Considerations on the use of the body in the double bassist's daily routine

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Abstract
Recent publications on the use of the body in musical performance, particularly those that address the teaching of and preparation for double bass performance, have been made available in the US and Europe through lectures and clinics as part of major double bass conventions, conferences and international events. Reviews of both traditional and innovative teaching materials have been discussed among bass professionals, but few papers have been published on the subject. A review of recent publications shows information on musculoskeletal disorders as well as body posture approaches (Alexander technique, Pilates, etc.) specifically associated to the daily musical performance activities of double bassists, from beginners to advanced professionals. The main objective of this proposal is to discuss how double bassists have been guided in their training with regard to the use of their bodies and to how the pedagogical material used can favor body education in learning and performing the double bass. The discussion is based on the available literature published in Brazil, Portugal, US and England, mainly within the last ten years. The main conclusion is that recent teaching approaches pay special attention to the use of the body. However, they ignore relevant benefits present in the traditional materials, which are still very widely used all over the world.
Keywords: Double bass, use of the body in performance, performance pedagogy.
teaching and learning the double bass, in traditional aspects such as: posture, first steps for the left hand, first steps for the right hand, ideas about the movement of the arms, etc. These ideas have never been studied in such detail or taken so seriously by professionals as they are today.

On the other hand, outstanding performers who were traditionally trained have successfully added their own “tips” to their teaching and to their own practicing routine, in such a way that the traditional material continues effective with regard to the use of the body. Unfortunately, as we will discuss here, not all traditional material can be used nowadays without being deeply reviewed and properly applied according to the performer’s physical and psychological reality, as was the case in the past.

Therefore, this paper is divided into two main parts: 1. a brief discussion of the use of the body in playing the double bass, based on authors such as Gannett apud Ray (2010); Ray (2005); Karr (2001) and Vance (1995), all authors specializing in the double bass, and also some works pointing to musculoskeletal disorder in music performance (teaching and practicing) such as Gelb (1987), Connable (2003) Andrade;Fonseca (2000), Carvalho;Broseghini;Ray (2006), in order to search for answers to the main questions of this paper; and 2. a general comparison of bass methods used worldwide in order to demonstrate how their authors (double bass performers and teachers) have approached the use of the body in learning and teaching the instrument, particularly within the last three decades.

1. A brief discussion of the use of the body in playing the double bass
Reviews of both traditional and innovative teaching materials have been discussed among bass professionals, but few papers have been published on the subject. A review of recent publications shows information on musculoskeletal disorders as well as body posture approaches (Alexander technique, Pilates, etc.) specifically associated to the daily musical performance activities of double bassists, from beginners to advanced professionals.

This paper mainly focuses on the following questions: what is natural in the gestures the double bassist makes in order to play? What is not natural, though
unavoidable? And also, what could be considered a natural or a non-natural gesture in playing the double bass? What do postural reeducation programs teach us with regard to learning and performing the double bass?

Michel Gelb (1987) discusses approaches to the use of the body from the point of view of the Alexander Technique (AT), which emphasizes the importance of balancing the player's body and the instrument's body. Details on this approach can be learned from Barbara and William Conable (2003) in their work addressing AT specifically for musical performance. One of the most important lessons one can learn from AT as described in the Conables' work is how to "map" one's body, thus gaining a better understanding of how one uses it when performing or practicing.

When performing the double bass, an unaware individual may hurt their body due to a misconception of how much effort is necessary, for example, to "bring out" the sound or to play fast. In both situations (i.e. playing loudly or fast), if one realizes what muscles are required by the movement and knows how to stand or how to sit in a comfortable position, injuries can be avoided (Gannett apud Ray (2010). Double bassists have been doing intense research on the use of the body in the last 30 years, trying to transform learning into a more pleasurable, more satisfactory process and, of course, one that yields results. "Class exercises" by Gary Karr and Diana Gannett (1997) and Jeff Bradetich (2007) were successfully used with their students and later turned into books, with the explicit intent to consider body efforts, starting from very simple physical activities in a comfortable position before the exercises begin to involve more complex moves.

George Vance (2007) exemplifies this type of gradual approach in advocating that students should begin by learning harmonics and closed notes at the middle of the neck, which is a position with lots of references for the player to check his intonation. The other advantage of starting at that spot is that the angle of the left arm can stay in the region of the player's chest, with less pressure on the shoulders and making it easier to relax the neck – since the player can look at the fingerboard without any neck twist. For centuries, double bass methods gave virtually no attention to the player's physical aspects. As some authors have pointed out, the instruments used until the early 20th century
tended to be a lot more rustic than these days, and it was not rare for players to develop musculoskeletal disorders during their musical practice or performance (Andrade; Fonseca, 2000; Carvalho; Broseghini; Ray, 2006).

Considering the studies above, one might say that playing the middle part of the bass allows a player to keep a “natural” position, whereas playing other parts of the instrument can lead to a harmful posture. That is not exactly true. A harmful position for the double bassist’s body is one that hurts it, that is, that forces an unprepared muscle to perform a task requiring a stronger muscle. A common mistake that various methods repeated for centuries was to teach beginners to start at the top of the neck (in half position) and slowly work in half steps along the fingerboard. A beginner’s muscles are not strong enough to sustain the half position for very long. Results generally cause frustration when the left hand starts to slide down on the fingerboard and the player immediately goes out of tune. The recently revised edition of the Suzuki double bass books (1991) has solved that problem by allowing young bassists to begin their studies at the neck position.

The second part of this paper discusses two groups of methods and pedagogical materials used since 1850 and their distinct ways of treating the body in the bass training.

2. A general comparison of bass methods used worldwide in terms of their approaches to the use of the body

Methods and exercise books intended for teaching the double bass present similar ideas about what a player needs to learn. However, they vary dramatically in terms of how authors address the body when proposing their learning systems. The two tables below show two large and distinct groups of 20 selected bass teaching proposals: Table 1 (1850-1977) lists a group of materials (most of them being methods) advocating the traditional view of starting at the lowest note and gradually reaching the highest positions; Table 2 (1977 -2010) lists materials (a mix of full methods and alternative teaching materials published as articles, DVDs or books) clearly addressing body posture and not making it an obligation to start from the lowest note. Karr starts with harmonics, Suzuki and Vance start from the middle of the neck, Gannet and
Bradetich start by sliding through the entire fingerboard using one finger, and so on.

The materials of Table 2 are considered to be the innovative ones, since not only do they show different options as to the first steps on the bass, but they also provide rich iconographic information – including, for some of them, video examples of how the body should be positioned when sitting or standing to play, holding “German” or “French” bow styles, among other features.

Although Table 1 ends with the same year as Table 2 starts, the ideas of François Rabbath are far more flexible than those of Ludwig Streicher. Rollez, as a matter of fact, is frequently misunderstood because the book discussed in this paper is all written for one position. However, in the introduction, the author states that the exercises are conceived to be practiced all over the fingerboard. Therefore, one could apply the same idea of exercise one to playing in the middle of the neck or even in thumb position!

<table>
<thead>
<tr>
<th>Author</th>
<th>Published</th>
<th>Approach to the body use</th>
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<tbody>
<tr>
<td>Montanari</td>
<td>1850</td>
<td>Considers the size of the player to adjust the instrument and physical aspects of the bow.</td>
</tr>
<tr>
<td>Bottesini</td>
<td>1865</td>
<td>Considers how to hold the bass and brings a few illustrations.</td>
</tr>
<tr>
<td>Simandl</td>
<td>1874</td>
<td>Describes the left hand position (form)</td>
</tr>
<tr>
<td>Nanny</td>
<td>1920</td>
<td>Brings drawings on how to hold the bass standing and sitting; bring a text on general posture.</td>
</tr>
<tr>
<td>Bille</td>
<td>1922</td>
<td>Considers how to hold the bass and how to place the left hand and move the right hand (bow)</td>
</tr>
<tr>
<td>Findiesen</td>
<td>1930</td>
<td>Considers how to hold the bass and how to place the left hand and move the right hand (bow) Brings 1 illustration.</td>
</tr>
<tr>
<td>Hertl</td>
<td>1964</td>
<td>Considers how to hold the bow and move the left hand. Brings author’s illustration front &amp; back.</td>
</tr>
<tr>
<td>Cruft</td>
<td>1966</td>
<td>States that sitting is more comfortable for the player and recommends ‘caution’ on placing the hands on holding the bass and the bow.</td>
</tr>
<tr>
<td>Benfield</td>
<td>1973</td>
<td>Bring a text considering body aspects of playing (breathing, speaking). Several illustrations (standing, sitting, left and right hands with both, French and German bow)</td>
</tr>
<tr>
<td>Streicher</td>
<td>1977</td>
<td>Detaches the advantage of a good physical preparation for bassists as a way of reducing efforts on playing; Fits his left foot under the bass to hold it to “support the bass and to free the left thumb easing the movement of the left hand.</td>
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Table 1: traditional approaches to teaching the double bass.
### Table 2: Innovative approaches to teaching the double bass

<table>
<thead>
<tr>
<th>Author</th>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rabbath</td>
<td>1977 e 1984</td>
<td>Physical innovation on the equipment: creates an end-pin (called egg-pin) with allowed the player to hold the bass inclined in a more horizontal angle while standing, easing the work for both hands but losing some volume quality.</td>
</tr>
<tr>
<td>Portnoi</td>
<td>1978</td>
<td>Detaches the advantage of a good physical preparation for bassists as a way of reducing efforts on playing; He says that strong muscles and body education can take away a possible initial uncomfortable feeling for the beginner.</td>
</tr>
<tr>
<td>Pettracci</td>
<td>1980</td>
<td>Concentrated in prepare soloists, he strong recommends body preparation.</td>
</tr>
<tr>
<td>Vance</td>
<td>1989-2005</td>
<td>For beginners. Starts in the neck position minimizing the efforts. Presents harmonics soon and give incentive for the player try all fingerboard with harmonics combined with open strings and fingered notes. Stretching exercises are recommended for every lesson.</td>
</tr>
<tr>
<td>Karr</td>
<td>1987-1988</td>
<td>For beginners. Starts in the neck position minimizing the efforts. Presents harmonics soon and give incentive for the player try all fingerboard. Stretching exercises are highly recommended as well as muscle endurance exercises.</td>
</tr>
<tr>
<td>Suzuki</td>
<td>1991</td>
<td>For beginners. Starts in the neck position minimizing the efforts. Works slowly the positions between the neck and the lower position and then presents the thumb position.</td>
</tr>
<tr>
<td>Gale</td>
<td>1991</td>
<td>For beginners. Starts in the lowest position but combines lots of harmonics and open strings for tuning accuracy. His melodic approach to learning the bass helps the student to prepare lessons playing duets with the teacher. Presents harmonics soon and give incentive for the player try all fingerboard. Relaxation is proposed within exercises over a harmony.</td>
</tr>
<tr>
<td>Rollez</td>
<td>1997</td>
<td>For beginners. The whole book is in the lowest position. The idea is to transpose the exercise wherever the teacher considers the student should be playing. Can also be applied for advanced students. Can be used with respect for the student’s body limits.</td>
</tr>
<tr>
<td>Bradetich</td>
<td>apud Ray, 2007</td>
<td>Embraces from beginners to advance students. Bring instruction of relaxation in all exercises and fundamental techniques. Starts with searching the good sound quality of one open string and soon slides one finger all over the fingerboard.</td>
</tr>
<tr>
<td>Gannett</td>
<td>apud Ray, 2007</td>
<td>Embraces from beginners to advance students. Bring instruction of relaxation in all exercises and fundamental techniques. Starts with searching the good sound quality of one open string and soon slides one finger all over the fingerboard. Associates Stages of practicing (Phases Exercises) to cycles from martial arts an relaxation to yoga exercises.</td>
</tr>
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### Final Considerations

The main conclusion is that recent teaching approaches pay special attention to the use of the body. However, some new authors ignore relevant benefits
present in the traditional materials, which are still very widely used all over the world.

Except for Cruft, all other authors consider the standing position not to be harmful to the player. In fact, standing can make the player freer to move while playing. However, it is a lot harder for beginners to adjust and to find a comfortable position to play. Once the comfortable “zone” – that is, a position without pain or extra tension – is found, standing or sitting is a matter of choice. The iconography in the materials shows that authors vary their recommendation for a way of sitting. Again, that has to be tried by the student until he finds his preference, or the position in which his body feels more comfortable.

The tendency of new authors to ignore ideas from old methods is partially understandable, especially for the examples and fingering commonly proposed by old books, which are almost always inconsistent with the new high quality instruments available these days. On the other hand, ideas from the Billè method (traditional Italian 1-3-4 fingering) can be used with an adaptation in the fingering system (with 1-2-4 as in most American and European schools) and also by applying the concepts of good tone quality and discipline in practice schedules, always present in old methods.

Finally, it is important to recognize the association of body education techniques such as the Alexander technique to help performers find their comfortable playing zone. This is particularly important for players of large instruments such as the double bass, but it is certainly useful for all performers.

References

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**Author’s biography**

Double Bass Professor at the Federal University of Goiás (goiânia City, Brazil) where she teaches bass and chamber music for both undergraduate and Graduate levels. Sonia also teaches music performance research at the Graduate department of the State University of São Paulo (São Paulo City, Brazil). She has a DMA (1998) from the University of Iowa (EUA) where she had Diana Gannett as her adviser and teacher. She has been a guest artist at ISB since 1995.