

# Doing without thinking? Aspects of musical decision-making

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When asked to explain their processes of musical decision-making, musicians attribute their behavior to various causes. This paper explores how musical decisions are made. A semi-structured interview was conducted with a Baroque violinist about her interpretation of the violin line in the aria *Ich bin vergnügt in meinem Leiden* from J. S. Bach's Cantata BWV 58. Using interpretative phenomenological analysis (IPA), the interview was coded to create categories describing differing influences on the performer's musical interpretation: feelings, score analysis, research, technical considerations, and specific experiences. A second analysis identified intuition and analysis as contrasting approaches to musical decision-making. This paper focuses on the nature of intuitive methods of making interpretative choices with reference to the interview data and psychological literature on intuition.

*Keywords:* music performance; interpretation; decision-making; intuition; phenomenology

Musicians are involved in complex and often rapid processes of decision-making when preparing and performing a musical work. This paper explores how musical decisions are made, focusing on the experiences of an individual musician to identify influences on their artistic practice. Within this framework of musical decision-making, this paper aims to distinguish between intuitive and non-intuitive methods of making interpretative choices, focusing on the nature of intuitive processes in particular.

Intuition has been conceptualized and defined in many ways (see Sprengle 2005). Betsch (2008) identifies three differing approaches to understanding the concept and how it may operate:

Some scholars focus on intuition as a *source* of knowledge. Accordingly, intuition is what we know without knowing how we learned it. Others suggest a *process* view by equating intuition with automatic or implicit processes of thinking. Finally, one spots proponents of a *system* view claiming that intuition is a distinct faculty of the human mind (p. 4).

This paper takes a process view of intuition based on dual process theories of cognition that distinguish between processes that are unconscious, rapid, and automatic (System 1), and those that are conscious, slow, and deliberative (System 2) (see Hammond *et al.* 1987, Epstein 1991, 1994, 2003, Hogarth 2001, Evans 2008). Many of the characteristics of System 1 can be found in definitions of intuition:

Intuition is a process of thinking. The input to this process is mostly provided by knowledge stored in long-term memory that has been primarily acquired via associative learning. This input is processed automatically and without conscious awareness. The output of the process is a feeling that can serve as a basis for judgments and decisions (Betsch 2008, p. 3).

## METHOD

### Procedure

A semi-structured interview was conducted with Baroque violinist Alice Evans in January 2009. Evans chose to discuss a piece by J. S. Bach with a prominent violin line: the soprano aria *Ich bin vergnügt in meinem Leiden* from Cantata BWV 58. The interview questions were designed to elicit reflection on the interpretative choices involved in performing the piece. The interview began with a hypothetical masterclass scenario asking Evans how she would teach her interpretation of the piece and progressed to broader questions about musical decision-making.

### Analytical framework

The interview transcript was analyzed using interpretative phenomenological analysis (IPA) within the qualitative data analysis software program Atlas.ti (version 6). IPA studies explore the meaning of a particular experience for the participant by focusing on the participant's views and perceptions of the topic being investigated (see Landridge 2007, Willig 2008). IPA is a version of the phenomenological method that does not separate description and interpretation; instead, it acknowledges that the researcher's own conceptions are re-

*Table 1.* Influences on musical decision-making.

<i>Category</i>	<i>Discussion points</i>	<i>Language examples</i>
Feelings	Musical characters	I feel
	Tempo choice	You get the sense
	Ornamentation	
	Baroque bow and instrument	
	Bass line	
Score analysis	Harmony	I look for
	Beat hierarchy	Be aware
	Placement of rests	Noticing
	Chord position	
	Articulation markings	
	Clarity of different parts	
Research	Text of cantata	I learned
Technique	Intonation	Basic things
	Producing good tone	
	Rhythm	
Experiences	Playing other pieces by Bach	I played
	Playing from different editions	He said
	Using first Baroque bow	
	Rehearsals with Sigiswald Kuijken	

quired to make sense of the participant's life world through a process of interpretative activity (Smith *et al.* 1999, pp. 218-219).

## RESULTS

During the interview, Evans discussed 20 different influences on her musical decision-making in relation to interpreting the piece. Analysis of the transcript resulted in the creation of five thematic categories: feelings, score analysis, research, technical considerations, and experiences (see Table 1). The language used to discuss an aspect of the piece—for example, “feel,” “sense,” “look,” or “learn”—informed this process of categorization. Based on the definition claiming that the output of intuition is a feeling (Betsch 2008), 5 of the 20 elements of Evans' interpretation could be classed as operating via intuition, while the categories score analysis and research demonstrate more conscious, controlled decisions. The categories technique and experiences

Table 2. Discussion of decision-making processes.

<i>Category</i>	<i>Discussion points</i>	<i>Language examples</i>
Intuition	Instinct	Accumulative learning
	Subconscious realization	Thoughtlessness
		Absorption
		Innate sense
Analysis	Taste	Reaction
	Consciousness	Thoughtfulness

seem to influence decision-making at varying levels of conscious awareness. For example, Evans recalled some specifics from influential rehearsals and performances but suggested that knowledge gained through experiences usually took place at a more general, less explicit level.

Although the categorization process demonstrates a mixture of influences on her musical decision-making, Evans labeled herself an “instinctive” rather than a predominantly “learned” player. This distinction is similar to Dunsby’s (2002) differentiation between “performers who are more inclined to the intuitive approach, and those who feel that some kind of thorough cognitive underpinning yields better results” (p. 226). Concepts related directly to intuitive and non-intuitive or analytical methods of decision-making discussed during the interview were identified and categorized through a second analysis of the transcript (see Table 2).

## DISCUSSION

While Evans frequently referred to “instinct” during the interview, instinct is not guided by deep knowledge structures, prior learning, and expertise (Carlson 2004), and what Evans described could perhaps be more accurately termed intuition:

For me there is an aspect in music which is accumulative learning and so you do something automatically that is sort of the culmination of what you’ve learnt up until that point and so you don’t make a conscious decision about what you’re doing. You do it completely without thinking. So for me instinct, whether or not semantically that’s correct, for me instinct includes partially reacting without thought using the knowledge that you’ve had up until that point. Therefore it can change, so the more you

learn, your instincts towards something can change. But for me, I use instinct as the opposite of thoughtfulness, consciousness, so that you do something without being conscious of why you're doing it in the moment.

Evans' description of intuitive processes as being automatic, having low conscious awareness, and being based on accumulated knowledge corresponds to the characteristics of intuition as defined by Betsch (2008) and other authors (see Hodginkson *et al.* 2008). These characteristics result in decisions that "make sense" or "feel right" and cannot be readily explained by a specific reason.

According to Weber and Lindemann (2008), the lack of conscious access associated with expert intuition is either because "previously conscious, analytic processes have become automated to a point in which conscious attention is no longer necessary or as the result of cumulative, associative learning that has never been conscious" (p. 191). The interview data suggests that for Evans, much of her knowledge was not gained consciously, but through experience and what she termed "absorption." The automation of analytic processes on the other hand is similar to Simon's (1987) definition of intuition as "analyses frozen into habit" (p. 63), which in musical contexts could apply to learning technical skills or the activity of practicing in general.

This preliminary study has attempted to present a framework of decision-making through which intuitive and non-intuitive processes involved in interpreting a musical score can be identified. The study concentrates on the subjective experience of musical intuition while acknowledging that self-report data can present difficulties for the researcher. For example, musicians may inaccurately attribute their behavior, certain processes may not be introspectively available to them, or they may be "anxious, defensive, or unaware of what they do" (Chaffin and Crawford 2007, p. 156). The author intends to develop an understanding of how musical intuition is experienced by period instrument string players through further interviews in combination with other approaches to data collection.

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