Motion and Emotion

BY REBECCA PENNEYS

As a little girl, I spent hours dancing around the house to all kinds of music. Fortunately my parents loved music and encouraged this routine. By age three I could play the piano by ear and soon afterwards began lessons in both piano and ballet. I loved music, and even thought I was music.

Early on I felt the first symptoms of physical problems at the keyboard. Sitting at the piano felt confining and seemed to restrict my natural self-expression, whereas dance felt liberating and exhilarating. In dance I seemed one with the music, with my body in balance; at the piano I felt cut off from the music's emotion.

Encouraged by my family to pursue piano as a career, I found myself giving concerts by age 17, yet already I was having trouble with fatigue and tension during larger works. Gradually I realized that becoming comfortable as a performer meant combining my two childhood disciplines, to find a way to dance at the piano. As a student, performer, and teacher, I drew from knowledge of how the body works in dance and applied this to the piano, seeking an effortless way of translating musical emotion into physical motion at the instrument.

The Piano Mechanism

Often I hear students complain, "I can't get the piano to do what I want," a lament that usually indicates they do not adequately understand the instrument's mechanism. As in any keyboard instrument, what is true for one key is true for all others. Whether a pianist plays rapid figuration, trills, tremolos, repeated notes, or repeated chords, the piano functions the same way: the key goes down and comes back up. The player who can feel the key moving smoothly in both directions has maximum control of the action.

A typical key travels about three-eighths of an inch, with one or two ounces sufficient to depress it. Thus the finger action necessary to play the instrument efficiently is quite small; at increased speeds the movement is even smaller. No one needs extra finger muscles to play the piano, and anyone who can wiggle his fingers quickly has enough finger independence. Finger exercises are not music, and practicing them endlessly amounts to waging war against what the action already does for the pianist.

In addition to the escapement, which causes

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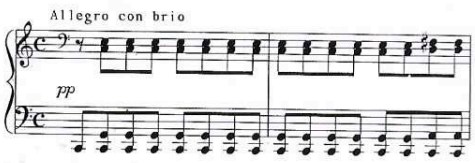
Rebecca Penneys is professor of piano at Eastman School of Music and chairs the piano department at the Chautauqua Institution. Founder and pianist of the New Arts Trio, she balances a busy solo and chamber music schedule with an international class of students.

the key to come back up unaided, the piano mechanism includes an element pianists call repetition and piano manufacturers call after-touch; the finger feels this as a bump in the action as a key is slowly depressed. Because of this feature the key does not have to come all the way up before a note can be repeated, so repeated notes can be played easily by moving only between the bump and the bottom of the key bed. The efficiency of the repetition and escapement makes the modern piano respond well to weight transfered in seesaw-like fashion from the upper arm to the finger pad. This weight transfer is far less efficient, though, if the hand is tense or inflexible.

Like the modern instrument itself, the repertoire of physical motions for playing the piano arose in the 19th century, beginning primarily with Beethoven. Octaves, repeated chords, trills, tremolos, rapid motion up and down the keyboard, and other technical challenges are part of the language of 19th- and 20th-century piano literature and form the basis of successful piano technique, a technique that involves the entire body. For most young piano students, however, early lesson repertoire consists of music that uses only the fingers and forearm; this includes many baroque and classical pieces written for clavichord, harpsichord, or fortepiano, instruments that differ greatly from the piano in construction and physical requirements. I know of no pianist who has developed any serious discomfort or physical ailment from playing only baroque and early classical music. In essence piano students learn to play other keyboard instruments on the piano, then run into trouble when they try to apply technique appropriate for the harpsichord, clavichord, or fortepiano to 19th-century repertoire. When small and limited muscle groups are asked to do the impossible, eventually injury is inevitable.

Many piano students seemingly confuse the mechanism of the piano with that of earlier instruments. For example, they press heavily on the key to keep the sound going, when the slightest arm weight would suffice, and even though only the right pedal can extend the sound. In the opening of Beethoven's *Waldstein* Sonata, Op. 53,



they are unable to play the repeated chords rapidly because they apply too much pressure, not allowing the keys to come up of their own accord. Left to itself, a key rises quite swiftly; press a key with a pencil and see for yourself.

Music for 17th- and 18th-century keyboard instruments calls for only occasional and modest horizontal motion; figurations tend to be the size of the hand or smaller, generally less than an octave in range. The piano, an instrument two to three octaves longer than its predecessors, calls for more horizontal movement, which of necessity involves the upper arm. By opening and closing the arm so that the hand can slide along the tips of the white keys with knuckles parallel to the keyboard, a pianist maintains the same hand position for every key. Changing the wrist level or moving the arm up or down changes the amount of weight released into the key. Opening the arms from the shoulder preserves the horizontal relationship between fingertip and keyboard.

Liszt is said to have told his students that the hand starts at the shoulder, a wonderful image even if the anecdote is apocryphal. Although a finger is the connection between pianist and piano, it is the end and not the beginning of motion involving the rest of the body. A pianist playing forte uses the muscles of the upper arms, back, and legs; playing triple forte adds body weight and the muscles of the lower torso. The vast majority of gradations in piano sound depend on an efficient operation of the arm supported by the back and lower limbs, and a pianist's expressive capabilities hinge on his precise knowledge and control of these physical operations. Like dance, playing combines motions of the entire body to express the emotions of the music.

The Player's Physical Mechanism

Most of my students have already received extensive training yet feel uncomfortable and tight at the piano. In learning to concentrate so hard intellectually, they have neglected many other aspects of playing. Commonly they replace normal breathing with long periods of holding the breath or with shallow, jerky inhalations. Asking a student to sing the phrases he is playing teaches the importance of breathing. When we sing or talk, we move naturally in harmony with what we sing or say, automatically communicating both physically and emotionally. Breathing deeply, as in sleep or an otherwise relaxed state, helps melt the statue-like postures and awkward, rigid positioning so many students wrongly adopt when playing an instrument. In life we are in continuous motion, both our inner thoughts and feelings and, however subtle, their external manifestations; the effects of gravity and the principles of physics and physiology are also in constant operation. Music is an art form that

exists in time, and playing it calls for continuous motion. A musician feels best when, as in dance, the body's movements and breathing resonate with the rhythms of the music.

Any unnatural posture or exaggerated rigidity leads to physical problems at the piano. The same is true of finger pressure; pressing hard results not in feeling more but in feeling bad. Less physical energy and thus less emotional expression can pass through a joint when it is immobile. Often pianists impose a set of gestures on their playing that have nothing to do with giving physical expression to the emotions of the music; with bodies cut off from these emotions, eventually pianists suffer injury and are forced to stop playing.

The human body is itself a miracle. How do we all learn to walk, run, and play in the sandbox? No one takes lessons, yet the muscles are able to perform highly complicated tasks without any interference from the conscious mind. The neurological patterns involved in playing trills, scales, or arpeggios are not consciously learned detail by detail, any more than a child learns to run or jump step by step.

No healthy person chooses to walk in a cramped position; similarly, a healthy performer retains his flexibility and avoids a cramped playing position. Just as we do not stretch before normal walking or talking, a pianist should be able to perform without a regimen of preparation. Children are more limber than adults and have an innate sense of their bodies, but as they grow up and assimilate knowlege in other areas, they lose this body awareness; adults rarely regain this sense until something goes wrong. Dalcroze, Alexander, and Feldenkreis offer excellent techniques for reuniting mind and body.

Deciding to use a tool as a lifelong vehicle of communication should imply learning the most effective and efficient way of using that tool, so as to achieve maximum results with minimum effort. Seventy-five percent of my teaching is devoted to undoing acquired, unnecessary manipulations of the body. All too many music teachers know a great deal about music and how it should sound but have only a slight understanding of how the body works and how it can be used most economically to draw music from the instrument. Producing the piano's infinite array of sounds involves exploring speed, height, weight, mass, and gravity; it is the combination of these aspects that creates variety in touch and tone. Nevertheless, many of my students think that hearing a piece in their head is a good substitute for practicing. While it tells the performer that he knows how the piece sounds from beginning to end, inner hearing does nothing for physical security. Technical accuracy depends on merging hearing with body movement.

Once a student is comfortable with the mechanical aspects of playing, practicing can shift to a more imaginative mode. Paraphrasing my major teachers, Aube Tzerko, Menahem Pressler, Janos Starker, and Gyorgy Sebok, I tell students that practicing is communication, like writing letters left unsent: complete except for the audience or postage stamp.

Learning and Memorizing

A pianist should combine the breathing of a singer, the movement of a dancer, and the timing of a conductor. The resulting synthesis encompasses both the process of learning music and the resulting process of remembering it. For most musicians today, though, memorizing means something different: sitting down expressly to learn a piece through a series of intellectual contortions. This is another way of imposing artificial and unnecessary systems onto an otherwise natural process.

When I was 13, I arrived at the Aspen Music Festival to study with the now-legendary teacher Rosina Lhevinne. Prior to this I had played music either by ear or from the score and had had no problems with memory. Blessed with perfect pitch and good coordination, I simply sat down and played; it seemed the easiest thing in the world, a channel of security in an otherwise unsettled existence.

At Aspen I found myself in a weekly master class with older players, ranging in age from 20 to 40. Whoever performed invariably suffered a memory lapse. I had never before encountered this phenomenon and found it frightening, all the more so because our teacher never addressed the questions of predicting and preventing such lapses. I began questioning my every move and instinct and within two weeks was no longer able to play anything from memory. Worrying that I did not know the music or would forget it derailed my performances as a matter of course. Furthermore, I began to question my hearing and thus lost the ability to play by ear and use perfect pitch. My innate talents went underground; it took years for me to trust myself to play by ear again and to understand how my intuitive, established learning patterns had been burglarized.

Through hearing sounds, feeling the physical motions of playing, and experiencing the emotions of the music, a pianist develops a natural, integrated learning process that is at once conscious and unconscious, instinctive and intellectual. Virtually anyone who can carry a tune can sing back a melody if it makes an

impression; to a great extent the emotional experience creates the memory. Playing an instrument simply involves translating this emotional connection into a satisfying physical sensation that, like riding a bicycle, the body will remember. Memory then emerges as a spontaneous by-product. A pianist does not sit down at the instrument to remember but to recreate an experience; in doing so he will automatically recall images, whether visual, physical, or aural.

Similar ideas apply to sight-reading, the ability to read music fluently at sight just as we read words aloud. Music begins with the ear and then via the body becomes actual sound; in making music the ear is far more important than the eye. For professional performers sight is of minimal importance because the hand often moves more quickly than the eye. Even in chamber music visual cues may be unnecessary, because after playing together for a long time the members of a group may develop a sixth sense of each other's timing; they often achieve better ensemble by not looking, and the act of looking may needlessly delay the physical response at the instrument.

For most pianists sight-reading is a difficult task, far more of a struggle than reading aloud. They read note by note rather than in phrases, the equivalent of reading aloud letter by letter or syllable by syllable. Similarly, whereas we take for granted the ability to converse freely without stumbling for words, many professional pianists cannot improvise in any style. Just as reading the written word assumes a knowledge of grammar and syntax, reading music should draw on a player's familiarity with harmonic, rhythmic, and melodic patterns. The stronger the connection between hearing and feeling, both emotional and physical, the easier to improvise, sight-read, and learn new music.

Performance Anxiety

Any performer has to learn to deal with stress. Many times the fears inspired by an upcoming performance arise from the musician's character and have nothing to do with music or performing; the anxiety is there already, and the approaching performance merely pulls the trigger. Were the player to switch professions, the anxiety would simply turn up in another guise.

Anxiety inspired specifically by performing typically manifests itself in shallow breathing, cold hands from impaired circulation, stiff legs, a slight tremor in hands or legs, sweaty palms, confused speech, and other physical symptoms. Onstage the pianist generally plays more rapidly than intended and keeps the pedal down too long. A performer worries not about missing a few notes but about not being able to play at all or having a memory lapse without being able to recover.

In performance a musician does not think, in the usual sense; there isn't time for that. Instead one lets go, allowing the body and its instincts to take over. This works provided that both the mind and body have absorbed the music, with motion and emotion fully integrated, and that the player leaves room for inevitable human error rather than trying to mimic the mechanical perfection of recordings. As performers we should remember that we have a lot to draw on; the aural and physical language of playing is part of our very fiber, and as long as we exist the music within us will exist as well.

At best performing takes getting used to. A pianist has to know how to switch from practicing to practicing performing, adjusting from practice room to lesson to an audience of one to a master class, informal recital, or formal recital. This differs little, though, from the way we shift gears between activities in daily life. Ultimately performing is interesting and enjoyable, a way of learning about oneself, the music, and even other people.

An Ounce of Prevention

Not every performer has aches and pains; many colleagues and I have learned that it is possible to play the piano without discomfort. Some players even have an inborn capacity for playing an instrument, much like a gift for languages. Eventually, though, everyone gets tired, and repeating the same task for hours without respite runs a high risk of injury. The body is not a machine. Every player should develop a sense of his physical limits and avoid driving himself beyond that point. Common sense suggests resting when we are tired, whether amidst arduous practice or the night before a concert.

It is important to distinguish between tension and overuse. Even the most relaxed player has to avoid overuse; but as much as we minimize tension in technique, some tension is basic to playing the piano. The trick is to build the release of tension into the physical action of playing.

Once the body suffers a major injury, it is never quite the same. As a teacher my goal is to prevent incipient injuries before they occur, encouraging students to respect their physical limits as they integrate motion and emotion. In teaching myself to play comfortably, I have learned to understand my students' discomfort and pain, the flaws in their listening, and the problems in their coordination. The journey has been a rewarding one: they tell me that they feel better, practice less, and accomplish more. □