Jazz and body percussion. A proposal of creative strategies with the BAPNE method Jazz y percusión corporal. Propuesta de estrategias creativas con el método BAPNE Víctor Navarro-Maciá, Francisco Javier Romero Naranjo

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Abstract. Neuromotricity is one of the most effective resources to possibly work cognitive and executive functions, highlighting its activities through the dual task in the BAPNE method. There is bibliography in Web of Science that provides positive data in several investigations with different types of population. Through the BAPNE method, the activities are structured in a specific way to ensure the learning process. In this way, with an adequate progressive sequence in the motor and cognitive difficulty, the independence of the upper and lower limbs and the voice is sought. The learning process of jazz music resides mainly in imitation, but also in the acquisition of knowledge and skills, the creativity of the teacher is as important as that of the learner, so it is proposed that once a certain level is reached, the latter assumes the role of leader in the activity. From the 32-bar AABA form of the Rhythm Changes, multiple activities can be created, supporting coordination, dissociation and laterality processes, among many other aspects, and thus providing a greater number of tools to professionals in different fields such as education and therapy to better and more widely understand the roots of jazz music.

Keywords: Neuromotricity, BAPNE method, Jazz, Dual task, Body Percussion, Creativity.

Resumen: La neuromotricidad es uno de los recursos más efectivos para trabajar posiblemente las funciones cognitivas y ejecutivas destacando sus actividades a través de la tarea dual en el método BAPNE. Existe bibliografía en Web of Science que aporta datos positivos en diversas investigaciones con diferentes tipos de población. A través del método BAPNE, las actividades se estructuran de manera específica para asegurar el proceso de aprendizaje. De esta forma, con una adecuada secuencia progresiva en la dificultad motora y cognitiva, se busca la independencia de los miembros superiores e inferiores y de la voz. El proceso de aprendizaje de la música jazz reside mayoritariamente en la imitación, pero también en la adquisición de conocimientos y habilidades, la creatividad del docente es tan importante como la del aprendiz, por lo que se propone que una vez alcanzado cierto nivel, este último asume el rol de líder en la actividad. A partir de la forma AABA de 32 compases del Rhythm Changes se pueden crear múltiples actividades, apoyando procesos de coordinación, disociación, lateralidad, entre muchos otros aspectos, y brindando así un mayor número de herramientas a los profesionales de diferentes campos como el educativo y terapéutico para comprender mejor y más ampliamente la raíz de la música jazz. **Palabras clave:** Neuromotricidad, BAPNE, Jazz, Doble tarea, Percusión Corporal, creatividad.

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Introduction

Over the last few years, interest in the impact of movement as support in educational and therapeutic processes has been increasing. There is no doubt about the relevance that body percussion has taken to be included both in the comprehensive education of students at school and in the prevention and treatment for cognitive impairment. Rhythmic-motor activities that stimulate both cognitive and executive functions, and particularly the dual task, are the object of study in various fields. The existing literature shows very positive effects when implementing the dual task together with displacement, walking and movement activities, both in adults and in young people, whether healthy or with certain conditions (Teixeira et al., 2013a, 2013b; Kim et al., 2017a, 2017b, 2020, 2022). Neuromotricity is an excellent tool (Andreu-Cabrera & Romero-Naranjo, 2021) 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 didactics of body percussion, the BAPNE method underlines the need for adequate planning and progression of the teaching process. Therefore, all the resources of the methodology, based on neuromotricity, must follow a learning sequence that guarantees the acquisition of skills related to cognitive and executive functions. The BAPNE method in its movement initiation program, BAPNE Basic, offers a global vision to work and develop the basic principles of neuromotricity where, through current and attractive rhythmic structures for students, the dual task plays a fundamental role (Romero-Naranjo, 2008, 2013a, 2013b, 2013c, 2014, 2017, 2019, 2020a, 2020b, 2020c, 2022a, 2022b). BAPNE has numerous 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, 2022a) in the which the entire learning sequence of the rhythms it proposes is systematically described. True virtuosos of body percussion can sometimes be found, but normally they lack the tools to teach what they do. BAPNE is based on the value of the teaching process, leaving behind the idea of just doing body percussion as an end product of a choreography.

This article aims to demonstrate the applicability of the BAPNE, which focus on the development of executive control, method through the study of jazz music through rhythm change's structure, creating a sequence of activities in order to enhance student's rhythmic, harmonic and improvisation abilities, based on the recent studies that demonstrate how important is dual task to jazz improvisation (Rosen et al., 2020) and also the development of "greater executive control enhances creativity of jazz improvisation for novices, but hinders it for those with more expertise" (Rosen et al., 2016, p.1).

Brief Jazz history

If there's a figure who represents the origins of jazz music, that person is Charles "Buddy" Bolden (1863-1931), at least that's what music tradition has always tried to point out, but also some of the most influential jazz musicians, as Louis Armstrong or Wynton Marsalis. "So, in the memories of older musicians, and in the retelling of these musicians' sorites, Bolden became the loudest, flashiest, most competent and stylistically cutting-edge musician in history" (Meeder, 2008, p.29). The sad part of this, is there's no proof about any of these affirmations, but anecdotes and stories like Armstrong told, but is well known "Bolden was the most popular musician among black New Orleanians between 1900 and 1906" (Marquis, 2005, p.XV) and definitely he was the biggest influence on one of the most important jazz musicians, Louis Armstrong. There is other important jazz figure on it owns beginnings like the pianist Ferdinand "Jerry Roll" Morton (1890-1941), Joe "King" Oliver (1885-1938) or "Paul Whiteman, the self-proclaimed 'King of Jazz'" (Meeder, 2008, p.58).

If there's a classical western music composer who can be considered as one of the most influencers of jazz music, that's George Gershwin. Among lots of compositions that had become jazz standards, Fascinating Rhythm (1924), Someone to Watch Over Me (1926), But Not for Me (1930) and Embraceable You (1930), and I got rhythm (1930). The last one appeared in the musical *Girl Crazy* "from the early 1930s into the 1950s *I got rhythm* was widely performed and recorded by popular singers and pianists" (Sadie & Grove, 2001). Its structure 32 bar with AABA became one of the most used music structures in the XX century jazz music's panorama as we will present later.

This period, was called the "Swing Era", where Fletcher Henderson, Benny Goodman, Cab Calloway, Artie Shaw, Glenn Miller or Duke Ellington helped with their compositions and bands to establish the language of jazz music. Due to World War II and the economic recession, "Bebop Era" emerged through the soloists of the big bands of the Swing era, some of these musicians, Coleman Hawkins, Lester Young, Billie Holiday, started to lead their own small bands, mostly quartets and quintets.

The rhythm changes' structure to most musicians, Charlie Parker and Dizzy Gillespie or Miles Davis among others, was the foundation from which to build the new musical forms of bebop. The changes were the base to improvise on, "and the first improvising chorus head would be given a new title, and the first chorus of the recording would become a new head, learned by other musicians and established as a standard." (Meeder, 2008, p.89).

The Hard Bop was the evolution of Bebop and the influence of the rhythm change's structure remained the same, even in the posterior eras, as the Avant-Garde Jazz era with musicians as Cecil Taylor, Ornette Coleman keep composing over the rhythm change's structure (Chronology) and later musicians along the 60's and 70's and composers as Quincy Jones or Gil Evans also composed over these changes. "Hard bop musicians still stuck to the small combos, 32-bar AABA and 12-bar blues structures, and virtuosic solos that their predecessors established as the norm" (Meeder, 2008, p.114). Musicians such as Bill Evans, Andrew Hill, Chick Corea, Keith Jarret, Herbie Hancock maintained the use of this musical form till nowadays.

Literature review

When we think about jazz pedagogy, automatically David Baker's (1979) name emerges, not only because he is one of the very first educators who have produced a significant bibliography, but his lessons and knowledge about jazz music has been one of the main influences (Fay, 2013). As Baker established the first routes and ways to approach to jazz education, and Aebersold produced a large amount of bibliography, more recently Dunscomb and Hill on his Jazz Pedagogy: The Jazz Educator's Handbook and Resource Guide (Dunscomb & Hill, 2002) to complete a part of the curriculum in general jazz studies, because "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.10).

A Historical and Critical Survey of Recent Pedagogical Materials for the Teaching and Learning of Jazz presents a brief section dedicated to jazz rhythm where concludes "the most common assumption made by pedagogues seems to be that there is not a great deal one can say about it" (Witmer & Robbins, 1988). As Witmer suggests, the approach that most of the jazz methods do to rhythm is more as a juxtaposition of licks or "patterns are to be memorized, then inserted as an appropriate point, strung together, or used cyclically" (Witmer & Robbins, 1988). Besides Witmer, one of the very specific publications which contains rhythmic exercises is Mehegan, where explores an interesting approach to rhythmic pedagogy on his Tonal and Rhythmic Principles. Mehegan presented four rhythmic composites for different kinds of standards: a ballad, and four more for an up-tempo tune (Mehegan, 1984, p.119). And in addition to that an exercise where he applies accents to the first or the second subdivision of every beat in a four beats bar.

Peter Spitzer in his Jazz Theory Handbook presented a list of tunes who have this chords change's structure (Spitzer, 2001). Goodkin also dedicated a chapter to the Jazz Standards on his Now's the Time and it shows the importance of the rhythm changes on the jazz learning process with a very accurate and simple example:

Two jazz musicians meeting for the first time can jam on these commonly understood chord changes without having to know a common melody. Now when they hear two musicians say, "Do you want to play a blues in Bb or a Rhythm changes in F?" the children are initiated into the secret language of jazz (Goodkin, 2004, p.251)

And in its book, Goodkin presented a list of only nine jazz compositions (Goodkin, 2004) who uses rhythm changes but Mark Watkins, on his e-book From *Fundamentals of Jazz Improvisation: What Everybody Thinks You Already Know* also presented a wider and longer list of the standards based on the I got rhythm changes. (Watkins, 2010, p.28)

Also in this work, Watkins presents an exhaustive and interesting study of the rhythm change's harmonic structure and the melodic possibilities for improvisation with some of the most important rhythm changes contrafacts melodies sorted chronologically and a proposal of scales and substitution chords on the original structure. (Watkins, 2010)

Anyway,

"Jazz originated in an oral tradition, namely, African American tradition. The same culture also developed a method for ear training based on aural imitation. [Most of the greatest jazz musicians] describe how they began by imitating recorded music" (Solli et al., 2021, p.83).

And obviously, jazz pedagogy has been using aural training since his own genesis. Solli presented a very interesting revision of the aural method specifically applied to jazz studies, more concretely at Norwegian Jazz Program at NTNU in Trondheim for more than 30 years (Solli et al., 2021, p.82).

¿But what exactly are we talking about? ¿What is a jazz standard? ¿Why should we use them? ¿How can we approach jazz improvisation through the standards? Toby Wren proposed a definition of jazz standard as "those tunes are considered common knowledge among jazz musicians and that appear in the pages of the various Real Books and Fake Books" (Wren, 2022, p.1) which a great number of these were published on the "Great American Songbook". As Wren says, "Gioia also includes in his list, compositions by jazz artists such as Ellington, Miles and Monk, that have become commonly performed by jazz musicians" (Wren, 2022, p.2).

Method

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 proposed activities are not choreographically-oriented, but rather, they are designed for the execution of specific musical-motor sequences starting from the simplest sequence of movements and progressively evolving in motor and cognitive complexity.

The development of motor skills involves a connection of different dimensions:

1) the affective-social, which refers to the set of decisions and emotions that are adopted in the learning process (Ariolfo, 2010);

2) the perceptive-cognitive dimension, which can be described as the involvement of a series of mechanisms and processes that activate operations of a cognitive and perceptive nature and that evolve during life significantly influencing motor development (Ruiz & Arruza, 2005); and

3) the neuromotor dimension, associated with motor

actions" (Luis-De Cos, 2019, pp.231-232)

Understanding dual task as the ability to perform two simultaneous and completely different tasks, paying attention to both in the same way constantly, all the exercises proposed in the methodology involve this executive function. This means, the activities seek to accomplish the dissociation of upper and lower extremities, as well as voice independence (Sayago et al., 2021).

There is large amount of literature on the use of dual task, including those articles that indicate the benefits in healthy older adults and in those with some type of cognitive impairment (Teixeira et al., 2013a, 2013b; Kim et al., 2017a, 2017b, 2020, 2022; Mas-Mas et al., 2023). Additionally, studies have been conducted showing improvement in gait while performing rhythmic activities (Kim et al., 2017b, 2020; Montero-Odasso et al., 2012; Oh et al., 2016; Patel et al., 2014; Schrodt et al., 2004).

Specifically, BAPNE method has an extensive record 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; Alonso-Sanz & Romero-Naranjo, 2015; Andreu-Cabrera & Romero-Naranjo, 2021; Arnau-Mollá & Romero-Naranjo, 2022a, 2022b; González-Sánchez et al., 2021; Romero-Naranjo & Sayago-Martínez, 2021a, 2021b; Romero-Naranjo, 2008, 2012, 2013a, 2013b, 2020a, 2020b; Romero-Naranjo & Andreu-Cabrera, 2023a, 2023b, 2023c, 2023d). But in addition to that, is also important to point all the contributions and benefits of using BAPNE method that were exposed last year (Alonso-Marco, M., & Romero Naranjo, F. J., 2022).

A proposal for sequencing activities according to BAPNE

Jazz is one of the wide numbers 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 jazz music to body percussion, and students or session attendees not only imitate rhythmic patterns, but by internalizing 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.

There is a close relationship between teaching creatively and teaching for creativity (Jeffrey & Craft, 2004). In the first place, the teacher, leader or BAPNE -trainer must be able to adapt to the environment and ensure that the teaching process is clear, systematized and focused. Thus, it is possible to not only ensure the transmission of the content (which in the first instance is based on imitation), but also the stimulation of executive functions, particularly the double task. The teacher can and should improvise within certain parameters to avoid repetition and support stimulation processes. Then, once a certain level is reached, he can allow students to perform variations that also develop creative processes in themselves.

In BAPNE, some activities are proposed in which students can assume the role of the teacher, adopting the responsibility of giving instructions for their classmates either in front of the whole group or working in small groups. In this way, by using the knowledge acquired to perform combinations and continue creating during their management, cognitive processes such as memory, language, praxias and gnosias, and various executive functions such as decision making, processing speed, inhibition, cognitive flexibility are activated while also contributing to the socioemotional aspect by generating a positive environment in the classroom (Sayago et al., 2021). Due to BAPNE method, we are going to follow the process to learn the 4/4 bar structure proposed in "Percusión Corporal y Solfeo Cognitivo" (Romero-Naranjo, 2020e) as the reference to understand the off beat and also the "swing feel".

The sequenced activities proposed to work on the rhythm changes 32 bar AABA form is presented below structured in several parts: 1. CINETICS. 2. RHYTHM CHANGE'S STRUCTURE 3. SCALES & IMPROVISA-TION.

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".

RHYTHM CHANGE'S STRUCTURE

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

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 blues 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. (Fig. 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 food as shown in the image below. (Fig.2)



Figure 2. Four steps square 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). (Fig. 3)



Figure 3. Accents on the weak beats and two steps 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. (Fig.4)



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

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



Figure 5. Accents on the weak beats, four steps square movement and vocalizations

2. RHYTHM CHANGE'S STRUCTURE

A. SEQUENCE Now the teacher uses three different words to concrete the 32 bar rhythm change's structure. (Fig.6)

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Figure 6. Accents on the weak beats, four steps square movement and vocalizations following the rhythm changes' structure

B. SEQUENCE The teacher presents the root note for every bar over the changes. (Fig.7)



Figure 7. Rhythm changes' structure singing over the changes on wholes notes

C. SEQUENCE The teacher presents the root note for every chord over the changes. (Fig.8)

Rhythm Changes (Medium Up Swing) Exercise $\frac{\overline{A}}{\overline{A}}C_{\Delta 7} \mathbf{A}_{7} \mathbf{D}_{-7} \mathbf{G}_{7} \mathbf{E}_{-7} \mathbf{A}_{7}$ D_{-7} G₇ 61 . 0 A- tún la- món con pan la- món con pan la- món con par Ia. món par å å N N 0.0 C 20-) 80 H 00 8 00) E G A₇ -7 A- tún Ja ja Ja- món con par Ja- món con pan **Å**ÅÅÅ ŝ -Ja- món pa p E7 8 8 07 0 C_7 A7 E-7 0 G A₇ 2 B^p7 G₇ C6 1

Figure 8. Accents on the weak beats, four steps square movement and vocalizations following the rhythm changes' structure singing over the changes on half and whole notes

3. SCALES & IMPROVISATION

A. The teacher, using the notes of the heptatonic Blues scale, presents an exercise singing over the structure of the C, E, A, D, G, heptatonic Blues scale. (Fig.9)



Figure 9. Accents on the weak beats, four steps square movement and vocalizations following the rhythm changes' structure singing the C blues scale on half notes

Conclusion

By including movement, rhythm and music within dualtask activities, numerous individuals have presented significant improvements in their mental abilities, according to the latest publications (Kim et al. 2017b, 2020). Rhythmicmotor activities involve a high level of attention and promote further development in cognitive stimulation.

The BAPNE method since its inception has published articles, books and manuals presenting several exercises that develop independence of upper limbs, lower limbs and voice through body percussion. The aim is to optimize brain performance in order to achieve a more efficient and successful learning process.

A new series of activities based on the BAPNE methodology has been proposed, in progression of complexity. Despite following a specific order and being defined by sequences, creativity is not limited. On the contrary, each sequence can be expanded as much as possible, incorporating elements of movement and phrases to generate an even greater number of activities. Likewise, the possibility of applying these and other sequences to new rhythmic structures remains open. With the previous publications, using Cuban clave, urban rhythms, blues and now an excerpt from jazz rhythm changes, 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. the methodology has supported all its theoretical and practical justification with numerous articles in Web of Science (Figure 10).

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Figure 10. Bapne publications on Web Of Science.

The purpose of this study was to expose the way in which activities can be developed with neuromotricity, starting from a small, current and attractive rhythmic structure. Full stimulation can occur by combining movements, body percussion, texts, mathematical operations, rhythms and even materials such as balls, in order to promote the dual task, in addition to the rest of executive and cognitive functions, while contributing to promote creative processes in both the teacher and the learner.

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