

# FREEING THE CAGED BIRD



Developing Well-Coordinated,  
Injury-Preventive Keyboard Technique  
with  
BARBARA LISTER-SINK

## *Rethinking Technique* by Barbara Lister-Sink

“...so we are not dealing with more or less ingenious theories, but with what ever goes straight to the point and smoothes the technical side of art...” *Chopin; Pianist and Teacher*, by Gean-Jacques-Eigeldinger, Cambridge University Press, 1986

Most music professionals acknowledge a waning of interest in traditional piano playing. Influences outside the studio are responsible for some shifts in values: popular music, television, general decline in arts funding and support, and peer pressure all contribute to the decline in classical music studies. Understandably, many teachers become discouraged and either give up or compromise standards of excellence to counter this trend, but still feel that this is a losing battle.

This is not the first time in the history of piano playing that such a problem has arisen. In 1928 teacher and pianist Abby Whiteside wrote: “There is a lamentably small ratio of successes in the piano field in proportion to the number of talented boys and girls found in studios throughout the country.”

Whiteside herself believed that **the way piano technique was taught was part of the problem**. Before placing all blame on forces beyond their control, teachers need to ask themselves if this is still the case today.

One need only ask any pianist to discover that many have had little technical training at all or have studied as many technical approaches as their number of teachers. These techniques can be blatantly contradictory, leaving the student to decipher the differences and relative merits. Often associated with a particular nationality, “school” or renowned teacher, various techniques of playing can run the gamut from sustained physical tension throughout the hands, arms, shoulders and neck, to near-complete relaxation of all playing muscles. Usually a student is confronted with a mixture of technical “pointers”—fingers lifted/fingers flat, wrists high/wrists low, elbows out/elbows in, arms stabilized/arms swinging, etc—which he diligently practices without knowing why. Many technical approaches contain learned or instinctive wisdom. However, the student rarely understands partially, let alone wholly, the bio-mechanical logic behind these approaches. Confusion is the predictable result. Pedagogical chaos is another: the pianist, understanding only in part, cannot teach the technical approach clearly or effectively to another pianist. The worst results are fatigue, discomfort, pain or eventual disfunction, and inevitable discouragement.

Clearly, one reason for the low ratio of successes among piano students is the existence of too many confusing, biomechanically specious spurious technical approaches. **The importance of technique cannot be overstated. It is the physical means whereby we make music.** The great teacher Nadia Boulanger stated “Music is technique. It is the only aspect of music we control... One can only be free to express music if the essential technique of one’s art has been completely mastered. (“Sayings of Great Teachers,” *The Piano Quarterly*, No. 26, Winter 1958-59)

Piano teaching is imbued with traditions; one of the strongest is to teach as we were taught. However, if a pianist studies a number of confusing or even contradictory technical approaches it is difficult to select the best one to pass on, were there indeed a best one. Pianists honor their teachers' knowledge, dedication, love of music, and kindness; consequently it is painful to entertain the idea that those efforts may not have always reflected what was best for us technically.

Perhaps the time has come to re-evaluate this diversity of technical approaches. For decades the right of an instructor to teach his technique of choice, constructive or destructive, has gone unquestioned. Up to now, teachers have even embraced the right to teach no technique at all. Attempts to reduce the variety of approaches and systemize technical instruction has often been viewed by teachers as a threat to individual artistry and creativity. Ironically, the prevailing distrust of a given system and the destructive results caused by some systems account for the proliferation of these approaches.

Radical changes in teaching and playing may not be necessary. Teachers need not categorically give up or discredit the techniques they learned or are teaching. Establishing a technical system that works for everyone is analogous to establishing the right nutritional program—eliminate what does not always work and retain or add what consistently works. The important rule is **to understand from a physical/bio-mechanical viewpoint why one is using the body the way one does.**

Piano technique needs, once and for all, to be clearly defined, drawing on past wisdom and present scientific knowledge. That definition should begin with the principles of good coordination and efficient body use. With these basic principles of good coordination and biomechanics clearly understood, teachers could discontinue promoting so many confusing technical approaches and establish a common, universally acceptable approach to playing the piano that works for all pianists in all styles. Playing with good coordination and the best use of their bodies would enhance, not threaten, individual musical styles and personalities.

In defining technique, some of the most successful keyboard teachers of the past three centuries have held several common beliefs: technical command is a skill, not a talent, and most can learn it; good technique is synonymous with physical ease, not difficulty; technique influences musicality; and injury from playing is unnecessary.

An attempt to establish a common technical system would create many challenges. The first challenge would be to identify biomechanically sound techniques and teaching methods, past and present. This is a mind-boggling task in view of the amount of information. There are a number of scientists, physicians and health and movement specialists who have joined with musicians to address injury prevention, good coordination and sound biomechanics at the piano. Numerous organizations, conferences, and journals on art and medicine appeared in the last decade. Among current piano teachers who understand and teach good coordination and injury-preventive techniques are Dorothy Taubmann and Rebecca Penneys. Gilels, Richter, Rachmaninoff, Josef and Rosina Lhevinne, to name a few, represented the Russian "school" of piano technique, a technical system renowned for its freedom and virtuosity. Versions of this technical system are currently being taught in our country by Alexander Peskanov, and a variety of Russian pianists recently employed in the US. Historically, there are numerous excellent writings on technique that revolutionized piano-playing at one time but that are now nearly forgotten. In 1716 Francois Couperin wrote his *L'Art de Toucher le Clavecin (The Art of Playing the Harpsichord)* Students and colleagues documented Chopin's teachings. In 1903, Tobias Matthay published his *Art of Touch* and reinstated the basic principles of injury-preventive technique and good coordination. In 1929, *The Pianist's Mechanism* by Abby Whiteside was published concurrently with the scientifically

exhaustive *The Physiological Mechanics of Piano Technique* by Otto Ortmann. Add to these various writings by great pianists and teachers of this century such as Hofmann and Gieseking, as well as more recent books such as Gyorgy Sandor's *On Piano Playing*. For a well-written, thorough overview of the history of piano technique, *Famous Pianists & Their Technique* by Reginald R. Gerig is a summary of keyboard technique since 1600.

Although this centuries-old technique of good coordination and efficient body use exists, something prevents it from widespread and universal acceptance. Pedagogical systems that teach this technique have come and gone while teachers and students continue to grapple with partial or faulty knowledge, discomfort, pain and injury.

The key to a permanent solution lies not only in defining technique through the principles of good coordination and sound biomechanics, **but in the means used to teach it**. The only way to teach the biomechanics of any complex physical activity, whether it be golf or piano playing, is hands-on, through the senses—aural, visual, tactile and kinesthetic. The great stumbling block to transmitting knowledge of piano technique through the centuries has been the reliance on the written or spoken work as the primary teaching language. While valuable as a means of underscoring what has already been learned, words cannot teach the physical sensations necessary for technical mastery and good coordination.

To begin with, pianists should view themselves as athletes, as well as artists. Basic form is a concept both pianists and athletes can use. The movements of piano playing are analogous to the complex movements of sports; good coordination in both are defined by natural, efficient body use in both simple and complex movement patterns—the most results with the least amount of effort. The only difference is that pianists use primarily the smaller muscles of the arms and hands, although the larger muscles support the smaller muscles. In tennis it is not enough merely to get the ball over the net or in figure skating to cut the appropriate patterns on the ice. The athlete's coordination of these movements—the basic form—is just as important. The mastery of basic form and physical coordination also insures consistency and reliability in the activity.

In instructing a beginner, a good tennis or golf coach first emphasizes the basic stroke or swing, coordinated throughout the whole body. A beginner practices this stroke again and again for two primary reasons: to insure consistency in controlling the placement of the ball and to develop a fundamental sense of good coordination and timing. It is this feeling of smooth coordination which eventually leads to mastery of the more complicated strokes or swings of the game. A good athletic coach realizes the importance of teaching basic form and efficient, free body use. Understanding and programming in the “basic stroke,” the fundamental gesture of making sound at the piano, is the first requirement of piano technique, but one which is rarely addressed by teachers. From it the principles of good coordination and efficient body use at the piano are established.

The following seven steps outline a plan for teaching the technique of good coordination and free, efficient body use at the piano. **The sensation of good physical coordination, as in sports, can only be taught in a hands-on manner.** These steps serve only as a superficial indicator of the complex, step-by-step process used for teaching. Depending upon the pianist's total profile and history, certain steps will require more time. All steps must be presented by means appropriate to the pianist's age and learning style. In teaching these steps, the cardinal rule of good pedagogy must be followed: master each step before proceeding to the next. The first six steps require an average of eight weeks of bi-weekly lessons, and daily short lessons to reinforce the physical sensations learned are desirable for the first two weeks. The technical goal is for the basic coordination and vocabulary of gestures to be “programmed” into the pianist's body and mind and become automatic.

The first four steps involve learning away from the piano. First, a pianist should understand the importance of total well-being, physically, mentally and emotionally. Realizing full potential, technically and artistically, is directly related to a pianist's state of health, maintained by sound nutrition, sufficient rest and exercise, good muscle tone, and an alert, positive mental attitude. The second step draws upon such body-awareness techniques as Alexander and Feldenkrais to help the pianist cultivate an awareness of the whole body at rest. (These first two steps may be modified for very young students.) Next, developing sensory-motor control of voluntary muscles teaches pianists to consciously contract and release the muscles necessary to playing. In this way, accumulation of muscle tension, a major cause of injury, is avoided. Fourth, the pianist understands how the whole body coordinates the movements of simple daily activities, such as walking, eating, writing, in the most efficient, natural way. Concurrently, accumulated body tension and habits of faulty body use are identified and eliminated.

Now that the pianist has knowledge and more control of the human mechanism, the fifth step is to learn how the piano mechanism works. Then from an understanding of how sound is produced, the pianist can move to the sixth and most critical step, the learning of the basic physical gesture of tone production. This is the "basic form" of the athlete or "basic stroke" of piano playing. **Reducing this all-critical gesture only to words is virtually pointless, although one hopes it may spark recognition of certain sensations or gestures already learned.**

In order to produce sound the most naturally and efficiently, the pianist must sit comfortably, be free and released throughout the body, and have no strain on the joints or spine, and no unnecessary muscle tension. The torso is well-balanced and supportive. From this point of ease and freedom, the basic stroke may be practiced in four separate parts and then as one integrated gesture. The first component part is an easy lift of the forearm, initiated from the wrist, hand hanging freely. (This is the equivalent of the golfer's preparatory back swing.) In this component, the upper arm is hanging freely from the shoulder socket. The second component is a free fall of the forearm, practiced on the pianist's lap and then on the keys. In this part, the hand lands on a naturally flattened palm. (This is the equivalent of the golfer's swing toward the ball.) The third component is the contact with the key. (This is the golfer's contact with the ball). In this component the pianist learns what the most efficient alignment of joints and degree of muscle tension is for supporting the falling weight of the arm and activating the piano key. The last component is the instantaneous release of the muscles of the forearm and hand and the retraction of the weight of the arm into the skeletal frame. (This is the golfer's follow through of the club after contact with the ball.) The instantaneous muscle release of the whole arm, excepting the bicep, is equivalent to the amount of time the hammer is in contact with the piano string. After concentrating on mastering these component parts, the entire gesture is integrated and timed for perfect coordination. Its speed and force will vary with the requirements of the music. **Every gesture is integrated throughout the entire body. Body parts are not viewed or experienced separately; good coordination is the harmonious working together of all the parts.**

The last step is the ongoing integration of this basic gesture of tone production into increasingly more complex movement patterns. This should be done primarily through exercises carefully selected to build good coordination incrementally. Skipping ahead prematurely to overly challenging movement patterns will create excess tension and cause the pianist to revert to inefficient body use and poor coordination. The *Mikrokosmos*, Books I - VI by Bela Bartok are brilliant pedagogical tools for step-by-step building of this basic form and good coordination at the piano.

By this time, with the constant hands-on instruction of the teacher-coach, the basic gestures of playing the piano will be natural, free and automatic. The pianist will then begin applying this basic playing mechanism or form to increasingly complex music.

Ultimately, the pianist acquires the **sensation** of good coordination and free, efficient body use. Observing visual images of great pianist examples of this technique, such as Artur Rubinstein, will reinforce the teacher-coach's hands-on instructions. As a result of using this technique, a pianist will be less likely to suffer the physical distractions of fatigue, strain, pain, or injury. Increased control, flexibility, facility and power will enhance tone quality, variety and dynamics and will allow a greater range of repertoire. A pianist will be less likely to suffer from performance anxiety because a healthy mind and body bring joy to playing the piano. Technique will no longer be a cage imprisoning artistic expression. The songbird of artistry will finally be free to sing forever outside the bars of any cage.