

STUDY ON THE EXPRESSIVENESS IN THE PERFORMANCE OF CHILDREN

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Abstract

This work studies the characteristics of musical expressiveness in children's performances through comparison of musical structures and behavioral patterns in executing music. The aim is to offer effective information useful in instrumental teaching, and elements of comparison with the performance of advanced students and musicians. Three ten-year-old piano students learned a piece previously unknown from Bartok's Mikrokosmos. During the learning process their teacher kept a log of the indications given to the children regarding musical content and performance practices. When the children could play the piece fluidly by memory, a video tape was made during a lesson. After about ten days during which the students received new indications, they performed the piece in a protected environment (private concert) and were video taped. A third videotaped performance in a non-protected context (public recital) ended the experiment. The analyses of the videotapes was done following two methods: one rigorously analytic, based on the presence of structural elements of the piece, the second one based on the interpretation of the expressive behavior in order to allow comparison with the structural aspects and with the teacher's log. The presence of important evidence in proximity of the conjunction points between the principal parts which define the structure of the pieces performed - mistakes, omissions, acceleration, memory lapse - all induce one to think that in the absence of analytic training and of awareness of form, the performance of the three children pivoted on the fundamental musical structures of the piece.

Keywords: children, expressiveness, musical structures

1. Introduction

The object of this work is based on the contributions of three different areas of study:

- Music analysis
- Music and emotions
- Musical development

Instrumental music training is founded on the development of multiple skills, which are related to three different kinds of abilities: those govern the decoding of the musical text in each of its aspects, technical-gestural and expressive abilities. Teaching and learning paths develop these three types of abilities through strategies, which focus on specific problems and are progressively ordered according to complexity and difficulty. The ulti-

mate purpose is to make music, which means to utilize the acquired musical skills in a perfectly synergistic manner, creating an event which is beyond each of them, and more than their synthesis: i.e. the expressive communication of a musical text.

In the performance of professional musicians these abilities are perfectly integrated and appear as a harmonious whole, functional, and substantially centered on the affective and emotional profile. Studies on the analysis of performance (Seashore, 1938; Cone, 1968; Schmalfeldt, 1985; Pozzi, 1999; 2009; Rink, 1995; Duke et al. 2009) show evidence that a performer at a high or complete level of training, does not play exactly the contents of a

score, but something more and/or less in terms of tempo, dynamics, articulation and sometimes even pitch: something that results impossible to translate from the writing (Shaffer, 1992; Shaffer, 1995) but which is of substantial importance from the standpoint of expression. Since the 1960s, this phenomenon has affected new technologies (Bengtsson et al., 1969) and progressively brought about the development of sophisticated software, first for measuring the shapes of sound waves, and later to measure other important parameters of sound.

In the case of piano performance, obviously, timbre and pitch are normally excluded from the computations, but the variables of the attack of the note (more or less legato or staccato), of dynamics (more or less soft or loud), and of duration (more or less conforming to what is written) have been repeatedly measured in numerous and well known cases (Todd, 1985; Repp, 1992; Friberg et al., 2006).

However, the study procedures utilized for adults or advanced level students have proven to be scarcely apt for research of the same phenomenon in children, since most of them are based on the full awareness of what the instrumentalist is playing and on his/her ability to describe the strategies utilized or the opinions developed on the subject. For this reason, it is necessary to consider also the fields of study, which deal more specifically with the preparation phase for a performance in all of its aspects, which in the case of working with children must be necessarily organized by a teacher.

Studies on the didactics of performance (Shaffer, 1995; Brendel, 1997; Monelle, 2002), on the research on mnemonic learning, (Williamson, 2002; Chaffin et al., 2009), on cognitive and motor theories applied to performance skills (Hallam, 1995; Cox, 2001; Davidson, 2007), on methods for the organization of personal study (Miklaszewski, 1989; Jørgensen, 2004; McPherson-Evans, 2007), on the tools for expressive interpretation (Clarke, 1991; Rothstein, 1995; Juslin et al., 2007), and finally on the analysis "for performance" (Dalmonte, 1999; Rink, 2002) have amply investigated the scope of expressiveness in performance, presupposing the acquisition of that perfect synthesis of information which characterizes

trained musicians. In the cognitive scenario of the artists themselves (Rink, 2002; Chaffin et al., 2009), all of these aspects are inseparably intertwined: even the fingering of a single musical passage (Clarke et al., 1997) is based on a combination of motor reasons, considerations on the structure of a piece and the expressive characteristics of the passage to perform.

There are also equally detailed studies on musical expression in the absence of a training program, taking into account vocal musical expression at the preschool and infant age and in the prenatal environment, and investigate expressiveness at its very beginning. (Sloboda, 2010; Tafuri, 2007; Trevarthen, 1999/2000).

Despite the wealth and depth of all these studies, instrumental teaching, traditionally linked to a laboratory setting and to the historical roots of the instrumental schools, has in fact developed methodologically based paths regarding technical-gestural abilities and the skills of decoding a musical text. At the same time, it has scarcely considered the evolution of expressive capacity, which has remained an area of development made up of unconscious and often unintentional paths, entrusted to the experience of the teachers, the tradition of the school and the presence of talent and sensitivity in the students.

2. Beginners and the expressive performance

This study, therefore, takes into consideration the problem of expressiveness in beginners, that is in very young students who have recently started their formative training, but have already experienced the division between decoding skills, technical-gestural ability, and expressiveness. The study poses three specific questions:

- Can it be affirmed that expression in beginners, being the perfect synthesis of all the acquired skills, finds its basis in the structure of the musical piece, as happens with adult pianists?
- Are observable gestural behaviors connected to the perceived structure of a piece?

- What are the indications which can truly support and improve the process of instrument teaching in the matter of expression?

Studies of this nature can be truly useful to instrumental teaching methods, since they may be naturally compared to studies on professional pianists, highlighting the differences and similarities of expressive behavior during performance, defining a starting point and an arrival point. In fact, the study of performance in beginners who are developing various abilities (decoding, technical-gesture, expressive) and with similar analytical criteria (structural and technical-gesture aspects of expression), truly expresses both the relationship with the expected result (the fully trained pianist) and the relationship between the abilities themselves. It must not be forgotten that in fully trained pianists these are perfectly integrated in the expressive performance, while in children this does not necessarily happen.

This work takes into consideration the characteristics of musical expression in the performance of three 10-year-old girls through the study of both the analytical aspects recognizable in their performances, as well as the corresponding technical and gestural behaviors with the scope of contributing to the improvement of instrumental teaching methods, giving start to new theoretical reflections useful in building expressive abilities.

3. Phases of the study

Three young pianists, age 10, each studied a piece new to them, of unfamiliar structure and expressive profile, but suitable to their level of musical ability. The three children are enrolled in a piano course at the Pavia Conservatory of Music (Italy), where admission is by means of an entrance exam, and they regularly follow all of the mandatory courses (Theory and Choral Singing), and once a week attend a piano lesson. They have already experienced public performance and the preparation necessary to guarantee an adequate level. Chiara and Clara have been certified at the 1st level, and Luisa has been certified at the 4th level. The pieces chosen have been taken from Bela Bartok's

Mikrokosmos: Chiara studied *Five-tone Scale* and Clara studied *Melody Against Double Notes* both taken from Volume III, while Luisa studied *Minor Seconds, Major Sevenths*, taken from Volume VI. The pieces chosen, though having very different levels of difficulty, do have some characteristics in common: they all have titles with no semantic references other than music terms, use an atonal musical language, and make use of simple and recognizable structures.

During the entire learning process for the piece, the teacher kept a diary in which the instructions given to the children during lessons were recorded. All the instructions had to refer strictly to the musical writing, to the sound quality and to the structure of the piece, and had to present a language which made no use of any semantic image different from musical language, such as stories, characters, metaphors, drawings, etc., and had to clearly indicate what the children should study at home to improve the piece.

When the children were able to play the piece by memory with fluidity, a first video recording was made during the lesson. It was done in the room where the children usually have their piano lesson, in the presence of their teacher and of the audio-video operator. During this first recording session, the children had the chance to perform the piece a second time, in case their first performance turned out to be particularly problematic. In fact, making a video recording during a lesson was new and surprising to them, even though it had been planned and amply described in advance: Clara, for example, continued to look for her teacher with her glance, while Chiara seemed to be very curious and distracted by the taping procedure itself and by the presence of an operator. This prompted the operator to use cautious flexibility during the procedure.

After a period of 7 to 10 days in which the children received new instructions, annotated in the work diary, the pieces were performed and videotaped a second time, in a more official context, but still limited to more or less familiar people which in any case they had already met within the context of their piano class. The recording took place in the auditorium of the Institute. The teacher, the parents of

the children, and some schoolmates were present, making a total of five or six people. The children were aware of the fact that they would not be able to repeat the recording.

After another period of time, different for each of the children, a public recital took place during which the third performance of the girls was taped. In this context, other students performed as well, in the presence of about 50 people. Obviously, the time needed to learn the pieces was different for each child and there were interruptions and the typical problems of the learning process of very young children. For example, Clara had to postpone her final recording quite a bit due to an illness. Luisa, dealing with a very challenging study program, needed a long time before she was able to make her first recording. In all three cases, there were difficulties related to scheduling problems with the family when planning the recording.

The quantitative and qualitative analysis of video recordings followed two paths. One was strictly analytical, based on the presence of structural elements during the execution of the piece, and the other focused on the observation of the related gestures. This analysis was followed by a comparison of the data with the teacher's diary, which helped to clarify and deepen their interpretation.

4. Recordings and teacher's diary

Clara's first recording took place on January 25, 2013. She performed her piece in 1 minute and 22 seconds, rather than in 1 minute and 8 seconds, as indicated by the composer (figure 1), and brought out the melodic line very much, underlining the entrances of the right hand with a gesture bringing her body and head closer to the piano, and the entrances of the left hand with a gesture towards the right and pulling slightly away from the piano. In measure 8-9 she highlighted the duration of 6 quarter notes of the two dotted half notes with a light gesture of the body and the leg. In measure 18, before the beginning of the coda, she forgot the diminuendo and began the upbeat of bar 19 with a *mp* / *mf* dynamic.

The image shows a handwritten musical score for a piece titled "Melody against Double Notes" (Mélodie contre double-cordes / Doppelgriffe gegen eine Melodie). The score is written for piano and includes several measures with annotations. At the top, there are handwritten notes in Italian: "quando sin / inter. del / tenore nella parte doppo". The score is marked "Adagio, J. 66" and "f. espr.". There are several circled numbers (12, 20, 5, 10, 15, 20) and other markings like "p", "mf", "pp", "dim.", "cresc.", "Sc", and "cresc.". The score is written in a clear, legible hand.

Figure 1.

Chiara was able to make her first recording on March 1st, and she performed her piece, *Five Tone Scale*, in 45 seconds, while the composer indicated a duration of 27 seconds (figure 2). She respected the phrasing following the closing and the beginning of phrases with her hand gestures, underlining the dynamic distension with care, especially in measure 9. She performed a very natural rubato between measure 16 and 19, which does not find a correspondence in the indications given by the teacher. In measure 27, she had a memory lapse, coinciding with a mistake of the left hand, where she played an E instead of a G in the second quarter note, and skipped bar 28 and played bar 29, the final measure, commenting "I did it all wrong".

The image shows a page of a musical score for Béla Bartók's 'Five-tone Scale' (Op. 10, No. 34). The score is written for piano and includes the following elements:

- Handwritten notes at the top:** 'Livello concertistico Ottimo' and 'BARTOK'.
- Title and translations:** 'Five-tone Scale', 'Gamme pentatonique', and 'Pentatonische Tonart'.
- Tempo and dynamics:** 'Allegro, J. = 100' and 'f, ben ritmato'.
- Handwritten annotations:** Circled numbers (1, 2, 3, 4, 5) and letters (A, B) are placed above the notes. There are also 'OK' marks and a circled 'F#'.
- Performance markings:** 'Gesto' is written at the bottom of the score.
- Measure numbers:** 1, 78, 12, 18, and 24 are visible.

Figure 2.

In the second previous recording, made in a context of a semi-public performance, Clara adopted similar expressive behaviors with a few relevant differences: she performed her piece in 1 minute and 17 seconds (figure 1), and in bars 8 and 9, at the end of the first section of the piece, she shortened the duration of the tied eighth-notes of a quarter note value, and she did not highlight the pulse with the movement of her body as it had happened in her first recording; in bar 19 she omitted a quarter note rest, coinciding with the beginning of the last section.

The second recording by Chiara lasted 35 seconds at $J=100$, she did not make any mistakes, but an acceleration took place starting at bars 14 and 15 (figure 1), which brought her to $J=112$ in bar 20. The acceleration corresponded to the crescendo and relaxes exactly with the beginning of the third section of the piece. The phrasing was always respected, as were the accents. The recording on March 25 was made in public, and represents the third and last performance of the children. Clara performed her piece in 1 minute and 16 sec-

onds, and reproduced her second performance rather closely.

Chiara performed her piece, *Five Tone Scale*, in 34 seconds with two mistakes, both relevant ones. The first was in bar 10, where the left hand has an hesitation to land on the F#, showing a slight disorientation right at the moment in which, in the left hand part, the descending and perfectly pentatonic line of the first 8 measures is abandoned.

The second mistake happens in the last 4 bars, where the phrasing of the left hand is shortened and is reduced to one bar repeated twice: in this situation, we can see a very light movement of the head.

In the conclusion Bartók writes a *crescendo*, but Chiara ends in *diminuendo*, using instinctively the more usual mode of concluding a phrase in general.

Luisa performed her piece for the first time in 3 minutes and 24 seconds, rather than 3 minutes and 25 seconds as indicated by Bartók, and a general lack of precision appears evident from the start, on the execution of the 16th note - dotted 8th note rhythm, which characterized the entire first part of the piece, with a tendency to lengthen the 16th note. Several errors are noticeable, almost always near the end or the beginning of the main sections of the piece: in bar 14, she omitted the "poco stringendo", in bar 33 the "Double movement", in bar 51 she omitted the quarter note rest, in bar 61 she did not accelerate, and in bar 67 she did not go back to "Tempo I". Other errors of a mechanical type occurred in bar 39 and 56, both on double stops.

Minor Seconds, Major Sevenths
 Secondes mineures, septièmes majeures
 Kleine Sekunden, große Septimen
 Kis másod- és nagy hetedhangközök

1-50

Molto adagio, mesto, $\text{♩} = 60$
 (sempre simile)

144*
 6-3,10

4

7 poco string...

11 tornando al tempo poco string...

Figure 3a.

40 TENERE QUINTINA
 un poco più intenso

42 Più andante, $\text{♩} = 72$
 intenso poco string.
 più intenso più intenso

48 quasi meno intervallo
 Mosso grave e

52 poco a poco.
 crescendo dim.

Figure 3c.

15 tornando al tempo (un poco mosso) $\text{♩} = 66$
 intenso self.

21 intenso

25 poco a poco accelerando.
 sempre più grave e orosa. dim.

33 Doppio movimento Tempo I. see Appendix (Editor)¹³
 pp

38

13 Voir l'Appendice (Note du rédacteur)
 Siehe Anhang (Anm. d. Hrsg.)
 Lásd a Függelékben az idévonalonként megjegyzést (a kiadó megjegyzése)

Figure 3b.

37 tornando. al Tempo I.
 p pp

61 poco a poco - accelerando.
 p

63 orosa.

65 Tempo I.
 pp

[3 min. 25 sec.]

Figure 3d.

In the second recording Luisa performed her piece in 3 minutes and 4 seconds, with three mistakes similar to those reported in the first performance.

In the third performance she had a memory lapse in bar 16 and 17, in correspondence to the end of the first section and the beginning of the second. She made a mistake again approaching the change of section, in bar 34, *Movimento doppio*, and in bar 43, where for a mechanical error she played a C rather than a D flat. Her head and body were nearly immobile, and she was very focused on the necessary movements of the hand, wrist and arm in order to play her piece with the timbres that she had studied.

The diary of the teacher contains general information about the study method of the children: they initially learned their assigned piece studying it with separate hands, trying to understand its musical sense right from the very first reading by paying attention to phrasing and being aware of the parts which compose the piece. Joined hands practice followed, as well as a study of the dynamics, tensions, the definition of the velocity of piece, memorization and the progressive fine tuning of all of the information necessary for the performance. This method of procedure and the type of information linked to it, were in fact very similar to the diaries of the three children. However, other interesting information which was much more related to each single child's course of study was not so similar:

- The time necessary to learn the assigned pieces, evaluated in weeks starting from the date in which the piece was assigned to the date of the first recording, with annotations of the rest period due to absences, illness or other problems;
- The type of difficulty or mistakes which took place during their study;
- The persistence of difficulties and mistakes;
- Memorization times, expressed in weeks;
- Thoughts and/or reactions of the children regarding their study or their piece.

The learning and memorization times of the piece are well illustrated by graphics 4, 5 and 6. They are very different in the three cases: Luisa was able to record for the first time after 13 lessons, Chiara after 12, and Clara after 8. We also observe that the Luisa was engaged in memorization from the seventh lesson on, for 7 lessons. Chiara from the eighth, for 3 lessons. Clara from the sixth, for 5 lessons.

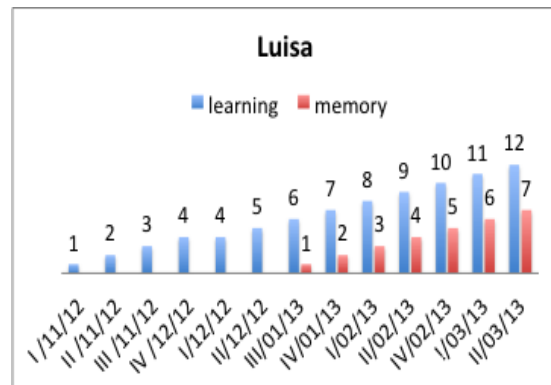


Figure 4.

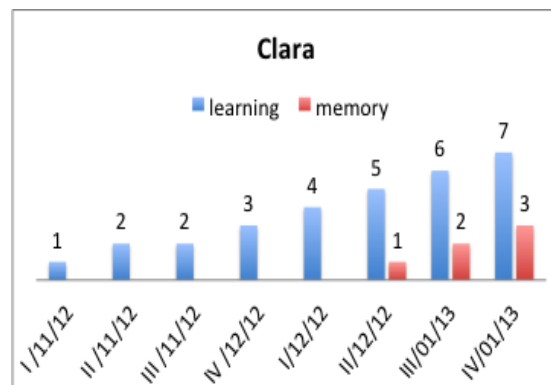


Figure 5.

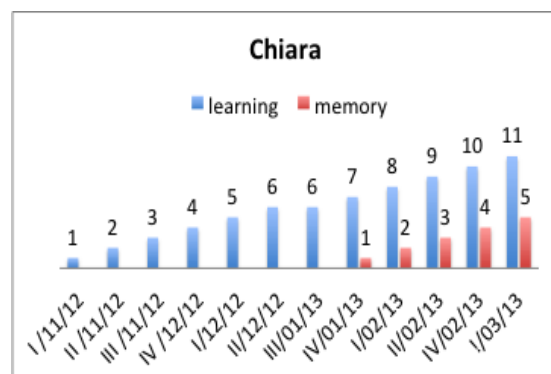


Figure 6.

Concerning the difficulties that the children encountered, the indications given to Chiara

had to deal mostly with fingerings (figure 9), which were the object of observations during four lessons, on phrasing (2 lessons) and on rhythmic imprecision (1 lesson). The indications given to Clara (figure 8) have had to deal mainly rhythmic precision for at least two lessons. In Luisa's case the difficulties showed themselves at a more advanced level of study (figure 7), closer to the date of performance, and regarded tone quality, the use of pedal, the dynamics, and precision in the performance of the rhythmic pattern recurring throughout the entire piece.

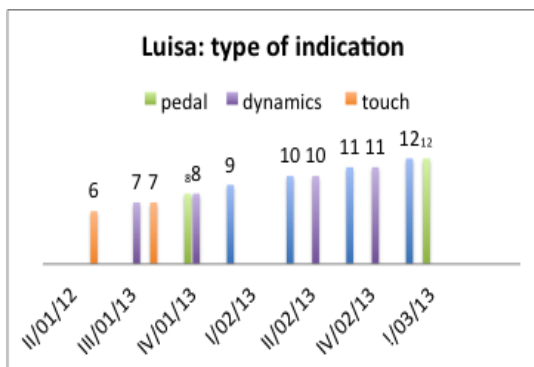


Figure 7.

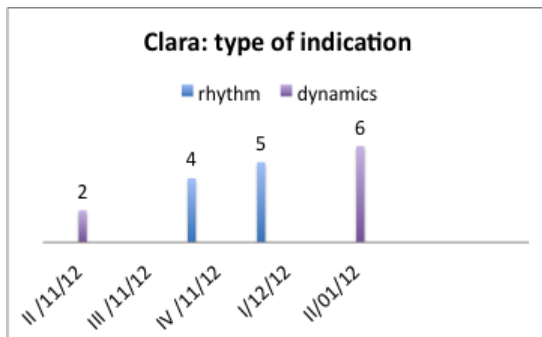


Figure 8.

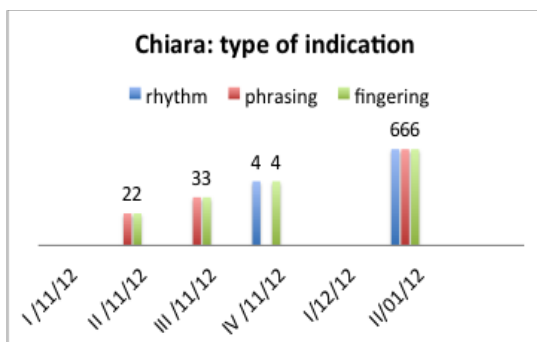


Figure 9.

Reading the diary, we can learn important details to understand the path through which expressive performance has matured, in that they represent authentic autonomous reactions and thoughts of the children. In particular, in the case of Luisa, the child continued to sustain that she did not like her assigned piece until March 2, when she spontaneously said "Now I'm starting to like it...". The fact that she did not like the piece probably caused fatigue and slow learning, contrarily to the case of Clara, who as early as November 16 told the teacher that she had discovered that by making a great difference in dynamics between the two hands she could make the dissonances throughout the piece much more pleasing due of the intervals created by the chromatism.

5. Conclusions

The presence of important evidence in proximity of the conjunction points between the principal parts which define the structure of the pieces performed, mistakes, omissions, an acceleration, a memory lapse, a rubato - all induce one to think that in the absence of analytic training and of awareness of form, the performance of the three children pivoted on the fundamental musical structures of the piece. The same gestures of the body and of the hands is strongly connected to relevant musical events, like the dialogue between parts, the separation of musical phrases or the handling of a long sound which preludes a new formal section. The choice of having the children study pieces whose titles do not refer to the extra-musical language world, and the fact that the language and structures of the pieces excluded immediate associations to other musical or non-musical ideas has effectively enclosed the children's affective experience within the pure musical experience, making it possible to get a significant reading of their behaviors, of their reactions and their patterns in learning. This study can be developed and deepened from the point of view of the methods of investigation and certainly has need of evidence from a larger sample of young musicians, but the indications which it will be able to give to instrumental teaching are of great

relevance since these could give added guidance to the field of teaching expressiveness.

References

- Bengtsson, I., Gabrielsson, A., & Thorsén, S. M. (1969). Empiriskrytmforskning (Empirical rhythm research). *Swedish Journal of Musicology*, 51, 49-118.
- Brendel, A. (1997). *Il paradosso dell'interprete. Pensieri e riflessioni sulla musica*. Firenze, IT: Passigli.
- Clarke, E.F. (1991). Expression and communication in musical performance. In Sundberg J. et al. (Ed.) *Music language, speech and brain* (pp. 184-193). London, UK: McMillan.
- Clarke, E., Parncutt, R., Raekallio, M., & Sloboda, J. (1997). Talking fingers: an interview study of pianist's views on fingering. *Musicae Scientiae*, 1(1), 87-108.
- Cone, E.T. (1968). *Musical form and musical performance*. New York, US: Norton.
- Cox, A. (2001). The mimetic hypothesis and embodied musical meaning. *Musicae Scientiae*, 5(2), 195-212.
- Dalmonte, R. (1999). Proto e para-analisi per l'interpretazione. *Bollettino di analisi e teoria musicale*, 6(1), 43-60.
- Davidson, J. (2007). *Corpo e movimento nell'esecuzione musicale*. In Tafuri-McPherson (Ed.) *Orientamenti per la didattica strumentale* (pp 115-130). Lucca, IT: Libreria Musicale Italiana
- Duke, A., Simmons, A. L., & Cash C. D. (2009). Characteristics of practice behavior and retention of performance skills. *Journal of Research in Music Education*, 56(4) January, 310.
- Friberg, A., Bresin, R., & Sundberg, J. (2006). Overview of the KTH rule system for musical performance. *Advances in Cognitive Psychology* (Special Issue on Music Performance) 2, 145-161.
- Hallam, S. (1995). Professional musicians' approaches to the learning and interpretation of music. *Psychology of music*, 23, 111-128.
- Jørgensen, H. (2004). Strategies for individual practice. In A. Williamson (Ed.) *Musical excellence: Strategies and techniques to enhance performance* (pp. 85-104). New York: Oxford University Press.
- Juslin, P., Evans, P., & McPherson, G. (2007). L'interpretazione musicale e le emozioni. In Tafuri-McPherson (Ed.) *Orientamenti per la didattica strumentale* (pp 131-155). Lucca, IT: Libreria Musicale Italiana.
- McPherson, G., & Evans, P. (2007). Come studiare. In Tafuri-McPherson (Ed.) *Orientamenti per la didattica strumentale* (pp 33-48). Lucca, IT: Libreria Musicale Italiana.
- Miklaszewski, K. (1989). A case study of a pianist preparing a musical performance. *Psychology of music*, 17, 95-109.
- Monelle, R. (2002). The criticism of musical performance. In J. Rink (Ed.) *Musical Performance. A Guide to Understanding* (pp 213-224). Cambridge, UK: Cambridge University Press.
- Pozzi, E. (1999). L'intuizione dell'esecutore e il rigore dell'analista: la prospettiva schenkeriana. *Bollettino di analisi e teoria musicale*, 6 (1), 83-111.
- Repp, B.H. (1992). Diversity and commonality in music performance: an analysis of timing microstructures in Schumann's "Träumerei". *Journal of the Acoustic Society of America*, 92, 2546-2568.
- Rink, J. (Ed.) (1995). *The practice of performance. Studies in music interpretation*. Cambridge, UK: Cambridge University Press.
- Rink, J. (2002). *Analysis and (or) performance*. In J. Rink (Ed.) *Musical Performance. A Guide to Understanding* (pp 35-58). Cambridge, UK: Cambridge University Press.
- Rothstein, W. (1995). Analysis and the act of performance. In J. Rink (Ed.) *The practice of performance. Studies in music interpretation* (pp.217-239). Cambridge University Press, Cambridge.
- Shaffer, L. H. (1995). Musical performance as interpretation. *Psychology of music* 23, 17-38.
- Schmalfeldt, J. (1985). On the relation of analysis to performance. Beethoven's Bagatelles op. 126, nos. 2 and 5. *Journal of Music Theory* 29, 1-31.
- Seashore, C. E. (1938). *Psychology of music*. New York, US: McGraw Hill.
- Sloboda, J. A. (2010). Music in everyday life: The role of emotions. In P. Juslin, J. Sloboda (Ed.) *Handbook of music and emotion. Theory, research, applications* (pp.493-514). Oxford, UK: Oxford University Press.
- Tafuri, J. (2008). *Infant Musicality*. Farnham, UK: Ashgate.
- Trevarthen, C. (1999/2000). Musicality and the intrinsic motive pulse: evidence from human psychobiology and infant communication. *Musicae Scientiae*, Special Issue, 155-211.
- Todd, N. P. (1985). A model of expressive timing in tonal music. *Music Perception*, 3, 33-58.
- Williamson, A. (2002). Memorising music. In J. Rink (Ed.) *Musical Performance. A Guide to Understanding* (pp 137-153). Cambridge, UK: Cambridge University Press.