Figure 10. C pentatonic scale with accents on weak beats and four step square movement with structure and vocalizing

f. SEQUENCE After using the C pentatonic scale with body percussion and using three words, one every four bars, teacher prepares the students for the blues changes with three notes of the same arpeggio in the three chords of Blues progression (C, F, G). (Figure 11)

**VOCAL BLUES EXERCISE**

BAPNE

Figure 11. 3 note from C pentatonic scale on weak beats and four step square movement with structure)

g. SEQUENCE After using the C pentatonic scale with body percussion and using three words, one every four

bars, teacher prepares the students for the blues changes with three notes of the same arpeggio in the three chords of Blues progression (C, F, G) and presents a syncopated rhythm. (Figure 12)

**12 BAR BLUES**

BAPNE

Figure 12. Syncopated C pentatonic scale on weak beats and four step square movement with structure

h. SEQUENCE After using the C pentatonic scale with body percussion and using three words, every four bars, the teacher prepares the students presenting the arpeggio in the three chords of Blues progression (C, F, G). (Figure 13)

**VOCAL BLUES EXERCISE**

BAPNE

Figure 13. C pentatonic scale and four step square movement with structure and vocalizing

i. SEQUENCE After using the C pentatonic scale

with body percussion and using three words, every four bars, the teacher prepares the students using the arpeggio in the three chords of Blues progression (C, F, G) with the same syncopated rhythm that sequence (Figure 14)

**VOCAL BLUES EXERCISE**

BAPNE

Figure 14. Syncopated C pentatonic scale over changes on weak beats and four step square movement with structure).

j. SEQUENCE Now the teacher explains the canon form and presents the same exercise but singing in canon in the third tempo of the first bar.

k. SEQUENCE Now the teacher explains the canon form and presents the same exercise but singing in canon in the third tempo of the first bar and moving freely in the room.

### Conclusions

The use of the movement has been proved as a useful and helpful tool to understand better the offbeat feeling of blues music and also has been significant the new approach through neuromotricity to the 12-bar blues structure using rhythmic-motor activities combined with spoken word in a high level of attention.

This group of new activities are only a simple proposal of a sequence that can be expanded and combined with other options in order to increase the development and abilities of the students. Thus, the methodology has a high number of publications in Web of Science (Romero-Naranjo et al., 2023a, 2023b, 2023c, 2023d, 2023e, 2023f, 2023g, 2023h). (Figure 15).

With the previous publications, using Jazz Rhythm changes, Cuban clave, urban rhythms, Bruno Mars repertoire and now an excerpt from the 12-bar blues, it becomes more evident that the BAPNE method is versatile

enough to adapt to a wide range of population with different characteristics, environments and interests.

It's mostly the main purpose of this study to use neuromotricity to stimulate fully both teacher and learner using the blues as a guide to combine special movements, body percussion, mathematics, dual task and executive and cognitive functions but also to teach the roots of blues music and improvisation as a musical and cultural resource.

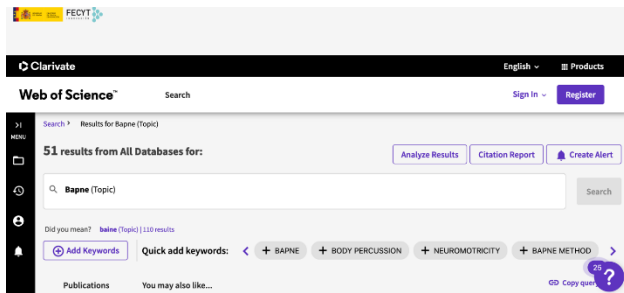


Figure 15. Web of Science publications on BAPNE.

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