

# ***Multi-Dimensional Piano Playing: Establishing Fluid Technique from the Beginning***

presented by

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## I. Foundations

### A. Seated position

1. Position on bench
  - a. Supported back, but not arched
  - b. Sit on front half of bench with feet comfortable for pedals; find the "center" of balance, allowing for *rotational* and *vertical* mobility of hips, not just lateral
  - c. Dropped shoulders with arms hanging freely; head comfortably balanced over spine.
2. Distance from keyboard—gauged by
  - a. Angle of upper arm: close to perpendicular to floor, but elbow slightly forward of shoulder
  - b. Feeling of mobility per individual anatomy
3. Height
  - a. General guideline: forearms roughly parallel to floor when playing to facilitate gravity usage, but not so low as to cause strain on carpal tendons
  - b. Variable per anatomy and taste (e.g., notable low-sitters: Awadagin Pratt, Glenn Gould—although we now know that Gould had focal dystonia! )
4. Lateral position
  - a. General guideline: between c<sup>4</sup> and d<sup>4</sup>
  - b. Variable; may depend on repertoire or individual anatomy

### B. Continuing alignment

1. Forearm behind metacarpophalangeal joints (bridge or knuckles); no cramped or "swiveled" wrist
2. Quiet hand: fingers not in use rest on surface of keys, whenever possible; thumb relaxed and aligned (often *off* of keyboard)
3. Fingers supported (not collapsed) at each joint, *slightly* curved—not "curled" or hyperextended)
4. Land in center of finger, *usually* on "pad" (exceptions include higher wrist in double notes). Also, carefully practice to land in the center of black keys (room for error is smaller than on white keys)
5. Follow natural alignment rather than trying to stay perpendicular to keys (see A.1.b. —hips usage)

### C. Awareness of levers and joints: Sternoclavicular joint, upper arm, forearm, hand, & fingers

## II. Applications of Three-Dimensional Technique

- A. Awareness of the soundpoint—3 main varieties: shallow, keybedded, “cushioned”
- B. Utilizing gravity: free fall with rebound
  - 1. Whole hand (palm/cluster)
  - 2. Intervals (dyads; e.g., a fifth)
  - 3. Each finger, aligned and supported
  - 4. Chords aligned between the extreme fingers
- C. Two finger exercises (“Down-up”)
  - 1. Generate gesture from motion, with a preparatory lift and drop
  - 2. Supple wrist is essential
    - a. Allows “rebound” of arm weight *just past* soundpoint
    - b. Acts as “conductor” for effective utilization and transference of arm weight
  - 4. Combinations: 2-3, 3-4, 4-5, 1-2; others possible (e.g., 2-4, 3-5)
- D. Three, four, and five fingers, stepwise motion: Basic Three-Dimensional Form
  - 1. Preparation is essential (as in II.C.1.); release arm weight on follow-through of last note
  - 2. Transfer weight from one finger to next
  - 3. *Release* each finger naturally (not pulled up or any continued contraction) as next is utilized
  - 4. Adjusting motions
    - a. Vertical motions, including “continuous drop,” when appropriate
    - b. Awareness of supporting arcs at wrist: l.h. —clockwise, r.h. —ctr-clockwise
      - 1. “Under [and out] ” motion from thumb to 5th (supination); often helpful to ‘see fingernails,’ toward edge of keys, during supinating movements
      - 2. “Over [and in]” motion from 5 to 1 (pronation)
    - c. Small in and out adjustments effect continuous, circular movement
    - d. For black keys, wrist *slightly* higher & upper arm more forward
    - e. No visible or *unsupported* rotary motion of forearm
    - f. When speed of passage increases, size of motions decreases
  - 5. Combinations without passage of the thumb
    - a. Three-fingers: 2-3-4, 3-4-5, 1-2-3
    - b. Four fingers: 2-3-4-5, 1-2-3-4
    - c. Five fingers: 1-2-3-4-5, 1-2-3-4-5-4-3-2-1

### E. Arpeggio technique

1. Applications of the Basic Three-Dimensional Form (II.D.) with interval expansion
2. The Throw—(sudden, unprepared lateral motion from 3 to 1 or 4 to 1 and vice versa)
3. Combination of three-dimensional movement and the throw, with musical listening and connection
4. “Finger legato” is possible (and usually desirable) in slow arpeggios; in faster arpeggios, throw is essential

### F. The Vibrato Technique

1. Preparatory, whole body exercises
  - a. Breathing and activation of larger muscles
  - b. Knocking on a vertical surface
  - c. The basic vibrato motion on a horizontal surface
2. Repeated Notes and Chords
3. Octaves
4. Tremolos
5. Trills

### G. Scales

1. Applications of II.D
2. Passage of the thumb
  - a. Generally, slightly lower wrist position; at faster speeds, adjusting motions almost invisible
  - b. *Small* movement inward towards 3 or 4 before passing under with the thumb—not “thumb-under” with held tension. (The effective motion is similar to *the throw* in arpeggios.)
3. Order of learning major scales
  - a. Group II (B, C<sup>#</sup>, F<sup>#</sup>)
  - b. Group I (C, G, D, A, E)
  - c. Group III (A<sup>b</sup>, E<sup>b</sup>, B<sup>b</sup>, F)

Most pianistic scales: r.h.--B, E, F<sup>#</sup>; l.h.--C<sup>#</sup>, E<sup>b</sup>, F<sup>#</sup>; most awkward: C; l.h.--D, A

## H. Staccato

### 1. Types

- a. Finger
- b. Wrist ("Fallacy of" - Gyorgy Sandor in On Piano Playing)
- c. Arm
- d. *Integrated*, with three-dimensional shaping, particularly "in and out" and "up and down" with upper arm

### 2. Applications

- a. Single notes, predominantly step-wise
- b. Double notes, less than an octave
- c. Octaves (with vibrato technique)
- d. Repeated notes—with or without alternating fingers

## J. Thrust (faster attack from the surface of the keys, without preparation)

1. Motion generated from upper arm
2. No wrist preparation, however, wrist still aids in decelerating the motion
3. First fulcrum employed is the fingertip itself
4. Variety of speeds possible

## Premises:

- Circular gestures produce more continuous, musical sound than jagged, angular ones, which stop sound.
- Fingers should be independent of one another, but *interdependent* with the rest of the playing apparatus.

## Watchwords for Multi-Dimensional Movement and Coordination:

**Balance  
Support  
Quiet Hand  
Alignment  
Preparation  
Continuous Drop  
Momentum  
Follow through  
Continuous Alignment  
Release**

## Physiological Terms Related to Piano Playing\*

**muscle** - a tissue composed of fibers capable of contracting to effect bodily movement

**metacarpus** - the part of the human hand that includes the five bones between the fingers and the wrist

**flexor** - a muscle that when contracted acts to bend a joint or limb in the body

**extensor** - a muscle that extends or straightens a limb or body part

**abductor** - a muscle that draws a body part, such as a finger, an arm, or a toe, away from the midline of the body or extremity

**adductor** - a muscle that draws a body part, such as a finger, an arm, or a toe, inward toward the median axis of the body or extremity

**ligament** - a sheet or band of tough, fibrous tissue connecting bones or cartilages at a joint or supporting an organ

**tendon** - a band of tough, inelastic fibrous tissue that connects a muscle with its bony attachment

**bursa** - a sac or saclike bodily cavity, especially one containing a viscous lubricating fluid and located between a tendon and a bone or at points of friction between moving structures.

**synovia** - a clear, viscid lubricating fluid secreted by membranes in joint cavities, sheaths of tendons, and bursae

**supinate** - to turn or rotate the hand or forearm so that the palm is upward or forward

**pronate** - to turn or rotate the hand or forearm so that the palm faces down or back

\*Taken from The American Heritage Dictionary of the English Language, 3rd edition

### Quotes:

"The work 'technique' is often mistaken to mean agility and dexterity at the keyboard, whereas it signifies the vast possibilities to be drawn from the piano. It encompasses every shade of expression the instrument can give..."

--Tobias Matthay/Denise Lassimonne

"In one respect technique is mental: for you must teach your mind to direct the limb-condition required by activity and inactivity. The important thing is to supply solely the needed exertions, without any interference from unwanted ones. If you allow opposite exertions to be used at the same time as required ones, the result is stiffness and an inability to express what you intend."

--Tobias Matthay/Denise Lassimonne

"Technique is the ability, gained by experience and practice, to bring the anatomy of the human body to bear on the instrument, and in so doing to achieve the best possible results with the least possible exertion."

--Louis Kentner

"Teaching means searching together with the student. It is a voyage of discovery. Real teaching means extracting the potentialities already in the person, helping him or her to obtain the maximum result by using the minimum effort, but the required effort at the right moment and the right place, projecting the emotional impulse within yourself to the instrument."

--Tobias Matthay/Denise Lassimonne

**Fred Karpoff** is the 2011 Winner of the Frances Clark Keyboard Pedagogy Award presented by Music Teachers National Association, for *The 3-D Piano Method*. Produced with filmmaker Richard Breyer in 2009, *3-D Piano* is a multi-DVD series and book on a whole-body approach to piano playing and teaching, currently in use by pianists and teachers in over thirty countries around the world. *Entrada Piano Technique*, his new online video resource to support piano teachers and their students, launched in late 2014.

A former USIA Artistic Ambassador and prizewinner in several international piano competitions, Fred Karpoff is an acclaimed pianist with performances in twelve countries. He presents workshops and master classes at universities, music teachers' associations and conventions throughout the United States.

His principal teachers were Yoheved Kaplinsky, Ann Schein, and Robert Weirich. He holds the Doctor of Musical Arts degree from the Peabody Conservatory, where he was a frequent performer in the master classes of Leon Fleisher. His undergraduate training took place at Northwestern University. He has also studied with Richard Goode, Jeffrey Kahane, and Karl-Ulrich Schnabel.

Karpoff has served on the faculties of the Peabody Conservatory, University of Maryland at Baltimore County, and as Visiting Professor at the Eastman School of Music. He is Professor of Piano and chair of the keyboard department at the Setnor School of Music at Syracuse University, which has honored him with the Excellence in Graduate Education Faculty Recognition Award.

Fred Karpoff is a Steinway Artist. More information is available **at [entradapiano.com](http://entradapiano.com)**.