

**Five myths about expressivity in music performance  
and what to do about them**

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One of the recurring themes in treatises on music is that music is expressive. Yet, of all the skills that make up music performance, the ones to do with expressivity are often regarded as the most elusive. Research has indicated that expressive skills are frequently neglected in music education. The goal of this paper is to provide a critical discussion of musical expressivity. First, I consider five myths about musical expressivity which have had a negative impact on music education: (a) *Expressivity cannot be studied objectively*; (b) *You must feel the emotion in order to convey it to your listeners*; (c) *Explicit understanding is not beneficial to learning expressivity*; (d) *Emotions expressed in music are very different from everyday emotions*; and (e) *Expressive skills cannot be learned*. Then, I outline criteria for a useful teaching strategy aimed at expressive skills. Finally, I describe a new and empirically based approach to learning expressivity that meets these criteria. The method is termed *cognitive feedback*, and aims to allow performers to compare their use of acoustic cues to express emotions with an “optimal” model based on how listeners use the same cues to judge emotional expression. Implications for music education are discussed.

## **Five myths about expressivity in music performance and what to do about them**

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The title of this paper does not simply reflect the present author's hubris. It is rather an attempt to arouse interest and emotion in the reader, much like a music performer tries to arouse interest and emotion in a listener. In treatises on music, one of the recurring themes is that music is perceived as expressive of emotion (e.g., Davies, 1994). This idea applies not only to the notated or implied structure of the music but also to the way it is performed. The performance is essential in shaping the expression of the music. Yet, of all the subskills that make up music performance, the ones to do with expressivity are often regarded as the most elusive. Moreover, research has indicated that expressive skills are often neglected in music education (Juslin & Persson, 2002). Why is this so? First, music teachers lack a theory that can guide their teaching of expressive skills. Second, there are certain myths about musical expressivity that are shared by many teachers and students.

The goal of this paper is to provide a critical discussion of musical expressivity. First, I consider five myths (in my view) about musical expressivity, which have had a negative impact on music education. Then, I outline some criteria for a useful teaching strategy aimed at expressive skills. Finally, I describe a new teaching strategy that meets these criteria.

### **Five myths about musical expressivity**

#### **“Expressivity cannot be studied objectively”**

A lot has been written about expressivity by philosophers, musicologists, and musicians – often with the implication that there is something mystical about expressivity. Different authors have described surprisingly different facets of expressivity. This has led to the belief that expressivity is an entirely “subjective” quality which cannot (or at least should not) be described in scientific terms. Musicians are often unable, or unwilling, to define the concept of expressivity or to probe its underlying mechanisms. Does this mean that it is impossible to study expressivity objectively? Not so. Acoustic correlates of perceived expressivity can readily be obtained and manipulated in musical performances, and listeners' judgments of expressivity can be systematically and reliably related to acoustic correlates. (For an example of empirical findings, see Figure 1.)

One example of how performance expressivity might be formally conceptualized is provided by the GERM model (Juslin, Friberg, & Bresin, 2002). This is a so-called computational model that decomposes patterns of expression into different sub-components. Drawing on previous research, Juslin et al. propose that expression derives from four primary components: (a) *Generative rules*, which mark the structure in a musical manner; (b) *Emotional expression*, which serves to convey a particular mood; (c) *Random fluctuations*, which reflect human limitations in timing precision;

and (d) *Motion principles*, which postulate that tempo changes should follow patterns of human movement. The four components were simulated in synthesized performances, and listening tests revealed that all of these components contribute to the perceived expressivity of a performance.<sup>1</sup> Studies like this one suggest that expressivity is an empirically tractable problem, and lend some hope to the notion that teaching of expressive skills can be informed by science (Juslin, 2002).

**“You must feel the emotion in order to convey it to your listeners”**

‘A musician cannot move others unless he too is moved’, C. P. E. Bach argued in his treatise on the true art of playing keyboard instruments. ‘He must of necessity feel all of the affects that he hopes to arouse in his audience’ (1778, p. 152). This (romantic) notion is common, even among today’s music students (Lindström, Juslin, Bresin, & Williamon, in press).

True enough, focusing on felt emotions may help a performer to naturally translate emotions into appropriate sound properties. But felt emotion is no guarantee that the emotion will be conveyed to listeners, neither is it necessary to feel the emotion in order to convey it successfully. After all, it is the acoustic features of the performance (not the performer’s emotions as such) that reach the listener. As observed by Sloboda (1996) students rarely monitor the expressive outcomes of their own expressive performances. Instead, they monitor their own intentions, and “take the intention for the deed” (p. 121). Emotional engagement is not a bad thing. However, it cannot substitute for teaching that addresses the actual playing in specific and informative ways.

**“Explicit understanding is not beneficial to learning expressivity”**

It seems generally agreed that music performers are usually not aware of the details of how their expressive intentions are realized in a performance (Sloboda, 1996), even though there are large individual differences among performers in this regard. To the extent that acoustic cues are used implicitly, this presents a problem for the teaching of expression, which relies predominately on verbal instruction (Tait, 1992). Furthermore, because *expert* performers do not consciously think about how to apply expressive cues, we may wrongly conclude that *students* do not benefit from consciously thinking about expressive cues, even in the learning stages.

The notion that the learning of musical expressivity is best left untouched by conscious thought reflects a misunderstanding that pervades commonsense teaching based on tradition and folklore. It is not realized that goal-directed strategies that initially are willfully applied normally undergo *automation* as a result of practice. That is, although a performer may *initially* have to use cues in a conscious manner, soon the associations among cues and emotions become *internalized* by the performer and no longer in need of conscious control. Recent studies have suggested that explicit instruction is very beneficial to learning expressive skills (Juslin & Laukka, 2000; Woody, 1999).

**“Emotions expressed in music are very different from everyday emotions”**

Some authors have argued that emotions expressed in music are very different from the emotions expressed in everyday life. (Indeed, some authors have denied that music can express emotions at all!) It is often said that music expresses emotions so subtle and complex that we cannot describe them in words. They are “ineffable” to use a popular term. This view has not proved very helpful in music education. How could teachers say anything about the ineffable?

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<sup>1</sup> Notably, the “emotion” component correlated most strongly with the ratings of expressivity in this experiment.

A more fruitful approach regards emotions expressed in music as in many ways similar to those expressed outside music (cf. Davies, 1994; Juslin, 2001; Sloboda, 1996). The acoustic cues used to express emotions in performance (e.g., tempo, sound level, articulation, timbre) gain much of their power from the nonverbal communication of emotions (e.g., voices, gestures, movements). Hence, when teachers say that musical emotions are different from everyday emotions, they are robbing their students of their most powerful sources of expressive form. Teaching of expressive skills must allow everyday emotions back into the classroom. Musical emotions touch us deeply not because they are so different from everyday emotions, but because they are so similar.

#### **“Expressive skills cannot be learned”**

The four myths about musical expressivity described so far will tend to reinforce the fourth one, namely that expressive skills cannot be learned. If expression is entirely subjective and passive, and has nothing to do with explicit understanding or emotions as we know them, it is obviously difficult to teach expression to students.

Expertise in musical performance is often seen as the synthesis of technical and expressive skills. But technical aspects of playing are often regarded as learnable skills, whereas expressive aspects are regarded as instinctive. Many teachers regard expression as something that cannot be taught – a view that is sometimes shared by their students: “there is no technique to perform expressively. You have to use your soul” (cited in Woody, 2000, p. 21). Consequently, expressivity is wrongly believed to reflect merely talent, which is beyond learning and development.

True enough, knowledge about expressivity is mostly tacit and difficult to convey through verbal means, making it somewhat elusive to both research and teaching practice. Also, expressive skills may to some extent reflect the emotional sensitivity of the performer. But this does not imply that it is impossible to develop expressive skills through training. This is really an empirical question. Studies which have addressed this question have demonstrated that expressive skills *can* be much improved by instruction and training (Marchand, 1975; Juslin & Laukka, 2000; Woody, 1999).

#### **What can be done?**

First, music teaching should incorporate up-to-date theories and findings concerning expressivity. Second, if current teaching of expressive skills is not optimal, perhaps we need to consider using new ways of teaching expressive skills. If so, what are the criteria for a useful teaching strategy? First, the strategy should include the three elements required for *deliberate practice* (cf. Ericsson, Krampe, & Tesch-Römer, 1993), namely (a) a well-defined task, (b) informative feedback, and (c) opportunities for repetition and correction of errors. Second, it should provide some objective means of measuring the accuracy of the musical communication. Third, it should relate the actual sound properties of the performance to experiential concepts (e.g., emotions, metaphors). Finally, it should allow the student to compare his or her playing to an “optimal” model. In the following, I outline a teaching strategy that meets these criteria.

In a project called Feedback-learning of Musical Expressivity (*Feel-ME*) we aim to develop new methods for teaching expressive skills based on recent advances in psychology, technology, and music acoustics. A new and empirically based approach to learning expressivity termed *cognitive feedback* is developed and implemented in user-friendly computer software. The purpose of this

method is to allow performers to compare their use of acoustic cues to express specific emotions with an “optimal” model based on how listeners utilize these same cues to judge the expression.

Cognitive feedback proceeds as follows: In the first phase, performers play a piece of music with various emotional expressions (see Figure 2). Their performances are recorded and automatically analyzed by the software with regard to acoustic characteristics (e.g., tempo, sound level, timbre). Then, statistical analysis is used to model the correlations between the performer’s intentions and the acoustic cues. The performer’s model is mathematically related to a stored model of listeners’ emotion judgments. This makes it possible to directly *compare* how performers and listeners use the same cues in the performances (Juslin, 2000).

In the second phase, the performers receive feedback from the software. This consists of a verbal description of the performer’s cue utilization, the listeners’ cue utilization, the degree of matching between performer and listeners. Instances of poor matching are explained to the performers. For example, a performer may be told that “you use *staccato* articulation in your sadness expressions, but listeners associate *legato* articulation with sadness. Thus, you should try to play your sadness expressions with more legato articulation”. The accuracy of communication is also indexed.

In the final phase, the performers repeat the first task once again. The goal is to see whether the performers have *improved* their accuracy by *changing* the cue utilization in the ways suggested by the feedback. A recent study evaluated the efficacy of this procedure (although using manual acoustic measurements), and showed that the method is highly effective (Juslin & Laukka, 2000).

The goal of cognitive feedback should be to provide students with the tools they need to develop a personal expression. Knowledge concerning the relationships between acoustic cues and their perceptual effects will help the performers to *reliably* achieve desired listener responses. The fact that software is used brings certain advantages. Computer feedback (a) provides critical feedback, but in a non-threatening environment, (b) is available 24 hours, (c) offers possibilities for flexible and individually based learning, and (d) involves expressive features that teachers only have tacit knowledge about.

### **Concluding remarks**

This paper suggests that new strategies for teaching expressive skills are within reach. Adopting these strategies in music education will require openness among teachers. Some of the dominant views on expressivity may need to be revised in the light of empirical findings. But regardless of whether the reader agrees with this author’s conclusions, I hope that he or she will at least agree that the issues addressed in this paper merit closer consideration than has hitherto been the case.<sup>2</sup>

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<sup>2</sup> This research was supported by the Bank of Sweden Tercentenary Foundation through a grant to Patrik Juslin.

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