2D WRIST MOTION

The Role of 2D Wrist Motion: A Foundation, Not a Final Step

Two-dimensional wrist motion plays a valuable role in the early stages of developing expressive technique. It helps establish a link between the imagined direction of sound—particularly lateral side-to-side movement—and the physical response of the wrist.

This foundation becomes essential as you begin to explore more complex three-dimensional motions, such as 'rolls and swings'. One of the challenges with 3D motion is knowing where to begin—especially which direction the wrist should move first: left or right. Without clear directional awareness, these intentions can feel vague and confusing. 2D motion, practiced early on, helps develop that clarity.
It teaches you to recognize the direction of sound in your imagination and to choose the corresponding wrist movement with clarity.

In this way, 2D motion lays the groundwork for the 3D motion that will come later.
That said, it's important not to overuse 2D motion.

Practicing it for more than a couple of days—especially before your touch becomes fully relaxed and light—can lead to discomfort in the wrist, particularly if there is residual tension in the hand.
When using 2D motion, let the touch remain soft and light. Approach it as a brief learning stage—something to move through, not dwell in.

Aim to transition into 3D motion once the basic coordination and sense of direction are in place.
If you notice tension or strain, it may also point to a deeper issue: a missing link in tone production.
Elements like mental practice, inner singing, and the natural transfer of arm weight (which we will explore later in this course) are essential for freeing the hand from unnecessary effort.

Keeping your hands light, loose, weak and empty is essential in all wrist motion
in order to prevent unhealthy tension or playing-related injuries.

2D WRIST MOTION

How to Integrate 2D Wrist Movement into Your Playing

Wrist motion should follow the direction of the music:

- Move the wrist to the right when the next note is higher than the previous one.
- Move to the left when the next note is lower.
- If you begin with a single note, the initial direction is up to you. Personally, I find outward motion (right hand to the right, left hand to the left) more natural and spacious than inward motion.
- When repeating the same note, keep the direction consistent.
- In polyphonic textures, such as intervals or chords played with one hand, choose your wrist direction based on the melody line.

Practicing 2D Wrist Motion Mindfully

- Keep the hand light and soft—like a gentle, weightless stroke.
- Make a clear intention not to move the elbow during this stage. This is essential. Our goal here is to let the wrist develop new sensations of motion. If the elbow takes over, the wrist remains static and untrained. In that case, the elbow does the work that the wrist should be learning to do.
- For notes moving in the same direction, use one continuous stroke—avoid turning the wrist back after each note.
- For notes moving in the opposite direction, lead with the finger toward the note first, then let the wrist follow in 2D motion.

3D WRIST MOTION

The Role of 3D Wrist Motion in Relaxed, Expressive Playing

Three-dimensional wrist motion brings depth and expression to your playing.
It allows the hand to reflect the full sensation of tone, weight, and musical direction—especially when working with intonation and phrasing. Where 2D motion establishes the plane of movement, 3D motion gives it shape and breath.

Balancing Active and Passive Movement in 3D Wrist Motion

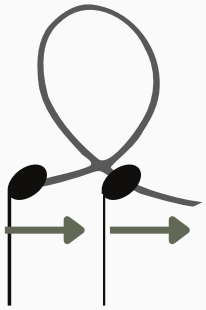
The balance between active and passive hand motion is essential for maintaining healthy, breathing tension while playing. When movement becomes entirely active or entirely passive, the natural ebb and flow of energy is lost—leading to stagnation and, eventually, tension in the body.

This is where 3D wrist motion becomes especially valuable. It helps you navigate the interplay between effort and release. For example, when the wrist reaches the 6 o'clock position through an active motion, it should then rise gently to the 12 o'clock position through a passive release—not another active push.
Allowing the upward motion to remain passive builds momentum for the next active movement downward, creating a continuous, wave-like cycle.
This alternation supports ease, rhythm, and fluidity—keeping the energy dynamic, balanced, and sustainable.

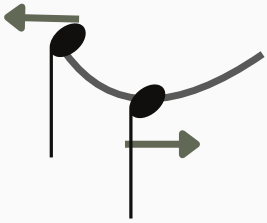
How to Integrate 3D Motion into Your Playing

In the same and opposite direction notes 2D motion describes the direction of the notes, while 3D 'roll or swing' motion describes connection between the notes.

Make a 'roll' between notes with the same wrist direction as well as between repetitive notes:



Make a 'swing'
if notes have opposite wrist direction:



3D WRIST MOTION

Practicing 3D Wrist Motion Mindfully

- At first, you'll likely not make your wrist movements deep enough—reaching only 4 o'clock instead of the full 6 o'clock position. For both 'rolls & swings', visualize a clock face placed against the keyboard, with the line from 9 to 3 o'clock aligned with the keybed. This will give you a clear sense of how wide and deep your 3D wrist motion should be as you follow this clock's path. To keep your hand relaxed, try imagining the clock as soft and melted.
- You can try counting "1 & 2 &," where "1" and "2" align with your wrist reaching the 6 o'clock position, and "&" corresponds to 12 o'clock. This even rhythm in counting will help build momentum, promoting smoother and more effective wrist movement.

- Between the notes, keep your fingertips lightly touching the key surface. Lifting your hand too high creates empty space, which invites tension. It's like writing in cursive versus printing. In cursive, the flow between letters makes writing faster and easier because you don't lift the pen off the page (like keeping your fingertips connected to the key surface). In contrast, when writing in print, lifting the hand after every letter creates gaps, slows you down, and demands much more effort.

- Amplitude in 'rolls & swings' is only in a slow tempo (one note/sec). In a faster tempo the wrist should not be dropped lower than the surface of the keyboard. All the movements become more elliptical.

- To prevent any abrupt pushing when approaching the first note, use an additional 'ghost roll' before playing it. This tendency to fixate on the initial note can stem from old habits of relying on finger movement rather than engaging your entire hand. Incorporating this extra 'roll' before starting helps break the habit of touching the first key with your finger alone. It allows you to approach the first note at the 6 o'clock hand position, after completing the 'ghost roll'.

Eventually, these motions will become part of your muscle memory and internal experience. Even when your wrist moves with minimal amplitude, you'll still feel a gentle, 'breathing' sensation within it. This ongoing internal motion helps prevent the stiffness that so often creeps into the wrist during extended practice.

Applying 2D and 3D Wrist Techniques to Double Notes and Ornamentation

- In intervals and chords hold on to the melody and gently let go of other supporting notes to freely move your wrist.
- Treat all ornamentation and embellishment notes as a melody, playing them slowly with good 2D or 3D wrist motion.

OPEN LESSONS