

Habits Common to Pianists with Dystonia and Other Involuntary Movements

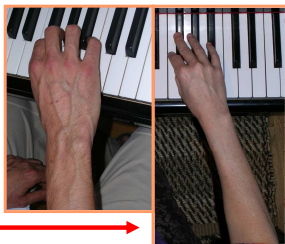
Teresa Dybvig, DMA

Observations over 15 years of 17 pianists with involuntary movements who sought help to play with healthy technique revealed the same **incoordinate** movements and alignments.

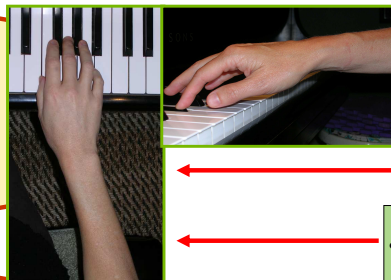
The incoordinate alignments and movements can be changed. When pianists play in their natural alignment with **coordinate** movements, the involuntary movements reduce or disappear.

Incoordinate:

- Wrists too straight outside
- Wrists below level of arm and hand



Hand shape:
Wrists
2nd finger

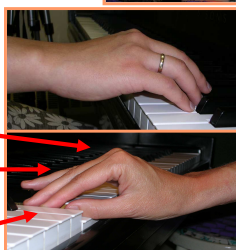


Coordinate:

- Wrists one piece with arm and hand
- Wrists in mid-range of motion:
 - up and down
 - side to side

Incoordinate:

- 2nd finger pulling toward thumb



Hand shape:
Knuckles



Coordinate:

- 2nd finger in easy natural shape

Incoordinate:

- Main **knuckles** tented
- Usually accompanied by straightened middle knuckles



Hand shape:
Thumbs

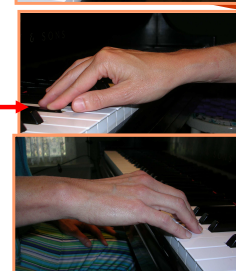


Coordinate:

- Main and middle **knuckles** in their tension-free natural shape

Incoordinate:

- **Thumbs** pulling forward (especially when moving to 2 or 1)
- Thumbs pulling or hanging down
- Thumbs pulling back (especially when moving to 4 or 5)



Finger movement



Coordinate:

- **Thumbs** slightly to side of palm
- No activity (extending or flexing) in thumb nail joint

Incoordinate:

- **Fingers** thrusting into key (aiming past the bottom of the key)
- Long fingers avoiding black key area



Posture



Coordinate:

- **Fingers** dropping easily from main knuckle
- Touching the bottom of key
- Long fingers rest in or over black key area

Incoordinate:

- Torso back
- Head forward
- Shoulders pulling forward
- Elbows out

Coordinate:

- Neck and head an extension of spine.
- Torso leaning slightly forward from hip joint
- Collarbones and shoulders open
- Upper arms hanging easily

Definitions

Involuntary movements. Involuntary movements are unwanted movements people's hands make that are out of their control. Fingers can twitch spasmodically from side to side, pull under the palm, snap under the hand, or pull up and linger in the air. I have seen students with involuntary movements who haven't received any diagnosis, and students who have received diagnoses of *focal dystonia*, which conforms to the description above, and *intention tremor*, which involves a more general trembling of the hand when a certain task is attempted.

Mid-range of motion. The range in which only the muscle on one side of a limb is activated.

At first, it is easiest to feel the *mid-range of motion* in contrast to the *extreme range of motion*. For example, when the hand is lifted from the wrist so the hand is at a 90° angle from the forearm, it is at its extreme range of motion. In this position, people may not feel the extensors, which are lifting. However, they almost always feel the flexors, on the bottom of the forearm and wrist, being stretched to their limit. Lifting in the *mid-range of motion* would not activate the flexors this way.

Coordinate. Efficient alignment and movement in the *mid-range of motion*, producing the maximum result from the minimum effort.

Incoordinate. Inefficient alignment and movement, often exceeding the *mid-range of motion*. Incoordinate alignment and movement produces fatigue and tension, and contribute to injury.

Our natural alignment is best for playing!

Fortunately, we carry a model of our own perfect alignment around with us: our hands hanging at rest at our sides. As this gallery of perfect forearms shows, we can look in a mirror to see our own true alignment -- the place of the wrist, knuckles, and thumb when none of it is rigid, but it it's all balanced in perfect alignment. The only thing that's missing is the toned liveliness that allows movement to occur. The less we mess with our perfect alignment, the better we play!

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