Embodying sound: The role of movement in performance and interpretation.

In the last lecture, I suggested in rather abstract terms how a theoryof musical gesture might be framed. Now I wish to approach the subjectmore pragmatically, from the standpoint of actual embodiment by a performer. Alexandra Pierce, Professor of Music and Movement at the University of Redlands in California, is a composer and pianist who has devoted her careerto exploring gesture in very practical ways, not only in her own composingand performing, but in collaboration with her husband, Roger Pierce, onexpressive and "generous" movement in everyday life, and in her pedagogy of movement for performers. I had the opportunity to study with her for five days in March, 1995, and we have collaborated ondemonstrations for the Society for Music Theory and the SemioticSociety of America. Her definitive article to date the assigned reading for this lecture, "Developing SchenkerianHearing and Performing" (1994).

For the non-musician, one may describe the early twentieth-centuryViennese theorist Heinrich Schenker's approach to music analysis as hierarchical,based on the basic contrapuntal and harmonic patterns of movement impliedby the pitch organization of tonal works. Mapping the best gestural realization of these hierarchical pitch structures is enriched by (and made more difficultdue to) the metrical and durational hierarchies in which pitch structures are embedded.

In a general sense, one may speak of two levels of expressivity ina tonal work of music. One arises from the regular periodicities of meter,phrase rhythm, and harmonic progression, when stylistic expectations arefulfilled in

timely fashion. The other arises from the inevitable freedomwith which the composer plays with regular (stylistic) expectations, bydeferring their realization (Meyer, 1973) and/or by creating various irregularities and asymmetries. These striking events challenge a simplistic interpretation and thereby expand the expressive potential of the work.

What we call music theory is primarily concerned with regular featuresand expectations; music analysis deals with the irregular and unexpectedas these relate to a horizon of expectations. The background may be conceived comprised of stylistic "types" or patterns of structures and processes which exemplify stylistic "principles" of organization. The foreground of a musical work is involved in strategies of innovation—creating marked events that imply "new" meanings by their coherent departure from previous, familiar structures and processes, and by their evasionor deferral of immediate expectations. This model suggests the dramatic scheme in which conflicts are introduced, developed, and ultimately resolved at a later point in the work. Indeed, many tonal pieces (especially from the Classical period) present this strategy as a means of engaging the listener.

What Pierce offers her students is a nuanced pedagogy that accountsfor the expressivity of both regular and irregular processes in music works—boththose that issue straightforwardly from the style, and those that strategicallydeflect the interpreter from such a straightforward reading. Accountingfor these stylistic and strategic meanings involves analysis not only inthe theoretical or intellectual sense, but insights that emerge from theheuristic of physical embodiment, at the instrument and away from it. Aseries of exercises enables the performer to explore, gesturally, the backgroundcoherence and foreground configuration of a work and to sense kinestheticallythe pulls and releases implied by organic phrases in their unique combinationsof tonal and rhythmic forces. Ultimately, the performer

learns to translategestural character into sound, through the medium of the body's corresponding(intermodal) gestural realizations. Learning how to perform is thus inseparable from learning how the piece is structured, how it has expressive meaning, how one can physically manifest that meaning in one's body, and how one can then transfer that bodily gestural meaning to the instrument. The goalis to achieve in sound the expressivity and implied meaning one has previously explored and experienced through the embodied analytical exercises.

Whereas the Intégral article is primarily concerned with therhythms of pieces as they work elastically within and beyond the regularframeworks of meter and four-bar phrases (hypermetric units), one of thetechniques Pierce teaches involves experiencing the regularity of beat, or pulse, through pendular, swinging motions ("arm swings") awayfrom the instrument (1994: 102-3). The point of this exercise is to embodythe full motion required to produce what in overly abstract terms mightbe called an "attack point" for an event that occurs "onthe beat." One begins to shape the upswing and the after swing (asthe next beat's upswing) with as much attention as one calculates the precisearrival of the arms at the bottom of the arc, which signifies the beatas an ictus. Thus, what happens between beats is as crucial to the experienceas the arrival, and the expressive vitality of even an undifferentiated steady pulse becomes a part of one's kinesthetic awareness. One can thentransfer this awareness of energized timing to a "straight" metricperformance of a passage (or a regular metric reduction of the passage), with the result that one can generate a wealth of of gestural (hence, musical)expressivity even before one has fully explored the passage's unique rhythmsand contours.

Another "preliminary" exercise, "contouring" (1994:103-9), focuses on the melodic line, which is easier to follow that the subtleties of structural harmonies in aural analysis. Here, one draws withthe hand, using

sustained arm weight, an analogue to the shape of the melody,transferring pitch and rhythm into tracings of space that correspond intheir highs and lows, their sudden and sustained movements, to what onehears as a continuous line connecting the successive pitches of a sequence. Clearly, it is natural to hear melody as though it were a single forceor line traversing a space, rather than literally a sequence of distinctsound events. Indeed, one might argue that this perception of musical motionis crucial to our experiencing of successive sounds as music, rather thanas mere acoustic phenomena. In any case, our evolutionary training hasbiased our perceptual systems to link sounds with objects and agenciesin our environment — a necessary survival skill for detecting predatorsor hunting prey.

Pierce's contouring has an interesting precedent in the work of EduardSievers (1924), Gustav Becking (1928), and Alexander Truslit (1938) inGermany, as described by Patrick Shove and Bruno H. Repp (1995: 65-72). Truslit's *Gestaltung und Bewegung in der Musik* (1938: 144) presentsa "kinematic interpretation" of the opening theme of Brahms'sOp. 79, no. 2 (reproduced in Shove and Repp, 1995: 70) that comes closestto the kind of dynamic mapping that Pierce proposes with her "contouring." As Shove and Repp describe it:

[The] height in space [of Truslit's curves] tends to follow the pitch contour of the melody ... with the speed of movement and the consequent relative tension being governed mainly by the curvature of the motion path. That is, a slowing-down and commensurate increase in tension in the musicis portrayed by a tight loop, whereas faster, more relaxed stretches correspond to relatively straight movements. (1995: 71) As opposed to the abstracted individual composer's pulses of Becking (and his spiritual heir,

ManfredClynes), Truslit's curves are "work-specific" and give a primaryrole to the smooth flow of the pitch sequence in the melody (1995: 71).

Just as one must negotiate the gestural projection of regularly occurringevents with the aperiodicities that constitute the unique dynamic shapeof a work, one must in performing physically negotiate the complementaryclaims of, for example, a chord's vital presence and its subsumed roleas part of a temporal sequence. Whereas the arm swings introduce somethingof this duality or co-presence, Pierce addresses this complementarity formore complex musical passages in her concepts of "coalescence" and "middleground rhythmic vitality":

Coalescence in physical movement refers to the weightof the body as it settles into an integral stage of action or gesture. Middleground rhythmic vitality refers to the manner in which weight passescontinuously throughout an action, its energy intensifying and diminishing, setting up a pattern in time. (1994: 73)

The physical means of embodying these complementary dynamics is called stepping, not coincidentally a play on Schenker's concept of Stufen, or scale steps, which refer to the structural harmonies of a passage. Reducing a musical passage to its essential harmonies may produce a rhythmthat is out of synch with the regular divisions of time suggested by meterand four-bar phrases (hypermetric groupings), and thus physically stepping the structural bass line will challenge a performer far more than will regular arm swings. As the performer shifts weight from foot to foot, shemust also gauge a number of different-sized temporal spans, as well asmap the approximate pitch intervals between bass notes by the size and direction of her steps. Once she is able to embody the unique

"structuralrhythm" of the passage, then she can return to the instrument andmove more confidently in her performance, with better preparation and follow-through. As a consequence, there will be a marked aural difference in the gestural persuasiveness of the passage.

At this point, the student has advanced to a level of performance analogousto a proper declamation of the accents in a poem (as opposed to a sing-songyrendition of an iambic pentameter). The final stages of preparation involve, to pursue the analogy, internalizing the intonational curves and climaxesthat shape the sense of the poem, and embodying the peculiar characteror tone that carries the poem's implied emotional affect(s).

These two essential expressive attributes may be practiced separately as "spanning" and "tone of voice" (1994: 87-101). Spanningmay be embodied in two ways, first, by stretching the hand from a loosefist outward to the full extent timed to the perceived climax and gradually releasing the tension in the hand after the climax (97-91). What one discoversis that a "performance phrase" for a musical passage (at leastby a master composer) will typically go against the grain of the regularhypermetric structures (four-bar, eight-bar, sixteen-bar units). The exercise is also useful in determining whether one is dealing with the proper sizedmusical unit for a performance phrase. If one cannot find a "convincingclimax," then "the phrase level chosen may be to small to havedeveloped compelling harmonic motivation, or too long to sustain the elasticity of a single harmonic-structural purpose" (85). In this sense, Pierceshares fellow Schenkerian William Rothstein's understanding of a phraseas "a directed motion in time from one tonal entity to another; theseentities may be harmonies, melodic tones (in any voice or voices), or somecombination of the two" (1989: 16). In other words, if the first fourmeasures of the Blue Danube Waltz (Rothstein's example) merely prolonga single harmony, they

cannot constitute a phrase; indeed, in Rothstein's analysis only the first 32 measures qualify as a "complete tonal motion," or span, in Pierce's terminology.

Pierce's second exercise for determining climax and performance phraseis "arcing," which involves a stretch of the whole body directedby the full arm functioning in a large, sweeping motion along an imaginarygiant clockface. The climax in this case is the point of maximum extension of the arm diagonally from the body, peaking around 1:00 or 2:00 on the clockface if the right arm is arcing in a clockwise direction. As Piercedescribes the exercise:

Just enough momentum is spun forth to match the kineticenergy heard from the musical phrase as it continues, intensifies, subsides, and finally releases into completion. Effort washes out into stillness, without there necessarily being any lapse of time before the next phrasebegins. (92) Such practice away from the instrument (but nevertheless mappedonto a recording or another student's playing of the passage) can helpone realize the "elastic play of foreground against deeper levels," and thus spanning is "perhaps the most purely 'Schenkerian' of themovement processes" (95)

Alexandra Pierce's final exercise may well be the most difficult (speakingfrom my own personal experience), since it is also the most intimate orpersonal. "Tone of voice" is her term for "the wash of affectin a piece of music" which "suffuses the sound with hue and theplayer with expressiveness visible through the entire body" (96). In previous lectures I noted that there are two useful (intermodal) sourcesfor our understanding of musical gesture — the physical movements of thebody and the intonation curves of language. Tone of voice draws on thelatter for its

inspiration, but an intonation cannot be achieved withoutan intention, a semantic and pragmatic context as represented in the exerciseby a word, with all its symbolic richness of denotative and connotativemeaning. One might begin by choosing an adverb (e.g., "boldly"),saying it with a characteristic tone of voice, making a comparable bodilygesture, freezing it into a momentary stance, then taking that gesturalpose to the instrument and saying, "If I were speaking, it would soundlike this — ," and performing the passage (100). The student shouldthereby transfer not merely kinetic energy but a particular quality ofenergy to his performance.

But the difficulty pedagogically is in helping the student overcomea natural reticence to express character in a word, and to express it full-feelingly, in an intimate setting. In listening to my microcassette recording of thesession when Alexandra introduced me to tone of voice, I became aware ofhow my voice dropped considerably in dynamic power when I intoned my chosenword, perhaps reflecting my uncertainty or lack of confidence in the exercise. A commitment to the meaning of a single word may also have been in conflictwith my prior (wordless) expressive sense of the passage, and thus I mayhave been fighting against the limitations of my own word choice. Ironically, despite having written a book on musical expressive meaning, I was unableat first to connect with this most semantically loaded of exercises, asmuch as I could appreciate its usefulness from a theoretical standpoint.Later, in our staged demonstrations for music theory and semiotic conferences, we were able to illustrate tone of voice as it affected my tone in themelodic line from a Chopin Prélude, but the word I had chosen was "sinking," which already encompasses a fluid intermodality betweenfeeling and motion, as well as invoking its typical usage in teaching pianotechnique ("sink into the keys").

In concluding this lecture with a strong endorsement of Alexandra's approach, I must acknowledge the limits of my medium of

communication (wordsin cyberspace) for conveying the subtle nuances of gesture she can helpstudents achieve. I can only report to the reader the remarkable transformations in expressive performance that ensue from these exercises, both as I have experienced them in my own playing, and as I have taught them to studentsin an integrative seminar on gesture and performance last spring at PennState. Those who have had some experience with the music and movement pedagogyof Emile Jaques-Dalcroze (one of Alexandra'sinspirations in her own movement research) will perhaps appreciate thekinds of insights that can emerge from such efforts to embody the dynamicmeanings of music. What Pierce offers the sophisticated performer is aheuristic for exploring expressive dynamics in conjunction with a detailed analysis of complex musical materials. By choreographing to the score, as it were (rather than in counterpoint to it, as one finds in most balletchoreography), one can realize just those dynamic movements and gesturalmeanings implied by a musical work's own organization, and translate theminto moving performances.

In the next lecture, I will consider particular gestures that may be solated as thematic to a work and argue that their implied meanings, as projected in performance, can reveal a level of structure often neglected even by the best pianists — with consequences for a proper understanding of, in this case, Schubert's compositional style.

Footnotes

Expressive Movement: Posture and Action in DailyLife, Sports, and the Performing Arts (New York: Plenum Press, 1989), and Generous Movement: A Practical Guide to Balance in Action (Redlands, CA: Center of Balance Press, 1991).

Back to where you left off.

"From Gesture to Interpretation: A Demonstrationand Dialogue," with Alexandra Pierce, for a session I organized, "Gestureand Music: Theoretical and Practical Considerations," Semiotic Societyof America, San Antonio, October 20-22, 1995; and "Movement as a Modelof Performance," with Alexandra Pierce, for a special session organized David Lidov, "Musical Microstructure in Expressive Performance," Society for Music Theory, New York City, November 2-5, 1995.

Back to where you left off.

The interested reader may wish to consult the work of one of Alexandra Pierce's colleagues at the University of Redlands, StephenMoore: The Writings of Emile Jaques-Dalcroze: Toward a Theory for the Performance of Musical Rhythm (Ph.D. diss., Indiana University, 1992). Another movement theorist whose influence is acknowledged by Pierce (92, footnote 27) is Rudolf Laban. Cf. *The Mastery of Movement*, rev.and enl. by Lisa Ullmann, ed. (London: Macdonald and Evans, 1971). ReferencesBecking, Gustav. Der musikalische Rhythmus als Erkenntnisquelle. Augsburg: Benno Filser, 1928. Meyer, Leonard B. Explaining Music. Chicago: The University of Chicago Press, 1973). Pierce, Alexandra. "DevelopingSchenkerian Hearing and Performing." Intégral 8 (1994),51-123. Rink, John, ed. The Practice of Performance: Studies in MusicalInterpretation. Cambridge: Cambridge University Press, 1995. Rothstein, William. *Phrase Rhythm in* Tonal Music. New York: Schirmer Books(Macmillan), 1989. Shove, Patrick, and Bruno H. Repp. "Musical Motionand Performance: Theoretical and Empirical Perspectives," in ThePractice of Performance: Studies in Musical Interpretation, John Rink,ed. (Cambridge: Cambridge University Press, 1995), 55-83. Sievers, Eduard. Ziele und Wege der Schallanalyse. Heidelberg: Carl Winters Universitätsbuchhandlung, 1924. Truslit, Alesander. Gestaltung und Bewegung in der Musik. Berlin-Lichterfelde: Chr. Friedrich Vieweg, 1938.