Emotions in Music

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In this essay we argue that musical expressiveness is not confined to "emotion characteristics in appearances," i.e., musical gestures which are experienced as *resembling* gestures or behaviors characteristic of a person in a particular emotional state, such as *vocal* expressions of sadness or anger (sighing, wailing, shouting, etc.) and *behaviors* expressive of joy (skipping lightly), or sadness (moving heavily and slowly as in a funeral procession). We claim that sometimes music can appropriately be heard as containing a "persona," a fictional or virtual agent whose emotions are expressed in the music, and that this persona can be experienced as expressing more *complex* emotions, such as hopefulness or resignation, as well as *blends* of emotion, and emotions that *develop and change* over time. A complex piece of music may have a composed expressive trajectory or musical "plot," which dramatizes a psychological journey by a persona. Moreover, listeners may be invited not only to *recognize* the emotions expressed in such music but also to *experience those emotions themselves*, either actually or in imagination, by empathizing with the musical persona as he or she travels on a psychological journey through the music. Such experiences are typically reinforced by the arousal of actual physiological states and action tendencies in listeners. We illustrate our argument by means of analyses of the Prelude in E♭ Minor from Book I of Bach's *Well-Tempered Clavier* and the third movement of Brahms's Piano Quartet in C Minor, Opus 60. Finally, we admit that not all listeners will approach music in the way we suggest, but we argue that listening in the way we recommend can significantly enrich our musical experiences.

Keywords: emotion in music, musical expressiveness, the musical "persona," Bach, Prelude in E♭ Minor, *Well-Tempered Clavier*, Brahms, Piano Quartet in C Minor, Opus 60

INTRODUCTION[1]

IT IS A TIME-HONORED THEME IN WESTERN thinking about music, going back to Plato and Aristotle, that music has an especially intimate connection with the emotions. And in the last thirty years or so, there has been an upsurge of interest and research into emotions by philosophers, psychologists, neuroscientists, anthropologists, and others, so that we now have a much better understanding of what emotions are and what functions they play in human life. However, there is still little agreement about the role or roles that emotion can play in music, and indeed some of the recent research into the emotions has raised new and difficult questions about music, especially about the *expression* of emotions in music and the *arousal* of emotions in listeners.

Some people make no distinction between the expression and arousal of emotion by music: according to this view, to say that a piece of music expresses an emotion E is simply to say that it arouses E in its listeners. But the emotions aroused by music are frequently not the emotions it expresses. Listeners may be bored or shocked by a piece that expresses neither boredom nor shock. Moments in a piece may surprise the listener although they do not express surprise. Similarly, music can express emotions that it fails to arouse, as when we *recognize* that a piece expresses excitement or wistfulness without ourselves becoming either excited or wistful. And music can arouse emotional reactions as a result of idiosyncratic associations that have nothing to do with what the music expresses.

Whatever the mechanisms involved, and to whatever degree we listeners may actually experience emotions when listening to music, the emotions with which we are primarily concerned in this essay are those that are *aesthetically warranted* by the music.[2] This includes not only those emotions expressed by the music, but also those emotions that may arise in direct (empathetic or sympathetic) reaction to our understanding of the music's expressive structure. The relevant structural features of a work must be interpreted, of course, and for that we can rely on the historical and theoretical reconstruction of the stylistic competency presupposed by the work, as well as on our interpretations of the work's unique realizations of stylistic principles (its individual "strategies," to use the term first proposed by Leonard B. Meyer[3]), to help determine those features for a given work. Our understanding of those features as being *expressed* will depend crucially, as we will argue below, on hypothesizing a fictional or virtual persona in the music whom listeners experience as an agent expressing genuine emotions—those (or some of those) which the music expresses. Finally, our understanding of a work's expressive meaning is grounded in familiar expressive topics, or topical fields, such as the pastoral or the

1 Many thanks to Justin London for his helpful comments. Jenefer Robinson is also grateful to the Charles Phelps Taft Research Center at the University of Cincinnati, which provided a Taft Center Fellowship for 2011–12 that partially supported her research.

2 Hatten (2010a).

3 Meyer (1973, 14). See also Meyer (1989, 20ff.).

tragic, and the expressive genres to which they give rise, such as tragic-to-triumphant.[4] Most of the world's music is accompanied by words, and it seems less problematic how songs or operas or even program music can express and arouse emotions, since words can obviously both express and arouse emotions. But how can "pure" instrumental music without words express or arouse emotions? By choosing examples from purely instrumental works, we intend to focus more closely on those expressive mechanisms proper to music alone. We can thus more convincingly counter the claim by some music aestheticians that the primary (or only) aesthetically warranted emotions engendered by a musical work are those that arise from our appreciation for its exquisite craftsmanship and/or structural beauty (note the hint of formalism in that phrasing).[5]

We begin by briefly explaining 1) what emotions are and how they function. Next, we explore 2) whether our sense of the expressiveness of music can be explained in terms of the expression of genuine human emotions by music and, if so, how; 3) whether it is ever appropriate in (at least some) music to hear or imagine a fictional or virtual persona in the music, an implied agent experiencing genuine emotions, with whom we might identify or with whom we might sympathize; 4) how we might understand expressive *meaning* in music; and 5) how the arousal of emotions in listeners might have aesthetic significance; for example, how it might reveal aesthetic understanding even in those listeners who lack music-theoretical (conceptual) competency in a style (or those who possess such competency tacitly), and how it might lead every listener to further insights into the structure and meaning of music. Finally, we demonstrate how these approaches to musical emotion and expressive meaning can be justified, focusing on a keyboard prelude by Bach and the slow movement from a piano quartet by Brahms.

1. WHAT ARE EMOTIONS?

There is fairly wide agreement that emotions are initiated by an *appraisal* of the environment. Thus if my boss appears to be ignoring me in a meeting, I may feel *fear* if I appraise the situation as a threat (He's going to fire me!), *anger* if I appraise it as an offense (He's deliberately insulting me!), or *sadness* if I appraise it as a loss (He doesn't like me anymore!). So-called basic emotions are pan-cultural and appraise the environment in terms of "adaptational encounters" or "core relational themes," such as threats, offenses, and losses, that are of vital significance to an individual[6] or its close kin or "group," although what counts as an "offense" or a "loss" may differ from one culture to another.[7] These "affective" appraisals need not be consciously entertained: they are typically made without deliberation or conscious thought of any kind, and may be based on irrational beliefs. As the psychologist Klaus Scherer has noted, affective or emotional appraisals "can occur, in more or less complex forms, at several levels of processing" and should not be thought of as necessarily involving "a slow, deliberate process."[8] Some theorists think that affective appraisals are more like perceptions: I "see" the world as threatening or offensive, even if I deny that I literally believe it to be so. Thus, I may be afraid of spiders because I "see" them as nasty hairy creatures with long legs that might drop on me suddenly from above, although I know that most species of spiders are harmless. As the psychologist Nico Frijda puts it: "Emotional experience is perception of horrible objects, insupportable people, oppressive events."[9] But "seeing" in this context means something like "construing" or "interpreting," rather than literal visual perception. In the throes of emotion, my attention is riveted on something in the environment, construed in terms of how it appears to me in light of my goals, wants, interests, etc., and those of my "group."

Emotions, however, not only appraise a situation but also prepare a person for dealing with the situation as appraised. Emotions are responses which typically call for an immediate bodily reaction. Indeed, it is widely believed that the evolved function of basic emotions[10] is to respond quickly and automatically to "adaptational encounters" or "core relational themes," which need our immediate attention. In fear, I not only focus on a threat, but I act instinctively to deal with it. In his ground-breaking work, *The Expression of Emotion in Man and Animals*, Charles Darwin argued that expressions of emotion originally evolved as behaviors that prepared the human or other animal to deal with a particular kind of adaptational encounter, such as showing the teeth as preparatory for attacking (biting) an enemy in anger, or opening the eyes wide when confronting an unexpected stimulus that elicits surprise.

Contemporary evolutionary biologists think that these habits have taken on a new function as signals that communicate emotional states to other members of the species; thus, showing the teeth remains part of the expression of anger and opening the eyes wide is part of the expression of surprise. In other words, these behaviors are secondary adaptations, adaptations that have persisted because they have taken on a new function after the original one has been largely supplanted. In creatures that live in social groups and depend on other members of the species for survival, it is reasonable to think that the ability to communicate one's emotional state has been selected for (even if deception is sometimes useful, too). Expressing anger by showing one's teeth may no longer indicate that a biting attack is imminent, but it does vividly communicate one's state of mind

4 For a detailed account of expressive genres in the music of Beethoven, see Hatten (1994, 74–90).

5 See, for example, Kivy (1990) and elsewhere.

6 Although this is true in general for all animals, our concern here is obviously with human beings.

7 So, too, do *attitudes toward* these emotions differ from one culture to another.

8 Scherer (2001, 370).

9 Frijda (1986, 188).

10 There are various explanations for how subtler human emotions are related to basic emotions. Perhaps, for example, non-basic emotions are cognitive elaborations of basic emotions. See Prinz (2004, especially Chapter 4) for a good discussion.

and thereby influences other people's behavior. Interestingly, some other primates have many facial expressions of emotion similar to our own, strongly suggesting that they have a shared evolutionary history.

The psychologist Paul Ekman has taken on the mantle of Darwin in the emotional domain. He has found good evidence that a "basic emotion" sets off an "affect program," an automatic, coordinated suite of bodily effects including autonomic nervous system changes (heart rate, skin conductance, etc.), characteristic facial and vocal expressions, postures, action tendencies, etc.[11] Regardless of what is being appraised as threatening—a wild boar or my boss's smirk—the fear response exhibits the same swift sequence of events (although it is almost always immediately followed by more thoughtful behavior). Ekman has found pan-cultural facial expressions for at least seven so-called basic emotions: sadness, happiness, fear, anger, surprise, disgust, and contempt.[12] Vocal expressions of emotion (i.e., the way an emotion affects patterns of stress and intonation in the human voice) have also been studied, and a great deal of attention has been paid to autonomic nervous system reactions, some of which reveal themselves in such symptoms as turning red (or white), trembling, sweating, and so on. Although there are measurable differences in the various autonomic reactions associated with different emotions, it appears that there is no unique autonomic signature for any particular basic emotion.

Ekman's view that expressions of emotion are, in general, reliable guides to a person's inner states has been disputed by some social psychologists, who have emphasized the role of social context in eliciting expressions of emotion.[13] Nevertheless, whether "natural" indications of a person's mental state or (for example) strategic behaviors designed simply to change other people's behavior, it remains highly plausible that expressions of emotion function as communicative signs and that the form they take has been dictated by our evolutionary history.

For William James, what makes an emotion emotional is the presence of characteristic bodily changes.[14] As we saw, the same initial angry or fearful response results from an appraisal of offense or threat, regardless of the nature of the offense or the threat. Recently the neuroscientist Antonio Damasio produced compelling evidence that cognitively complex emotions employ some of the same subcortical neural systems as do simple "instinctive" emotions.[15] If I appraise the situation with my boss as a threat that he is going to fire me, my reaction will be fear. Clearly, such a fear requires complex, culturally specific beliefs about jobs, bosses, firing, and so forth: it could not be a "pre-programmed" emotion that evolved when human beings roamed the jungle. But if Damasio is right, this cognitively complex fear uses the same neural pathways as more primitive fears, such as fear of a predator or of the dark. More specifically, the neural pathways in cognitively complex fear appear to travel through the pre-frontal cortex, but, as in the case of primitive fear, these pathways apparently lead to the amygdala, which in turn initiates bodily responses of various kinds, notably in the autonomic nervous system, such as changes in heart rate and skin conductance, and in the motor system. Many of these bodily changes are in turn available to consciousness as *feelings of emotion*. Damasio has identified brain areas that monitor bodily changes in an ongoing fashion, and it is these brain areas that are activated when one is feeling an emotion. Interestingly, these brain areas appear to be distinct from those involved in the emotion-appraisal mechanism.

One consequence of the James-Damasio view is that changes in bodily response naturally produce changes in the corresponding emotional feelings. Recently the psychologist James Laird, following Damasio, argued that "feelings are not the forces that produce actions; instead they are the feedback information about the effects of those actions, information that permits the control and shaping of action."[16] Laird has chronicled a great deal of evidence showing that changing one's bodily state does indeed lead to changes in one's "emotional feelings." He examines in turn the effects of adopting the facial expression, the posture, the breathing pattern, the vocal behavior, and the autonomic changes characteristic of a particular emotion, and finds convincing evidence that merely changing these outward behaviors has the effect of inducing the corresponding emotional feelings.[17] Particularly telling are experiments in which facial or vocal expressions are manipulated so that subjects, unbeknownst to them, are induced to adopt facial or vocal expressions of sadness, happiness, fear, anger, or disgust, after which they strongly tend to experience the corresponding emotional feelings. For example, Fritz Strack and colleagues asked subjects on some plausible pretext to hold a pen in their mouth with their lips protruding (inducing an angry expression) or with the teeth (inducing a smiling expression). The experimenters then showed the subjects a series of cartoons, independently judged to be moderately humorous. They then took "funniness ratings," the subjects' cognitive evaluation of the cartoons, as well as "amusement ratings," i.e., subjects' "reports of their emotional feelings." Although the funniness ratings were "hardly affected" under the various different conditions in the experiment, "subjects' reports of their emotional feelings . . . were clearly influenced by the experimental manipulations": subjects who were holding the pen in their teeth at the time the cartoons were shown "reported feeling more amused than those who held it in their lips."[18]

Similar effects on emotional feelings can be achieved by inducing suitable vocal expressions. For example, people who

11 Ekman (2003, 58–71). Ekman thinks these affect programs are "open" systems that humans can adapt to changing circumstances to some extent.

12 Ibid.

13 See, for example, Griffiths and Scarantino (2009).

14 James (1884).

15 Damasio (1994, 127–39).

16 Laird (2007, 18).

17 Ibid. (63). Other studies have demonstrated that "inducing people to adopt long, unbroken mutual gaze with a member of the opposite sex is sufficient to produce increased feelings of romantic attraction" (53).

18 Strack et al. (1988, 774).

were asked to utter the German sound "ü," which requires something like a disgust expression, report "much less pleasant feelings than when they were, for example, saying 'ee' " as in "cheese."[19] Manipulating posture also works: Laird cites eleven different studies that succeeded in inducing "feelings of depression, anger, fear, sadness, confidence, and pride" by causing subjects to "[adopt] a posture characteristic of the corresponding emotion."[20] This is particularly interesting from a musical point of view because music often induces listeners to adopt a certain bodily stance and movement. Music can sound confident and proud, for example, and if it can induce postures and movements characteristic of confidence, then it ought to be able to induce *feelings* of confidence. Indeed, Laird remarks that the effects of manipulating people's expressions parallel the same sort of effects as are produced by other means, *including listening to music.*

Extrapolating from this brief and oversimplified account of emotion, we can see that emotions are not just appraisals or judgments, not just physiological changes, not just behavior or action tendencies, and not just feelings of bodily change, but a *process* in which all of these aspects of emotion play a role: 1) an affective appraisal of a given situation that focuses attention on it in terms of its significance to the person; 2) bodily responses of various sorts, including autonomic changes, posture, and action tendencies, which in turn prepare the person to deal with the situation as affectively appraised (Threat! Loss!), as well as changes in facial and vocal expression which communicate to others the emotional state of the person; and 3) feelings of bodily change which can consciously alert the person to their own emotional state.[21] Although we will not discuss this aspect of emotion in any detail, the affective appraisal that initiates the emotion process is typically followed by 4) a more discriminating assessment or monitoring of the situation and one's immediate emotional response to it.[22]

Despite differences among researchers about the details, what we have outlined is a widely accepted view of what emotions are and how they function. But why should music have any close connection with emotion at all? Music is said to *express* emotion, yet when people express emotion in ordinary life, they do so by changing their facial or vocal expression, and their gestures or action tendencies, not usually by playing or composing music. Furthermore, how can music *arouse* emotion, when music normally fails to present us with an "adaptational encounter," such as a loss or threat?

2. EXPRESSIVENESS IN MUSIC: APPEARANCE EMOTIONALISM (THE "DOGGY" THEORY)

If I express my anger or sadness in ordinary life, I reveal or manifest my emotional state to those around me through my facial or vocal expression, behavior, action tendencies, and so forth. But sometimes my expressive gestures may be expressions of an emotion that I do not currently feel. Perhaps the look on my face or the quality of my voice is always expressive of melancholy, regardless of whether I am actually melancholy. It has seemed plausible to many theorists that music can be expressive of emotion in a similar way. Thus, in *Sound Sentiment*, Peter Kivy distinguishes between a sad expression and an expression of someone's sadness,[23] pointing out that if a man has a sad expression, it does not follow that he is therefore sad: he may just have been born with a lugubrious-looking face, like the face of a St. Bernard dog, for example. Like the St. Bernard's sad face, sad music is expressive of sadness by virtue of possessing a sad expressive "contour." In the same year in which *Sound Sentiment* was published, the philosopher Stephen Davies articulated a very similar theory of musical expressiveness, although his chosen example was the basset hound rather than the St. Bernard; for Davies, sadness and happiness in music are "emotion characteristics in appearance"[24] that are not expressions of any genuine emotion in anyone but which are *experienced as resembling* a human expression of sadness or happiness.[25] He calls his theory "appearance emotionalism."[26] More recently, Davies has amplified his account: following the music psychologist Patrik Juslin, Davies suggests that musical expressiveness rests in part on "distinctive prosodic contours of specific emotions [that] can be recreated musically,"[27] i.e., there are some experienced resemblances between expressive vocal intonations, such as moaning or screaming, and expressive musical gestures. But he thinks that "the resemblance that counts most for musical expressiveness . . . is that between music's temporally unfolding dynamic structure and configurations of human behavior associated with the expression of emotion."[28] In particular, "music is expressive in recalling the gait, attitude, air, carriage, posture, and comportment of the human body." For example: "Just as someone who skips and leaps quickly and lightly, makes expansive gestures, and so on, has a happy bearing, so music with a similar vivacity and exuberance is happy sounding."[29]

For Davies (as for Kivy) it is a virtue of this view that when we say that a piece of music is *expressive of* some emotion, we are talking only about the aesthetic surface of the music: we do not imply that the music is a genuine expression of emotion in its composer or its performer or its audience. After all, it is often possible for listeners to recognize or perceive that a musical passage is expressive of sadness without feeling that sadness themselves, and notoriously composers can create works expressive of joy while they themselves are feeling wretched. A classic case is that of Mozart toward the end of his life when

19 Laird (2007, 29).
20 Ibid. (57).
21 See Robinson (2005, Chapters 1–3) for a more detailed account.
22 Ibid. (Chapter 3).
23 Kivy (1989, 12–17). The distinction comes from Tormey (1971, 106–9). For extended discussion, see Robinson (2005, Chapters 8, 10).
24 See Davies (1994, 221–40).
25 Kivy (2002, 46–47) expresses some reservations about his earlier account. We will therefore focus on Davies's version of the theory.
26 Robinson (2005, 300) christens it "The Doggy Theory."
27 Davies (2006, 181). For more on Patrik Juslin, see our Section 5 below.
28 Ibid.
29 Ibid. (182).

he was composing (among other things) the joyful first movement of the "Jupiter" symphony. As for performers, it is very difficult if not impossible for them to perform in a way that is expressive of inconsolable sadness while simultaneously expressing that degree of sadness themselves.[30]

To the objection that music can be heard as resembling a wide variety of things, not just expressions of emotion, Davies points out that in fact people have a tendency to anthropomorphize their environment: "Our interests shape how we see the world, thereby making some resemblances more salient than others and giving them the direction they take."[31] So we are more likely to see a weeping willow as a downcast person than as a frozen waterfall, even if the "objective" similarities are greater in the second case than in the first. Nonetheless, the so-called "doggy theory" seems to assume that there is a significant degree of *natural* resemblance between musical expressive gestures and human gestures that are expressive in real life. But, as the art historian Ernst Gombrich has emphasized, expressiveness depends not just on simple resemblances, but on understanding the "language" in which a work of art or music is created and the choices available to the artist or composer.

> What strikes us as a dissonance in Haydn might pass unnoticed in a post-Wagnerian context and even the *fortissimo* of a string quartet may have fewer decibels than the *pianissimo* of a large symphony orchestra. Our ability to interpret the emotional impact of one or the other depends on our understanding that this is the most dissonant or the loudest end of the scale within which the composer operated.[32]

More broadly, we need to know something of the *style* within which the composer worked before we can appropriately experience a particular harmonic progression or melody as "cheerful." Faced with a set of possible alternatives, there is usually a "natural" basis for judging one color or melody or harmonic shift as "more cheerful" than another, but without knowing the range of alternatives available to the creator, we cannot say of a specific color or melody or harmonic shift that it is correctly heard as (simply) "cheerful."

One of the most important facts about the context of a piece is the category or genre to which it belongs:[33] "The grim *scherzo*, the melancholy waltz . . . could not deliver their 'message' without this firm context."[34] Of course, some gestural features of these works cannot fail to have their effect even in the absence of stylistic knowledge.[35] Nevertheless, Gombrich's examples illustrate that very often the expressiveness of a piece is determined (in part) by its deviation from a norm. The scherzo and the waltz are typically relatively cheerful and in a major key. These properties are *unmarked* and unremarkable. A grim scherzo, on the other hand, is not only expressive in an unusual way; its grimness is significant: it is part of the meaning of the piece. The composer has deliberately chosen a *marked* property to convey a particular expressive meaning.

A brief explanation of markedness will be helpful at this point. Markedness is a concept developed in linguistics in which oppositions are asymmetrically interpreted. For example, in the opposition man versus woman, we have an opposition between male and female, but also the asymmetry by which man is used to refer to humankind in general (hence "mankind"). In the opposition duck versus drake, we find the opposite situation with respect to gender. Here, the female term, "duck," is also used as the general (hence, unmarked) term of the opposition, referring to all ducks, whereas "drake" can only mean a male duck. One way new concepts emerge (requiring new terms) is by carving out a distinctive semantic niche from the more general realm of meaning covered by an existing term. Thus, a new term is marked with respect to the pre-existing term, which now becomes unmarked with respect to the new one. One advantage of attempting to reconstruct markedness relationships in music (admittedly a speculative task, but one aided by the observation that marked terms will have a narrower distribution than unmarked terms) is that it provides more rigorous accounting for the particular meaning to be associated, or "correlated," with the opposition. Thus, we may find that the opposition of minor and major mode has something to do with the opposition of dysphoric and euphoric emotions, without necessarily specifying the particular quality of emotion, which will likely depend on still other oppositions. Likewise, rather than mapping minor versus major literally onto sad versus happy, markedness suggests that the minor mode (in the Classical style) is more narrowly interpretable (e.g., implying those emotions associated with the tragic realm) whereas the major mode has a wider range of interpretation (involving emotions that are non-tragic, such as those associated with the pastoral, heroic, and comic realms). Note that with respect to their major mode, such works may imply either an emotionally euphoric expressive state or a non-emotional, merely "contented" mood; this latter state, implying an emotional equilibrium, is only associable with the unmarked term of the opposition. The wider range of euphoric expressive states for the major mode emerges from the use of a wider range of topical fields that developed in the eighteenth century. Pastoral (from rustic pleasures to the sublime serenity of faith), heroic (from contented noble bearing to joyful affirmation and jubilant triumph), and comic (from low humor to higher wit in the Classical style) are three contrasting fields of meaning that are all accommodated within the major mode, and other marked oppositions are therefore required to distinguish them.[36]

30 Notably, if a singer is genuinely expressing inconsolable sadness—weeping and sighing and so on—it will be exceedingly difficult and probably impossible for her to sing at all, let alone sing in a way that is expressive of such sadness.

31 Davies (2006, 182).

32 Gombrich (1963, 62). Davies (1994, 244) acknowledges this point.

33 See Walton (2008, Chapter 11).

34 Gombrich (1963, 67).

35 A sudden, loud, dissonant, staccato chord in a slow, smoothly melodic piece might always be startling, for example. See Robinson (1995).

36 For examples of markedness as further articulating meaning, and as one explanation for style growth and change, see Hatten (1994, 39–63).

Another advantage of acknowledging changes or complexities in markedness values is that they may reflect growth and change of style. For example, the opposition between minor and major mode in the early Baroque may not be strongly marked (to say nothing of the possible oppositions among other available modes). Thus, not all minor mode movements are explicitly tragic in the seventeenth century, and other oppositions may carry more weight in marking the distinction between dysphoric and euphoric—such as the opposition between quadruple and triple meter in Monteverdi. Nevertheless, the appearance of chromaticism (associated with the tragic lament as early as the Renaissance) in works in minor mode (or those modes that would devolve into minor, such as Phrygian and Dorian), along with the harmonic minor's greater number of highly dissonant intervals (notably the diminished seventh and the diminished fourth) suggest that the ultimate correlation of marked minor with marked tragic expression was inevitable.

Markedness theory has clear application to other oppositions in music. A normative style or genre is by definition unmarked. Its deformation will be marked, and will carry more specific expressive import. For example, objectively there is not much natural resemblance between a grumpy old man expressing his grumpiness in his voice and gestures and the bassoon theme for Peter's grandfather in *Peter and the Wolf*. Nevertheless (in this case, helped by the words), we hear and are clearly intended to hear this theme as grumpy and pompous. How do we manage this? Broadly speaking, it is because we recognize the *style*, or at least the *genre*, of the piece. In this particular case, the theme is a march that has gone awry: instead of horns playing a tune in a regular rhythm with military precision we hear bassoons which sound vaguely military but which play an irregular melodic line in a strangely jerky rhythm. We can say that the music is experienced as resembling an elderly man (possibly with military tendencies) who sounds querulous and who moves in a halting way. But the apparent naturalness of the resemblance between these human behaviors and these musical gestures is more apparent to those who are already steeped in music in the Classical style that Prokofiev is to some extent subverting. That is why the expressiveness of music in different cultures from our own may be opaque to us, although it appears entirely "natural" to those who know the relevant conventions.[37]

To return to appearance emotionalism, although Davies's view seems to account for some of our experiences of musical expressiveness, it has severe limitations. First, as he himself notes, in his view music can be expressive only of emotions that have a distinctive posture, gait, air, or carriage, but there are not many emotions that "can be individuated solely on the basis of observed bodily comportment."[38] He acknowledges sadness and happiness as paradigm cases, but suggests that there are a few other candidates, such as timidity, anger, "swaggering arrogance, the mechanical rigidity that goes with repression and alienation from the physicality of existence, ethereal dreaminess, and sassy sexuality."[39] If we take seriously the account of emotion given in Section 1, then it is perhaps worth pointing out that most of these examples are not emotions per se. The only candidates for emotions are sadness, happiness, and anger. The rest are either character traits visible in behavior (timidity, rigidity, dreaminess) or simply behaviors (timidity, sassy sexuality). This is not surprising, since Davies stresses the analogy between music and emotionally expressive *behavior*.

Not only does the appearance emotionalism theory allow only a very few emotions to be expressible by music, but it also leaves unexplained many of the emotions that music, especially music of the Romantic era, is commonly said to express. For example, how can the third movement of Beethoven's *Hammerklavier* sonata express *resignation* or religious *abnegation*[40] and his Symphony No. 6 in F major, Op. 68, the "Pastoral," express not only cheerful feelings but also *thankfulness* or *gratitude*? How can the second movement of Mahler's Symphony No. 9 express *nostalgia* for an innocent past?[41] And how can the third movement of Shostakovich's Symphony No. 10 in E Minor, Op. 93, contain a passage that expresses *hopefulness* for the future?[42] None of these emotions has a distinctive behavior or bodily comportment associated with it. Of course, many theorists, especially formalist theorists, would simply deny that music is capable of expressing either cognitively complex emotions such as resignation or nostalgia, or patterns of emotional change such as a development from despair to resignation and acceptance.[43] But many serious music theorists and critics, especially those once labeled the "new musicologists," make such claims and produce more or less musically convincing arguments in their favor.

Moreover, if appearance emotionalism is correct, it is hard to see how music can express *blends* of emotion, *conflicts* between emotions, or *patterns of emotional change* such as disappointment turning into resignation or nostalgia giving way to acceptance. Davies suggests that patterns of emotion can be expressed in music when a number of different emotion characteristics occur in sequence. We would counter that an important part of disappointment turning into resignation, for example, is a change in cognitive states: disappointment suggests that something one expected to happen did not, and if disappointment is followed by resignation, this implies that after one's expectations or hopes for a longed-for outcome have been dashed, one is able to accept the disappointment and regain some kind of equanimity. The Davies-Kivy view, however, assumes that there is no psychological reality behind these changes in emotional expression, and so the connections between the two emotional states remain enigmatic.[44]

37 Davies (1994, especially 243–46) also explores the role of conventions in musical expressiveness.

38 Davies (2006, 183).

39 Ibid.

40 See Hatten (1994, Chapters 1–2 and Appendix) for a complete account.

41 Newcomb (1997).

42 Karl and Robinson (1997).

43 Kivy thinks that music cannot express complex emotions. See Kivy (1990, 174–81).

44 Davies has attempted to rebut this accusation in, e.g., Davies (1997). But his response is inadequate. Consider, as a counterexample, Bill

Second, if the appearance emotionalism theory is correct, then "pure" music is never a genuine expression of anyone's emotions, but only something that sounds or moves *as if it were* such an expression. Yet a Romantic lied such as Brahms's "Immer leise wird mein Schlummer," Op. 105, No. 2, is best interpreted as a genuine expression of emotion in a fictional protagonist, a woman who yearns to see her lover one more time before her death; even though the words also signify her longing, her near-despair, and finally her ecstatic hope that indeed he will come again, it is the *music* which plays the major role in expressing her emotions, by articulating the details of her state of mind and the intensity of her desire. Some "pure" music without words seems to be appropriately interpretable as expressing genuine emotions in a very similar way, as we will see shortly.

A third problem is that appearance emotionalism fails to explain *audience reactions* to the expression of emotion in music. If all we mean when we say that a piece of music expresses melancholy or cheerfulness is that the music possesses certain *aesthetic properties* which can be detected in the music, then it is puzzling why expressive music should at least sometimes arouse corresponding emotions in listeners. It is true that sometimes we simply recognize an emotion—or other aesthetic quality—in music without feeling any emotion. But if an expressive theme such as the cello solo that opens the third movement of Brahms's Piano Quartet in C Minor, Op. 60 (to be interpreted more fully below) moves us deeply, it certainly seems as if it is the *emotional character* of the theme that is largely responsible for our emotional responses to it. Kivy, however, argues that music never induces in listeners the emotions that it expresses.[45] When we are moved by good music it is simply because it is good: we are moved by its beauty and/or its creativity and craftsmanship. But this suggests that we will be moved in a similar way by *any* music that is beautiful and well crafted and expressive, *regardless of precisely what is expressed.* Yet listeners who pay careful attention to the expressive music they hear are often profoundly moved not only by the beauty or ingenuity of the music but by the expressed emotions they hear in the music as well, and *different expressed emotions move us differently.*

Finally, in the appearance emotionalism view, expressiveness in music is not an aspect of musical *meaning*: expressive qualities are nothing but aesthetic qualities which are possessed by a musical work and *perceived* or *recognized* in that work. They are on a par with such non-emotional aesthetic properties as "cool," "fresh," "brash," "sweet," "delicate," "stormy," and so on.[46] Such aesthetic qualities, whether emotional or not, are qualities of the surface or "appearance" of the music, and do not imply anything about the *meaning* of the music, if any. If I describe a melody as "fresh" and "breezy," I am not implying that the piece is about the weather (unless of course it has a suggestive title such as "Spring"). If I describe one theme as leapfrogging over another, I am not implying that the piece is *about* or *represents* the game of leapfrog.[47] But for many musicologists and music theorists, expressiveness is an essential aspect of musical meaning. The marked opposition between a "melancholy waltz" and a regular waltz *means* something. When a piece is expressive of yearning or nostalgia or heroic determination, this may be an important part of its "composed expressive trajectory"[48] or musical "plot,"[49] as we will see.

3. EXPRESSIVENESS IN MUSIC: THE PERSONA THEORY

A rival theory of musical expressiveness has been proposed by the philosopher Jerrold Levinson, who defines musical expressiveness in terms of the expression of emotion in a persona in the music. More specifically, "a passage of music P is expressive of an emotion E if and only if P, in context, is readily heard, by a listener experienced in the genre in question, as an expression of E. Since expressing requires an expresser, this means that in so hearing the music the listener is in effect committed to hearing an agent in the music—what we can call the music's persona—or to at least imagining such an agent."[50]

The idea of a persona in music was first proposed by Edward T. Cone in *The Composer's Voice*; he suggested that we take "A Lesson from Berlioz" to the effect that "all music, like all literature, is dramatic" in the sense that "every composition is an utterance depending on an act of impersonation which it is the duty of the performer or performers to make clear."[51] Berlioz's *Symphonie fantastique*, for example, expresses the reactions of a (single) persona to the sequence of events outlined in the program for the symphony. But Cone thinks that even in "pure" instrumental or "absolute" music "there is a musical persona that is the experiencing subject of the entire composition, in whose thought the play, or narrative, or reverie, takes place—whose inner life the music communicates by means of symbolic gesture."[52] Cone suggests that pure instrumental

Viola's slow-motion video piece, *The Quintet of Remembrance*, in which five people express different emotions in their facial expressions and gestures. These five individuals, however, do not interact with one another and viewers have no idea why they are (apparently) experiencing the different emotions expressed. As a result the piece comes across as both histrionic and weirdly lifeless, yet these figures are expressing patterns of emotion according to the doctrine of appearance emotionalism.

45 Kivy (1990, Chapter 8). There is now a wealth of empirical evidence that this is false. See Section 5, below.

46 Most philosophical theorists, however, have restricted the term "expression" to psychological or emotional properties such as sadness, joy, anxiety, and so on. (Nelson Goodman is an exception: see Goodman [1968, Chapter 2].) But musicologists have sometimes criticized the philosophers for their "excessive" concern with emotional properties of music.

47 See Robinson (2007).

48 Hatten (2010a, 83).

49 Newcomb (1984).

50 Levinson (1990, 193).

51 Cone (1974, 5). "A Lesson from Berlioz" is the title of Cone (1974, Chapter 5). Note that Levinson's view is not identical to Cone's. In particular, for Cone the persona in the music is always the composer, whereas we agree with Levinson that this assumption is too restrictive. See also Monahan (2011). For an important distinction between actual and virtual agents, see Hatten (2010b).

52 Cone (1974, 94).

music is "a form of utterance" emanating from musical personae or characters, "a form of purely symbolic utterance, an utterance by analogy with song."[53]

Both Davies's and Levinson's theories of musical expression rely on the close connection between how music moves and sounds and what emotions it expresses, but they make different assumptions about what that connection is. Whereas Davies thinks that expression in music rests upon resemblances perceived by listeners between musical gestures and human gestures that are (in ordinary life) expressive of some emotion, Levinson thinks that we postulate a persona in the music who is perceived by listeners as actually having the emotions that he or she (apparently) expresses. In other words, expressiveness in music should be analyzed as *the genuine expression of genuine emotion in an imagined persona*. Expressiveness has *psychological reality*, even though it is a fictional person, not a real one, who is expressing the emotions in question. Thus, just as a Romantic lyric poem, such as Keats's "Ode to a Nightingale," or a Romantic (lyric) song such as "Immer leise" can and should be experienced as an expression of emotion in an imagined or virtual persona, conceived as the protagonist or "dramatic speaker" of the poem or song—who may or may not be a persona of the poet himself—so a Romantic, lyric piece of "pure music" such as the Brahms B♭-minor Intermezzo, Opus 117, No. 2, can and should be experienced as an expression of emotion in an imagined persona, whose emotional journey the piece embodies. This piece is in A–B–A′ form, and the B theme is built of the same melodic materials as the A theme, although they have a different character (very roughly, yearning versus calm) and are respectively in the tonic B♭ minor and its relative major. In the coda, the questing, yearning A theme takes on the rhythm of the calmer B theme, but the harmony moves between B♭ minor and B♭ major until the very end. When the resolution in B♭ minor finally occurs, it is not particularly resolute, since it is in the form of an arpeggio that begins on the lowest B♭ on the piano and rises to the highest. Because the themes are so closely related melodically, they are readily heard as two conflicting propensities in a single persona—roughly, yearning and resignation. In the coda "it sounds as though the A theme's passionate yearning has been neither satisfied nor conquered, but . . . has to some extent been subdued."[54]

This is a short piece in a very familiar form: A–B–A′. It is also very expressive, but the appearance emotionalism theory of musical expressiveness would have a hard time explaining its powerful emotional effect. The A theme does perhaps sound like someone (metaphorically) reaching out for something which is out of grasp (never fully resolved), so it can perhaps be explained by Davies's theory as expressive of unfulfilled desire or *yearning*. But much of expressive import remains unexplained by the appearance emotionalism theory. In particular, this is a case in which hearing the music as expressing a *conflict* between two unfolding emotional states in a single persona affords an enriched and deeper experience of the music. One of the appealing features of the persona theory of musical expressiveness is that it allows for emotions, which, as we have seen, are *processes*, to be represented in music by musical processes. Thus, just as emotions are processes that develop, morph, blend into, or perhaps conflict with one another, so too do some musical works exemplify processes in which an expressed psychological state develops, morphs, blends, or conflicts with another such state or with events in the actual world that present themselves as challenges, impediments, surprises, epiphanies, and so on.

The persona theory relies on the listener's ability to imagine a persona in the music; just as there is an important conventional aspect to appearance emotionalism, so there is an important conventional aspect to the imagining of a persona. It is indeed partly a matter of convention that we can hear a piece of expressive instrumental music as an expression of emotion in a persona at all. It is probably largely because song is typically an expression of emotion in a persona that the idea arose that nonvocal music could also be such an expression.[55] And again, as we noted with respect to the appearance emotionalism theory, there is no striking resemblance between a theme played on musical instruments and a person expressing his or her emotions in real life.[56] It is just that music has always been thought of as a mode of personal or group expression—indeed, in virtually all cultures vocal music is what "music" primarily refers to—and so it is not surprising that this has become a culturally conventional way of thinking about music even when it lacks words. In the West there is little music that does not carry these associations.[57]

Levinson, however, goes too far when he *defines* musical expressiveness in terms of a persona. After all, Davies's view seems to account for many of our experiences of expressive music: the buoyant, rapid, major-mode theme of the first movement of Mendelssohn's Symphony No. 4 in A Major, Op. 90, the "Italian," for example, can be heard as expressive of joy or high spirits because we experience it as resembling high-spirited behavior and movement—we do not need to hear the high spirits as emanating from a persona.

As Aaron Ridley has convincingly argued, whether a piece should be heard as embodying a persona should be decided on a case-by-case basis. The crucial question we should ask when listening to a piece of expressive music is this: which way of listening to the piece is the deeper and more enriching? Is it an "experience of hearing it as a string of 'emotion-characteristics in appearance,'"[58] or is it an experience of hearing it as the expression of a persona? Ridley gives the example of

53 Ibid. (160).

54 Robinson (2005, 343). For the entire analysis of the Intermezzo, see (337–47).

55 Moreover, the embodied expressiveness of a solo performer is another powerful motivation to hear some music as expressive, even though the performer cannot practically embody the full emotional intensity of some musical expressions without endangering technical control. And of course there can be a single persona in a piece with multiple performers.

56 And typically there is no very striking resemblance between a performer and an ordinary person expressing an emotion in their gestures and posture.

57 Techno music might be an exception, but see Butler (2006).

58 Ridley (2007, 144).

Samuel Barber's Adagio for Strings, Op. 11, where the emotion expressed is—he thinks—unalloyed grief, and where there is apparently not much emotional *development* in the piece. Nevertheless, according to Ridley, this is a better piece if heard as an expression of emotion in a persona. And this way of hearing benefits from the nuancing of emotions tied to subtle differences in musical processes.

The persona theory provides solutions for all the major problems in the appearance emotionalism view. First, if we are invited to imagine a persona in the music, then music can (although it need not) express cognitively complex emotions such as yearning, resignation, or nostalgia—emotions that can be attributed to this persona; we are not restricted to the narrow range of emotional expressions Davies proposes. The music can also express blends of emotion,[59] emotional conflicts, and patterns of emotion. Second, "pure" music can properly be interpreted as a genuine expression of emotion in a (fictional) persona, not as an expression that lacks psychological reality, such as the sad expression on the face of the St. Bernard. Third, and relatedly, because the expressions we hear in the music are heard as having psychological reality, i.e., as belonging to a persona who is actually experiencing them, it is not surprising that listeners *respond* emotionally to the emotions they hear expressed. This might partly account for our being so moved by the Barber Adagio, for example. The listener's experience of a piece is typically more stirring if the piece is heard as expressing a psychological state or a psychological journey from one state to another enacted by a protagonist with whom one can empathize (feel with) or sympathize (feel for). Finally, if we postulate personae in music it not only becomes possible to identify complex emotional states as being expressed by the persona; it also becomes possible to identify an entire piece as enacting the psychological story of a persona.[60] In other words, it becomes possible to construe a piece as having expressive meaning and an unfolding expressive trajectory.

Kivy, however, sees no virtue in the persona theory of musical expressiveness, and in a recent book he has vigorously criticized it on a number of different counts. He grants that in program music, such as the *Symphonie fantastique*, there is a program explicitly stating that the symphony represents the dreams and imaginings of the poet, the hero of the work. But there is no explicit program for the Brahms Intermezzo or for Beethoven's Symphony No. 5 in C Minor, Op. 67, or his *Hammerklavier* sonata. Kivy thinks that listeners who hear personae in absolute music are letting their minds wander from the music itself: the "images" such listeners form as they listen "are not part of the music *qua* music, or *qua* art."[61] Similarly, Davies has accused the persona theorists of simply free-associating to the music, rather than responding to any qualities that are genuinely possessed by the music: "the listener interjects, instead of uncovering, the ideas that fuel her imagination."[62]

Kivy argues that unlike the characters in a novel by Tolstoy or Dickens, personae in music lack character—they are "nameless" and "featureless"—and hence cannot explain any of our aesthetic interest in a great work of music.[63] Now, it is true that the persona is not characterized in a detailed way, as are the characters of Dickens, as Kivy says. We do not know what the persona in Beethoven's Symphony No. 5 looks like (unless we identify him with the composer) or what his personal habits are, but that is beside the point. What interests us is the musical characterization of the persona's emotional and other psychological states. We can experience these states as belonging to a persona in the music without necessarily feeling anything for that persona, but we can also imagine ourselves to *be* the persona in the music and feel yearning, despair, resignation, and so on, just like the persona. Or we can experience in the music a persona separate from ourselves but with whom we empathize emotionally, feeling *with* or *for* the persona for the duration of the piece.[64] Notice that the lack of detailed information about the persona actually makes it easier for the listener to identify or empathize with the persona's emotions.

We might also remark that the dramatic speaker in a lyric poem, such as Keats's "Ode to a Nightingale," also lacks a detailed characterization. We know nothing about him (or her) except the emotional experiences he (or she) expresses in the poem. What is emotionally gripping about the "Ode" is (partly) how we empathize with this persona or protagonist, and experience with him or her[65] the emotions which the poem expresses so vividly and beautifully: in our imaginations, we too yearn for a world of art and beauty beyond "the fever and the fret" of this transient world.

Kivy has a second critique of the persona theory, arguing that "the art of absolute [music] has been, from Bach through Brahms, 'the fine art of repetition,' "[66] and that this is a reduction to the absurd of the idea of the musical persona: since the Brahms Intermezzo is in A–B–A form, he says, "the 'story' attributed to the Intermezzo must be one in which it makes sense for the persona to repeat at the end what he or she said or experienced in the beginning."[67] But it is incorrect to claim that the piece is an A–B–A structure. The end in which the A and B themes interact is crucial for its expressive significance, and there is no exact repetition of the beginning at the end. On the contrary, this reinterpretation is typical of Haydn's varied

59 As in the case of musical tropes that fuse the expressive characteristics of independently expressive elements, such as topics. See Hatten (1994, 168–72) and (2013).

60 Regardless of whether we identify the persona with the composer, with the performer, or—the most general case—with an imagined agent in the music.

61 Kivy (2009, 95). For a more detailed rebuttal of Kivy's attack on the idea of personae in music and the notion of musical meaning, see Karl and Robinson (2012).

62 Davies (1997, 105).

63 Kivy (2009, 106).

64 We will explore this idea further in Section 5 below.

65 Kivy objects that we do not even know the gender of the persona. True. That is because the gender of the persona is often beside the point. Both men and women can feel with the protagonist of the Brahms Intermezzo, for example.

66 Kivy (2009, 109).

67 Ibid. (103).

recapitulations, and Beethoven also tends to reconceive his returns to further the expressive discourse, as in the Cavatina from his String Quartet in B♭ Major, Op. 130.[68] Other works on a larger scale, such as Beethoven's Symphony No. 5, may indeed include many repetitions. Kivy notes that in the opening movement there are about forty-five repetitions of the Fate motive in the exposition alone, and the exposition is then repeated. Kivy is of course right that few literary works would countenance so much literal repetition. After all, literary works do not have to contend in the same way with issues of memory: repetitions greatly aid the remembered image of the work. And composers of complex Romantic symphonies probably include repetitions partly to allow the listeners to grasp more easily this complex material. But at the same time repetition may have an expressive role to play. There is an important expressive rationale for the forty-five repetitions of the Fate motive, for example. Beethoven represents Fate as inexorable, as beating one down with a series of blows from which one cannot escape. He hammers home this message in the hammer blows of the Fate motive. Notice, too, that lyric poetry and ballads are also frequently full of repetitions that, in the case of the latter, enhance the obsessiveness of stories in that genre.

Kivy is right that most music in which some of us at least are inclined to hear a persona does not typically *represent* or *refer* to a specific individual.[69] To that extent he is correct to say that there are no such things as personae in absolute music. But a musical persona is merely posited as the hypothetical possessor of the emotional or other psychological states that the piece expresses. It is a posited center of consciousness, an imagined or virtual agent who expresses emotions heard in the music by listeners familiar with the genre in question, and with which emotions they may, perhaps, empathize.[70] Moreover, as we will see in the next section, very often so-called absolute music metaphorically exemplifies patterns of human experience which can be attributed to this persona, and which we can share in our imaginations.

At the heart of Kivy's attack on musical personae in "absolute" music is his rejection of the idea that absolute music can have *meaning* of any kind. Indeed Kivy *defines* absolute music as music that lacks meaning. That is why he is so keen to argue that, unlike literature, absolute music cannot refer to specific characters and cannot be "about" anything (an acceptance of unsatisfied desires, a struggle to victory, and so forth). He is willing to accept the consequences of this position, namely that music has no relation to ordinary life or ordinary emotional experience, and that music cannot express complex emotions. But when asked why it is that music moves us so deeply, he can say only that it is a "divine mystery."

68 See Hatten (1994, 220–22).

69 Sometimes, however, the music clearly does refer to a specific individual, namely the composer, as when Bach or Shostakovich writes his own name into his music. Kivy thinks that this necessarily turns absolute music into program music, but there is not such a sharp distinction between the two as Kivy supposes. See Karl and Robinson (2012).

70 We will discuss further in Section 5 whether listeners really feel the persona's emotions or only imagine doing so.

4. EXPRESSIVE MEANING IN MUSIC

When Kivy denies that pure music has meaning, he seems to be thinking of meaning as necessarily propositional. Since a great work such as Beethoven's Symphony No. 5 does not have a meaning that can be reduced to a *proposition* (such as "the hero struggles to victory") and does not *refer* to any specific individuals, he seems to think that it follows that the symphony cannot have meaning at all in any literal sense. But most musicologists, theorists, and philosophers of music agree that musical meaning is not usefully compared to propositional or linguistic meaning.

To what kinds of meaning, then, can music lay claim? There are some fairly arbitrary conventional meanings in music, such as national anthems that refer to a particular country. But far more interesting and widespread are meanings derived from conventional associations in music, which have an important influence on musical expression. Leonard Ratner has identified what he calls "*topics*" or "topoi" in the Classical style—musical elements which conventionally refer to culturally specific activities or events or institutions, and have a corresponding mode of expression.[71] Ratner includes among his topics simple figures (sighs, horn fifths), textures (hymn, learned imitation), genres (various march and dance types), and styles (*Empfindsamkeit*, *Sturm und Drang*). Any music containing one of these topics in effect refers to it, either directly or by allusion. More inclusive categories for Ratner's topics include the *exotic* (such as Turkish marches), the *religious* (such as hymn tunes), the *military* (marches, fanfares, etc.), the *hunt* (hunting horns, galloping tempi), the *pastoral* (musette and *siciliano*), and so forth. Topical meanings are not normally purely arbitrary, like the meanings of (most) words—the hunting topical field typically includes a horn call, the pastoral field a pedal point—but they all refer via culturally specific conventions that have developed over the historical course of Western music, and that have to be *learned*.

Topics provide a framework for expressive meaning, and their expressive oppositions help articulate the semantic field of a musical style. In addition to this useful role, topics may also cue and direct expressive genres, those typical dramatic trajectories in which changes of expressive state occur as part of a larger emotional journey. For example, the "tragic-to-transcendent" expressive genre might initially be cued by minor mode, lower register, and tragically suitable topics such as the lament bass and grieving, *empfindsame* figures. But by the end, we may have experienced a transformation to major mode, higher register, and more transcendent topics from topical fields or modes such as the religious and the pastoral (elevated to the expression of serenity and spiritual grace). Along the way, we will experience

71 Ratner (1980, 9–29). See also Monelle (2006) for more detailed studies of hunt, military, and pastoral topics.

a dramatic working-out of these oppositional forces, which may be more or less reminiscent of struggles in real life. And our experience of emotion can emerge from the compelling way in which the drama unfolds, not simply from our identification of tragic or transcendent topics in a dissociated sequence.

Music with an expressive trajectory refers to its "story" or "plot" by exemplification.[72] For example, the third movement of Beethoven's *Hammerklavier* sonata is an instance of the expressive genre of "tragic to transcendent." The work enacts and exemplifies this trajectory via a virtual agent or persona who at the beginning of the work is faced with tragedy, but who strives to overcome adversity and is eventually able to achieve (the emotions of) *resignation* or religious *abnegation*. By contrast, the first movement of Beethoven's Piano Sonata in A Major, Opus 101, which largely exemplifies the pastoral expressive genre, expresses a persona's "spiritual state of innocence (or serenity) subject to the disturbances of tragic experience (or remembrance)."[73] Shostakovich's Symphony No. 10, which seems to instantiate the expressive genre of a heroic struggle to victory (like Beethoven's Symphony No. 5), contains a (brief) passage in the third movement in which the virtual protagonist of the work expresses *hopefulness* for the future.[74]

The second movement of Mahler's Symphony No. 9, as interpreted by Anthony Newcomb, exemplifies a conflict between innocence and experience, represented respectively by a *Ländler*, a peasant dance, which Mahler makes clumsy, crude, and oafish-sounding, and a waltz, an urban, sophisticated dance. The *Ländler* is *brusquely interrupted* by the waltz, which eventually *takes over* the movement and *swallows up* the *Ländler*, but not before another *Ländler* with associations to the first *tries and fails to dominate* the movement. In other words, the conflict is primarily between two dance *topoi*, the *Ländler* and the waltz. This conflict is not only a conflict between musical elements but also *exemplifies* a certain kind of psychological conflict as well; and the *meaning* of the movement derives in part from the conventional associations of these topics and their dramatic interactions. Furthermore, in light of the expressive meaning of the piece as a whole, we can fairly claim that certain individual passages have the capacity to express the *complex emotions* of a virtual agent or persona, such as *nostalgia* for a simple, innocent past, or *attraction* to a more glamorous, sophisticated life. Not that the opposition between *Ländler* and waltz to which Newcomb draws attention can unequivocally be identified with a clumsy rustic person facing the temptations of urban glitter. This is but one way in which the movement can be experienced.[75] The value of the notion of a musical plot resides in its ability to organize our experience of the details of the music, and there are different ways of doing this. As Cone pointed out, music has an "expressive potential" which can be realized in different ways by different listeners, or the same listener on different occasions.[76] But a musical plot *constrains* those interpretations in a very important way.

Fred Maus has demonstrated how some music at least can be conceived in certain respects as resembling a drama or play. He usefully describes the four properties that are most relevant to the analogy between a stage play and a musical plot:

> (1) a play presents a series of actions; (2) the actions are performed by fictional characters . . . ; (3) for the audience, it is as though the actions are performed at the same time as the audience's perception of the actions; and (4) the series of actions forms a *plot* that holds the actions together in a unified structure.[77]

The main point of the analogy is that we hear the music as presenting a series of actions that are unfolding before our eyes—or ears. Listeners in this case do not listen to a narrative voice "telling" the story, but follow the action as it is enacted, akin to a drama. The musicologist Gregory Karl has also emphasized the actions that occur in music which help to determine its expressive trajectory. One melody or harmony can enclose another, disrupt it, subvert it, counteract it, interrupt it, integrate with it, diverge from it, withdraw from it, realize its potential, or transfigure it.[78] A happy theme can be *swallowed* by a grim or macabre theme; a theme can be *transformed* from tragic to serene; a key area can be *undercut* by a shift in harmony. In the progression from tragic to transcendent in the third movement of Beethoven's *Hammerklavier* sonata, for example, the opening hymn-like tune is *interrupted* by what sounds like a very brief operatic aria. In the recapitulation the hymn and the aria are *integrated*. And in the coda there is a violent outburst that is *undercut* by a return of the lamenting first theme.

The idea of a musical plot or composed expressive trajectory is not meant to suggest that a Beethoven symphony (for example) is in all respects like a play. For most defenders of the idea of a musical plot, the main point of the analogy is that listeners experience the musical events as not only "purely musical," but as exemplifying actions by a persona or personae in the music that are expressive of certain psychological states in a psychologically coherent story. These actions unfold before listeners in a temporal sequence as they listen, but whereas when watching a play we see the events unfold before our eyes, when listening to a dramatic piece of instrumental music, we hear the events unfolding in our ears. Crucially, however, and unlike a narrative in which a narrator narrates a story, in a drama—whether in music or a play—we perceive events unfolding as they occur. If the composed expressive trajectory is successful, the music will have not only "purely musical" coherence in

72 See Goodman (1968, Chapter 2). As we will see, Malcolm Budd also uses this concept fruitfully in his discussion of musical value.

73 Hatten (1994, 96).

74 It *seems* to instantiate the expressive genre of "struggle to victory," but Shostakovich ultimately undercuts this theme. See Karl and Robinson (1997, 178).

75 As Newcomb (1997, 141) notes, the interpretation is along the lines of Charpentier's 1900 opera *Louise*, which Mahler had recently been conducting. Newcomb himself admits that there are at least two other acceptable interpretations of this piece.

76 Cone (1974, 168–70).

77 Maus (1997, 126).

78 Karl (1997).

a music-theoretical sense but also psychological coherence. Indeed, often the "purely musical" coherence will be dependent on the psychological or expressive coherence.[79]

Kivy argues that what he calls "literary" interpretations of music are caught on the horns of a dilemma: if the literary interpretation is too detailed, it risks "offending common sense and eschewing authorial intention,"[80] whereas if it is too vague and general, it cannot account for why the music is so interesting and moving. He argues that the supposed psychological "story" behind the composed expressive trajectory of a piece is typically utterly banal—e.g., that Beethoven's Symphony No. 5 expresses a struggle to victory, or that the third movement of the *Hammerklavier* sonata moves from tragedy to transcendence. Kivy is right that sometimes "literary" interpretations of "purely musical" works become somewhat too detailed: Newcomb's story of the clumsy peasant torn between rustic innocence and urban sophistication might be an example. But the suggestion that composed expressive trajectories are totally banal and uninteresting is misguided. No one claims that the value of a piece that exemplifies a struggle to victory comes exclusively from the fact that it exemplifies this very general structure. After all, a description of the plot of many great literary works, from *Hamlet* to *War and Peace*, would also sound very trite if summarized in this bald way. The value in the musical case comes from the listener's *experience* of the evolving musico-psychological states *as they develop*. Listeners may bring with them their own related experiences that can enrich their listening experience, or they may learn shades of emotions which are new to them. In either case it is the way the composed expressive trajectory is played out in the musical details and the listener's experience of those details that is valuable. We will return to this theme in Section 5.

The actions performed in a work with an expressive trajectory are not only actions performed by musical elements (changes of key, melodic transformations, etc.); they also have significance in ordinary life. As Malcolm Budd puts the point in an insightful discussion of value in instrumental music, "the appreciation of music is infused with the perception of relations between parts *as* such relations, and . . . these relations are not specific to music but obtain outside it." Moreover, "if the idea of exemplification of properties by works of art is extended to what can be called 'make-believe exemplification,' . . . then the range of properties that musical works can be about is greatly extended."[81] He is alluding here to Kendall Walton's idea that in listening to music with close attention we are often induced to *imagine* (make-believe) certain actions occurring, such as the swallowing up of something tender and fragile by something stronger and cruder. What Budd adds is the idea that the music can refer to this action by exemplifying it.[82] Some of the best examples of the "relational properties" to which Budd refers are actions and reactions by one "part" of a piece on another. In listening we cannot help but hear the fragile tender theme *swallowed up* by the loud and vulgar one as exemplifying something that happens all the time—to our sorrow—to people in ordinary life. The fate of the persona is more than just the fate of a melody (will it remain largely unchanged or be subverted? remain in major or be wrenched to minor?). We can experience the vicissitudes of the melody as those encountered by the persona in the music who is struggling to avoid being dominated by some powerful force.

Both Kivy and Davies argue, as we have seen, that experiencing (absolute) music as exemplifying the emotional experiences of a persona is not experiencing the music per se at all, but merely having one's attention distracted from it. There are two complementary responses to this objection. The first is that topics and expressive genres are not the result of wool-gathering by uninformed listeners; they have been handed down from composer to composer and they are part of the cultural tradition of Western tonal music. There is strong evidence that these expressive genres were well known to composers and listeners alike. The second response to the accusation that hearing personae in the music takes us away from "the music itself" to something "extramusical" and is therefore irrelevant to criticism is to point out that competent philosophers and musicologists who espouse this type of music criticism engage closely with the music itself: they show in musical terms how the musical development not only instantiates a structure in a strict formalist sense but also embodies an expressive structure or composed expressive trajectory. In the Brahms Intermezzo, Op. 117, No. 2, for example, we can hear the music as having a "purely musical" structure of A–B–A′. Supervening on this structure, however, is an *expressive* one.[83] The persona of Keats's "Ode to

79 Sometimes such interpretations are introduced to explain apparent anomalies in music, such as the horn call in the third movement of Shostakovich's Symphony No. 10 in E Minor, Op. 93. Anomalies may be interpreted instead as merely atypical in the style—unique realizations of stylistic principles—and hence as marked events in the unfolding expressive genre (see Hatten [1994, 55, 287–88]). But note that compositional practices of many Romantic composers permit critics to infer that the idea of a musical plot was widely accepted in the nineteenth century.

80 Kivy (2009, 106).

81 Budd (1995, 170). See also Robinson (2007).

82 See, e.g., Walton (1997a), which we will discuss more fully in Section 5. Perhaps with Kivy in mind, Budd comments that "the neglect of these facts contributes greatly to the feeling that music's abstract nature renders its power to engage and reward our interest theoretically problematic" (Budd [1995, 170–71]). For another application of Nelson Goodman's concept of exemplification to music, see Hatten (1994, 239–40).

83 Very roughly, what this means is that the expressive structure and the purely formal one are two distinct structures related in such a way that *necessarily* the expressive structure cannot change unless the purely formal structure on which it depends also changes. For a more nuanced account of supervenience in aesthetics in a general sense, see Levinson (1990, Chapter 7). Some theorists prefer to talk of expressive properties as *emergent* ones: the latter are properties of a whole which are not properties of any particular part of that whole. *Developing from tragic to transcendent*, for example, could be a property of a whole musical passage or movement without being a property of any of its proper parts, such as the melody or the harmonic progressions. Those who endorse supervenience, like those who endorse emergentism, agree that such supervening (or emergent) properties of, say, a musical work, cannot be simply *reduced* to

a Nightingale" comes to realize that his yearning (for an ideal world of art and beauty) will not ultimately be realized. The expressive structure of the Intermezzo is very similar: yearning leading to a reluctant resignation. Indeed, this is a familiar expressive genre for Romantic composers. The main difference between a lyric poem and lyric musical piece is that we cannot know exactly what the protagonist is yearning for in the musical case.[84]

Moreover, if a work has an expressive trajectory, say from tragic to transcendent, it makes sense to attribute this psychological story to a persona in the music. The persona's story is thus enacted or dramatized in the music, and the music *exemplifies the actions* of the persona as he or she is perhaps at first *overwhelmed* by a tragic fate, then *struggles against* it, and finally *transcends* the struggle and reaches a state of acceptance or abnegation. In exemplifying this expressive trajectory or plot, the music is also able to express the changing psychological states that the protagonist experiences, such as helplessness and rage that eventually give way to transcendent emotions of acceptance and resignation. Thus, the music can be experienced as a genuine expression of emotion by the fictional protagonist, and listeners engage with the unfolding psychological development of the protagonist just as they do when engaged with the fictional characters in a movie or a play.

5. THE AROUSAL OF EMOTION BY MUSIC

There has recently been a good deal of psychological research into the mechanisms of emotional arousal by music. Unfortunately, however, most of it does not distinguish between music as an aesthetic object, worth paying attention to in the detailed ways we have been discussing, and music as simply strings of tones, regardless of any aesthetic interest they may have. For example, in an important recent article on mechanisms of emotional arousal by music, two leading psychologists of music, Patrik Juslin and Daniel Västfjäll, discuss various mechanisms whereby music arouses emotions, some of which appear largely irrelevant to musical understanding and appreciation. Thus they cite "episodic memories," the way in which music evokes emotion by prompting a memory of some past episode in the listener's life, and "evaluative conditioning," which refers to "a process whereby an emotion is induced by a piece of music simply because this [musical] stimulus has been paired repeatedly with other positive or negative stimuli."[85] These mechanisms of emotional arousal are independent of anything specific to the structure or expressiveness of the music in question. If Barber's *Adagio* always makes Jill feel warm and happy inside because it was playing when Jack proposed to her (a case of "episodic memory"), this fact has nothing to do with the music itself considered as a work of art: it is not an emotion that is *aesthetically warranted* by the music itself.

Another mechanism—"brain stem reflex"—that Juslin and Västfjäll identify involves "a process whereby an emotion is induced by music because one or more fundamental acoustical characteristics of the music are taken by the brain stem to signal a potentially important or urgent event." Sounds that are "fast, loud, noisy, very low- or high-frequenced [sic]" produce "an increased activation in the central nervous system," perhaps because they indicate an unexpected and potentially dangerous event. "Moreover, sensory dissonance is suggestive of 'danger' in natural environments, because it occurs in the 'threat' and 'warning' calls of many species of animals."[86] Thus "music performers are able to communicate emotions to listeners by using the same acoustic code as is used in vocal expression of emotion."[87] In other words, listeners automatically appraise certain auditory signals such as shrieks and wails—whether real life or musical—as signifying something to be avoided. While it is interesting that there may be an evolutionary explanation for some of the aversive effects due to music, the explanation does not take us very far if our interest lies in understanding music aesthetically: very few passages of art music can be fully explained on this model (a point Juslin would doubtless acknowledge).[88]

As we saw in Section 1, emotions are processes that are typically initiated by an *appraisal* of some significant event or situation such as losses, threats, and offenses. At first glance we might puzzle over how music can arouse emotions in this way. When, for example, we are saddened by sad music, it is not because we have suffered a loss, and if music makes us uneasy, it is not because there is anything in particular to be uneasy *about*. When we look more closely, however, there are least three ways in which music can arouse aesthetically warranted emotions by means of affective appraisals.

1) Often we are emotionally moved by a piece of music that we appraise as supremely beautiful and well constructed.[89] We might even feel awe or ecstasy or intense excitement directed at the beauty and craftsmanship of a piece. We might wonder why people react emotionally to beauty and craftsmanship in the way that they do—evolutionary theorists have come up with some

the underlying formal properties on which they depend. Thanks to Iris Spoor for discussion of this issue. Further discussion of the relationship between supervenience and emergentism is beyond the scope of this essay.

84 Unless, for example, we have biographical evidence concerning the composer's expressive intentions.

85 Juslin and Västfjäll (2008, 564).

86 Ibid.

87 Juslin (2001, 321).

88 Of the six mechanisms identified by Juslin and Västfjäll, three have already been mentioned as largely irrelevant to music appreciation. Two others ("emotional contagion" and "musical expectancy"), which are much more relevant to appreciation, will be discussed shortly, although not in quite the way that music psychologists do. The sixth mechanism they identify is "visual imagery," i.e., the way in which emotions are aroused by visual imagery induced by the music. But it is entirely unclear whether visual images aroused when people are listening to music track anything musically significant or whether they are simply free associations to the music—what Peter Kivy calls "wool-gathering."

89 Compare Kivy (1990, 158–61). These are the only emotions he recognizes as both aroused by music and relevant to musical appreciation. See also Kivy (2002, 130–31).

imaginative hypotheses[90]—but at least it is plausible that beauty and craftsmanship are significant to human beings and liable to induce emotional responses of joy, awe, and so on. These emotions are clearly not pan-cultural, like brain stem reflexes, but depend on an understanding of musical style. We often cannot assess the craftsmanship—or even the beauty—of music in a style and from a culture with which we are unfamiliar.

2) Knowledge of a musical style induces certain expectations in listeners as to how music in that style is likely to unfold. The idea that music can evoke emotions such as bewilderment, surprise, and relief in listeners by means of temporarily thwarting and eventually satisfying these expectations is due to Leonard B. Meyer. In his study of tonal music in the Classical and Romantic eras, Meyer points out that listeners have certain expectations based on the stylistic norms of the music. He argues that given these expectations, certain *emotions* may be aroused in the comprehending listener "when an expectation—a tendency to respond—activated by the musical stimulus situation, is temporarily inhibited or permanently blocked."[91] Thus, if I understand the stylistic norms of a piece, I may be *surprised* by an unexpected harmonic change, *bewildered* when the harmony seems to be getting further and further away from the tonic, and *delighted* when, by a skillful maneuver, the composer brings back the tonic. One problem is that in listening to music it does not seem as if we are responding to any significant "adaptational encounter." Why, for example, should we be emotionally upset by the delayed return of the tonic? The music psychologists Patrik Juslin and John Sloboda have a plausible solution to this problem. They hypothesize that our emotion systems are set up to respond affectively to *anything* weird and unusual, *any* breach of expectations, even those that turn out to be immaterial to our survival. In the realm of emotion, it is usually better to be safe than sorry, and false positives are not unusual.

A music theorist might simply *notice* such events in music without becoming emotionally aroused, but, according to Meyer, less-informed listeners who respond with appropriate emotions at corresponding points in the music are exhibiting musical understanding even if they cannot articulate that understanding in music-theoretical terms. For example, in the third movement of the *Hammerklavier*, Beethoven subverts expectations when the first main theme is interrupted in m. 26.[92] Such moments can evoke emotions in a listener who is following the music, perhaps leading to surprise at the unexpected interruption of silence, bewilderment about the key structure, or even anxiety as to whether or how the harmony will resolve.[93] Of course, only a listener familiar with the style of the piece will have the relevant expectations and experience the corresponding emotions.

Following Meyer, the music psychologist David Huron has shown how the thwarting of musical expectations can sometimes have further emotional effects. In the opening to *Peter and the Wolf*, the intervals of the third measure are "strikingly improbable. The pitches sound 'wrong,' " as though Prokofiev had made a mistake. But, as Huron notes, Prokofiev immediately repeats the odd notes, as if to say "Yes, I really intended that pitch." Huron points out that the "wrong notes" will be more noticeable to those who are accustomed to the conventional Classical style. He comments: "The psychological effect of Prokofiev's music has been variously described as " 'quirky,' 'unexpected,' 'weird,' 'impertinent' and 'impudent.' "[94] Huron is here describing emotional properties of the music rather than emotional reactions in audiences, but it is worth noting that the comprehending listener normally does not merely *recognize that* the music is impertinent but is also inclined to *smile*, i.e., to manifest an emotional reaction (amusement). Moreover, it seems reasonable to believe that Prokofiev intended his audience to smile. With this example we are getting close to what is perhaps the most interesting topic when it comes to the arousal of emotions by music: How are the emotions *expressed* by a piece related, if at all, to the emotions *aroused* in listeners? In the Prokofiev, the listener's feeling of amusement is aroused by an appraisal of the oddity or improbability of the musical progression, which in turn is responsible for the expressive quality in the music, its quirkiness and impertinence. We are amused not just by the oddity, but also by the impertinence.

3) On other occasions, the emotions aroused by music can be due at least in part to the *cultural* associations of *topoi* in the music.[95] Thus in responding to what sounds like a hymn, we may feel reverence; a cradle song may induce tenderness; a military march may induce feelings of pride. In these cases, however, the appraisal that provokes the emotion is not directed at the music itself but rather at whatever it is that the music refers to or is associated with. Thus, someone who despises the

90 See, e.g., Dutton (2009).

91 Meyer (1956, 31). Meyer cites Dewey's "conflict theory" of emotion, from which he derives the "law of affect, which states that emotion is evoked when a tendency to respond is inhibited" (ibid., 22). Clearly, this will not work as a general theory of emotion, as it excludes all the positive emotions, such as the relief that follows the satisfaction of previously thwarted expectations, or the joy and contentment that result from plain sailing toward a much-desired goal.

92 Hatten (1994, 17).

93 Kivy (2002, Chapter 6) has suggested that what Meyer is talking about is not the evocation of emotions by music but rather the *recognition* of emotional qualities in the music, in particular, tension and relaxation. But Meyer presents his view as a view about the emotions that music, when heard appropriately, evokes in listeners. Indeed his main point is that if listeners respond emotionally in the "right" ways at the "right" times, they thereby demonstrate that they are understanding the musical structure, even if they cannot give an "intellectual" or "cognitive" account of it. Kivy also objects that *feeling* tension rather than merely recognizing it as a quality of the music is always unpleasant, like tension in the dentist's waiting room. But I can feel pleasurable tension too, and in the hands of a good composer I am likely to feel pleasurable tension, as when I anticipate seeing a good friend I have not seen for a long while.

94 Huron (2006, 291).

95 These cases are in marked contrast to aesthetically irrelevant emotional responses based on *idiosyncratic* associations to music (as when Jill perks up on hearing the Barber *Adagio*).

military will presumably respond with contempt rather than pride to what a military march brings to mind. More interesting still are cases in which listeners respond emotionally not just to an isolated topic but to a composed expressive trajectory or musical plot, and to the travails of a persona in the music.

Although the emotion process is typically initiated by an appraisal, we also saw in Section 1 that simply changing one's bodily state can change one's emotional *feelings*. There is a good deal of empirical evidence that music can indeed affect our bodily states, including autonomic nervous system responses (heart and pulse rate, blood pressure, skin conductance, and so on), as well as posture, muscular tension, and respiration. In particular, music affects movement, as in foot-tapping and swaying to the music, and action tendencies (flinching, fist-clenching, etc.).[96] It is highly likely, therefore, that music can induce bodily changes that are experienced as emotional feelings. Most of the available evidence concerns the way in which music causes listeners to experience emotional feelings of happiness, sadness, calm, excitement, and anxiety or tension. Some of these effects are probably due to rhythm. The neuroscientist Aniruddh Patel has noted that "humans are the only species to spontaneously synchronize to the beat of music,"[97] and there is evidence from the interaction between mother and newborns suggesting that lullabies may have a calming effect by a process of "rhythmic entrainment." Juslin and Västfjäll suggest that "perceived motion in music stimulates self-movement, which through entrainment and its effects on the physiology of the listener" evokes an emotional response.[98]

Because the happiness, sadness, calm, or excitement induced by music does not seem to be about anything in particular, some have argued that what are aroused are *mood* feelings rather than *emotional* feelings strictly speaking. Moods are widely believed to be more global and diffuse than emotions, and not to require anything specific that they are about. Moods can be caused by drugs, fatigue, or the season of the year; hence they do not need to be set off by an appraisal relating to a specific adaptational encounter, such as a specific threat or loss. There is some evidence to support the view that music can arouse moods. First, according to many studies, people do report feeling happy when listening to happy music, sad when listening to sad music, anxious when listening to anxious music, and calm when listening to calm music. And second, psychologists sometimes use music as a "mood induction procedure" and then study its effects on various cognitive capacities. There is good evidence that moods bias the cognitive system, affecting memory, perception, decision-making, and so on.[99] For example, people in a sad (or happy) mood are more likely to remember sad (or happy) events and to perceive more sadness (or happiness) in ambiguous faces. Music does apparently have the capacity to arouse moods and to influence people's memories and perceptions in this way. Moreover, many people think that moods are *dispositional* states, i.e., states in which we are disposed to enter more specific emotional states. Thus, music that puts me into a "global" sad mood could indirectly induce in me a more specific emotion of sadness in which my sadness is, for example, about a remembered sad event in the past.

However, when we are closely following the formal structure and expressive trajectory of a piece, we are not merely put into a diffuse or global mood which then disposes us to experience a corresponding emotion by virtue of remembering or perceiving something unrelated to the music, such as a sad memory or the facial expression of a companion. Aesthetically warranted emotions seem to be aroused by and correspond to the trajectory of whatever the music is expressing. Indeed, much so-called "mood music" is undistinguished, inexpressive, and designed to affect us only subliminally, as when soothing music is played in hospitals and cheerful music in shopping malls.[100] So although music is indeed capable of arousing moods, this fact does not explain our more complex, subtle, or profound emotional responses to music, which change and develop with the music as *it* changes and develops. Recall, however, that according to William James and his contemporary disciple, James Laird, the emotional feelings that can be aroused by changes in action tendencies, expressive gestures, movements, and postures are not restricted to sadness, happiness, anxiety, and calm. In discussing the effects of bodily changes on emotional state, they cite not only happiness and sadness, but also feelings of confidence, pride, amusement, tenderness, anger, and romantic attraction. If music can induce bodily changes and behaviors characteristic of these emotions, then perhaps it can arouse the corresponding emotional feelings as well.

After several studies involving the self-reports of large numbers of music listeners, Marcel Zentner and his collaborators[101] at the Center for Affective Sciences in Geneva have proposed nine music-induced "emotion factors": wonder, transcendence, tenderness, nostalgia, peacefulness, power, joyful activation, tension, and sadness, which they have christened the Geneva Emotional Music Scale (GEMS). Each "factor" includes a number of different emotional feelings. For example, "power" includes feelings of triumph, energy, and heroism; joyful activation includes feeling bouncy or animated; "transcendence" includes feelings of

96 For a recent article with a good bibliography citing some of the newest evidence, see Sloboda and Juslin (2010).

97 Patel (2008, 100).

98 Juslin and Västfjäll (2008, 605). Cox (2006, 45–60) has emphasized this point for music.

99 See Robinson (2005, 391–400) for more on music and mood, especially the "Jazzercise effect." See also Robinson (2010).

100 There are also, of course, great works which might count as "mood music," such as Debussy's *Prélude à l'après-midi d'un faune* or Delius's "Walk to the Paradise Garden" interlude from *A Village Romeo and Juliet*. There are also "moody" pieces such as Eric Satie's *Gymnopédies*, which Matravers (2011, 219) describes (without explanation) as "[wearing] the aura of emotion" as opposed to "music which expresses (in the sense of communicates) emotion—such as the great Romantic symphonies." Perhaps the kind of complex emotional state Satie's work expresses (a pleasurable world-weariness or ennui?) is characterized by a kind of listlessness that Matravers considers as lacking the energy of Romantic expressiveness.

101 Zentner et al. (2008).

spirituality or transcendence. It is interesting to note that—at least, according to self-reports of music listeners—among the emotions detected by GEMS are not only joyful activation, sadness, peacefulness, and tension (which seem to be roughly equivalent to happiness, sadness, calm, and anxiety), but also feelings of tenderness, nostalgia, and triumph. Zentner et al. found that "frequency ratings of felt musical emotions and everyday emotions differ significantly from each other,"[102] so that nostalgia, for example, occurs far more frequently in response to music than it does in ordinary life. The inclusion of feelings of tenderness, triumph, and nostalgia as paradigmatic musical emotions, however, seems to compound our problem. How can we feel tenderness, or nostalgia, or triumph, without anything to be tender, nostalgic, or triumphant *about*?

Similar questions have been raised regarding the emotions or emotional feelings we appear to feel for fictional characters in novels and movies. It seems as though we feel tenderness for Maggie Tulliver in her fall from grace (in George Eliot's *The Mill on the Floss*) and a sense of triumph for Dorothea Brooke's happy ending (in *Middlemarch*). Kendall Walton has famously argued that it is only *in imagination* that we experience these emotions. Absolute music is different from movies and novels in many ways, of course, but Walton has suggested that it mandates similar kinds of imaginative experiences. In particular, expressive music "sometimes gets us to imagine feeling or experiencing exuberance or tension . . . or relaxation or determination or confidence or anguish or wistfulness" depending upon which emotions the music expresses. Moreover, "not only does anguished or agitated or exuberant music induce one to imagine feeling anguished or agitated or exuberant; it also induces one to imagine of one's auditory experience that *it* is an experience of anguish or agitation or exuberance."[103] In Walton's preferred terminology, it is *fictional* (or true in the game of *make-believe* that the listener is playing in listening to the music) that the listener is experiencing anguish or agitation or exuberance. Walton concedes that sometimes music induces listeners "to imagine someone else feeling exuberance or anguish," while simultaneously causing the listener to "imagine feeling this herself" through empathy. He also notes that music can prompt actual feelings, not just imaginings, but rightly points out that this is more plausible for some emotional feelings than others:

> It is more plausible to say that music makes listeners tense or relaxed or exuberant or agitated, in ordinary instances, than that it arouses in them genuine, as opposed to imagined, anguish or determination or confidence or pride or grief (although the experience of vividly imagining feeling anguish or determination or grief is likely itself [to] be an emotional one).[104]

As we have seen, music that is tense, relaxed, exuberant, agitated, determined, or confident can indeed make listeners *genuinely* feel those ways simply by inducing corresponding bodily changes, such as changes in movement, posture, gestures, and so on. Notice, however, that relaxation, exuberance, agitation, and even confidence often refer to characteristic behaviors rather than emotions per se (one can behave confidently even while feeling timid), and of course it is much less controversial to assert that music can cause listeners to behave in certain ways. On the other hand, music that appears to make listeners feel exuberant or confident does not necessarily lead to overtly exuberant or confident behavior (especially if one is sitting in the concert hall): one merely *feels* exuberant or confident. In Walton's terminology, the music induces listeners to *imagine feeling* exuberant or confident—or (following Zentner et al.) nostalgic or tender or triumphant. Walton wrote the article from which we quote in 1994; since then there have been some important empirical discoveries in psychology and neuroscience which can help us refine his suggestion.

In his book *Simulating Minds*, Alvin Goldman describes how *simulation* of other people's states of mind, including their emotional states, enables us to detect what mental, including emotional, state they are experiencing. "Low-level" simulation works by a process of "contagion" or "mirroring," which has been corroborated by the discovery of so-called "mirror neurons."[105] There is now good evidence to suggest that when subjects watch another person performing an action, e.g., with the hand, foot, or mouth, a motor representation of that action is "internally generated in the observer's premotor cortex." Something similar can happen when we watch someone else being touched in a certain way (Goldman recalls a film scene in which a tarantula crawls on James Bond's chest!). And there is also auditory mirroring: neurons in the premotor cortex of monkeys discharge not only when they perform a particular action but also when they hear a sound related to that action. Such "emotional contagion" can occur subliminally; it is an automatic way in which we can grasp other people's emotional states simply by mirroring them. Elaine Hatfield and her colleagues have summarized the mechanism of emotional contagion between human beings in ordinary life in three propositions:

> Proposition 1. In conversation, people tend automatically and continuously to mimic and synchronize their movements with the facial expressions, voices, postures, movements, and instrumental behaviors of others.
>
> Proposition 2. Subjective emotional experiences are affected, moment to moment, by the activation and/or feedback from such mimicry.
>
> Proposition 3. Given Propositions 1 and 2, people tend to "catch" others' emotions, moment to moment.[106]

102 Ibid. (500).
103 Walton (1997a, 73).
104 Ibid. (74–75).
105 Goldman (2006, 113–46). Arnie Cox (2006, 46–48), has noted the importance of mirror neurons as evidence for his "Mimetic Hypothesis" in explaining musical understanding via covert or overt imitation of the sounds of music, or the actions or "exertion patterns" of performers.
106 Hatfield et al. (1994, 10–11). See Robinson (2005, 387–400) and Davies (2011, Chapter 9) for slightly different ways of describing emotional contagion in music.

In other words, the mechanism of emotional contagion relies on feedback from motor mimicry.[107]

Now, as we have seen, music has the capacity to affect listeners' emotional feelings by affecting their motor systems.[108] But this does not mean that music induces full-fledged emotional behavior, only that it induces motor representations that are "internally generated in the [listener's] premotor cortex."[109] In other words, there is reason to believe that music can induce internal motor representations which, if characteristic of a particular emotional state, can in turn cause us to experience the corresponding emotional feeling.[110] These processes can be subliminal and do not rely on any high-level cognitive inferences.[111] We might say that internally it is as if I am making virtual gestures and performing virtual actions: virtually I flinch, or caress, or withdraw and hide, or tense, or strive, or relax.[112] Low-level simulation certainly helps to explain how music can arouse emotions that are warranted by the unfolding of the music to which we are attending: our motor systems are responding to it as it unfolds and inducing in us corresponding emotional feelings that track the *actions* and *gestures* in the music, whether sad, relaxed, tense, energetic, boisterous, agitated, triumphant, confident, or tender.[113] But we may still feel uneasy about attributing to music listeners' emotions such as tenderness, confidence, and nostalgia, which seem to involve not just a certain kind of behavior but also cognitively complex appraisals. Nostalgia, for example, requires happiness at the memory of a happy past that is gone forever, together with sadness and regret at its passing. It seems implausible to suppose that internal motor representations can all by themselves manage to capture this kind of cognitive subtlety.

Walton points out that "there is little strain in thinking of some musical passages" as "inducing us to imagine . . . exuberant or agitated or bold behavior," and that "where there is behavior there is a behaver."[114] He goes on to suggest that in "listening with imagination," as he describes it, we find ourselves engaged with what are "suspiciously like the beginnings of story fragments in music, the beginnings of programs."[115] Walton thinks that in most pure music there is "rarely . . . a plot line for the listener to follow,"[116] and that the music itself does not normally have a "work world" such as that of *The Mill on the Floss* or *Middlemarch*. But in Section 4 we showed that in at least some pieces there *is* a world of the work, although normally it is not a concrete place like Middlemarch. As we have seen, some works do have a plot, a "*musical* plot" or composed expressive trajectory (for example, the trajectory from tragic to transcendent), and such works tend to express complex emotional states, including blends and conflicts of emotions, and emotions that morph into different ones. In tracking the emotions expressed by the music, perhaps listeners can experience those same emotions, or at least *simulate* experiencing them. But in this context the simulation involved is not mere mirroring or "low-level" simulation but what Goldman calls "high-level simulation" or "enactment imagination," akin to visualization or motor imagination. Unlike low-level simulation, high-level simulation is to some extent subject to voluntary control and accessible to consciousness. The paradigm of high-level simulation is deliberately *imagining seeing* (visualizing) your childhood home in order, say, to recall how many windows it had, or *imagining walking* through your childhood town in order to determine how far it was from your house to the station. High-level simulation also typically occurs when we are reading a novel or watching a movie. We imagine listening to a narrator telling us about the gunman or we imagine seeing the gunman as he walks across the high prairie, and we

107 There is also a lot of evidence that people "catch" another person's emotion simply from observing that person's facial expression, but simulation of *actions* and *gestures* seems more relevant to our emotional reactions to music.

108 Neuroscientist Daniel Levitin has noted that there are neural connections from the ear that bypass the auditory cortex and "send masses of fibres to the cerebellum" (Levitin 2006, 180), a structure deep in the so-called "reptilian brain," which is a center of motor control linked to our sense of timing, and which also contains "massive connections to emotional centres of the brain," such as the amygdala and the frontal lobe (Levitin [2006, 171]). Levitin is currently exploring how tiny timing changes can make huge differences to the expressiveness of a performance (see Beluck [2011]).

109 Goldman (2006, 135).

110 Similarly, "watching others in pain-inducing situations [triggers] a part of the neural network known to be involved in self-pain processing" (ibid. [138]).

111 In mind-reading, however, there is an inference: we attribute the way *we* feel to the way the other person is feeling. There is nothing exactly comparable to this in listening to music, although we may infer from the way we feel to the emotions we attribute to a musical persona.

112 Interestingly, neuroscientist Katie Overy has recently suggested that mirror neuron systems may play a role in the musical *expression* of emotion. The Shared Affective Motion Experience (SAME) model suggests that musical sound is perceived not only in terms of the auditory signal, but also in terms of the intentional, hierarchically organized sequences of expressive motor actions behind the signal. This suggestion fits well with Charles Nussbaum's theory of musical expression, which we will discuss shortly. "Within a neural network involving the temporal cortex, the fronto-parietal MNS [mirror neuron system], and the limbic system, auditory features of the musical signal are processed primarily in the superior temporal gyrus and are combined with structural features of the expressive *motion* information within the MNS. The anterior insula forms a neural conduit between the MNS and the limbic system, . . . allowing incoming information to be evaluated in relation to the perceiver's autonomic and emotional state, thus leading to a complex *affective* or emotional response to the music. . . . The recruitment of these neural systems in both the agent and the listener allows for a *shared affective motion experience* (SAME). Thus, the expressive dynamics of heard sound gestures can be interpreted in terms of the expressive dynamics of personal vocal and physical gestures." See Overy and Molnar-Szakacs (2009, 492).

113 Of course we do not want to claim that if we are listening to a virtuoso pianist or trumpet player, for example, we must be engaging in motor representations of *their* motor behavior. The internally generated motor representations are of the actions the musical persona seems to be performing (in the "story") and not of the mechanical actions performed by players, such as hitting, plucking, and blowing. Thanks to Justin London for clarifying this point.

114 Walton (1997a, 63).

115 Ibid. (64).

116 Ibid. (67).

imagine or simulate the fear of the terrified widow alone in her house as he approaches.[117]

It seems likely that music, especially music with an expressive trajectory, can induce both low-level and high-level simulation. In a recent book, *The Musical Representation*, Charles Nussbaum has proposed "that we regard listening to a piece [of music] with understanding as an attempt to grasp a complex plan by trying it out, adopting it and acting on it by way of simulation or in imagination. Musical affective feelings would then arise out of an ongoing attempt to negotiate a musical virtual terrain, to act in accordance with its musical affordances, dealing with surprises, impediments, failures, and successes on the way, and requiring the constant reevaluation of strategy to which emotional response is keyed."[118] This is a view that resonates with many musicians. For Nussbaum the "complex plan" he is referring to is a Lerdahl and Jackendoff tree diagram, which maps the "purely musical" structure of a piece.[119] But his view makes much more sense if we think of the "complex plan" as the *expressive* structure of a piece rather than the "purely formal" one.

As we have seen, absolute music is typically structured as much by the trajectory of its expressive meaning as by its purely musical structure. And typically the expressive trajectory is that which a fictional persona undergoes. Thus, in Newcomb's account of the second movement of Mahler's Symphony No. 9, as discussed above, the piece exemplifies a conflict within an individual between nostalgia for an innocent past and attraction to a "racy" future. Listeners who hear this movement in the way Newcomb suggests may therefore empathize with the protagonist, feeling in imagination his (or her) nostalgia and attraction. Or they may feel sorry for the conflicted protagonist. Similarly, if we interpret the third movement of the *Hammerklavier* as governed by the expressive trajectory of tragic to transcendent, then when the first main theme is interrupted by a two-bar Neapolitan expansion in a noticeably higher register, it can be interpreted as a vision of grace experienced by the virtual protagonist in the music, an interpretation supported by the expressive genre as a whole.[120] If interpreted in this way, it is easy to see how an attentive listener may also experience an empathetic feeling of transcendence or spirituality like the one the musical persona is undergoing.

According to Nussbaum, music makes us move in imagination through or perhaps with the music: we simulate a persona in the music who is finding his or her way through musical space on a journey directed by the composer. Or, in other cases, such as, perhaps, the Barber *Adagio*, we simulate a state of mind that is powerfully presented in the music. Nussbaum's theory goes some way toward explaining why listeners sometimes report having transformative experiences as they listen to music that is expressive of emotions, including complex ones such as resignation, despair, nostalgia, hopefulness, and so on. In Nussbaum's view, listeners are not just attending to the music as it progresses; they are enacting in their imaginations the actions and movements that the persona seems to be performing in the music. Thus, as we listen to some complex music, we seem to be moving on an emotional journey in which our emotional feelings change as the music changes. As Beethoven's hero surmounts challenges, so do we, in imagination, as we follow the music. As tragedy turns to transcendence in the third movement of the *Hammerklavier* sonata, we experience both feelings in our imagination, and in turn take complicated routes from one to the other. In enacting such a journey, we find the music valuable not just as beautiful, hierarchical, organized sound structures, but also for the experience of an emotional journey of discovery. That is why it is often exhausting to play or even listen to such a piece: in imagination we are acting and suffering with the persona in the music.

If we hear instrumental music as embodying a composed expressive trajectory, in which a persona interacts with other personae or with Fate, we can postulate of the musical persona or protagonist that he or she is experiencing an emotional "narrative" such as disappointment leading to resignation, or exuberant joy giving way to peaceful contentment, and in imagination we can feel with the persona. In other words, we can simulate the feelings of the suffering persona who gradually reaches a state of resignation, or the feelings of the exuberant persona who comes to achieve a calm contentment. But this is not to deny that sometimes we might simply *recognize* the expressive trajectory of a piece without feeling particularly "invested" in the story it tells. This might be a result of personal circumstances; it might also be a result of personal preferences. Formalists, for example, may prefer to hear music as purely musical, hierarchical structures. But for many listeners the music is experienced as more valuable when they are emotionally caught up in the "story."

Nussbaum thinks that music arouses not emotions per se but only *emotional feelings*,[121] presumably because the encounters we have in music are simulated: they occur only in the imagination. But as has been amply demonstrated, our emotional systems respond not only to actual adaptational encounters but also to imagined ones, as when we respond emotionally to the events described in a vivid and well-written novel. Just as we can genuinely empathize with Dorothea Brooke's complex emotions in *Middlemarch*, so can we relate to a musical persona struggling with the obstacles that Life or Fate presents and eventually achieving peaceful acceptance. As Goldman explains, high-level simulated emotions in response to imagined scenarios resemble in essential respects the emotions we feel in response to actual adaptational encounters. And in the musical case, there is a special reason for emphasizing the likeness between

117 Walton (1997b).

118 Nussbaum (2007, 214).

119 For music-analytical tree diagrams, see Lerdahl and Jackendoff (1983, Chapters 5–9).

120 Hatten (1994, 15). The interpretation of this passage is also supported by the change to a distant key, the shift of mode to major, the arrival $\frac{6}{4}$, and the thinner texture.

121 For the distinction between emotion and emotional feelings, see Section 1 above.

simulated and "ordinary" emotions: for when the listener *simulates* the emotional experiences undergone by the persona and expressed in a musical work, the simulated emotional responses are reinforced by the very real physiological and motor responses that the music induces as well. Thus, we simulate the grief expressed by a musical persona, and part of the reason why we can do so is that our bodily states—physiological and motor responses—have been directly influenced by the music. The physiological changes that we feel as emotional then reinforce our emotional engagement with the imagined "adaptational encounters."

Earlier we saw how music can have an expressive structure that supervenes on a purely musical structure. We also cited Budd as pointing out that the "actions" that a piece of music performs "are not specific to music but obtain outside it," and that music can exemplify relations which are not merely musical but also obtain in real life. We can now see not only how a work of music can possess an expressive meaning that is exemplified by the structure of the piece, but also how that meaning (e.g., from tragic to transcendent) is enacted as in a drama by a persona in the music whose experiences listeners can simulate as they listen. Thus, through imaginatively engaging with the expressive trajectory of a piece, listeners to a musical work can themselves feel the same or similar emotional feelings to those that the persona is undergoing in the musical "plot." It is also possible that we may feel *for* the persona rather than (or as well as) *with* him or her, perhaps simulating the emotional upheavals endured by the protagonist of the *Hammerklavier*, as well as pitying him[122] or admiring his endurance.[123]

If the expressive meaning of a piece induces emotions and emotional feelings in comprehending listeners, then it would seem to follow that having one's emotions aroused appropriately in listening to music can play a role in detecting what the expressive meaning of a piece is.[124] The exuberance I feel may alert me to the exuberance in the music; my simulated nostalgia may alert me to the nostalgia that the piece expresses. It is perhaps worth noting, too, that when we are surprised or bewildered or relieved by the way the music unfolds, as described by Meyer and his followers, what we are surprised or bewildered or relieved *by* is just as likely to be a development in the *expressive* structure as in the purely musical structure. A change of key may signify a change from light to darkness. A long sojourn in a key distant from the tonic may signify the persona's long sojourn in the wilderness, and *express* the persona's feelings of alienation and hopelessness.[125] The feelings the music expresses need not be identical to those it arouses in comprehending listeners, but if we are right, the emotions and emotional feelings experienced may be a relatively reliable guide to the expressive trajectory of the piece and the emotions of its persona (if it has one). In the slow movement of Brahms's Piano Quartet in C Minor (see analysis and interpretation below), the surprise return of the main theme in m. 78 after extended delays, hints, and further digressions may simultaneously arouse the emotion it so carefully sets up and expresses. And the aroused emotion may help alert the listener to the structural details that set up the surprising return.

We have seen how music arouses emotions and emotional feelings in myriad different ways, focusing our attention primarily on ways in which (some of) the emotions aroused by music—either actually or in imagination—are *warranted* by the music itself. And it may well be because so many mechanisms of emotional arousal are at work simultaneously when we listen to music, that the emotions and emotional feelings listeners experience are so often characterized as "ineffable."[126] However, regardless of whether we are consciously aware of the bases for our emotional experiences, the redundancy of musical means (from acoustical to gestural, and from cultural to music-stylistic) will help ensure that any emotional arousal is channeled along those composed expressive trajectories that make the flow of changing emotions both coherent and richly significant.

6. FROM BACH TO BRAHMS: TWO SUBTLE EXAMPLES OF EMOTIONS EXPRESSED AND AROUSED

To briefly recapitulate our position: 1) We have argued that "appearance emotionalism" is inadequate to account for some of our deepest experiences of expressive music: expressiveness in music is not confined to "emotion characteristics in appearances," which are experienced as *resembling* gestures or behaviors characteristic of a person in a particular emotional state. 2) Music is sometimes capable of expressing complex emotions such as hope or resignation. Moreover, 3) some music can appropriately be heard as containing a "persona," a fictional or virtual agent whose emotions—including complex emotions, emotion blends, and emotions that develop and change over time—are expressed in the music. 4) Listeners may be invited not only to experience the emotions as being expressed in the music but also to experience those emotions in themselves, either actually or in their imaginations. 5) In some complex music, especially (but not exclusively) of the Romantic era, a piece may have a composed expressive trajectory or musical "plot" which dramatizes the psychological journey of a persona. Finally, 6) there are many ways in which music can arouse emotions or cause us to simulate (imagine) experiencing some emotion or sequence thereof. One of the most important is music's ability to induce us to feel, or imagine feeling, tenderness, consolation, resignation, and other complex emotions by identifying, empathizing, or sympathizing with the musical persona as he or she travels on a psychological journey through

122 Presumably "him," since it may be a persona of the composer himself.

123 The present account of how music can arouse aesthetically warranted emotions in listeners goes beyond the accounts in Robinson (2005) and (2010).

124 See Robinson (2005, Chapter 12).

125 See, for example, Charles Fisk (2001, Chapter 9) on Schubert's last piano sonata, D. 960.

126 See Robinson (2005, 410–12).

the music. Such experiences are typically reinforced by the arousal of actual physiological states and action tendencies in listeners.

Clearly, our arguments for aesthetically warranted emotions presuppose an openness on the part of the listener to engage in feeling with (or for) a virtual agent (or persona) whose own emotional experience is interpretable as human and genuine. It is, of course, always possible merely to recognize and "appreciate" what is being expressed without actual feeling it, and such appreciation may generate powerful emotions in itself, as Kivy has eloquently argued in discussing the emotions aroused by beauty and craftsmanship in music. But we think that these are not the only aesthetically warranted emotions that music can induce.

Robinson has tied the expression theory of music to Romantic music,[127] but here we claim that persona-based expression of emotion can be justified much earlier, at least by the time of the Baroque (consider the co-development, around 1600, of expressive monody, dissonant appoggiaturas, and the dramatic characterizations of opera), and arguably much earlier (consider the songs of the *trouvères*, the motets of Machaut, the madrigals of Marenzio).[128] The (topical) adoption of vocal genres in instrumental music is one way in which a purely instrumental work can appropriate the expressive power of a persona. And the fully developed tonal syntax of the later Baroque provided the systems to calibrate, by means of harmony, voice-leading, and tonal distance, an emotional journey of considerable force. Thus, complex emotions and a subtly shifting emotional trajectory are found already in works such as Bach's Prelude in E♭ Minor, from Book I of the *Well-Tempered Clavier*.

In this Prelude the prevailing texture of an upper, solo voice accompanied by rolled chords suggests an operatic aria (see Example 1). The *opera seria* character of this minor-mode aria also adds to the dignity of its tragic expression. A solo voice suggests a more personal, suffering agent, marked as individual and subjective, against the texturally oppositional backdrop of an unmarked, more objective accompaniment with hints of hymn-like texture. "Sadness" is initially cued for a listener competent in the style by the minor mode. Already by this point in the Baroque, minor is marked within the opposition, "minor versus major mode," and therefore has a narrower range of meaning than major. Having initially recognized the music's more general expressed emotion of sadness, we can then infer a persona as a subject experiencing and expressing that general emotion, which may lead to the arousal of a corresponding emotion in listeners, and enable them to follow more closely the gradual development and specification of sadness throughout the work. For example, at key rhetorical moments we may be stimulated to experience more intense emotions, corresponding in turn to those implied by the music's more extreme expression.

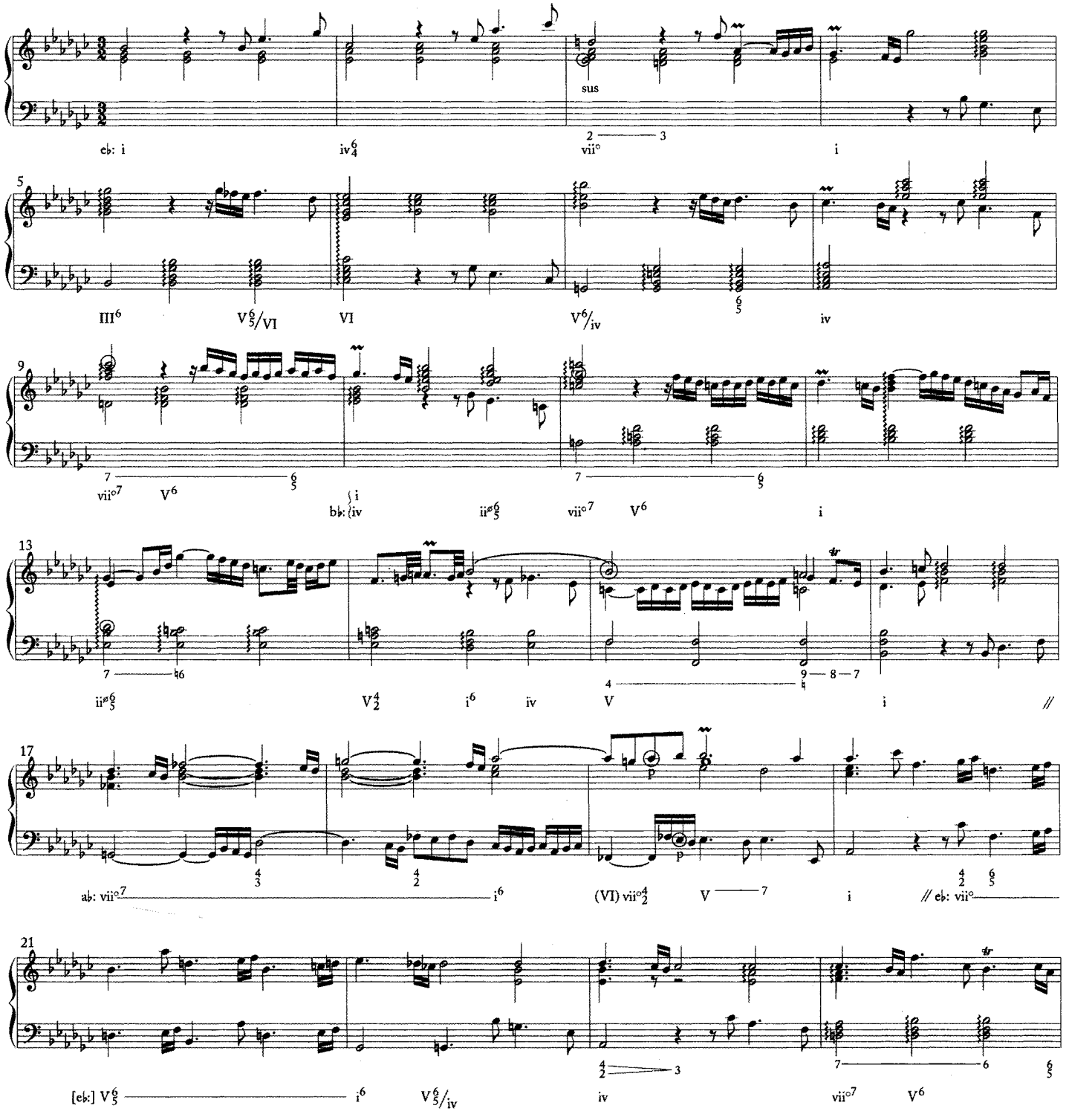
Let us consider the grounding of nuanced emotional expression in the conventions of style. The emergence of an expressively marked opposition between minor and major mode as a convention in the late seventeenth century does not mean that a minor mode work is merely "sad." Its expressed emotional states or activities may range further, from poignant reflection or ritualized grieving to personal suffering, but other musical oppositions are required in order to make those finer distinctions. For example, the meter of the Prelude in E♭ minor is triple, and a competent listener will hear the topical influence of the sarabande, which by the time of Bach had become a dignified dance in slow tempo (made slower here by the choice of 3/2 over 3/4). The sarabande meter, topically imported as basis for this aria-like prelude, contributes its own associations of high dignity and solemnity. The melody's dotted rhythms would likely have been performed more sharply, as double dotted, drawing on the conventions of the French Overture, yet another imported topic that evokes similar associations. These stylistically conventional topics, overlapping and mutually supportive in their expressive associations, provide sufficient redundancy to ensure the Prelude's basic emotional purport. The blending of aria, hymn, sarabande, and French Overture topics constitute a musical trope in which a unique expressive meaning is emergent—and such tropes may lead to more delimited kinds of emotional arousal.[129] For example, the shared dignity of these topics suggests a persona that is not inclined to extreme outbursts. Nevertheless, our empathy for such a persona (or for ourselves, imagined as protagonists) may lead to even greater emotional arousal—perhaps even to tears.

The expressed state of sadness at the opening is thus aesthetically warranted, although it is a relatively generic sadness, perhaps experienced initially as a relatively unmarked mood. Later, sadness becomes more nuanced, and hence marked as more emotional, through the use of specific expressive dissonances associated with visceral expressions of sadness, such as those created by suspensions and expressive leaps to appoggiaturas. The stepwise, descending resolution of these marked dissonances creates the conventional *pianto*, or sigh figure (as in the suspensions circled in mm. 3 and 13), while the broken-off resolution of dissonance to consonance (for the 7–6 suspensions circled in mm. 9 and 11) creates an emotionally freighted expressive declamation characteristic of eighteenth-century *Empfindsamkeit* (a style expressing deep sentiment). The unfolding emotional journey is marked by still other conventional features of the style; modulations to the dominant (B♭ minor) in m. 10 and subdominant (A♭ minor) in m. 17, as opposed to the more hopeful mediant (G♭ major) or submediant (C♭ major), only briefly hinted at in mm. 5–6, help sustain the tragic character of the discourse. Even the home key of E♭ minor, in a well-tempered tuning, would sound more dissonant than in today's equal temperament, and hence would express a more exacerbated sadness.

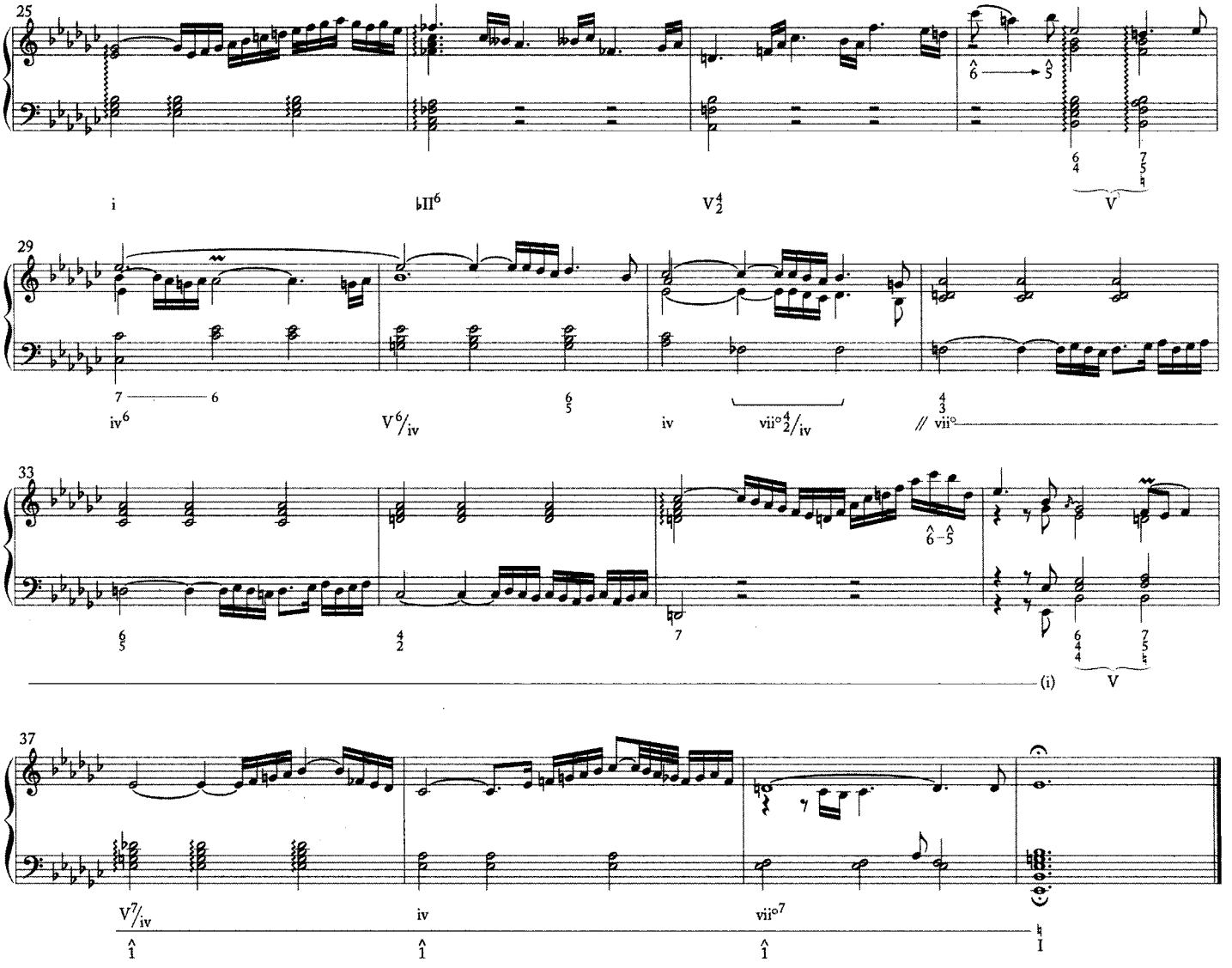
127 Ibid. (especially Chapters 10–11).

128 Furthermore, as Arthur Danto has argued, once a new concept has been introduced into aesthetics it can be applied retroactively in insightful ways to earlier artworks. See Danto (1964).

129 For more on the concept of troping in music, see Hatten (1994, 161–96) and (2013).



EXAMPLE 1. *J. S. Bach, Prelude in E♭ Minor from* The Well-Tempered Clavier, *Book I (originally published by the* Bach-Gesellschaft, *Leipzig, 1866; repr. Dover, New York, 1983, reproduced here without Saul Novack's tempo indications and explanation of ornaments).*



EXAMPLE 1. [Continued]

Although the dignity of the opening, hymn-like chordal accompaniment may suggest a degree of reserve on the part of a persona experiencing profound sadness, as noted above, the Prelude's ongoing tragic trajectory is strongly marked by unusual events that further enhance the *empfindsamen* character of the music in ways calculated to shock the listener. Recall that expectations denied often have expressive implications. Here, the listener is not only surprised but may share in the apparent suffering of the persona, as that suffering is intensified by sudden reversals or other *rhetorical gestures*, defined as those events that break the unmarked flow of the musical discourse.[130] Thus, instead of merely sharing the general mood, or experiencing the lower-level emotions of a ritualized grieving by both individual and choral voices, we may be moved to feel (or the music may arouse) a more intense feeling of emotion by a series of wrenching shifts, helping us interpret the Prelude as expressing the less predictable fluctuations of a very personal experience of profound sadness. Granted, we do not know the cause of this sadness, but we can share, intersubjectively, the trajectory of its progress, as the dramatic *mise-en-scène* of a protagonist, a virtual persona, who is feeling genuine human emotions.[131] In the case of a solo piano piece it is natural to identify this persona with the "suffering" soloist, whose sadness we can *enactively imagine* or simulate.

130 Hatten (2004, 135–37).

131 Note that we can identify with a single virtual persona, as emotional protagonist, throughout this Prelude, even though we recognize the potential existence of other virtual agents (as implied by the chordal accompaniment, for example) that may interact with that persona in various ways.

Among the surprises that heighten the emotional intensity of the Prelude are several marked uses of the diminished-seventh sonority. By itself emblematic of angst, the sonority is used twice to create unexpected tonal shifts (as opposed to typical common-chord modulations): first to A♭ minor on the downbeat of m. 17, and then back to E♭ minor at m. 20 (following the cadence in A♭ minor on the downbeat). Near the end of the Prelude (mm. 32–35), a four-bar expansion of the diminished seventh as vii^{o7} in E♭ minor follows a rhetorical shift displacing the vii^{o4}_2 of iv in m. 31 (the intensification is enhanced by the non-syntactic shift as well as by the diminished-seventh sonorities themselves). Temporal expansion of the vii^{o7} is expressively complemented by registral expansion to create an unmistakable gesture of emotional intensification, leading to an expressive climax on a high C♭ in the solo voice at the end of m. 35. With such intense gestures of emotionality, as performed by a sensitive performer, the listener may be aroused physiologically as well as psychologically.

Throughout, textural changes also create hints of recitative, interpretable as a more intimate mode of expressive discourse, in those passages where the accompaniment is sparser. The colorful Neapolitan sixth chord (m. 26) is used not only conventionally to mark an impending cadence, but rhetorically to mark a shift in texture toward more direct discourse (note the rests in the left hand that leave the solo voice isolated). The shock of this Neapolitan can be interpreted as a moment of sudden insight—perhaps even "recognition," if the Prelude is interpreted as a tragic emotional drama. The cadenza-like elaboration of the soloist during the rests following the Neapolitan and V^4_2 interjections leads to a high C♭ in m. 28, in clear anticipation of the later climax in m. 35. The poignant dissonance is barely resolved to B♭, however, before the high solo register is drastically undercut by the return of the chordal texture midway through m. 28 (notice that the V^4_2 in m. 27 is left unresolved). The implacable cadential chords may be interpreted as a marked harmonic interruption of the protagonist's climactic plaint, suggesting an external agency with the power to disrupt the emotional trajectory of the protagonist by means of an intrusion of inescapably tragic reality. The chordal accompaniment has emerged here from its initial state as unmarked, objective background, and taken on the role of a more independent, external agent acting in dramatic opposition to the internal agent implied by the solo melodic voice.[132] Within the model of a tragic drama, this external agency could be identified with Fate, and its E♭ minor goal as inexorably tragic. The deceptive cadence in m. 29 would then function not merely structurally, to delay the expected perfect authentic cadence, but expressively, to heighten the protagonist's anguished attempt to avoid that reality; here, by means of an exceedingly poignant 7–6 suspension (B♭–A♭) in an inner (alto) voice suitably surrounded, as if trapped, by the fateful cadential progression it just barely evades.

An expressive plot (here, tragic) and a persona (here, the principal agent or protagonist expressing emotions of great sadness while suffering disruptions entailing heightened states of feeling) are mutually supportive and stylistically grounded interpretations in this Bach Prelude. A listener initially simulating or experiencing in imagination the sad mood of this Prelude may become emotionally aroused by the various means Bach employs to intensify that mood. With investment in an ongoing emotional drama, the listener may continue to identify with an implied protagonist and more deeply experience the process of unfolding emotions correlated with those that the implied protagonist is expressing or experiencing. Bach's marked rhetorical events offer clear evidence of his intent to intensify key points in the expressive drama. Furthermore, the listener's emotional response may provide clues to those important events, even when that listener cannot explain their structural significance.

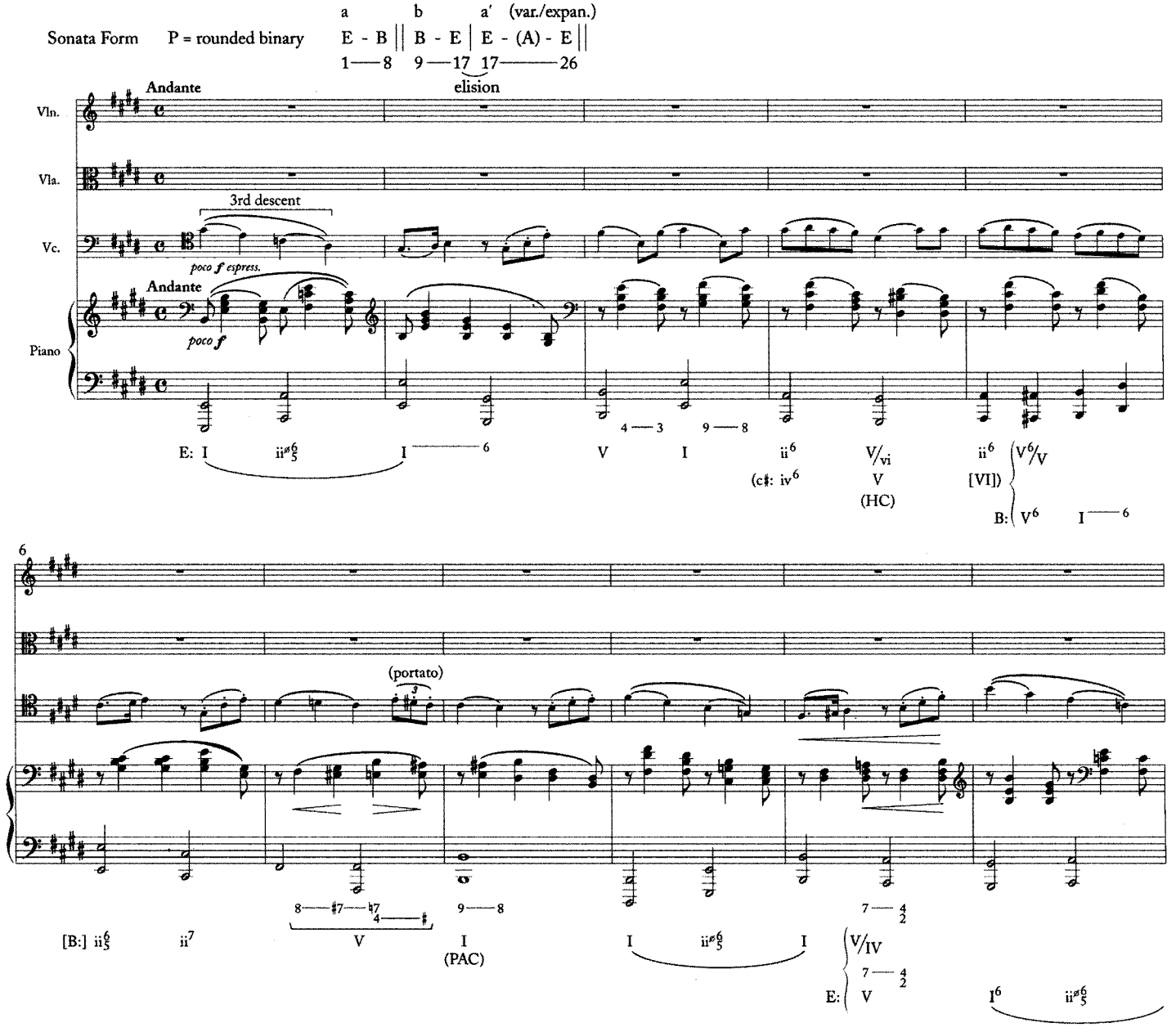
A performer (an actual agent constrained by his or her interpretation of the virtual agency in the music) may bring out still other features that may be interpreted as unique expressive gestures (tokens of stylistic types). And a listener who hears and sees a live performance may find some aspects of the protagonist/persona viscerally embodied in the physically contained but strongly conveyed anguish of the performer. But even if we are listening alone with headphones, we can empathize with the virtual agent in the music, whose expressions of profound sadness and anguish unfold not only before us but in us. We are not claiming that this is the only appropriate way to experience the music, but rather that it is a particularly powerful way, and one which allows us to explain some listeners' powerful emotional responses to the piece.

In the third movement of Brahms's Piano Quartet No. 3 in C Minor, Op. 60, we find another set of compositional strategies being employed to deepen emotional expression and encourage emotional arousal in the listener. We begin by examining the highly personal compositional history of this work, although we will demonstrate that an expressive interpretation of persona and plot is quite possible without reference to the composer's personal or programmatic motivations—the interpretation is written into the musical style and expressive strategies of the movement itself.

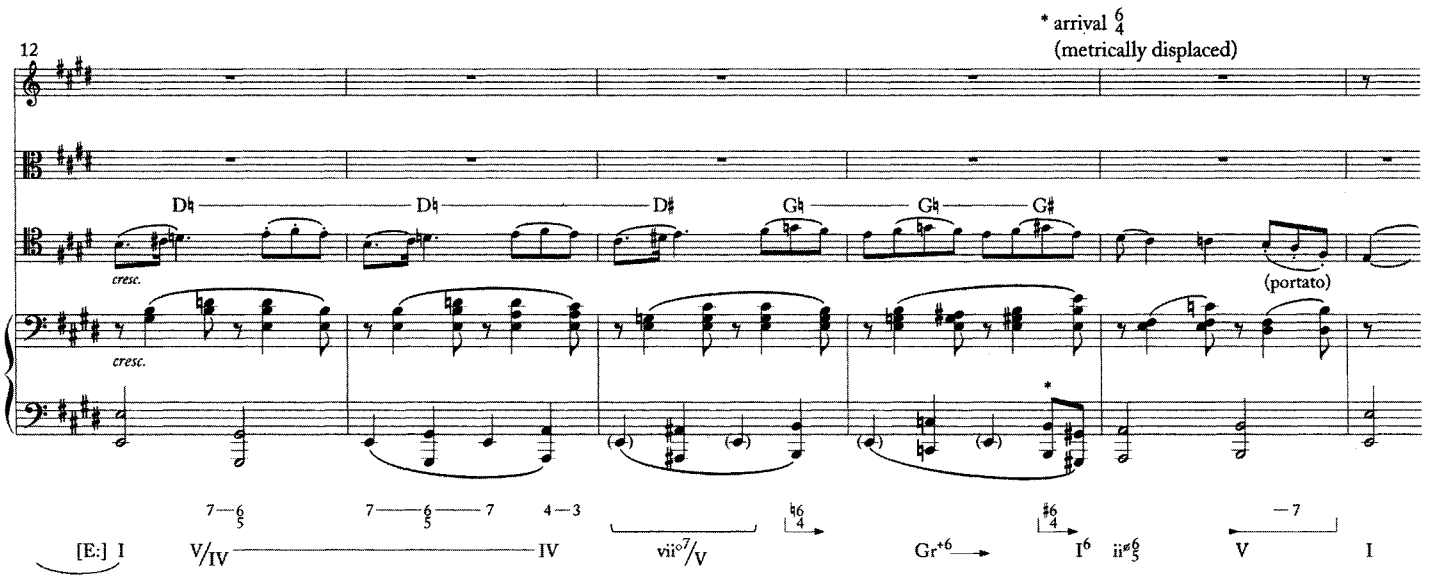
Peter Smith has provided a richly interwoven formal, Schenkerian, and motivic analysis of the work, leading to a fascinating biographical interpretation of this movement.[133] In his construal, the first theme (given as Example 2) is linked to Robert Schumann ("a portrait of Robert in memory"), the second theme (see Example 4, below) to Clara Schumann, and the dotted rhythmic figures beginning in m. 37 to Brahms himself. Smith's interpretation is motivated by Brahms's reference to an earlier version of the quartet, in C♯ minor, which was, as Brahms confided to his friends, his "Werther" Quartet, referencing the somewhat analogous love triangle in Goethe's novella *The Sufferings of Young Werther*. However, listeners will bring their own very specific values and emotional experience to their interpretation of the movement, and

132 For more on types of agency, see Hatten (2004, 225–26) and (2010b).

133 Smith (2005, 214–24).



EXAMPLE 2. *Brahms, Piano Quartet No. 3 in C Minor, Op. 60, III, Andante, mm. 1–17, first theme in E major (first two phrases of rounded binary form, cadencing in the dominant [m. 8] and then returning to the tonic [m. 17]).* Klavier-Quintett und -Quartette, *vol. 8 of* Johannes Brahms: Sämtliche Werke; Ausgabe der Gesellschaft der Musikfreunde in Wien, *Breitkopf und Härtel, Leipzig, 1927; repr. Dover, New York, 1968.*



EXAMPLE 2. [Continued]

Brahms may have deliberately encouraged that range of interpretation by not publicizing his personal motivations for the piece.

Consider the stylistic and intertextual evidence for grounding an expressive interpretation independent of any particular program. The first measure and a half of the opening theme (Example 2) already feature several strategies characteristic of Brahms's style: the melodic descent in thirds, the use of a plagal passing/neighboring chord, and the mixed-mode inflection of that plagal chord (as a ii⌀6/5). In Brahms's style, the descent in thirds draws intertextually on Beethoven's use of the strategy in his *Hammerklavier* sonata (one could even argue that Brahms took the opening theme for his Symphony No. 4 in E Minor, Op. 98, from the development section of the Adagio from Beethoven's Op. 106). As an emblematically "profound" gesture, falling thirds appear in Brahms's own "O Tod, wie bitter bist Du" from the *Vier ernste Gesänge*, Op. 121 and, as a "mystical" gesture, they open the Intermezzo in B Minor, Op. 119, No. 1. The use of falling thirds in the major mode in the Piano Quartet's Andante highlights the "sweet" scale-degree $\hat{3}$ which frames that descent.

E major in the context of a C-minor quartet is already strikingly marked (compare Beethoven's anticipation of this otherworldly effect in his Piano Concerto No. 3 in C Minor, Op. 37, the middle movement of which is in E major—a connection also noted by Smith[134]). A variant of the plagal progression enhanced with modal mixture may be found at the close of the slow movement of Brahms's Symphony No. 3 in F Major, Op. 90 (as minor iv to major I), and Brahms would surely have been aware of Wagner's similar post-cadential plagal closes for two of his operas, *Tristan und Isolde* and *Götterdämmerung*.

In Brahms's opening gesture, these various features interact to support a characteristic sense of resigned or poignant (cued by the use of mixture) acceptance (associated with the descending thirds) that is also profoundly moving and involves remembrance of an event in the past (signaled by the plagal, post-cadential harmonic progression).[135] Thus, Brahms has carefully calculated these expressive qualities, as shared by his competent listeners, even when composing an otherwise unique expressive utterance. In mm. 2–3, the arpeggiation of the tonic triad upward, reaching past to F♯, falling back to B, and then sequentially ascending by stepwise motion to the familiar G♯, are contours that metaphorically exemplify an expansive yearning that ultimately reaches its goal. The poignancy of yearning is enhanced by the unprepared suspensions in the upper voice of the piano part in m. 3, which trigger topical associations with religious music and thus provide another indicator of more positive acceptance, as well as a hint of the ultimate outcome of the expressive drama. In m. 4 the cello's G♯ goal is blissfully enveloped by neighbors, and the turning figure eventually descends sequentially in m. 5, just as the bass line in the piano introduces positive energy via $\sharp\hat{4}$, leading eventually to a cadence in the dominant key, B major, at m. 8. The dominant chord of B major in m. 7 is softened and made more gentle in that bar by yielding chromaticism (D♯–D♮ in the cello; E♯ to E♮ in the piano), which suggests relaxing into resolution, weakening by reversal the otherwise energetic impulse of E♯. The triplet descent in the cello at the end of m. 7 is further marked by the gentle *portato* articulation, a gesture which suggests an almost unbearable lightness of touch, half-unwilling to let go, though yielding graciously in the next bar by means of a sighing 9–8 suspension over the new

134 Ibid. (15).

135 For the subdominant as associated with the past, see Hatten (1997) and Klein (2004, 39–40).

tonic. A listener may potentially be emotionally aroused by the subtle details just described, and in ways that are conventionally grounded if compositionally distinctive.

At this point, the theme's lyrical beauty may not appear to have set up an obvious dramatic conflict or premise that must somehow be "worked out." And yet, as Smith notes, there is already an expressive premise that intriguingly links this movement to the first movement of the quartet.[136] There, an E♮ intruded in uncanny fashion in the context of C minor; here, in the Andante, the situation is exactly reversed, when a C♮ intrudes into the realm of E major, carrying its poignant association from the tragic first movement. Furthermore, chromatic reversals suggestive of yielding or resignation are already being thematized, with consequences for subsequent passages.

A listener who is fully engaged emotionally with the work will probably not hear it as a portrait of Robert Schumann in memory (despite Brahms's initial inspiration or potential program), but rather as something that meets his or her own existential needs. In this case, the theme's profound descent in thirds helps convey a sense of resignation that, given the major mode and the warmth of the cello timbre, sounds reassuring; perhaps, given the framing by sweet scale-degree $\hat{3}$, the listener will hear it as warmly consoling, with its touch of wistfulness supported by modal mixture, and reminiscent reflection supported by the plagal gesture. These emotions, "reassuring" and "consoling," are more complex ones that may be aroused in listeners who hear the effect of Brahms's strategic choices, regardless of whether they are able to describe their structural motivation. Listeners may even begin to bask in the blissful escape of a theme that is heard as "otherworldly," in Smith's evocative language,[137] since its E major appears in the context of a work in C minor. Or the theme's beauty and compelling compositional craft may provide listeners (*à la* Kivy) with a sense of utter joy stemming from a deep aesthetic appreciation of these values.

There may even be an aesthetically warranted sense of communal sharing, depending partly on the pragmatic circumstances of the situated act of listening: is the listener sitting next to a like-minded soul (or soulmate) with whom he or she can share a knowing glance (at an aesthetically warranted moment)? Is the listener sharing the communication of extraordinary performers whose own emotional engagement is heightened (perhaps even by their self-imposed refusal to wallow in emotionality)? Or is the listener sitting alone, communing solely with the imagined persona of Brahms himself? These questions, of course, move beyond the harmonies and gestures of the movement and its expressed emotions; a piece can have somewhat different meanings for different listeners or for the same listener on different occasions, depending on the context of listening, although all are constrained by the expressive potential of the piece.[138]

136 Smith (2005, 214).

137 Ibid.

138 Cone (1974, 168).

Robinson claims that works of art not only exemplify—and express—emotional states, but also teach us about emotions (and much more besides). This aesthetic education can proceed from knowledge of a work to the emotions it expresses, but it can also go in the reverse direction: from a listener's experienced emotions which lead to further understanding of the work's expressive structures.[139] Aroused emotions can alert the listener to features that might otherwise have gone unnoticed, and can increase the profundity of an experience even when the listener is unable to explain the compositional craft behind it.

The second large phrase of the (rounded) binary opening theme in the Brahms sequences the opening motive (transposed to begin on scale-degree $\hat{5}$ in B in m. 9), in order to return directly to E major in m. 11. A suitably cadential reference to V^7/IV occurs in m. 12. This time, however, it is a chromatically lowered pitch (the "reminiscent" lowered $\hat{7}$) that is reversed chromatically, by being pulled *upward* to the leading tone in m. 14—and yet that willful, positive reversal is in turn darkened by the piano's introduction, also in m. 14, of lowered $\hat{3}$ (G♮, as the seventh of a vii$^{\circ 7}$/V). The cello in mm. 14–15 expresses this G♮ as a frustrating upper neighbor, until a similar chromatic reversal to G♯ suggests an emotional breakthrough back to the sweet scale degree $\hat{3}$ from which the theme began. Meanwhile, the piano adds intensity by means of a German augmented sixth (m. 15, beat 2) that expands outward, blossoming as it resolves onto an arrival or salvation $^6_4$ (metrically displaced) on the fourth beat in the bass, and simultaneously supporting the cello's breakthrough to G♯.[140] The lowered $\hat{6}$ lingers in the piano, but whereas it was introduced with a passing/neighboring ii$^{\circ 7}$ chord in m. 1, that same chord now progresses syntactically to a V^7–I authentic cadence in E, suggesting positive acceptance. In a good performance, listeners can feel the pressure building to these breakthroughs.[141] The emotion of relief, at the point of being delivered back to the tonic, may alert a listener not only to the tonal event but to its expressive import.

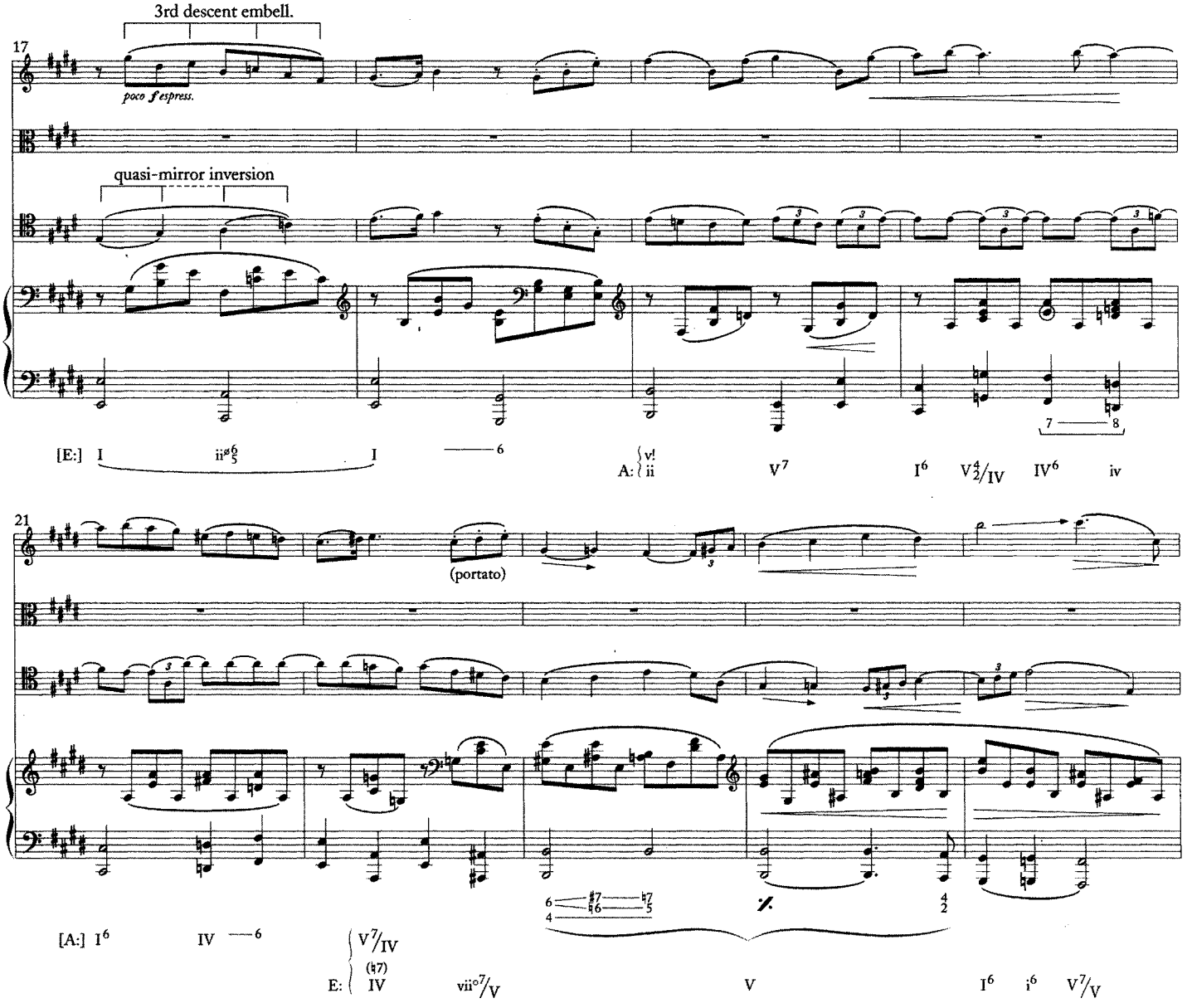
Particular variation techniques enhance the expressivity of this theme upon its return in m. 17, shown in Example 3. Incomplete neighbors embellish the theme, now in the first violin, while the cello takes on the role of a duet partner, moving in contrary motion with motivic thirds ascending in pairs.[142]

139 Robinson (2005, 366–69).

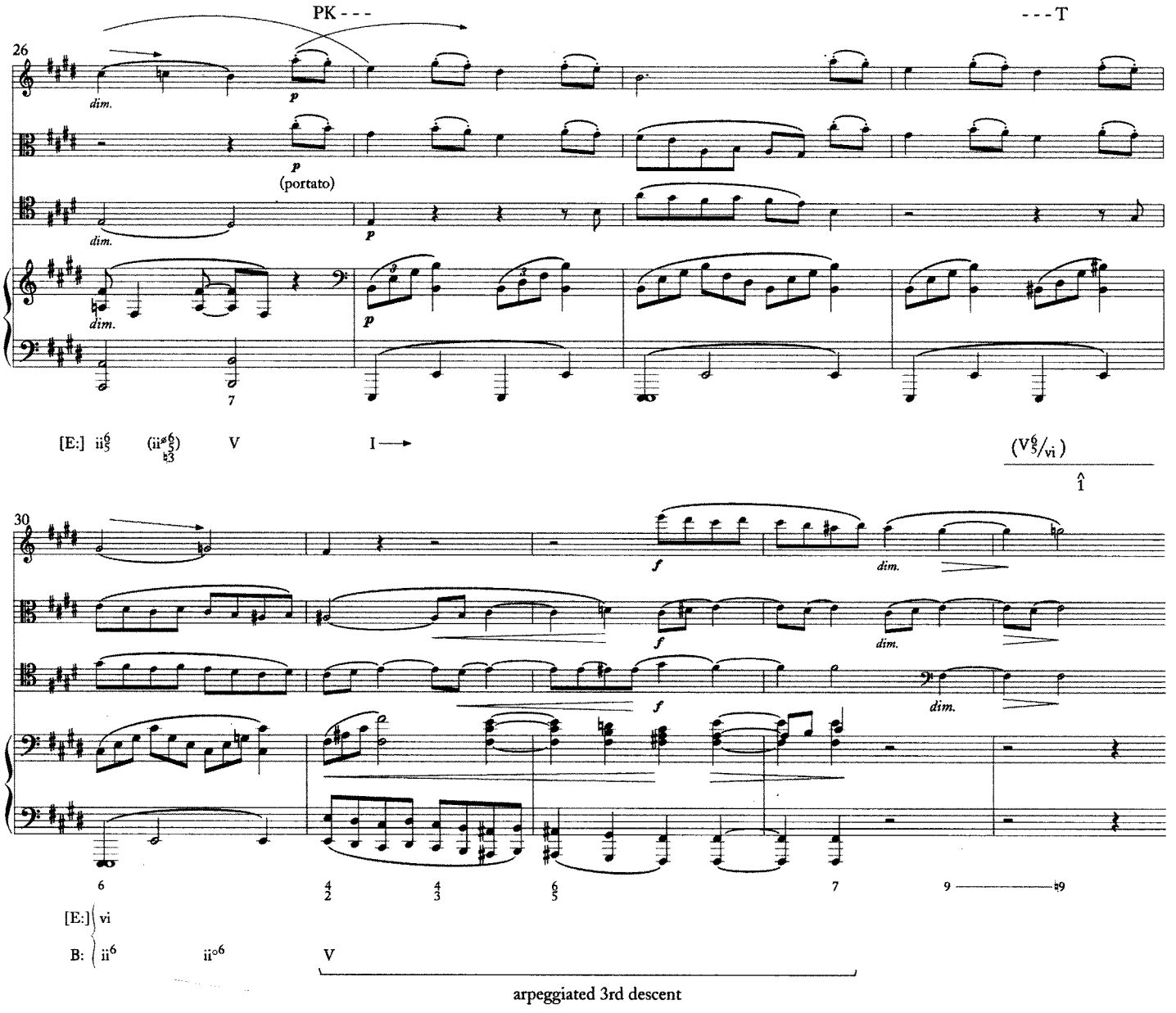
140 For another example of a metrically displaced "arrival" $^6_4$ also resolving outward from a German augmented sixth chord, see the brief passage in eighth notes that modulates from G major back to the final cadence in B major in Chopin's Nocturne in B Major, Op. 62, No. 1 (m. 76). The rhetorical effect of an arrival $^6_4$ is strengthened by its strong-beat location; however, once the expressive associations of this striking harmonic progression became a part of the style, they could arise in spite of (or nuanced by) a weak-beat arrival.

141 Larson (2012, Chapter 4) claims that we hear music by analogy with the physical forces of gravity, magnetism, and inertia; we would add here that going against these forces (as with the reversals of voice leading described above) provides good evidence for agential energies, thus supporting the interpretation of expression of emotion via a persona of some sort.

142 The duet suggests the possibility of two agents, but we can still hear their interaction through the focus of a single persona. Recall that Newcomb



EXAMPLE 3. *Brahms, Piano Quartet No. 3 in C Minor, Op. 60, III, mm. 17–34, elided return of the first theme's first phrase, varied and expanded in the violin, with cello duet (mm. 17–27), followed by a closing theme (mm. 27ff.) that quickly evolves into a transition (mm. 29–34).* Klavier-Quintett und -Quartette, *vol. 8 of* Johannes Brahms: Sämtliche Werke; Ausgabe der Gesellschaft der Musikfreunde in Wien, *Breitkopf und Härtel, Leipzig, 1927; repr. Dover, New York, 1968.*

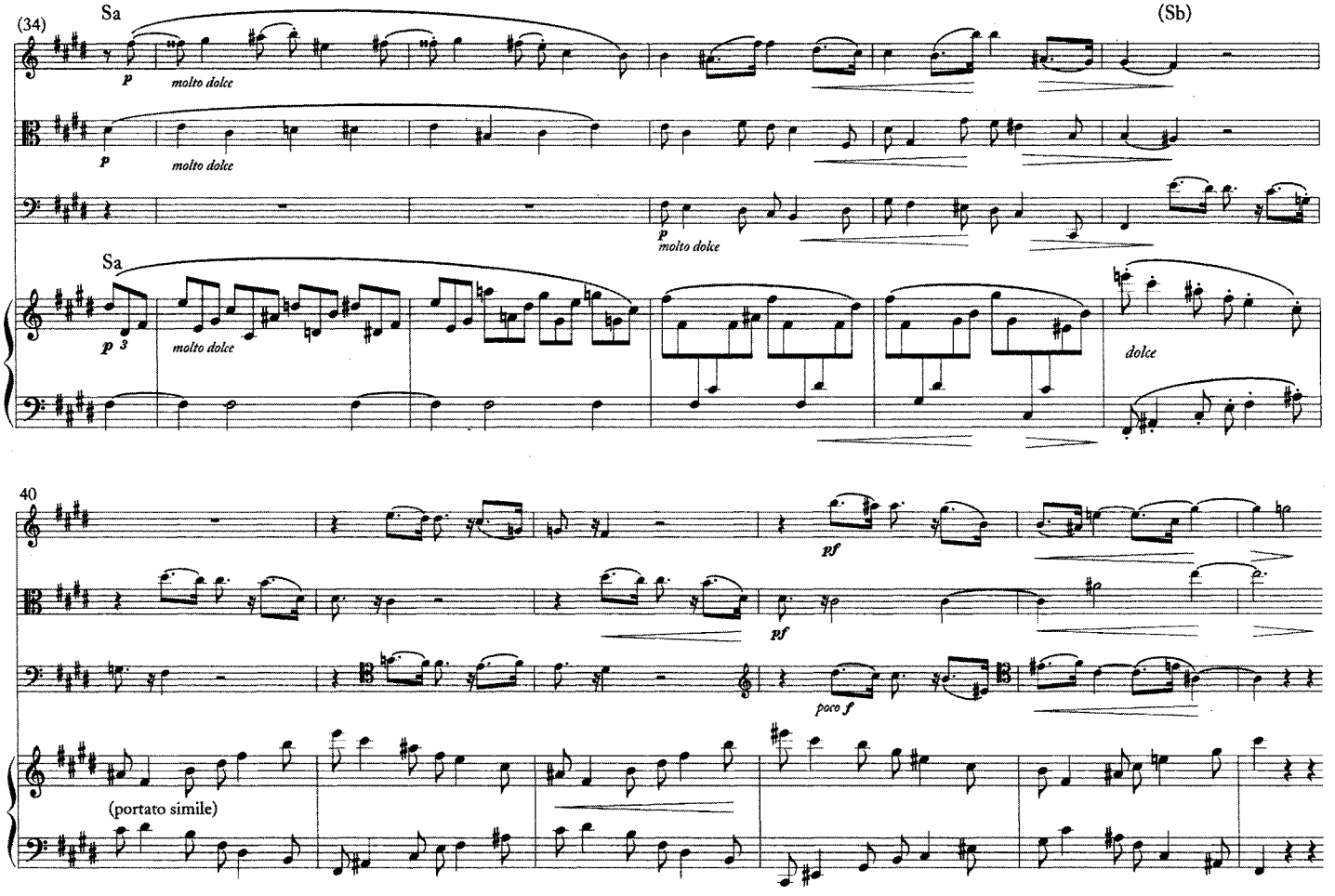


EXAMPLE 3. [Continued]

The 4–3 implied suspension from m. 3 appears in the cello in m. 19 as an implied 4–3 suspension to a lowered third, and the resulting minor v, although soon reinterpreted as ii in A major, makes the passage even more poignant. The cello slips into a tailspin as it accelerates the rhythmic pacing with triplets and syncopations, intensifying the violin's yearning gestures. The violin steps beyond the G♯ goal of the cello from m. 5, ascending in m. 20 to a more climactic A above mixed-modal harmonies in the piano. Further expansions lead to a cadential $^{6}_{4}$ in m. 23. Note the acceptant *portato* articulation in the violin. But instead of cadencing with this gesture (as in mm. 7–8), the violin in m. 23 reverses G♯ to the more tragic G♮ (echoed by the cello in the next measure[143]) and then builds to the Romantic climax of the entire first theme with a leap up to B and extension to C♯ in m. 25. The leap in the violin is energized by the cello's urgent rise in triplets (mm. 24–25) that fill in the quintessential yearning interval of the dominant seventh. This passionate climax is then undercut by a return to the yielding cadential gestures (cf.

(1997, 141) suggests the possibility of hearing the *Ländler* versus waltz as two sides of a single agency in the second movement of Mahler's Symphony No. 9.

143 The transposed *Stimmtausch* or voice exchange between violin and cello lines in mm. 23 and 24 ensures continual contrary motion in each measure.



EXAMPLE 4. *Brahms, Piano Quartet No. 3 in C Minor, Op. 60, III, mm. 34–45, beginning of the second theme (floating over a dominant pedal).* Klavier-Quintett und -Quartette, *vol. 8 of* Johannes Brahms: Sämtliche Werke; Ausgabe der Gesellschaft der Musikfreunde in Wien, *Breitkopf und Härtel, Leipzig, 1927; repr. Dover, New York, 1968.*

the bass in m. 25) and a mixed-modal ii$^{\varnothing 6}_{5}$ chord in m. 26 that progresses normatively to V^{7}.

At this stage, the lyrical theme has "completed" the climactic trajectory of the first phase of the movement's expressive drama, and it is possible to hear our virtual persona as having achieved a desired arrival. Among the possible Romantic readings of this trajectory, one might consider Brahms's own longing for Clara as providing an interpersonal interpretive frame. In this context, the arrival might be experienced as a spiritual consummation arriving after much yearning and, at times, frustrated striving. But irrespective of how a listener further interprets the trajectory, its expressive structure has the potential to arouse aesthetically warranted emotions. Perhaps it is too soon to speak of a listener's having learned something new emotionally at this point in the drama, but the first theme group has certainly made vivid a kind of experience we may never have had with this particularity or intensity. Brahms's techniques of variation, both at the larger scale of formal phrases (and their extensions), and more internally, as continuous motivic evolution or developing variation, are crucial strategies that help sustain a single, overarching discourse. This discourse in turn supports a subjectivity that is not limited to a single voice (e.g., the cello), but can synthesize multiple lines into a single experiential subject. The admittedly active dialogue between cello and first violin in mm. 17–26 is thus filtered through the consciousness of a single persona, experiencing the "relationship" of voices as a series of more or less harmonious interactions.

One might wonder how a four-person quartet can be the expression of a single persona whose experience we share in imagination as we listen to this piece. Regardless of how many instrumentalists are performing a piece, however, there is typically a single consciousness that is experienced as "owning" the emotions expressed by the piece. As we have said, it is sometimes appropriate to hear a single agent with conflicting impulses, as in Newcomb's interpretation of the second movement of Mahler's Ninth Symphony, and sometimes it is appropriate to hear a single agent as battling against external forces, as in the first movement of Beethoven's Fifth Symphony.

But almost always there is a single experiencing subject interacting with others or with the environment. In the Brahms Andante, when the violin enters in dialogue with the cello, it is as though the emotion expressed by the primary agent is reinforced or endorsed by another with whom he or she is in warm accord. But the music does not force us to identify two independent agents here; rather, the emotion expressed throughout is primarily that of a single persona who is either in harmony or disharmony with his surroundings. We do not believe that the appearance of any new melody or instrument automatically triggers a new persona; rather, the persona is a virtual subject whose experience is continually expressed through the trajectory of the piece. While it is true that other (external) agents may act upon the persona in its role as protagonist, the coherence of the persona (regardless of whether it is identified with the composer) is fundamental to a Romantic aesthetic understanding of purely instrumental works, as well as specifically programmatic ones such as Lizst's tone poems or Berlioz's *Symphonie fantastique*.

With the cadential arrival on the downbeat of m. 27, a new theme overlaps, exemplifying "linkage technique"—another of the means by which Brahms achieves a continuously unfolding developing variation.[144] Note the expressively marked *portato* articulation and the parallel sixths between violin and the newly appearing viola. This time, the articulated, three-note motive functions structurally as both the closing gesture to the cadence in E and the initiating gesture for a remarkable closing theme. Its expressive poignancy is also multiply motivated. Contextually, the gesture suggests a pastoral release (cf. the parallel sixths, consonant resolution, and pedal point) into sheer bliss (note the cello's fulfilled yearning in the duet with the viola, in mm. 28 and 30), as though in response to the passionate intensities of the main theme. It is also like a gentle caress, with its *portato* articulation and soft, stepwise yielding.[145] An actual gesture such as this is no mere resemblance—it exemplifies, and can be experienced as, affective motion. Its significance is also thematically enhanced by its role in the expressive drama—it matters that this gesture appears just here, at this crucial link between phrases, where it serves to fuse acceptance (cadencing the first theme group) with bliss (initiating a satiated closing theme). Indeed, there is a hazy, lullaby-like, and transportingly dance-like character to this closing theme. It suggests fulfillment as a kind of suffused plenitude; yet the delicate, time-absorbing *portato* touch conveys a sense of impending ecstasy. To experience this emotional effect one cannot help but share some degree of actual emotion, and our inability to specify just what that emotion is, or to agree on its exact nuances, is more a failure of translation into language than a weakness of the claim itself.

The purely formal function of this theme soon shifts from closural to transitional. When yearning gestures (the rhythmically syncopated and chromatically inflected stepwise ascents in the viola and cello in mm. 31–32) combine with an embellished, descent-in-thirds arpeggiation of the dominant-seventh chord in B major, we reach a thematically enhanced medial caesura in the larger sonata scheme. The caesura is filled by the overlapping strings, and a new theme begins on the last beat of m. 34 on top of a continuing dominant pedal in B major (see Example 4). This theme, which Smith links to Clara because of its "floating," syncopated rhythms and more "delicate" character,[146] might also be interpreted less directly programmatically as mystical contemplation—of Love, if you will—its axial and asymmetrical revolutions at different speeds suggesting a kind of mesmerizing or intoxicating reverie. The lulling triplet rhythms and slow, oscillating harmonic rhythm suggest entrainment to a mood, rather than projection of a more intense emotion (although one could also argue that the previous emotions are being sustained or prolonged in this way). The ensuing dotted rhythms, which Smith associates with Brahms, could well imply a more general masculine yearning interjected into this reverie, but it continues even when rhythmically transformed (compare, in mm. 39–42 of Example 4, the piano's shift from triplets to syncopated eighths taken from the strings, while continuing its mesmerizing prolongation of the dominant seventh to tonic oscillation by means of wedge-like arpeggiations between the hands).

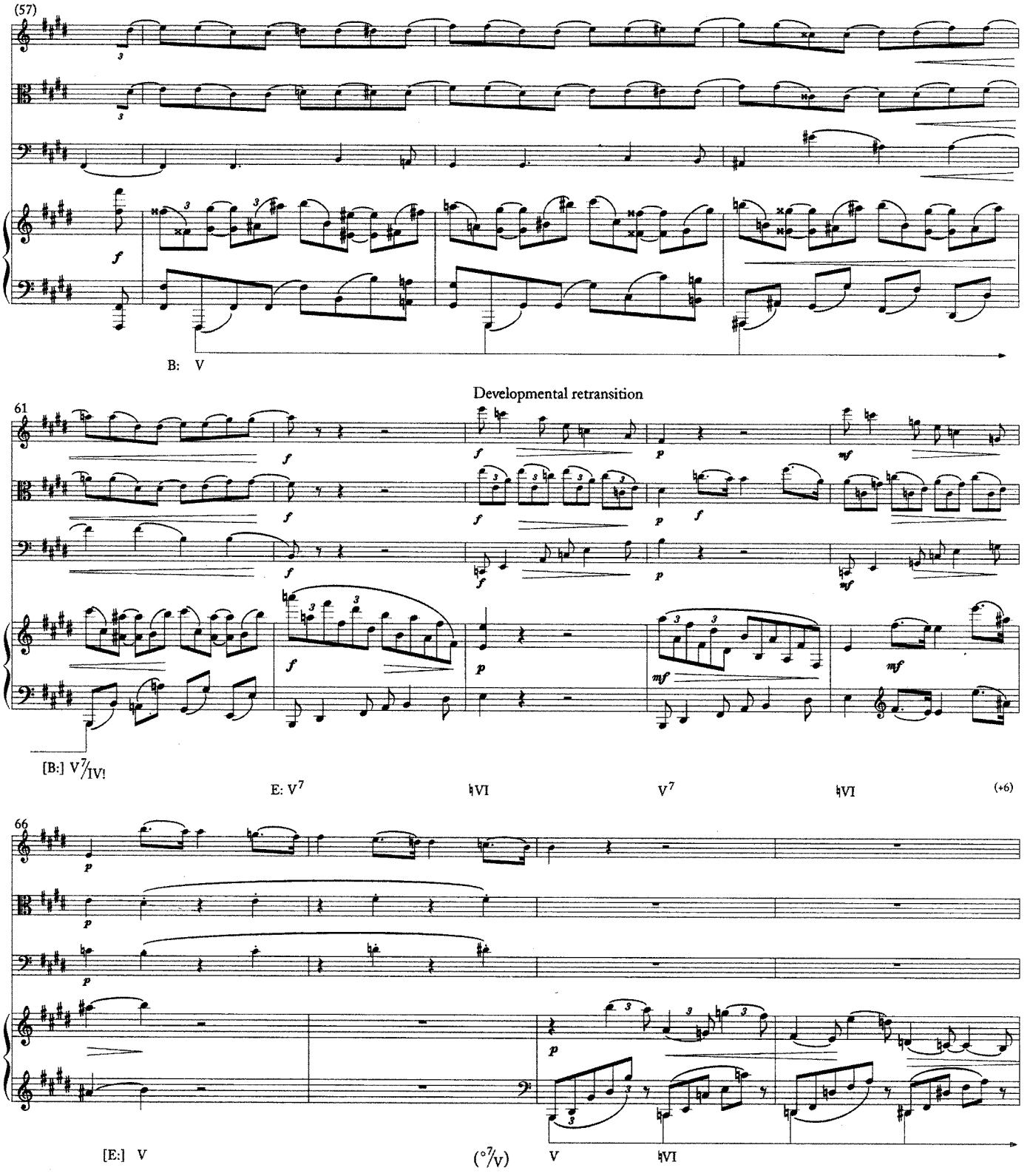
This mood of dreamy reflection eventually intensifies into a more directed emotion with the crescendo over a prolonged dominant in mm. 58–61 (see Example 5), but the expected authentic cadence in m. 61 is undercut by the A♮s that transform tonic B major into V^7 of E. Formally, the evaded cadence creates a fast way to return to E for the first theme, and there is an implication of sonata form without development.[147] But the presumed retransition via a dominant seventh of E is itself diverted, by means of a deceptive move to ♮VI (becoming iv^6) in m. 63, and again to ♮VI in m. 65, leading back to V by means of an augmented sixth chord. This presumed retransition soon turns into a potential development section after all. In addition to surprising modulations and disjunctions of keys, Brahms achieves a thematic transition by integrating the rhythms of the second theme with the intervallic descent in thirds of the first theme (see the violin in mm. 66–67). Tonally, an arrival on E minor in m. 70 is simultaneously undercut by an anticipatory return of the main theme in the cello in C major (and the deceptive move adds its character to the tonal shift). A similar progression turns a cadence in C minor into an arrival of the main theme in A♭ major (m. 75). And finally, the sequence leads to a cadential $\frac{6}{4}$ to V^7 in G♯ minor (enharmonically A♭ minor) that resolves deceptively to E major for the recapitulation in m. 78.

144 For more on Schenker's linkage technique (*Knüpftechnik*) and Schoenberg's concept of developing variation, see Frisch (1984, 1–16).

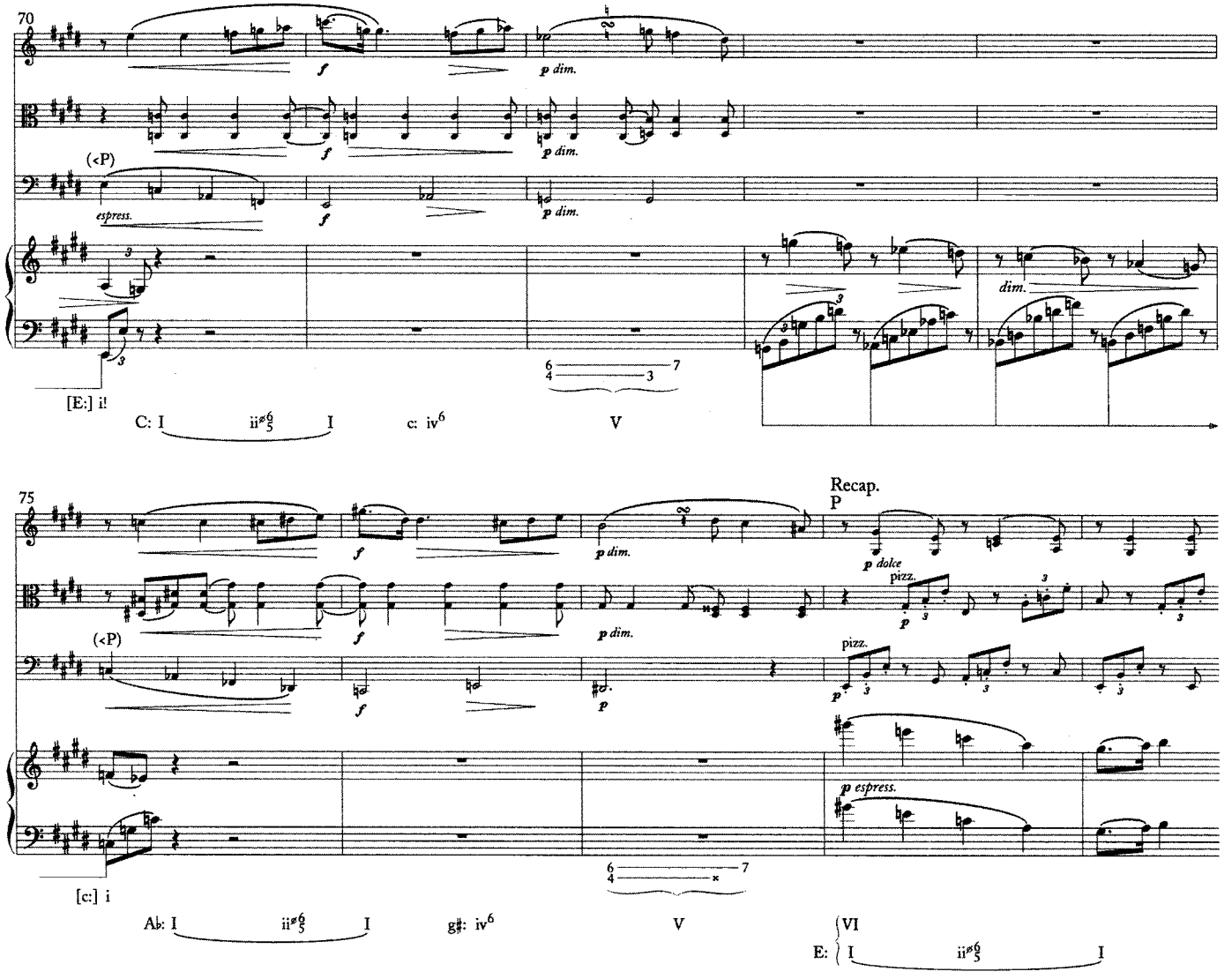
145 The expressive use of *portato* may be found in Mozart, Beethoven, and Schubert (see Hatten [2004, 147, 191, 221]); Brahms may well have learned it from their earlier uses.

146 Smith (2005, 220).

147 This is a typical strategy for Classical slow movements, such as that of Beethoven's Piano Sonata in F Minor, Op. 2, No. 1. Brahms is clearly referencing, while expressively moving beyond, Classical formal models.



EXAMPLE 5. *Brahms, Piano Quartet No. 3 in C Minor, Op. 60, III, mm. 58–79, climactic close of the second theme group (mm. 58–61), evading expected cadence in B major (m. 61) and evading presumed return to E (m. 63) for an unusual developmental retransition (mm. 63–77) that leads by a series of deceptive moves back to the opening theme (recapitulation) in E major (mm. 78ff.).* Klavier-Quintett und -Quartette, *vol. 8 of* Johannes Brahms: Sämtliche Werke; Ausgabe der Gesellschaft der Musikfreunde in Wien, *Breitkopf und Härtel, Leipzig, 1927; repr. Dover, New York, 1968.*



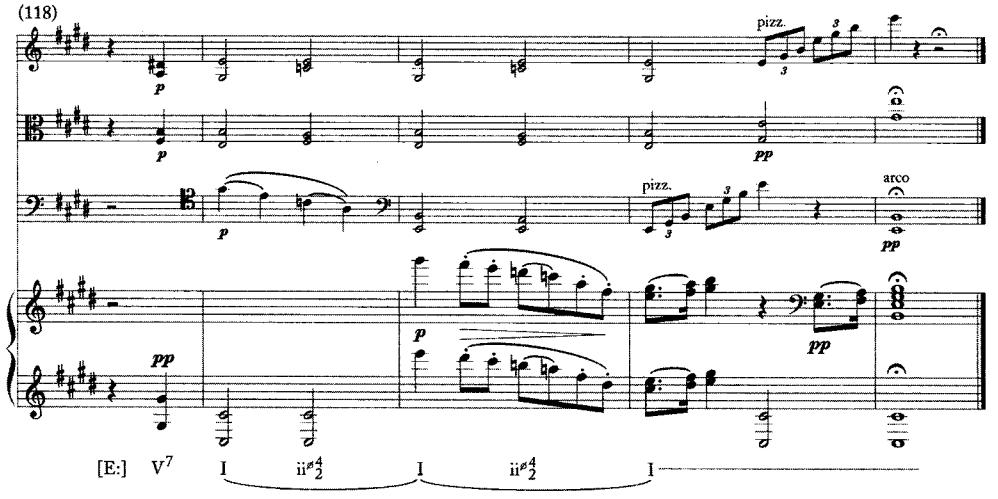
EXAMPLE 5. [Continued]

What are the emotional consequences of this extraordinary delay of the return, with its many rhetorical gestures undermining our expectations? The listener can experience a comparable sense of anticipation, frustrated but whetted by the anticipatory returns of the main cello theme, and finally a sense of delivered satisfaction as the main theme returns to the home key, albeit via the roundabout way of a deceptive cadence. In other words, we would expect a competent listener's emotions to track each harmonic and tonal swerve with a comparable registration of surprise, yet with anticipation (enhanced by misdirection), reaching a climactic point at the very moment the main theme returns. This intensification from mood (second theme in Example 4) to emotional buildup (throughout Example 5) also reaches its climax at the moment of the return in m. 78, and the overwhelming sense of relief is enhanced by the theme's textural apotheosis by means of diminutions in the strings.[148] The textural saturation suggests plenitude as emotional fulfillment.[149]

But, once again, we have no way of guaranteeing that expressed emotion will lead to arousal, or even to recognition of its expression. So much depends on the listener's stylistic awareness, emotional receptivity, and other factors comprising the context of the listening experience. What we *can* establish are

148 Apotheosis was first theorized for music by Cone (1968, 84), and it has since been applied extensively (centrally in Klein [2004]; see also Hatten [2004, 254, 284]). The apotheosis is a textural aggrandizement of a theme, which Cone describes as "a special kind of recapitulation that reveals unexpected harmonic richness and textural excitement in a theme previously presented with a deliberately restricted harmonization and a relatively drab accompaniment" (Cone [1968, 84]).

149 Hatten (2004, 43–52).



EXAMPLE 6. *Brahms, Piano Quartet No. 3 in C Minor, Op. 60, III, mm. 118–22, brief coda featuring motto-like return of the main theme.* Klavier-Quintett und -Quartette, *vol. 8 of* Johannes Brahms: Sämtliche Werke; Ausgabe der Gesellschaft der Musikfreunde in Wien, *Breitkopf und Härtel, Leipzig, 1927; repr. Dover, New York, 1968.*

the plausible constraints on the kinds of emotions that would be aesthetically warranted, and this is through the reconstruction of a stylistic competency that can track every structural, hence expressive, nuance of a composition.

Does the Brahms movement have a continuous plot? Or is its apparently lyrical mode only capable of "story fragments," in Walton's evocative phrase? First, we note that even works like this one can have a more or less continuous trajectory of emotional states. A lyric poem's reflections may constitute an emotional journal of sorts. We have encountered story fragments, for example in the way the lowered $\hat{3}$ "broke through" to the raised $\hat{3}$ in m. 15. We have also encountered moments of satisfying arrival, such as the blissful overlap via *portato* into the closing theme for the first key group, at mm. 26–27, and the return of the main theme at m. 78. Each of these moments implies a continuous build-up of energy that eventually finds release, and it is easy to claim a corresponding emotional release. But the continuity of developing variation serves to knit these moments into a coherent trajectory; beginning with somewhat poignant yet glowingly positive acceptance, the first theme moves into greater states of yearning and emotional turmoil, leading eventually to a blissful climax and aftermath. The second theme appears to prolong this state in a kind of suspended reflection, but its intensification toward the cadence leads not to a reestablishment of the opening state but to an emotionally anticipatory retransition involving further tonal searching. The ultimate return to E is both surprising (because of the deceptive cadence) and emotionally fulfilling (because of the textual saturation).

Kivy has complained that music is too repetitive to exemplify a psychological journey.[150] But the return of the luxuriant second theme section (only eight measures, instead of sixteen) is an abbreviation, not an exact repetition of its first appearance.[151] And Brahms's use of the more epic/dramatic scheme of sonata form gives further weight to our interpretation of an ongoing expressive trajectory of lyrical themes. A four-bar coda (see Example 6) serves as a condensed summary of the expressive trajectory of this movement: the cello's one-measure motto is echoed and filled in by the piano, and the resigned aspect of the theme is thereby poignantly enhanced. But a tropological blend of endings is achieved in the next measure, in which the piano continues with the more positive, dotted-rhythmic figure, ascending this time in parallel thirds. These three features—dotted rhythm as noble/heroic, ascent as positive, and parallel thirds as sweetly pastoral—add up to a sense of positive affirmation, which is operatically confirmed by the harp-like pizzicato arpeggiation from low to high in the cello and first violin, a "heavenly" cue for transcendence. Thus, the combination of resigned descent and heroic/pastoral ascent suggests the trope of positively willed acceptance, or abnegation, as the conclusion to an expressive journey in which emotional turmoil has left its imprint even on this final, positive conclusion. One might counter that abnegation is not an emotion but rather a complex moral state; nevertheless, the emotional effect of this complex acceptance that tropologically blends both negative and positive emotions can be profoundly moving.

We have suggested that the listener experiences a musical work's expressive trajectory by imaginatively undergoing the same actions and gestures that are performed by the inferred persona, the protagonist of the emotional drama that the piece exemplifies. In imagination, we too experience the emotions that this persona seems to experience, and we too enact in imagination the persona's psychological journey. Indeed, it is only by engaging with the music's expressed emotional states that

150 Kivy (2009, 103).

151 Recall the discussion of Brahms's Intermezzo, Op. 117, No. 2, in Section 3.

a listener can experience the emotions aesthetically warranted by the piece, in tandem with their continuing expression. In turn, an emotional experience of the music may help the analyst or critic heuristically in interpreting what the expressive potential of the work may be, leading to an interpretation of details that might have gone unnoticed without this commitment to emotional engagement. There is clearly a circular process to this logic, and it is unavoidable. In fact, it is characteristic of all interpretation: *guided* by what matters to us, we *interpret* what matters to us *in terms of* what matters to us; we give meaning to that which gives us meaning in return, and the interaction is mutually reinforcing. Works of art teach us new emotions, even as we bring our previous experience to bear in interpreting them. And musical works can take on added value to the degree that we are able to invest them with meaning.

7. CONCLUSION

In order to adequately address musical emotion, we have explored the many ways in which music may express emotional states (and their meanings), and the many ways that music may evoke (or arouse) emotion in a listener. We have argued that if listeners hear music as expressing emotion, it is often because they are able to infer one or more implied, virtual agents who can genuinely feel and express the trajectory of emotional states the music is heard as expressing. At times, a performer may embody the role of such an agent, although performers, like actors, do not often have the luxury of fully experiencing the more intense emotions that they nevertheless manage to express in their performances.

Despite enumerating ways that music can evoke physiological responses via engagement with rhythm, or psychological responses via vocal gestures akin to cries, or cognitive responses such as surprise in the face of a disruption or denial of an expectation, or emotional experiences simulating those of an imagined persona in the music, we have not demonstrated how an understanding of deeper musical expressive meanings *necessarily* leads to (evokes, arouses) an equivalent experience of those expressive meanings' emotional freight—at least, as comparably intense, felt, human emotions. But the frequent absence of overt emotional arousal among sophisticated listeners does not lead us to conclude that such arousal is somehow more primitive or less aesthetically significant as a response to the music. There is enough evidence in historical accounts of competent listeners' emotional responses to music to suggest that expressively motivated musical trajectories, if well-written, may have explosive emotional results—not just in the opera house, and regardless of whether we have consciously "chosen" to engage emotionally. Perhaps this depth of aesthetically warranted emotion is triggered whenever we sense that the emotional trajectory being expressed by a purely instrumental work is sufficiently "true to life," or true to our current experience and needs, such that we cannot help but yield to its cumulative force. But regardless of whether we (co-) experience emotions at the level of their presumed expression in music, we may well experience emotions triggered as a reaction to those expressed by the music, or experienced by a virtual persona. These emotions may be empathetic (feeling with) or sympathetic (feeling for), and they may be imagined as often as they are actually felt. But however we experience emotions when listening to music, they have the potential to enhance our musical understanding.

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