

# Inverting Bloom's Taxonomy: The Role of Affective Responses in Teaching and Learning

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A teacher's passion for a subject can be infectious—as Robert Leamson observes, “One of the surest ways for a student to develop interest is to ‘catch it’ from a beloved teacher.”<sup>1</sup> John Dewey, perhaps the most influential American commentator on teachers and teaching, asserted that “a genuine enthusiasm is an attitude that operates as an intellectual force;” teachers who are able to transfer their enthusiasm to their students have “done something that no amount of formalized method, no matter how correct, can accomplish.”<sup>2</sup>

While the professor's passion for a subject can be a clear goal for teaching, the student's passion for a subject is not an easily articulated goal for learning. It is difficult if not impossible to assess student engagement objectively, and while teachers might be comfortable insisting that students learn content, they are likely not going to insist that students *like* that content. Yet the relationships between learning and emotions, or affect, have long been the subject of study by scholars. Researchers have applied a variety of methodological and theoretical approaches,<sup>3</sup> investigated learners of different ages, and defined “affect” and “emotion” differently.<sup>4</sup> Nevertheless, as the editors of a 2002

1. Robert Leamson, *Thinking About Teaching and Learning* (Sterling, VA: Stylus, 1999), 75.

2. *The Collected Works of John Dewey, 1882–1953*, ed. Jo Ann Boydston (Carbondale and Edwardsville: Southern Illinois University Press, 1969–1991), *The Later Works* 13:345 and 8:137, cited in Douglas J. Simpson, Michael John Brierley Jackson, and Judy C. Aycock, *John Dewey and the Art of Teaching: Toward Reflective and Imaginative Practice* (Thousand Oaks, CA: SAGE, 2005), 33.

3. Paul A. Schutz and Jessica T. DeCuir (“Inquiry on Emotions in Education,” *Educational Psychologist* 37, no. 2 [2002]: 125–34) delineate three approaches that educational psychologists have applied to the study of emotions in education: inquiry into variables; inquiry into process and meaning; and socio-historical inquiry.

4. For convenience I will use the terms “affect” and “affective” interchangeably with “emotion” and “emotional.” Theoretical literature in both educational psychology and brain sciences generally (though with some exceptions, e.g., Pekrun) distinguishes emotion, a short episode or state, from affective trait, a more generalized mood. See Erika L. Rosenberg, “Levels of Analysis and the Organization of Affect,” *Review of General Psychology* 2, no. 3

special issue of *Educational Psychologist* devoted to emotions and learning noted, “in terms of our understanding of emotions in education, the game is just getting started.”<sup>5</sup>

Most teachers do want their students to come away from their classes with some appreciation for, even love of, the subject matter, but that goal is often implicit; it is more a desideratum, a potential side benefit, than an explicit objective. A reluctance to actively engage students’ affective reactions likely stems from a belief that it is too peripheral or too “soft” a goal to have in rigorous academic inquiry: teachers feel that students are in class to learn about music, not to discuss their personal preferences or have teachers shape them.

The most recent research in brain science challenges this notion. While it has been well over a century since constructivists such as Dewey, Piaget, and Montessori advocated for and created learning environments that eschew the archaic “empty vessel” or “transmission” idea of learning, research now demonstrates that the brain does not form new connections—which is to say, learn—in the absence of feelings.<sup>6</sup> To cite just one example: the hippocampus, the structure in the brain’s temporal cortex that serves as the place where incoming information is formed into a memory, directs its signals not only back to the cortex that surrounds it, but also, it seems, to nearby basal structures that serve as the brain’s pleasure centers and to the amygdala, which monitors for fear or danger. Thus there is more than just a metaphorical truth to statements like “That feels right,” or “I know it in my gut.” As Antonio Damasio proposes, it is in part through such somatic markers—low-intensity

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(1998): 247–70. An excellent overview of the state of the field is Elizabeth A. Linnenbrink, “Emotion Research in Education: Theoretical and Methodological Perspectives on the Integration of Affect, Motivation, and Cognition,” *Educational Psychology Review* 18, no. 4 (2006): 307–14. Useful summaries of the scholarship include Anastasia Efklides and Simone Volet, “Emotional Experiences During Learning: Multiple, Situated and Dynamic,” *Learning and Instruction* 15, no. 5 (2005): 377–80; and Paul A. Schutz and Reinhard Pekrun, *Emotion in Education* (Amsterdam: Elsevier, 2007). Paul Schutz et al., “Reflections on Investigating Emotion in Educational Activity Settings,” *Educational Psychology Review* 18, no. 4 (2006): 343–60 provides a useful, if specialized and highly detailed, definition of “emotion.”

5. Paul A. Schutz and Sonja L. Lanehart, “Introduction: Emotions in Education,” *Educational Psychologist* 37 (2002): 68.

6. Useful introductions to the connections between brain science and learning include James P. Byrnes, *Minds, Brains, and Learning: Understanding the Psychological and Educational Relevance of Neuroscientific Research* (New York and London: The Guilford Press, 2001); James E. Zull, *The Art of Changing the Brain: Enriching Teaching by Exploring the Biology of Learning* (Sterling, VA: Stylus, 2002); *The Jossey-Bass Reader on The Brain and Learning* (San Francisco: Jossey-Bass, 2008); and Daniel T. Willingham, *Why Don’t Students Like School?* (San Francisco: Jossey-Bass, 2009). The term “brain sciences” is a general one that encompasses several specialized areas, the principal four of which are neuroscience, cognitive neuroscience, neurology, and psychiatry. See Robert Sylwester, “Alphabetized Entries from *How to Explain a Brain*,” in *Jossey-Bass Reader*, 22.

sensations in the body generated by certain experiences—that the brain makes feelings an integral part of rationality.<sup>7</sup>

Since cognitive neuroscience now has evidence that “the mechanisms of cognition and emotion appear to be intertwined at all stages of stimulus processing,” teachers of music history need not—and indeed should not—treat affective reaction to music as a “soft” or peripheral goal but should, on the contrary, place it at the center of their teaching practice.<sup>8</sup> In this essay, I propose that reuniting the affective purposefully with the cognitive breaks down the false dichotomy between thinking and feeling and increases learning. This principle applies not only to students but to teachers as well. Teachers' affective responses to the music they teach—not simply enthusiasm for the subject matter in general, but genuine feelings, positive or negative, about the repertoire encountered in class—can and should play an important pedagogical role, one that fosters students' intellectual growth, as well as their appreciation for the music they are learning about.

There are four sections to this essay. The first part considers some of the strengths and shortcomings of Bloom's Taxonomy as a model for music history teachers, proposing that we re-imagine its top-level cognitive component, Evaluation, as the foundational level of a process that reconnects the cognitive with the affective. The second part examines the role of students' affective responses in their learning, presenting David Perkins's notions of “what awaits” and “what hides” as a way to understand, engage, and give language to those affective reactions, especially dismissive or negative ones. In the third section, I turn to the importance of teachers manifesting to students their own emotional reactions to the music they teach. The final section turns more concretely to classroom practice and proposes that teachers cultivate empathic listening, the re-creation within themselves of the experience of an apprentice audience like their students. This kind of listening helps to reinvigorate repertoire that has become too familiar through over-use, and to model for students the kind of engaged and articulate listeners we hope they will become. Ultimately, getting students to “language” their listening experiences—applying in a directed way the technical or historical material that we typically think of as the content of a course—increases not only the relevance and immediacy of the material to students but also the likelihood that they will come to like, even love, the repertoire. Teachers can, in short, use students' incipient affective responses to heighten the sophistication and degree of both their cognitive engagement and their ongoing affective connection.

7. Antonio Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain* (New York: Harper, 1995), esp. ch. 8; and *The Feeling of What Happens: Body and Emotion in the Making of Consciousness* (New York: Harcourt, 1999).

8. Elizabeth A. Phelps, “Emotion and Cognition: Insights from Studies of the Human Amygdala,” *Annual Review of Psychology* 57 (2006): 46.

### Bloom's Taxonomy and Its Inversion

The perceived divide between knowledge and emotion, between fact and feeling, is particularly well represented by the familiar and influential heuristic known commonly as Bloom's Taxonomy.<sup>9</sup> This taxonomy, subtitled "The Cognitive Domain," was the first of three handbooks envisioned by Bloom's committee, a group of psychologists interested in achievement testing. (A simplified schematic appears as **Figure 1a**). The second, published in 1964, is subtitled "The Affective Domain" (**Figure 1b**), while the even less-well-known third domain covers psychomotor skills.<sup>10</sup> These three discrete taxonomies consequently imply that learning is a process that occurs in one of three domains, and they permit very little overlap among them. In the second handbook, Krathwohl and his co-authors acknowledge the artificial distinction when they ask "whether a human being ever does any thinking without feeling, acting without feeling, etc.;" but because they are interested principally in the "evaluation of the attainment of affective objectives," they are able quickly to dismiss the concern with the observation that "the relationship between these domains is too low to predict one type of response, effectively, from the other."<sup>11</sup>

Yet despite the variety of criticisms that have been leveled at Bloom's Taxonomy<sup>12</sup> since its first appearance over half a century ago—including the claim that it is not a true taxonomy<sup>13</sup>—it has remained a staple of thinking

9. None of the taxonomies was the work solely of Bloom; he was, however, head of the group of psychologists who devised them, and is listed as Editor on the title page of the cognitive domain taxonomy, the first, most influential, and best-known of the three. Benjamin S. Bloom, ed. et al., *Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook 1: Cognitive Domain* (New York: David McKay, 1956), cited hereafter as *Taxonomy 1*.

10. David R. Krathwohl, Benjamin S. Bloom, and Bertram B. Masia, *Taxonomy of Educational Objectives: The Classification of Educational Objectives, Book 2: Affective Domain* (New York: David McKay, 1964), cited hereafter as *Taxonomy 2*. No handbook for the psychomotor domain was published by the original group; as the 1956 volume summarized, "Although we recognize the existence of this domain, we find so little done about it in secondary schools or colleges, that we do not believe the development of a classification of these objectives would be very useful at present" (pp. 7–8). Since then, other authors have devised their own psychomotor domain handbooks to fill the gap, such as Anita J. Harrow, *A Taxonomy of the Psychomotor Domain: A Guide for Developing Behavioral Objectives* (New York: David McKay, 1972).

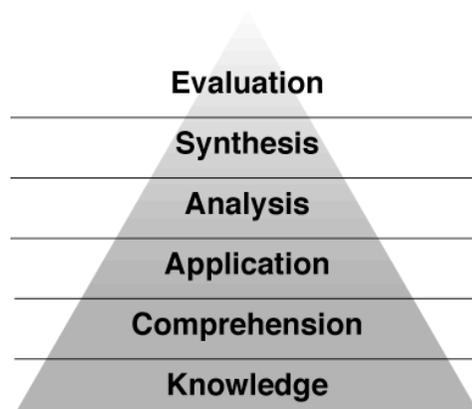
11. Krathwohl, Bloom, and Masia, *Taxonomy 2*, pp. 7, 15.

12. Following convention, I will use "Bloom's Taxonomy" to refer to the familiar cognitive domain heuristic. References to the affective domain model—the second of Bloom's committee's handbooks—will be clearly indicated as such.

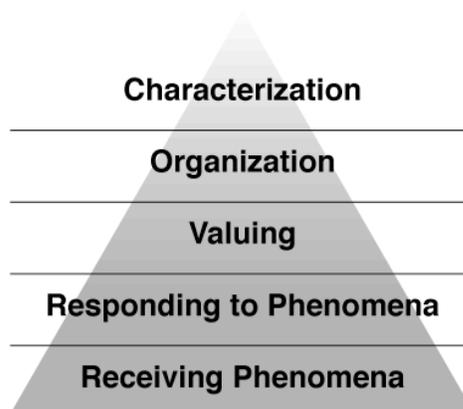
13. The Affective Domain handbook acknowledged such criticisms, conceding that it "is still far from clear" whether the cognitive classification scheme "is a true taxonomy" (Krathwohl, Bloom, and Masia, *Taxonomy 2*, p. 11). For detailed criticisms, see C. P. Ormell,

**Figure 1:** Two domains of Bloom's taxonomy.

1a) Bloom's cognitive taxonomy.



1b) Bloom's affective taxonomy.



about teaching from K–12 through the post-secondary level, perhaps even more so than its 2001 revision.<sup>14</sup> Bloom's Taxonomy remains ubiquitous and enduring, a common language among educators across subjects and grade levels, even countries.<sup>15</sup>

Bloom's Taxonomy and its familiar pyramid as a model for thinking about learning and designing teaching strategies, however, bring with it the unfortunate consequence not only of divorcing thinking from feeling, but of

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"Bloom's Taxonomy and the Objectives of Education," *Educational Research* 17, no. 1 (1974): 3–18; Edward J. Furst, "Bloom's Taxonomy: Philosophical and Educational Issues," *Review of Educational Research* 51, no. 4 (1981): 441–53, reprinted in *Bloom's Taxonomy: A Forty-Year Retrospective*, ed. Lorin W. Anderson and Lauren A. Sosniak (Chicago: National Society for the Study of Education, 1994), 28–40; A. E. Kreitzer and G. F. Madaus, "Empirical Investigations of the Hierarchical Structure of the Taxonomy," in Anderson and Sosniak, eds., pp. 64–81; and Robert J. Marzano, *Designing a New Taxonomy of Educational Objectives* (Thousand Oaks, CA: Corwin Press, 2000). Interestingly, Krathwohl ("Reflections on the Taxonomy: Its Past, Present, and Future," in Anderson and Sosniak, eds., pp. 181–202) posits that the word "taxonomy," as an "interesting and arresting name... seems likely to have been a contributing factor to its success," as the "use of this then unfamiliar term aroused curiosity among social scientists and educators who might otherwise have put the book aside" (p. 189).

14. Lorin W. Anderson et al., *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*, abridged ed. (New York: Longman, 2001).

15. As Dee Fink observes, "Any model that commands this kind of respect half a century later is extraordinary" (L. Dee Fink, *Creating Significant Learning Experiences* [San Francisco: Jossey-Bass, 2003], 29). The first handbook sold over a million copies and was translated into several languages. See, e.g., Arieh Lewy and Zoltán Báthory, "The Taxonomy of Educational Objectives in Continental Europe, the Mediterranean, and the Middle East," and Bom Mo Chung, "The Taxonomy in the Republic of Korea," both in *Bloom's Taxonomy: A Forty-Year Retrospective*, ed. Anderson and Sosniak, pp. 146–63 and 164–73. For a useful brief history of the legacy of Bloom's Taxonomy, see Marzano, *Designing*, pp. 2–4.

conceiving of learning as an orderly step-wise ascent that culminates in Evaluation.<sup>16</sup> Instead, we must heed the growing body of research that demonstrates a clear connection between emotions and learning. This connection is not news to teachers, of course. Joseph Schwab, a colleague of Benjamin Bloom at the University of Chicago, observed more than half a century ago that “Differentiation of the intellectual, active, and aesthetic has its place in philosophical analysis and as a heuristic ground for psychological research, but it is a dangerous doctrine for the liberal educator.”<sup>17</sup> Recent research in the brain sciences substantiates this intuition, concluding that “plasticity in the brain probably depends more on signals from the emotional centers than it does on new sensory input”—that is, emotions change the brain more readily than does information that the brain takes in through sight, hearing, and the other senses.<sup>18</sup> (A more extensive summary of the recent research on emotion and learning is found in Appendix A.)

Nevertheless, a review of the literature on emotion and learning reveals that little has been written explicitly connecting theories of affect and learning to what teachers do in their classrooms. Reinhard Pekrun and his colleagues have done considerable work on emotions and learning, but the classroom implications that they propose—improving the quality of instruction, giving students autonomy, etc.—are directed toward shaping students’ emotions positively towards learning itself, not the subject matter.<sup>19</sup> Other research calls some attention to teachers’ emotions, but it does so only in terms of a potential incongruity between emotions experienced and those that are pedagogically efficacious, such as when one’s goals as a teacher do not match with one’s

16. Marzano (*Designing*, p. 8) notes that such a hierarchical progression of learning is not supported by any research. In Anderson et al.’s revision of Bloom, Evaluation and Synthesis switch places so that Synthesis—renamed “Create”—is at the apex (pp. 84–8). This revised category embraces more kinds of tasks than did the original Synthesis, but it continues to comprise strictly cognitive processes (generating, planning, and producing). The authors do note (in a section titled “Unsolved Problems”) that Bloom et al.’s division of educational objectives into three domains—cognitive, affective, and psychomotor—has been “justly criticized,” since “nearly every cognitive objective has an affective component.” Nonetheless, they concede that, with the exception of recognizing metacognition, their revision “ignores this problem” (pp. 258–59).

17. Joseph Schwab, “Eros and Education: A Discussion of One Aspect of Discussion,” *The Journal of General Education* 8, no. 1 (1954): 52. The essay is reprinted in *Science, Curriculum, and Liberal Education: Selected Essays*, ed. Ian Westbury and Neil J. Wilkof (Chicago: University of Chicago Press, 1978), 105–32.

18. Zull, *The Art of Changing the Brain*, 225.

19. Reinhard Pekrun et al., “Academic Emotions in Students’ Self-Regulated Learning and Achievement: A Program of Quantitative and Qualitative Research,” *Educational Psychologist* 37, no. 2 (2002): 91–106; and Pekrun, “The Control-Value Theory of Achievement Emotions: Assumptions, Corollaries, and Implications for Educational Research and Practice,” *Educational Psychology Review* 18, no. 4 (2006): 315–41.

perceived success in progressing toward them.<sup>20</sup> Even less research addresses these topics for post-secondary teachers. How, then, might we bring these connections between the affective and the cognitive to bear on the college-level music history classroom?

Dee Fink's "taxonomy of significant learning" provides an important starting point for integrating domains of learning.<sup>21</sup> (See **Figure 2.**) Several of its six categories are identical to or evocative of aspects of Bloom's cognitive taxonomy: "Foundational Knowledge," for example, includes a student's ability to recall basic facts, while "Application" asks students to take action. The category "Caring," meanwhile, is more clearly affective, representing students developing new feelings or values, such as caring more about ideas, other people, or learning itself.<sup>22</sup> At the same time, Fink's taxonomy also comprises "important kinds of learning that do not emerge easily" from any of the three domains that Bloom delineated, such as "leadership and interpersonal skills, ethics...tolerance, and the ability to adapt to change."<sup>23</sup>

Fink's model is significant for the attention it focuses on a fully integrated learning experience for students (though some teachers might question whether all college courses can plausibly be expected to integrate all six of its categories). As it is, quite reasonably, predicated on the notion of "backward design," in which delineating learning goals is the first step in course design, it views "Caring" as a learning goal.<sup>24</sup> There is no doubt that this is vital, a goal that we as teachers implicitly or explicitly strive to attain. But I would like to propose that music history teachers can and should view caring as much as a starting point as a final goal, since, in the music history classroom, caring is coterminous with both foundational knowledge and the application of that knowledge. (I will return to this idea below.) In short, we should focus less on integrating caring with knowledge and more on making more explicit use of the unity that is already present in our students.<sup>25</sup>

20. Paul Schutz et al., "Reflections on Investigating Emotion in Educational Activity Settings," *Educational Psychology Review* 18, no. 4 (2006): 343–60.

21. José Antonio Bowen discusses Fink's book in his "Six Books Every College Teacher Should Know," *Journal of Music History Pedagogy* 1, no. 2 (2011): 177–8; <http://www.ams-net.org/ojs/index.php/jmhp/article/view/23/35>.

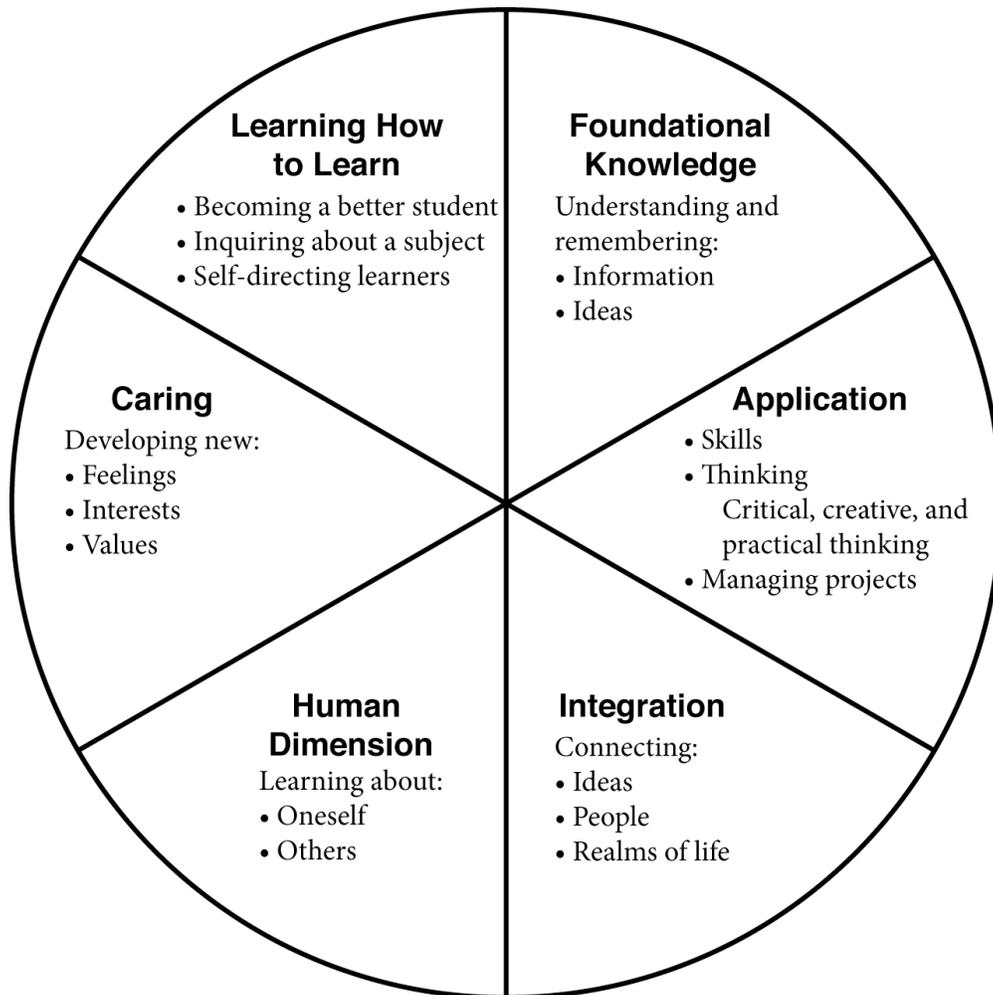
22. Fink, *Creating*, 48–9.

23. Fink, *Creating*, 29.

24. "Backward design" was coined in Grant Wiggins and Jay McTighe, *Understanding by Design*, expanded 2nd ed. (Alexandria, VA: Association for Supervision and Curriculum Development, 2005).

25. This unity is one of what Fink terms "situational factors," the examination of which is the first step in his plan for designing curricula.

**Figure 2:** Fink’s taxonomy of significant learning.<sup>26</sup>



Bloom and his co-authors, as noted above, were aware of this unity, but it was considerably downplayed. The second handbook (the affective domain) notes the “Fundamental Unity of the Organism” and delineates ways in which the cognitive and affective domains overlap.<sup>27</sup> Unsurprisingly, however, the junctions occur at the same levels of the taxonomies: the highest level of the cognitive domain, Evaluation, overlaps with the highest levels of the affective domain, Organization and Characterization. What is more, the affective domain recognizes as a discrete step in the taxonomy a student who “[d]esires to evaluate works of art which are appreciated,” but this is predicated on earlier levels in the hierarchy; the affective desire to evaluate works aesthetically

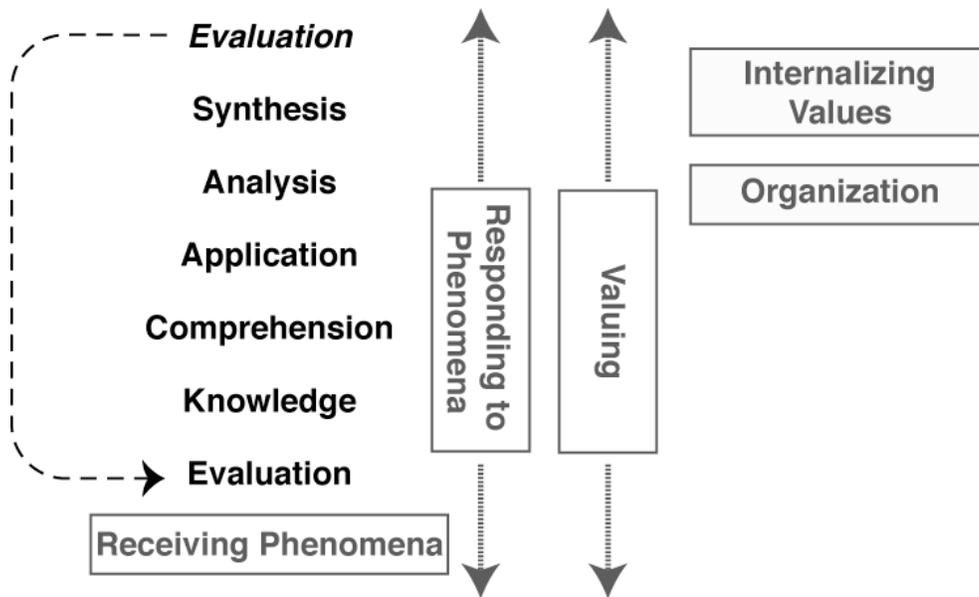
26. Fink, *Creating*, 30.

27. Krathwohl, Bloom, and Masia, *Taxonomy 2*, 45.

is thus seen as a step roughly halfway up the affective scaffolding.<sup>28</sup> The evaluative process itself remains at the apex of the cognitive model because it is “at a relatively late stage in a complex process which involves some combination of all the other behaviors” in the cognitive hierarchy.<sup>29</sup> *Wanting* to evaluate and *being able* to evaluate are mismatched tasks, it seems.

But music history classes offer ample opportunity to resolve the disjunction between wanting to evaluate and being able to evaluate by imagining an inversion of Bloom's taxonomic pyramid—or at the very least, a pyramid in which the upper story is moved to the foundation. (Figure 3 illustrates this inversion and its union with the affective domain.) Building mechanisms for personal engagement into course structures helps to re-conceive the function and practice of the Evaluation level and thereby rescue it from its exile in the cognitive realm. After all, we hear and react—receive and respond—to music viscerally. Might we turn the inevitable and welcome affective act of responding to music into something we can harness to foster greater cognitive engagement?

**Figure 3:** Integration of cognitive and affective domains (affective domain elements in boxes).



28. Krathwohl, Bloom, and Masia, *Taxonomy 2*, 66.

29. Bloom et al., *Taxonomy 1*, 185.

### Music History Students as Affective Learners

Designing classes with students' affective responses in mind helps at the outset by providing a ready-made object for student engagement. Teachers typically pique student interest in a topic in one of two ways. The first is by introducing unique or novel learning situations, such as a film clip or a performance. This is effective, but it is often difficult to sustain interest in the learning task that follows. Alternatively, teachers can strive to link the subject to students' individual interests; the obvious challenge, though, is that "there are as many individual interests as there are students."<sup>30</sup> However, students' affective responses to the music they encounter in music history classes—whether they listen to it in or out of class—can serve as the foundation for individual interest, especially if teachers make explicit to students that their reactions to the repertoire are important, that these responses are something that they should be aware of and will be a subject of class discussion.

If the affective responses of students pave the way for each one individually to be engaged with the same pieces of music, each student can then be called upon to use the same set of intellectual tools and information to articulate his or her own personal affective evaluation of the works. Such an approach validates the fact that all but the most disengaged listeners have *some* affective reaction to music; it pushes students beyond the affective tendency merely to "receive and respond" and instead joins it with a cognitive engagement with the material. In this way, it is a form of active learning, the now familiar premise that learners learn best when actively discovering material rather than passively absorbing (or, in many cases, not absorbing) it.<sup>31</sup> It is perhaps more than a happy coincidence that emotion is often defined as a "tendency to act."<sup>32</sup>

To compellingly articulate one's affective reaction to a particular musical moment, one needs a technical vocabulary and an understanding of the

30. Mary Ainley, "Connecting with Learning: Motivation, Affect and Cognition in Interest Processes," *Educational Psychology Review* 18 (2006): 401–2.

31. After appearing in a now-seminal list of "Seven Principles for Good Practice in Undergraduate Education" (Arthur Chickering and Zelda Gamson, *AAHE Bulletin* 39, no. 7 [March 1987]: 3–7), active learning was the focus of considerable research in the 1990s. Although the term has occasionally been misinterpreted to suggest that learners should be *behaviorally* active, Chickering and Gamson intended it to refer to *cognitive* activity. A wealth of research has confirmed that active strategies, in which students are "actively engaged in processing information in new and personally relevant ways and, in a very real sense, 'constructing' their own knowledge," are more effective than passive ones, such as most—but by no means all—lecturing. See Ernest T. Pascarella and Patrick T. Terenzini, *How College Affects Students, Volume 2: A Third Decade of Research* (San Francisco: Jossey-Bass, 2005), 101.

32. James Zull notes that the phrase "is found in discussions of emotion over the past century, possibly beginning with William James," and continues to show up in current scholarship (*From Brain to Mind* [Sterling, VA: Stylus, 2011], 78, n. 1).

work's historical context. (The level of sophistication and detail will of course vary with the level of the class.) For example, explaining the ominous intensity of "O Fortuna" from Carl Orff's *Carmina Burana* would likely require a discussion of ostinato; the surprising resolutions in early music invite a lesson on double leading-tone cadences; the opening of Richard Strauss's *Also Sprach Zarathustra* might lead to a diagram of the harmonic series, a discussion of Nietzsche, or both. Regardless of the level of the student, however, we foster learning when we predicate the application of terminology and research on the idea that speaking reflectively requires acknowledging, and then getting beyond, our first impressions. As Jeanette Winterson observes, "If the obvious direct emotional response is to have any meaning, the question 'Do I like this?' will have to be the opening question and not the final judgement."<sup>33</sup> The leap from "I don't like that" to "I don't like that *because . . .*" is a significant one.

David Perkins's work on the role of art in education provides a helpful framework to guide us in putting this theory into practice. Perkins's *Intelligent Eye: Learning to Think by Looking at Art* is concerned primarily with the visual arts, but the principles it espouses are readily applied to the study of music.<sup>34</sup> Like Howard Gardner, his colleague in the Harvard School of Education's Project Zero, Perkins is interested in different types of intelligence; unlike Gardner, however, Perkins eschews a complicated scheme of multiple intelligences in favor of a simple triad: neural intelligence, experiential intelligence, and reflective intelligence, with experiential and reflective intelligence serving as the basis of his work.<sup>35</sup>

Experiential intelligence consists of the intelligent behaviors that depend on "a rich repertoire of experience that fairly automatically and spontaneously guides us."<sup>36</sup> It is evident in the ease practiced drivers have navigating a busy highway, in expert chess players' ability to respond to dozens or hundreds of game scenarios, and in music historians' ability to identify with just a few seconds of music the century in which a piece was composed. We use our

33. Jeanette Winterson, *Art Objects: Essays on Ecstasy and Effrontery* (New York: Vintage, 1997), 14.

34. David N. Perkins, *The Intelligent Eye: Learning to Think by Looking at Art*, Getty Education Institute for the Arts Occasional Paper 4 (Los Angeles: J. Paul Getty Trust, 1994).

35. Though Gardner was not the first to compile a list of human abilities, it was his research and publications in the 1980s that generated substantial interest among educators. His most recent work on multiple intelligences is *Multiple Intelligences: New Horizons* (New York: Basic Books, 2006). Perkins's approach is concisely summarized in *The Intelligent Eye*. Neural intelligence, "the contribution of the efficiency and precision of the nervous system to intelligent behavior," is the kind of intelligence measured by traditional IQ tests. While neural intelligence "provides the substrate against which experiential intelligence and reflective intelligence play themselves out," experiential intelligence is "the bread and butter of our ongoing experience" (pp. 13–15).

36. Perkins, *Intelligent Eye*, 14.

experiential intelligence ninety percent of the time because it is an efficient way to respond to the familiar situations we encounter on a day-to-day basis.

The problem with experiential intelligence, however, is that it can lead us astray when we find ourselves in situations that find no parallel in the collective wisdom of our individual experiences, what Perkins calls intelligence traps. These four traps—ways of thinking that are misleading or insufficient—are those that are *hasty*, *narrow*, *fuzzy*, or *sprawling*. They are summarized in **Figure 4**.

**Figure 4:** Perkins’s “intelligence traps.”

Kind of Thinking	Description	Example
Hasty	Arrives at conclusions without appropriate deliberation; impulsive.	Concluding that atonal music consists of random pitches with no structure.
Narrow	Uses familiar or well-worn categories or tracks; ignores the possibility of other ways of understanding.	Difficulty understanding how a medieval motet might harness the secular in service of the sacred.
Fuzzy	Undiscriminating; fails to sort out details.	Concluding that all hip-hop is the same.
Sprawling	Jumps around haphazardly without a systematic inventory of the larger picture.	Drawing broad conclusions about symphonic form based on only one or two examples.

This view runs explicitly counter to the oft-heard assertion that “I don’t know a lot about art (or music or dance), but I know what I like.” In fact, Perkins would argue, such audiences do *not* know what they like because they do not know what they are looking at, or because they are looking at only the most superficial elements of an artwork in an un-nuanced way. As Perkins summarizes, “When we turn to works of art from other times or cultures, or from less familiar cultural enclaves within our own, we expect an easy entry for which we are ill-prepared. We often blame the work for obscurity when it is we who are uninformed.”<sup>37</sup>

This is equally true of music. Students who have never heard Arnold Schoenberg’s *Pierrot lunaire* before will provide post-listening assessments such as “I like it,” “I don’t like it,” “It’s boring,” or “I don’t get it,” since knee-

37. Perkins, *Intelligent Eye*, 25–6.

jerk reactions like these are the very picture of hasty thinking; they are usually (but not always) evidence that listeners are not aware of what awaits and what hides. But dismissing affective reactions out of hand also dismisses two meaningful opportunities: the chance to acknowledge the students' affective, emotional engagement as a means of fostering a cognitive one; and the chance to lead students in practicing reflective intelligence.

Perkins's language, then, offers a way to articulate to students what it is teachers ask them to do when they listen to music: in order to respond to music in a way that is neither hasty, narrow, fuzzy, nor sprawling, students must have a significant and sophisticated understanding of "what awaits" and "what hides," and their ability to express those understandings will require a specialized vocabulary and critical tools. Just as Winterson describes the shock of finding out that she did not know "how to look at pictures, let alone how to like them,"<sup>38</sup> so too do students' affective responses become more sophisticated the more they know about the music they are hearing—as they learn how to listen—and they are likewise more motivated to deepen their understanding—they learn how to like—when it is driven by a desire to articulate their affective responses.

In my experience, music students readily latch on to the notions of "what awaits" and "what hides," and the terms become useful shorthand for forestalling responses that are hasty, narrow, fuzzy, or sprawling. A negative affective response does not necessarily imply a lack of thinking on the part of the listener, but it is not enough simply not to like a work (nor, conversely, merely to like it). Students may dislike *Pierrot lunaire*, but if they can describe in persuasive detail *why* they do not—identifying, for example, the *Sprechstimme* and comparing it to earlier uses by Schoenberg and Humperdinck, or relating the piece to Expressionist painters and poets—then the affective becomes the jumping-off point for cognition and reflection. What is more, the process of articulating in musical terms a description or rationale of that dislike will very often lead students to discover that they *do* like the piece, and, like Winterson, simply did not know "how to like" it before.

I am not suggesting that students need a fundamentally new or different way of listening. On the contrary, I am proposing that teachers harness students' listening experience to give form, shape, and purpose to their cognitive experience of examining the work. After all, our default way of hearing music is not one that focuses on formal structures, historical antecedents, or specific harmonic events. This affective response—what Perkins would call the "experiential"—is the very core of what it means to listen to music. When we can marry this emotional response to intellectual reflection, we provide a scaffold on which to hang the cognitive "content" of a course. The critical

38. Winterson, *Art Objects*, 10.

thinking—what Perkins would call “reflective”—becomes a way of cultivating genuine interest, because it is directed towards students’ emotional responses. The *nature* of students’ experiential listening will not fundamentally change (nor should we really want or expect it to); except in the rarest of cases, they will not, for example, discern sonata form or Schenkerian linear progressions of the deep middleground or background. But the *quality* of students’ listening, as well as their interest in it, can be increased when we tie it purposefully to their affective responses.

To cite another example, listeners who hear Stravinsky’s *Sacre du printemps* with no prior knowledge will most likely find it confusing, or cacophonous, or energetic, or wonderful. Knowing something of Stravinsky’s compositional method, the incorporation of folk melodies, the piece’s programmatic aspects, Nijinsky’s choreography, or the legendary riot that accompanied its premiere helps to uncover some of “what hides.” Repeated listenings will likewise start to disclose some of “what awaits.” It is a commonplace for those who teach music history that the opening notes of Stravinsky’s *Sacre*, high in the range of the bassoon and thus intentionally strained and off-putting, are noteworthy; to students unfamiliar with the piece, though, this may not be immediately apparent.

Our instinct as teachers is to short-circuit this process of uncovering “what hides” and “what awaits,” jumping directly to delivering the fruits of such inquiry as the content of a lecture. This is understandable, to be sure, because we ourselves find it fascinating, because we routinely engage in this kind of analysis, and because it is simply more expedient to do so. But building space into our classes for our students to perform this process, with their initial affective reaction as a jumping-off point, can help to frame the process of learning the material in a way that makes it deeply relevant, without sacrificing the rigor of the intellectual inquiry. And because such inquiry helps students to “learn how to like” music that might otherwise be intimidating or challenging, we also help to build a passionate and engaged audience for the repertoire we teach.

### **Music History Teachers as Affective Teachers**

Music history teachers’ affective responses are just as crucial to learning as those of their students. First, teachers who manifest their own emotional connections present a vital model to students. Students accustomed only to popular music may have never witnessed an entirely different repertoire—whether that is Perotinus or Mozart, Mingus or Cage, string quartet or gamelan—provoking an emotional response in anyone, let alone evoking one in themselves. Teachers’ genuine affective responses illustrate to students that an emotional engagement with the music is welcome and, moreover, expected.

This becomes crucial when teachers solicit students' affective responses as part of their classroom practice.

What is more, research demonstrates that such enthusiasm has a strong positive effect on classroom atmosphere and learning.<sup>39</sup> Those teachers who make clear their zeal for the music make strides towards what is perhaps the most sought-after effect among music historians: getting students to like the repertoire. As Robert Leamnson points out, we do not need our students to work hard in order to please us personally; what we really want is for students to “find out what it is that some teacher finds so interesting.”<sup>40</sup> If music history teachers want students to respond affectively and develop a love of the music, then the teachers too must make their emotional responses manifest, or else risk being viewed as inauthentic or insincere. Revealing affective responses also demonstrates what Stephen Brookfield has termed “personhood”—“the perception students have that their teachers are flesh and blood human beings with lives and identities outside the classroom.”<sup>41</sup> Teachers who enthusiastically engage with music on an emotional level—even if that engagement is more lukewarm with some works than with others—thereby acquire a credibility and authenticity that reinforces their authority in discussing music at all.

Indeed, this authority is a second important reason for teachers to manifest their affective reactions: doing so substantiates the idea that the music we teach in our classes (as distinct from the music that our students listen to on a day-to-day basis) is an object deserving of study and consideration. Most students probably do not listen regularly to the music that is the focus of their music history classes, but they are likely listening to music of some kind nearly all of the time. This means that teachers of music history are in a different position from the teachers of art history who are the subject of Perkins's work.

Put very simply, most students already care about music (even if they only ever listen to pop music written in the last decade). Music, much more so than other forms of artistic expression, is ever-present in students' day-to-day lives. It has become a particularly powerful marker of identity for college-age students, thanks in large part to portable music players that contain thousands of songs, the near-instantaneous availability of digital music, and the advent of services that aim to introduce users to new music based on their responses to recommendations. Liking certain artists and not others can signify something far more than a mere enjoyment of that artist's work, as genres and

39. For a summary of research on teacher enthusiasm, see Appendix A.

40. Leamnson, *Thinking*, 75.

41. Stephen D. Brookfield, *The Skillful Teacher: On Technique, Trust, and Responsiveness in the Classroom*, 2nd ed. (San Francisco: Jossey-Bass, 2006), 71–2.

artists each bear their own implications for their fans' musical, social, and even political identities.<sup>42</sup>

This is also true, to a degree, with Western art music, but for today's college students, having an affective response to a piece of music has come to be freighted with a significance far greater than what we might imagine. The music one listens to is a constituent part of oneself, of course, but in an environment with so many musical options competing for listenership, the converse is also true: through our listening and our enjoyment, we lend credibility and status to whatever it is we listen to. Thus, because tastes in music are so intimately tied to identity, teachers who fail to acknowledge any personal engagement with the works they teach risk sending to students the signal that the music is *important* but not necessarily *good*. When they allow their own enjoyment or disfavor to be manifest, on the other hand, they bestow authority and value on that repertoire purely by virtue of that response. They demonstrate that reacting to music on an emotional level does not in any way distance them from a cognitive, intellectual engagement with it.

This is especially important because students tend to believe that they already understand music. For music majors, in fact, musical aptitude is such a defining characteristic that “[a]ny perceived assault on their appearance as musicians is a threat to both their personal and communal identities,”<sup>43</sup> though the ubiquity of music (compared to, e.g., fine art and dance) means that this belief exists among non-majors as well. Teachers should capitalize on this situation, to be sure, keeping in mind that the misconceptions students bring into the classroom are often more of an impediment to learning than is mere lack of knowledge, since it takes considerable effort by both teacher and learner to undo existing neural pathways and then build new ones. Students who come to class expecting to approach, listen to, and discuss Western art music with the same tools and expectations with which they approach popular music are likely to be surprised, frustrated, or both; this is what can lead to hasty, narrow, fuzzy, or sprawling assessments like those Perkins describes.

This is a genuine concern if we want our students to leave our courses not only understanding the historical significance of the music we teach, but liking—even loving—it. When teachers approach repertoire in their courses,

42. See, e.g., David J. Hargreaves and Adrian C. North, “The Functions of Music in Everyday Life: Redefining the Social in Music Psychology,” *Psychology of Music* 27, no. 1 (1999): 71–83 and Tia DeNora, “Music and Self-Identity,” in *The Popular Music Studies Reader*, ed. Andy Bennett, Barry Shank, and Jason Toynbee (London and New York: Routledge, 2006), 141–47.

43. James A. Davis, “Classroom Discussion and the Community of Music Majors,” *Journal of Music History Pedagogy* 1, no. 1 (2010): 10; <http://www.ams-net.org/ojs/index.php/jmhp/article/view/8/6>. Davis is here summarizing Bruno Nettl's conclusions in his ethnographic study of schools of music, *Heartland Excursions* (Champaign: University of Illinois Press, 1995).

they therefore need to make listening at once an activity students have never done in quite the same way without making it so strange that it is alienating. This is a fine line, to be sure. Teachers must avoid what Simon Frith calls the “error in high cultural attitudes toward low music,” namely, “the condescending assumption that popular listening describes a quite different sort of experience” from listening to art music, while still making clear that, by and large, the context, expectations, and terminology used to describe the classical repertoire are typically quite different from those of popular music.<sup>44</sup> Students must know that their initial affective responses are valuable, but that those responses are necessarily provisional because they are still apprentice listeners (at least with this repertoire). Teachers therefore need to listen like a student *and* a teacher, crafting a classroom narrative in which they simultaneously empathize with—almost re-creating, in effect—the experience of a first-time listener, while still foregrounding the wisdom and insight that comes with years of experience.

It can be tricky to re-create the experience of a first-time listener, particularly if we are teaching a repertoire we do not especially care for, or—more likely—if our teaching repertoire has grown too familiar. Familiarity, while perhaps not always leading directly to contempt, can temper our enthusiasm in ways barely perceptible to us but perfectly evident, even if in only a sublimated way, to students. Canonizing a work of art, as Winterson observes, “is one way of killing” it, as “history, popularity, association all crowd in” and block out the work from its audience.<sup>45</sup> Winterson’s remark likely resonates with anyone who has ever presented Monteverdi’s *Cruda Amarilli* as an illustration of the *seconda prattica* or the prelude to *Tristan und Isolde* as a demonstration of chromatic harmony. There is an insidious process by which teachers may gradually start to view some music—likely the music presented most often in classes—principally as paradigmatic or emblematic of a concept, genre, or period, rather than as works of art that have an appeal on a purely emotional level.

If too great a sense of familiarity is, as Winterson suggests, one way of killing our interest in the canon we have created, then making the familiar unfamiliar, listening to and speaking of a piece of music as if we were encountering it for the very first time, is the way to reinvigorate those pieces and validate them as objects worthy of both deep admiration and study: they become both important *and* good. It is impossible, of course, to un-hear a piece of music; the “Surprise” Symphony surprises only once. But it is one thing to explain the surprise and then play a recording, another thing to play it, react to it, and then seek student responses. In fact, students’ affective responses

44. Simon Frith, *Performing Rites: On the Value of Popular Music* (Cambridge: Harvard University Press, 1996), 252.

45. Winterson, *Art Objects*, 12.

can have an important benefit for teachers, reminding teachers how it is to hear the music as a first-time listener. Focusing on student responses makes teachers into more empathic listeners.

A music history classroom grounded in affective responses can thus achieve several desirable outcomes for both students and teacher by harnessing the inherent interest and emotion that music generates. When integrated purposefully and thoughtfully, students' affective responses can help to reinvigorate for teachers a well-worn piece and serve as a springboard for complex and in-depth discussion. Even if the class is a survey of plainchant or Indian music, in which the chronological and/or geographical focus is so distant from the here-and-now, teachers do not need to generate the experience of caring among their students as much as germinate it, bringing forward and harnessing that emotional connection. By making clear to students that they are not yet expert listeners, teachers build on students' natural affinity for music and ensure that the illusory certainties of apprentice listening—most typically a conviction that they do not like a piece—do not prematurely preclude the possibility that they will come to love the repertoire. Such an approach does not require that teachers re-envision their identity as educators, but it does necessitate re-thinking some of their teaching behaviors, such as the way they conduct discussions or craft a syllabus and assignments.

### **Teaching with Affective Responses**

A classroom that purposefully strives to integrate students' emotions will use both teacher's and learners' affective responses as a scaffold to support the material of the course. The teacher's commitment to this principle should be laid out clearly early in the course. (A sample syllabus note appears as Appendix B.1.) Many students will have never experienced a teacher repeatedly asking them to limn in detail the feelings that a work of art evokes in them, so it is best to prepare students for this ongoing task early on. It is also important to insist that the mere act of having and describing an emotional response is not the main work of the course, but a crucial way of approaching the repertoire in a way that makes it more meaningful and more likely to create a new group of appreciative listeners. I have found it helpful to state outright that I want students to like the music, and that my asking them about how they feel is part of the process. At the same time, I insist that students' grades will be based ultimately only on externally observable acts—those represented by Bloom's cognitive taxonomy—and not on internal states that could only be self-reported. In a simple assignment that asks for affective responses (such as parts (a) and (b) of Appendix B.2), a grade would be assigned not on whether the affective response was "right," but instead on a student's clarity and effort in articulating it.

It might seem odd, initially, to make such “low-risk” assignments a central part of one’s pedagogy; I cannot say that the feelings that Beethoven’s “Moonlight” Sonata evokes in you are incorrect and thus subject to a lower grade than another person’s “correct” response. But the point of incorporating emotion into the classroom is not to ensure lock-step conformity among listeners’ reactions to music. It is to encourage, systematically, the kind of impassioned listening among students that teachers experience themselves. It generates for students an experience about which they want to talk, thus offering a rationale for grappling with the unfamiliar material that will permit them to describe and discuss the music with more sophisticated vocabulary, a greater understanding of historical context, and so on: the ostensible content of the course. The importance of this effort is reflected not by assignments that expect a specific affective response, but by assignments that expect diligent and genuine engagement on the part of students.

Thus the overarching framework for incorporating affect into a music history classroom consists of three principal acts: (1) teachers elicit students’ affective responses to a given piece of music; (2) teachers foreground their own affective responses; and (3) teachers turn to technical and historical material as a way of helping students to “language” their listening. Each of these three components can unfold in a variety of ways and at a variety of levels, and they need not occur in the same order every time, nor in the order listed above.

### *Eliciting Student Responses*

Since the content of students’ affective responses is not subject to any formal assessment—that is, we are not going to judge or grade them—they offer a low-stakes way of starting a dialogue and of piquing student interest. Class discussions, brief response papers, and online discussion forums all offer opportunities for students to answer open-ended questions about the kinds of reactions they have to a piece; the sample assignments in Appendix B.2–B.5 each illustrate different ways of soliciting these responses. Depending on the course, the students enrolled, and the week of the term, the degree and kind of this response will differ. Compare, for example, the questions in B.2 (a) and (b), which are fairly simple and form the bulk of the assignment, with the first question in B.4, in which the emotional response is only the first step in a much longer inquiry.

We must keep in mind, of course, that depending on the work and the particular students in question, the responses might be indifferent or unsophisticated: “It’s pretty,” “I liked it,” “It’s okay,” and so on. Teachers must resist the temptation to simply collate the responses and move on, or to tear out their hair in frustration at the lack of sophistication they seem to exhibit. For this reason, in-class discussion of these initial responses is important. This

discussion might follow up on a short out-of-class assignment such as Appendix B.2 or engage student responses offered on the spot. The dialogue gives the teacher the opportunity to push students on their affective descriptions (which, early on, are often not even affective at all, but instead more generic labels). Students might describe Bach's Brandenburg Concerto No. 1, on first listening, as "pretty," and while this might not be the most urbane description, it is a place to start. Instructors could pick up this adjective and elicit more specificity: what emotions does this "pretty" piece evoke? Does it elicit feelings of joy, reverie, elation, contentment, nostalgia? Does it trigger the same emotions as other "pretty" pieces, such as "Maria" from Bernstein's *West Side Story*, or Barber's *Adagio for Strings*, or The Beatles' "Yesterday"? (The specific points of comparison matter less than the fact that they evoke different affective responses, despite all being aptly described as "pretty.") The point of this discussion, once again, is to make clear to students that they can be open to the same potential emotional responses when listening to an unfamiliar repertoire as to a familiar one, and that their initial reactions, while genuine and real, nonetheless leave room for more detail and nuance. Those reactions may also change significantly over time.

#### ***Foregrounding a Teacher's Affective Responses***

Teachers can foster an even more productive classroom when they do not simply moderate the dialogue but actively participate in it. When teachers provide a context and history of themselves as listeners, they make their personhood—and thus their credibility and authority—manifest. Moreover, teachers who embrace the opportunity to join in the dialogue with their students about affective reactions can better resist the feeling of "This piece again?" that can undermine their enthusiasm. Though teachers may play the same Haydn symphony one semester after another, and even though the students' responses might always be basically the same, the very act of soliciting those responses gives teachers the chance to witness new listeners responding. They develop empathic listening.

Empathic listening serves as an entry point for those students whose initial reaction to a piece of music is the dreaded, but common, "I don't like it" or "it's boring." Stravinsky's *Sacre* is an apt example. In my experience, students are not quite sure what to make of it after hearing it for the first time. They often seem to find it as scandalous as the Parisians of 1913, and I envy their not knowing, as I do, the precise placement of the accents in the famous rhythmic block chords of "Les augures printaniers" ("Augurs of Spring"). Students are rarely shy about sharing their affective experiences of listening to the *Sacre*, and they vary considerably: some are immediately put off, while others, perhaps perceiving it as edgy or subversive, are inclined to like it.

In any case, as the teacher I can reassure students that one can come to like, even love, a “difficult” piece, and I do this simply by sharing my own experience with the *Sacre*, which began with dismay and incredulity and gradually transformed into reverence. I do not want to make my experience central to the class, but if I take just a minute to offer this story I can help students know that their own listening “journeys” are not categorically different from my own. It also offers a point of contact between students and teachers who are striving to listen empathically, presenting opportunities for a shared experience. In my experience, students like knowing that a particular passage evokes in me the same emotions that it does in them.

I am assuming here, of course, that our first encounters with “difficult” works, like those of our students, were not uniformly positive; but even if they were, it would still be incumbent on us to imagine empathically a first encounter that was more ambivalent or negative. Doing so recognizes that coming to love and appreciate music is a *process*, not a discrete event. It gradually erodes the viability of students claiming that their own dislike of, or lack of interest in, the material at hand is an immutable situation that therefore excuses their lack of engagement with it. What is more, teachers can insist through their own example—even exhortation—that students can and should try to like or love (not merely appreciate) the repertoire.

### “*Languaging*”

Discussing affective responses necessarily involves language. It might seem so trivial as not to need mentioning, but re-creating with words the process of hearing a work is a crucial step for the novice listener, and can be a challenge even for an experienced ear. As Frank Sibley observes, “Grasping meaning more than superficially certainly means noticing a good deal of what goes on, not just, say, the melody. But we would hardly try to articulate or describe to ourselves everything we hear as it goes along.”<sup>46</sup> Reflecting on and describing affective responses *after* listening, however, gives students, particularly novice listeners, a direct and concrete way to revisit a piece and put words to it. If learning is in the broadest sense a process of “languaging,” as Postman and Weingartner have it, then describing one’s affective responses is one of the few ways for the musical amateur, who lacks the technical vocabulary of music, to “language” a listening experience of their own, on their own terms.<sup>47</sup> The sample assignments in Appendix B each, in its own

46. Frank Sibley, “Making Music Our Own,” in *The Interpretation of Music: Philosophical Essays*, ed. Michael Krausz (Oxford: Clarendon, 1993), 173. Although Sibley’s essay is concerned with “descriptive language” rather than affective language, he notes that his “discussion is intended to apply equally” to feelings and emotions (p. 175).

47. Neil Postman and Charles Weingartner, *Teaching as a Subversive Activity* (New York: Dell, 1969), ch. 7, pp. 98–132.

way, asks students to perform this task, and teachers can readily do the same during in-class discussions. Pushing students to more clearly articulate their experience of hearing a piece gives them practice in nuance and subtlety, and provides opportunities to return to specific passages to hear them again. This process provides for students an immediacy—and thus importance—that catalyzes learning.

Once students have described their experiences on their own terms, teachers can then introduce and apply *their* own terms, as it were: the technical vocabulary, concepts, historical context, and so on, “the material” that forms the core of what music history classes focus on. This is where teachers can fold in Perkins’s notion of reflective intelligence, for the ability of students to articulate the reasons for their individual affective reactions, whether positive, negative, or neutral, hinges on their skill in describing the inner workings of the music: that which awaits and that which is hidden. Teachers can easily anticipate some of the students’ responses and be ready to link them to specific pieces of content.

The sample assignment in Appendix B.3 is designed to forestall the most un-reflective thinking by meeting it head-on. It directly asks students to generate hasty, narrow, fuzzy, and sprawling observations on a piece likely to generate such responses (in this case, Peter Maxwell Davies’s *Eight Songs for a Mad King*). After students listen to the piece several more times and read some background material that addresses both context and structure (“what awaits” and “what hides”), they then generate rebuttals to their own un-reflective observations. In doing this, students practice moderating their tendency to react un-reflectively, and they do so quite self-consciously. After doing a few assignments such as this—not only in written form, but also as in-class discussions—students report to me that they find that they are more likely to catch themselves when they start to make a hasty or narrow judgment; this self-awareness even extends beyond the music history classroom to other subjects and to non-academic pursuits.

It is a happy coincidence that leading students through the process of languaging their affective responses will require listening to a piece (or portions of it) several times, since the changes in neural pathways that come from repeated exposure to a work help to reshape students’ affective responses. The *Sacre* itself exemplifies this, as its public reception was transformed over the course of a quarter century from its scandalous premiere in 1913 to its inclusion in a popular classic, Disney’s 1940 *Fantasia*. Yet even if we sympathize, as Winterson does, with the potential for death by canonization, that does not mean that we should view this process, as Jonah Lehrer does, as one in which an “intransigent” work becomes “just another musical classic, numbing

listeners with its beauty.”<sup>48</sup> On the contrary, music historians should view this change in neural pathways as exhilarating: it represents an opportunity to heighten students' enthusiasm and passion for the music. Uncovering “what awaits” and “what hides” in the context of emotional reactions thus reunites the cognitive with the affective, increasing students' engagement with the intellectual content while also offering teachers ample opportunity to intensify students' love for music.

If teachers consistently apply this basic framework—seeking affective responses, foregrounding their own as necessary, then turning to technical and historical material as a way of helping students to “language” their listening—then students will have a clear sense of the learning trajectory. As students gradually become more discerning in their ability to describe why they like or do not like the music they are learning about, their affective evaluations will likewise become more nuanced and more embracing. Their analysis of the piece—discovering “what awaits” and “what hides”—addresses the content that needs to be covered, while their reactions to it reaffirm its status as a work of art. At the same time, teachers who value their own affective responses by cultivating empathic listening can come to respect the power and integrity of individual works anew.

## Conclusion

Joseph Schwab's 1954 article “Eros and Education” was a prescient response, at least in part, to the work that Bloom and his other University of Chicago colleagues were undertaking. In it, he forcefully asserted that

Education cannot, therefore, separate off the intellectual from feeling and action, whether in the interest of the one or of the other. Training of the intellect must take place (“must” in the sense of “unavoidably”) in a milieu of feelings and must express itself in actions, either symbolic or actual. We may employ the emotional and active factors existent in student and teacher as means for intensifying and facilitating the process of intellectual education—or ignore them and suffer at the least a loss of them as effective aids, and possibly an alienation which places them in active opposition to our purposes.<sup>49</sup>

Bloom's Taxonomy, when it appeared in print two years later, seemed to prove Schwab's fears to be warranted, despite some rhetorical gestures to the contrary. While Bloom's cognitive domain builds from the recall of factual knowledge—an often dull exercise—up to *cognitive* evaluation, by starting discussions with a provisional attempt at *affective* evaluation and then adducing

48. Jonah Lehrer, *Proust Was a Neuroscientist* (New York: Houghton Mifflin, 2007), 143.

49. Joseph Schwab, “Eros and Education,” 53 (p. 108 in the reprint edition).

the relevant factual and analytic material in the service of adding nuance to that appraisal, teachers generate a ready-made justification and goal for learning terminology, analyzing a score, and all of the other activities that typically find a place in the classroom. What is more, a recognition of the affective helps us become better, empathic listeners and thus better teachers, giving us a re-entry point into repertoire that is challenging or that needs revitalizing; and it allows us to model the kind of listeners we want our students to be, all the while legitimizing students' listening experience to music with which they may not be familiar or comfortable.

Students become more cognizant of using their reflective intelligence to forestall hasty, narrow, fuzzy, or sprawling assessments only when teachers insist that they do so, give them the intellectual and cognitive tools—the content, the material—with which to do it, and model the behavior themselves. Such students are more likely to form a deep and abiding connection to the material they are learning, and indeed to the act of learning itself. The precise physiological reasons for this remain, for the moment, obscure; as the editors of a 2006 special issue of *Educational Psychology Review* observe, “we still have much to learn about the affective experiences of students and teachers in academic contexts and how to integrate affect into existing models of motivation and learning.”<sup>50</sup> Regardless of the precise mechanisms, however, “it should be clear that instruction is more likely to be effective if it can somehow enlist the help of student emotions.”<sup>51</sup> Placing value on students' affective reactions to music serves as a means of framing the student learning experience, practicing reflective judgment, and fostering a personal connection to the material that will persist long after the final exam.

#### **APPENDIX A: The Literature of Affective Responses and Learning**

In the following pages, I trace a broad outline of the kinds of research into emotion and education that have thus far been undertaken, beginning first with educational psychology and then turning to the brain sciences. The principal areas of such research, which frequently overlap in various combinations, investigate relationships between affect on the one hand and motivation and cognition, including memory, on the other.

50. Linnenbrink, “Emotion Research,” 307.

51. Byrnes, *Minds, Brains, and Learning*, 112.

### *Research in Educational Psychology*

Affect has long been a part of theoretical models of motivation, both in and out of education.<sup>52</sup> The main avenues of inquiry in this literature involve student involvement and self-regulation.<sup>53</sup> As Meyer and Turner summarize, much of the early work viewed motivation as principally cognitive; emotion and volition were recognized as relevant, but subordinate.<sup>54</sup> Young, for example, posited in 1959 that affective processes “may be viewed as logical constructs which bring together in an orderly way a large body of facts.”<sup>55</sup> A turning point came in 1980 when Robert Zajonc's seminal work turned such assumptions upside-down, arguing for the primacy of affect over cognition.<sup>56</sup> Although his assertions have not been universally accepted, the flurry of scholarship that ensued indicated that he had “uncovered an unresolved set of modern issues that apparently had lain dormant in the minds of many

52. See, e.g., Julian B. Rotter, “Generalized Expectancies of Internal Versus External Control of Reinforcements,” *Psychological Monographs: General and Applied* 80, no. 1 (1966): 1–28; Abraham H. Maslow, *Motivation and Personality*, 2nd ed. (New York: Harper & Row, 1970); Albert Bandura, “Self-Efficacy: Toward a Unifying Theory of Behavioral Change,” *Psychological Review* 84, no. 2 (1977): 191–215; and Edward L. Deci and Richard Flaste, *Why We Do What We Do: Understanding Self-Motivation* (New York: Penguin, 1996). Excellent summaries of the educational literature include Jere Brophy, “Research on Motivation in Education: Past, Present, and Future,” in *Advances in Motivation and Achievement: The Role of Context*, vol. 11, ed. T. C. Urdan (Greenwich, Connecticut: JAI, 1999), 1–44; Jere Brophy, *Motivating Students to Learn*, 3rd ed. (New York: Routledge, 2010); and Dale H. Schunk, Paul R. Pintrich, and Judith Meece, *Motivation in Education: Theory, Research, and Applications*, 3rd ed. (Upper Saddle River, NJ: Prentice Hall, 2008).

53. See Bernard Weiner, “History of Motivational Research in Education,” *Journal of Educational Psychology* 82, no. 4 (1990): 616–22; Monique Boekaerts, “Self-Regulated Learning: A New Concept Embraced by Researchers, Policy Makers, Educators, Teachers, and Students,” *Learning and Instruction* 7, no. 2 (1997): 161–86; Monique Boekaerts, “Self-Regulated Learning: Where We Are Today,” *International Journal of Educational Research* 31, no. 6 (1999): 445–57; Monique Boekaerts, “Understanding Students' Affective Processes in the Classroom,” in Schutz and Pekrun, eds., *Emotion in Education*, 37–56; Martin Covington, “Goal Theory, Motivation, and School Achievement: An Integrative Review,” *Annual Review of Psychology* 51 (2000): 171–200; and Schutz et al., “Reflections on Investigating.”

54. Debra K. Meyer and Julianne C. Turner, “Discovering Emotion in Classroom Motivation Research,” *Educational Psychologist* 37, no. 2 (2002): 107–14. A useful and thorough historical summary is Richard S. Lazarus, “The Cognition-Emotion Debate: A Bit of History,” in *Handbook of Emotion and Cognition*, ed. Tim Dalgleish and Mick J. Power (New York: Wiley, 1999), 3–19.

55. Paul Thomas Young, “The Role of Affective Processes in Learning and Motivation,” *Psychological Review* 66, no. 2 (1959): 104.

56. Robert B. Zajonc, “Feeling and Thinking: Preferences Need No Inferences,” *American Psychologist* 35 (1980): 151–75. See too, more recently, Robert B. Zajonc, “Feeling and Thinking: Closing the Debate Over the Independence of Affect,” in J. P. Forgas, ed., *Feeling and Thinking: The Role of Affect in Social Cognition* (Cambridge: Cambridge University Press, 2000), 31–58.

psychologists.”<sup>57</sup> Accordingly, Meyer and Turner have more recently argued for models that treat emotions “as an integrated process, not as a precursor or outcome,”<sup>58</sup> and indeed recent research has taken just this direction.<sup>59</sup> Newer theories such as Academic Risk Taking,<sup>60</sup> Flow Theory,<sup>61</sup> Dynamic Systems Theory,<sup>62</sup> Control-Value Theory,<sup>63</sup> and Goal Theory<sup>64</sup> have helped to situate the interaction of student emotions with their classroom behaviors.

Other studies have investigated the influence of emotion on cognitive processes.<sup>65</sup> As with motivation, cognitive processes were until recently “studied in a vacuum, separately from the affective system, as if they were immune from such influence;” it is only in the last two decades or so that researchers have examined in detail the influence of the one on the other.<sup>66</sup> Some of the

57. Lazarus, “Cognition-Emotion Debate,” 7.

58. Debra K. Meyer and Julianne C. Turner, “Re-conceptualizing Emotion and Motivation to Learn in Classroom Contexts,” *Educational Psychology Review* 18, no. 4 (2006): 388.

59. See, e.g., Seth Duncan and Lisa Feldman Barrett, “Affect is a Form of Cognition: A Neurobiological Analysis,” *Cognition and Emotion* 21 (2007): 1184–211; Justin Storbeck and Gerald L. Clore, “On the Interdependence of Cognition and Emotion,” *Cognition and Emotion* 21 (2007): 1212–37.

60. Margaret M. Clifford, “Failure Tolerance and Academic Risk-Taking in Ten- to Twelve-year-old Students,” *British Journal of Educational Psychology* 58, no. 1 (1988): 15–27; Margaret M. Clifford, “Risk Taking: Theoretical, Empirical, and Educational Considerations,” *Educational Psychologist* 26, no. 3–4 (1991): 263–98; and Monique Boekaerts, “Being Concerned with Well-Being and with Learning,” *Educational Psychologist* 28, no. 2 (1993): 149–67.

61. Mihaly Csikszentmihalyi, *Beyond Boredom and Anxiety: Experiencing Flow in Work and Play* (San Francisco: Jossey-Bass, 1975); Mihaly Csikszentmihalyi and Isabela Selega Csikszentmihalyi, *Optimal Experience: Psychological Studies of Flow in Consciousness* (Cambridge: Cambridge University Press, 1988); and Mihaly Csikszentmihalyi, Kevin Rathunde, and Samuel Whalen, *Talented Teenagers: The Roots of Success and Failure* (Cambridge: Cambridge University Press, 1993).

62. Marc D. Lewis and Isabela Granic, eds., *Emotion, Development, and Self-Organization: Dynamic Systems Approaches to Emotional Development* (Cambridge: Cambridge University Press, 2000).

63. Reinhard Pekrun et al., “Academic Emotions in Students’ Self-regulated Learning and Achievement: A Program of Quantitative and Qualitative Research,” *Educational Psychologist* 37, no. 2 (2002): 91–105 and Reinhard Pekrun, “The Control-Value Theory of Achievement Emotions: Assumptions, Corollaries, and Implications for Educational Research and Practice,” *Educational Psychology Review* 18, no. 4 (2006): 315–41.

64. Martin E. Ford, *Motivating Humans: Goals, Emotions, and Personal Agency Beliefs* (Newbury Park, CA: Sage, 1992) and Elizabeth A. Linnenbrink and Paul R. Pintrich, “Achievement Goal Theory and Affect: An Asymmetrical Bidirectional Model,” *Educational Psychologist* 37, no. 2 (2002): 69–78.

65. A recent summary of the state of the field is Jan De Houwer and Dirk Hermans, *Cognition and Emotion: Reviews of Current Research and Theories* (New York: Psychology Press, 2010).

66. Isabelle Blanchette and Anne Richards, “The Influence of Affect on Higher Level Cognition: A Review of Research on Interpretation, Judgement, Decision Making and Reasoning,” in De Houwer and Hermans, eds., 276.

potential implications have been far-reaching; Antonio Damasio, for example, posits that feelings lie at the heart of consciousness itself.<sup>67</sup> Much of the literature on emotion and learning, however, is more specific, and addresses ways in which negative emotions can hinder attention and learning, as with test anxiety.<sup>68</sup> A review of the literature between 1974 and 2000, in fact, shows more than 1200 studies that examined the connection between anxiety and achievement, while sixteen other emotions (joy, envy, etc.) were the subject of only one quarter (314) that many studies.<sup>69</sup> Ten studies that did consider a wider range of student emotions—including enjoyment, pride, hope, anger, and boredom—in both college and pre-college students, conclude, perhaps unsurprisingly, that self-reported feelings of positive emotions correlate strongly with student motivation and effort, and with academic achievement more broadly. What is more, the authors find that “positive academic emotions may in fact facilitate flexible, creative modes of thinking,” though they also propose that such results might reflect that creative learning might itself be more enjoyable.<sup>70</sup>

A largely separate but related body of research investigates the effect of teachers' emotions on their students, demonstrating the importance of teachers' affective responses at the cognitive and interpersonal level; much of this research focuses on elementary and middle-school classrooms,<sup>71</sup> and typically

67. Damasio, *Descartes' Error*.

68. Chapter 4 of Isca Salzberger-Wittenberg, Gianna Williams, and Elsie Osborne, *The Emotional Experience of Learning and Teaching* (London: Routledge, 1983) is representative; titled “Emotional Aspects of Learning,” it begins with a discussion of “Learning and Mental Pain.” The section titled “Having an Emotional Experience” focuses on teachers developing empathy to the “fear, depression, confusion, etc.” that students feel. On attention and anxiety, see Yair Bar Haim et al., “Threat-Related Attention Bias in Anxious and Nonanxious Individuals: A Meta-Analytic Study,” *Psychological Bulletin* 133, no. 1 (2007): 1–24. For another take on negative emotions, see Jeannine E. Turner, Jenefer Husman, and Diane L. Schallert, “The Importance of Students' Goals in Their Emotional Experience of Academic Failure: Investigating the Precursors and Consequences of Shame,” *Educational Psychologist* 37, no. 2 (2002): 79–89. On test anxiety, see Reinhard Pekrun, “Prüfungsangst und Schulleistung: Eine Längsschnittdanalyse [Test Anxiety and Academic Achievement: A Longitudinal Analysis],” *Zeitschrift für Pädagogische Psychologie* 5, no. 2 (1991): 99–109; Moshe Zeidner, *Test Anxiety: The State of the Art* (New York: Plenum, 1998); Paul A. Schutz and Heather Davis, “Emotions and Self-Regulation During Test Taking,” *Educational Psychologist* 35, no. 4 (2000): 243–55; and Jenny Yiend, “The Effects of Emotion on Attention: A Review of Attentional Processing of Emotional Information,” in De Houwer and Hermans, eds., pp. 211–75.

69. Pekrun et al., “Academic Emotions,” 91–2.

70. Pekrun et al., “Academic Emotions,” 99.

71. See, e.g., Helen Patrick et al., “Teachers' Communication of Goal Orientations in Four Fifth-Grade Classrooms,” *Elementary School Journal* 102, no. 1 (2001): 35–58; Ellen A. Skinner and Michael J. Belmont, “Motivation in the Classroom: Reciprocal Effects of Teacher Behavior and Student Engagement Across the School Year,” *Journal of Educational Psychology* 85, no. 4 (1993): 571–81; and Paul A. Schutz et al., “Teacher Identities, Beliefs, and Goals

from the standpoint of developing ways for teachers to ameliorate negative emotions (such as anxiety) in their students and themselves.<sup>72</sup> While there has been much research on classroom practices that impair student achievement and motivation,<sup>73</sup> Patrick, Hinsley, and Kempler investigated teacher behaviors that promote student intrinsic motivation, finding, as Dewey suggested almost seventy-five years ago, that “when a teacher exhibits greater evidence of enthusiasm, students are more likely to be interested, energetic, curious, and excited about learning,” though they take care to note that “the evidence does not suggest that a steady diet of teacher enthusiasm can act as a panacea for the motivational ills of students.”<sup>74</sup> Indeed, teacher enthusiasm is the single characteristic most frequently investigated for its influence on student learning. Rosenshine’s review of the research shows that high-inference studies of this connection—that is, those that rely on an observer’s judgment about a teacher’s level of enthusiasm—find that students whose teachers are described as “energetic” or “stimulating” display higher levels of achievement.<sup>75</sup> Low-inference studies, which have typically focused on K–12 populations, count the frequency of behaviors that are indicative of enthusiasm—vocal delivery, eye movements, gestures, and so on—and look for correlations with student achievement. With very few exceptions, the correlation is similarly clear.<sup>76</sup>

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Related to Emotions in the Classroom,” in Schutz and Pekrun, eds., *Emotion in Education*, 223–41.

72. See, e.g., Rosemary E. Sutton, “Teachers’ Anger, Frustration, and Self-Regulation,” in Schutz and Pekrun, eds., *Emotion in Education*, 259–74 and Meca Williams et al., “‘There Are No Emotions in Math’: How Teachers Approach Emotions in the Classroom,” *Teachers College Record* 110, no. 8 (2008): 1574–610.

73. Edward Deci’s work on the way external rewards diminish intrinsic motivation is a famous example. See Deci and Flaste; and Deci et al., “Motivation and Education: The Self-Determination Perspective,” *Educational Psychologist* 26, no. 3–4 (1991): 325–46.

74. Brian C. Patrick, Jennifer Hisley, and Toni Kempler, “‘What’s Everybody So Excited About?’: The Effects of Teacher Enthusiasm on Student Intrinsic Motivation and Vitality,” *Journal of Experimental Education* 68, no. 3 (2000): 217–36, p. 233.

75. Barak Rosenshine, “Enthusiastic Teaching: A Research Review,” *The School Review* 78, no. 4 (1970): 499–514, p. 500.

76. See, e.g., Rosenshine, “Enthusiastic Teaching;” Rosenshine and Norma Furst, “Research in Teacher Performance Criteria,” in *Research in Teacher Education: A Symposium*, ed. B. O. Smith (Englewood Cliffs, NJ: Prentice Hall, 1971), 37–72; Edward M. Bettencourt et al., “Effects of Teacher Enthusiasm Training on Student On-Task Behavior and Achievement,” *American Educational Research Journal* 20, no. 3 (1983): 435–50; Jere Brophy and Thomas C. Good, “Teacher Behavior and Student Achievement,” in *Handbook of Research on Teaching*, 3rd ed., ed. M. C. Wittrock (New York: McMillan, 1986), 328–75; Brenda B. Streeter, “The Effects of Training Experienced Teachers in Enthusiasm on Students’ Attitudes Toward Reading,” *Reading Psychology* 7, no. 4 (1986): 249–59; and Patrick, Hinsley, and Kempler, “‘What’s Everybody So Excited About?’”

*Research in the Brain Sciences*

The work of social scientists investigating memory and emotion is now being complemented by recent advances in the brain sciences, although this latter research has only recently begun in earnest—as Damasio points out, through “most of the twentieth century, emotion was not trusted in the laboratory,” as it was too subjective, “too elusive and vague.”<sup>77</sup> Psychological studies have found that affect has a strong influence on the way information is processed, stored, and retrieved.<sup>78</sup> In educational contexts, Bower likewise found a correlation between a reader's ability to recall a narrative and the similarity of the reader's mood with that of the narrative being memorized.<sup>79</sup> In other contexts, phenomena such as memory narrowing and tunnel memory—in which “memory is enhanced for central or core features of emotional events but memory for peripheral or background features is not enhanced and may even be impaired”—reveal the complex interplay between emotions and cognitive processing.<sup>80</sup> Brain scientists can now offer their own evidence that, overall, emotion makes memory better,<sup>81</sup> and that emotions “direct our choices, even when those choices are based on reasoning.”<sup>82</sup> In one experiment, the auditory cortex of rats was found to respond to a high-pitched sound when their brains were induced to release acetylcholine, a neurotransmitter that marks specific brain activity as important.<sup>83</sup> Like other neurotransmitters, acetylcholine is associated with emotion, just as adrenaline is connected with excitement and serotonin with tranquility.

The many experiments similar to this one provide a biological explanation for the fact that we learn best those things that are important to us. There may therefore be less distinction than originally thought between explicit memory and implicit memory—the things we know we remember and those we do not know that we remember—and between semantic memory (facts, names) and episodic memory (stories and the feelings associated with events).<sup>84</sup> While it is intuitive that we might remember best that which is connected with a positive

77. Damasio, *The Feeling of What Happens*, 39.

78. See, e.g., Herbert Bless, “The Interplay of Affect and Cognition: The Mediating Role of General Knowledge Structures,” in *Feeling and Thinking: The Role of Affect in Social Cognition*, ed. J. P. Forgas (Cambridge: Cambridge University Press, 2002), 201–22 and Henry C. Ellis and Brent A. Moore, “Mood and Memory,” in Dalglish and Power, eds., 196–210.

79. Gordon H. Bower, “Mood and Memory,” *American Psychologist* 36, no. 2 (1981): 129–48.

80. Linda J. Levine and Robin S. Edelstein, “Emotion and Memory Narrowing: A Review and Goal-Relevance Approach,” in de Houwer and Hermans, eds., 169.

81. Cara Laney, Friderike Heuer, and Daniel Reisberg, “Thematically Induced Arousal in Naturally Occurring Emotional Memories,” *Applied Cognitive Psychology* 17, no. 8 (2003): 995–1004.

82. Zull, *From Brain to Mind*, 17.

83. Zull, *Changing the Brain*, 223–5.

84. Zull, *Changing the Brain*, 86.

emotional response, it is also the case that strong negative feelings can have a detrimental effect on memory and learning—we can remember things incorrectly, or uncontrollably<sup>85</sup>—while indifference may result in no change to the brain at all. In short, “emotional information is more likely than neutral information to hold attention and be rehearsed in working memory, increasing the likelihood that it will be stored in long-term memory.”<sup>86</sup>

## APPENDIX B: Sample Assignments

### *B.1: A sample syllabus note for music history classrooms incorporating affective responses*

*Note to Students:* In this class, we will return frequently to the question of how various musical works make you feel—what affective responses they evoke in you (and me). I make no effort to hide the fact that I want you to like this music as much as I do. (Note, though, that you don’t ultimately have to like any of the music to do well in this class! And conversely, loving it immensely is no guarantee of a good grade.) As we listen to each of the pieces on this syllabus, we will strive to answer these four questions, though not necessarily immediately or all at once:

1. What, if any, feelings or emotions does this work evoke in you? Although there is almost always a group consensus, there is genuinely no right or wrong answer to this question. Sometimes your responses to this question will be the subject of in-class discussion; at other times, I will ask you to write out a response either to turn in to me alone, or for public consumption (via our online forums). Assignments in which you respond to this question will not be graded based on whether you’ve experienced the “right” emotional state, but rather on the clarity with which you articulate that emotion.
2. What information helps you to better place this work in a broader context? What would you need to know about the composer, the era, etc., in order to make you the best possible audience for this work? (We will call this “what awaits” because it typically is not present in the music itself but must be sought out in other sources.)
3. What is happening in the music? That is, how would one describe this work using the technical vocabulary of musicology and music theory? Put another way, what is the “backstage machinery”? (We will call this “what hides” because it typically becomes apparent only through close analysis after listening closely several times and studying the score.)

85. Post-traumatic stress disorder is a well-known example of this phenomenon.

86. Levine and Edelstein, 173–74.

4. How, if at all, does your knowledge of “what awaits” and “what hides” change your emotional response to the music?

***B.2: Online forum discussion questions for an introductory-level music appreciation class***

*Assignment:* In class today we listened to different versions of two songs: *The Star-Spangled Banner* (TSSB) as arranged for military band as well as Jimi Hendrix's famous performance at Woodstock; and *Happy Birthday to You* as performed by a family at a birthday party (thank you, YouTube) and in Igor Stravinsky's *Greeting Prelude* (1955). Choose one of the songs and post brief responses to following questions (no more than 500 words total).

- a. Which version of the song you chose do you prefer?
- b. What feelings or emotions does it evoke? Does the other version of your chosen song evoke the same, similar, or different feelings?
- c. Are there purely musical aspects of the versions that might contribute to this emotional response? While you likely have certain associations (memories, cultural connections) with one or both versions, focus as much as possible on the technical aspects of the music. For example, while you might prefer Hendrix's version of TSSB because you appreciate his virtuosity or his counter-cultural views, try to articulate your response in only technical terms, such as tempo, instrumentation, and so on.

***B.3: Engaging and resisting intelligence traps***

*Assignment:* Listen once or twice to the excerpt from Peter Maxwell Davies's *Eight Songs For a Mad King* (1969). Then engage, intentionally, in some non-reflective thinking.

First, formulate four responses to this work, each an example of thinking that is hasty, narrow, fuzzy, or sprawling (HNFS). In short, you are generating the kind of knee-jerk reactions we're ultimately trying to avoid in this class.

Second, listen to the excerpt three or four more times; watch the posted video of a live performance; and read the provided background material.

Finally, rebut your own initial responses; that is, engage in some reflective thinking. How would you answer the HNFS responses you just formulated in ways that are *not* HNFS? Put another way: what might we find in this work if we move beyond thinking in HNFS ways? You need not necessarily believe the rebuttals to the non-HNFS responses; I ask only that they are plausible, thoughtful, and articulate. Include with your reflective responses a brief summary of what led you to each reflective response; e.g., was it hearing something specific when you listened to it for the fourth time, reading something about it, something else?

**B.4: Short response paper assignment for a lower-level class for majors and non-majors**

*Assignment:* Listen several times to the first 5–6 measures of the Confutatis from Mozart’s Requiem (i.e., ending just before the transition to C major). What feeling or sensation does this evoke? How does it do so? In a couple of pages, dissect the “backstage machinery” of these few measures. What’s going on? Does the music achieve the emotional effect you describe through one technique or device? Several, deployed in series? Several, deployed simultaneously? If you’re stuck, think about elements such as rhythm; counterpoint and imitation; melodic contour; instrumentation. Do a harmonic analysis. Label the intervals. Try singing along with the vocal lines and the instrumental lines. In short: take the music apart and report your findings.

**B.5: Short online forum response**

*Assignment:* Select one of the works assigned for class today: Perotinus’s *Viderunt omnes* (1198); Arvo Pärt’s *Cantus in Memory of Benjamin Britten* (1977); Gavin Bryars’s *Jesus’ Blood Never Failed Me Yet* (1971); and Terry Riley’s *In C* (1964). Your task is to find a piece of music that, for you, elicits the same affective response. Bring a recording of that piece to class, as we will listen to and discuss several of them. Here is the tricky part: the piece you bring to class *cannot* be Western classical (or “art”) music. Focus instead on popular music, jazz, world music, and so on. Before class, write an online forum response of about 300–350 words in which you (1) briefly explain what affective response both pieces (the in-class listening and your own discovery) elicit; and (2) propose what it is about “what hides”—the “backstage machinery”—in these two pieces that elicits the same affective response. If there’s nothing you can home in on about “what hides,” then consider “what awaits”: what there is about the historical context, reception, etc., of these pieces that contributes to your experiencing them emotionally similarly. If there’s really nothing you can identify that might link the ability of these two pieces to elicit the same emotion, then speculate as best you can about what *is* going on.