

Piano Playing Docs | Methods

JJ van Zon, 2021

Piano Motion Symbols

Introduction

This is an idea for a notation for that might extend fingering notation from just numbers to additional symbols, indicating how the hands and body might move.

I hope this might help create awareness of the body and help with piano technique.

Piano playing may involve:

- position, move, stretch, turn, press, stress or hold stationary
- fingers, wrist, arm and torso
- in x, y or z directions.

Not all body parts or motions seem equally involved.

These symbols aim to be a quite literal representation of body and motion, while still schematic and hopefully not ambiguous.

Basic Elements

| | | | | | |
|--|--------------|--|------------|--|-------------------|
| | Finger | | Move | | Press |
| | Fingers | | Stretch | | Loose |
| | Wrist | | Turn | | Tight |
| | Torso / arms | | Stationary | | Slightly (braces) |

Three Dimensions

Depicting things in 3 dimensions, the symbols may be like looking down at the hands in a sort of perspective projection. To represent depth, diagonal lines might be used. Here is how some things might work in 3 dimensions:

| | | | |
|--|-------------------|--|-----------------|
| | Move left / right | | Turn facing you |
|--|-------------------|--|-----------------|



Move toward black / white keys



Turn forward / backward



Move into keys



Turn side to side



Move out of keys

Nuance

Nuance, like press *a little* or move *a lot*, may be written down like this:

| | Restfully | Slightly | Normally | Exaggerated |
|--------------------|------------------|-----------------|-----------------|--------------------|
| Press | | | | |
| Move | | | | |
| Tight Wrist | | | | |
| Loose Wrist | | | | |

Tension & Release

| | | |
|--|-----------------------|---|
| | Reach sideways | Then let go, move hand back. |
| | Reach sideways | Then let go, move hand back. |
| | Stretch | Stretching fingers wider. But trying to release soon. |
| | Reach black keys | If arpeggiated, might prefer crossing over instead. |
| | Reach white keys | If arpeggiated, might prefer crossing over instead. |
| | Stretch diagonally | Composite of stretch sideways and reach for black keys. |
| | Finger move into keys | Pressure coming out of the fingers. |
| | Arm move into key | Pressure coming out of the arm. |
| | Hand resting on keys | |



Hand resting on lap

Jumps



Hand upward
(right)



Hand upward
(left)



Gravity assist
(right) Falling into key with gravity.



Gravity assist
(left) Falling into key with gravity.



Bowy jump
(sideways)



Controlled
jump
(sideways) Though grace might desire a bowy move, a jump may be rather big, and might need some control, so perhaps move toward first, then press.

Cross Over

May feel semi-smooth.

| | | | | | |
|--|-----------------------|--|------------------------------------|--|--|
| | Cross over (large) | | Thumb under finger / right hand | | With wrist turn (thumb under finger / right hand) |
| | Cross over (small) | | Finger over thumb / right hand | | With wrist turn (finger over thumb / right hand) |
| | | | Thumb under finger / left hand | | With wrist turn (thumb under finger / left hand) |
| | | | Finger over thumb / left hand | | With wrist turn (finger over thumb / left hand) |

Fingers

This might be used to say something specific about a finger in terms of motion, tension or otherwise.

Finger Position

And different amounts of fingers.

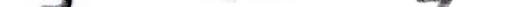
Flat Fingers Pronounced Fingers Curved / High Fingers

| | Flat Fingers | Pronounced Fingers | Curved / High Fingers |
|-------------------------|---|---|---|
| 1 Finger (Right) |  |  |  |
| 1 Finger (Left) |  |  |  |
| 2 Fingers |  |  |  |
| 3 Fingers |  |  |  |
| 4 Fingers |  |  |  |
| 5 Fingers |  |  |  |

Fingers Stationary

| | Flat | Pronounced | Curved / High |
|--|-------------|-------------------|----------------------|
| Fingers Stationary (left / right / finger number) | 14/ | | |
| Fingers Stationary (left / right / 1 finger) | 11/ | 17/ | 12/ |
| Fingers Stationary (left / right / 3 fingers) | 121/ | 1571/ | 131/ |
| Fingers Stationary (in / out of keys / finger number) | 4 | | |
| Fingers Stationary (in / out of keys / 1 finger) | 1 | 2 | 2 |
| Fingers Stationary (in / out of keys / 3 fingers) | 121 | 211 | 131 |
| Fingers Stationary (toward black / white keys / finger number) | 4 | | |
| Fingers Stationary (toward black / white keys / 1 finger) | 11 | 2 | 2 |
| Fingers Stationary (toward black / white keys / 3 fingers) | 121 | 211 | 131 |

Finger Move

Finger move
(right) 

$\vec{r} \rightarrow \vec{r}'$

$$\xrightarrow{m} \quad \quad \quad \xrightarrow{m} \rightarrow m$$

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$\vec{m}^1 \vec{m}^2 \vec{m}^3$

Finger move (left)

$\begin{smallmatrix} 5 \\ 3 \end{smallmatrix}$ $\begin{smallmatrix} 3 \\ 4 \end{smallmatrix}$ $\begin{smallmatrix} 3 \\ 4 \end{smallmatrix}$ $\begin{smallmatrix} 4 \\ 3 \end{smallmatrix}$

↑ ← ↗ ← ↑

$\leftarrow m$ $\leftarrow M$ $\leftarrow m$

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m^+ m^- m_4

Finger move (right / left)

$\overset{\leftarrow}{\overset{\rightarrow}{3}} \quad 3 \leftarrow \rightarrow \quad \overset{3}{\leftarrow \rightarrow} \quad \leftarrow \rightarrow 3 \quad \leftarrow 3 \rightarrow$

$$\leftrightarrow \leftarrow \rightarrow \leftrightarrow \leftarrow \rightarrow \leftrightarrow$$

$\leftrightarrow 3$ $\leftrightarrow 3$ $\leftrightarrow m$

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$\text{m} \leftrightarrow$

Finger move
(toward black keys)

$\begin{matrix} \uparrow \\ 3 \end{matrix}$ $3\uparrow$ $\begin{matrix} 3 \\ \uparrow \end{matrix}$ $\uparrow 3$

↑c ↑c ↑c ↑c

| | | | |
|--|---------------------------|----------------------------|-------------------------|
| | $\overset{\uparrow}{3}$ | $\overset{\rightarrow}{3}$ | $\uparrow m$ |
| | $\overset{\uparrow}{3}$ | $\overset{\rightarrow}{3}$ | |
| | $3\uparrow$ | $m\uparrow$ | $3\downarrow$ |
| Finger move (toward white keys) | $3\downarrow$ | $3\downarrow$ | $3\downarrow$ |
| | $\overset{\leftarrow}{r}$ | \leftrightarrow | \downarrow |
| | $3\downarrow$ | $\downarrow m$ | $\downarrow m$ |
| | $3\downarrow$ | $\downarrow 3$ | |
| | $3\downarrow$ | $m\downarrow$ | $3\downarrow$ |
| Finger move (toward black / white keys) | $3\uparrow$ | $3\downarrow$ | $3\downarrow$ |
| | $\overset{\uparrow}{r}$ | \uparrow | \downarrow |
| | $3\uparrow$ | \vec{m} | $\overset{\uparrow}{3}$ |
| | $3\uparrow$ | $\overset{\rightarrow}{3}$ | $\overset{\uparrow}{3}$ |
| | $3\uparrow$ | $\overset{\rightarrow}{3}$ | $\overset{\uparrow}{3}$ |
| Finger move (into keys / left view) | $3\downarrow$ | $3\downarrow$ | $3\downarrow$ |
| | $\overset{\leftarrow}{r}$ | \leftrightarrow | \downarrow |



Finger move
(into keys / right view)



Finger move
(out of keys / left view)



Finger move
(out of keys / right view)



Finger move
(in and out of keys / left view)



Finger move
(in and out of keys / right view)



Finger Enunciation



Move fingers restfully



Move fingers slightly



Move fingers normally



Move fingers exaggerated

Finger Switch



Switch finger (in place)

Part of existing fingering notation.



Switch finger (at different times)

At different times same key with different fingers.

Wrist

Wrist Position



With flat fingers



Pronounced



Curved



High



Tilted (flat fingers)



Tilted (pronounced)



Tilted (curved)



Tilted (high)

Wrist Stationary



Stationary (left-right)



Stationary (toward black / white keys)



Stationary (in / out of keys)



Stationary (composite)

Wrist Move

| | | | | | |
|---|---------------------------------------|---|--|--|---|
|  | Wrist move (left / variation 1) |  | Wrist move (right / variation 1) |  | Wrist move (right and left / variation 1) |
|  | Wrist move (left / variation 2) |  | Wrist move (right / variation 2) |  | Wrist move (right and left / variation 2) |
|  | Wrist move (into keys) |  | Wrist move (in / out of keys) |  | Wrist move (out of keys) |
|  | Wrist move (toward black keys) |  | Wrist move (toward white keys) |  | Wrist move (toward black and white keys) |

These wrist moves may be the same as wrist turning:

| | | | | | |
|---|--|---|--|--|--|
|  | Wrist move (into keys / left) |  | Wrist move (out of keys / left) |  | Wrist move (in or out of keys / left) |
|  | Wrist move (into keys / right) |  | Wrist move (out of keys / right) |  | Wrist move (in or out of keys / right) |
|  | Wrist move (toward black keys / right) |  | Wrist move (toward white keys / right) |  | Wrist move (toward black and white keys / right) |
|  | Wrist move (toward black keys / left) |  | Wrist move (toward white keys / left) |  | Wrist move (toward black and white keys / left) |

A composite, to show some flexibility:



Wrist move (composite)

Wrist Press

Is usually downward, not likely in any other direction.

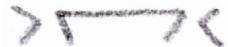
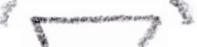
| | | | |
|---|---------------------------|---|---------------------------|
|  | Wrist press (variation 1) |  | Wrist press (variation 2) |
|  | Wrist press (right) |  | Wrist press (left) |

Wrist Turn

| | | | | | |
|---|--|---|---|---|--|
|  | Wrist turn (right) / 'pivot' |  | Wrist turn (left) / 'pivot' |  | wrist turn (right and left) / 'pivot' |
|  | wrist turn (facing you / right) |  | wrist turn (facing you / left) |  | wrist turn (facing you / right and left) |
|  | Wrist turn (forward / right) / 'flap' |  | Wrist turn forward (left) / 'flap' | | |
|  | Wrist turn (backward / right) / 'flap' |  | Wrist turn backward (left) / 'flap' | | |
|  | Wrist turn (forward and backward / right) / 'flap' |  | Wrist turn forward and backward (left) / 'flap' | | |

Wrist Stress

(Combined with wrist positions.)

| | | | |
|---|----------------------------|---|----------------------------|
|  | Wrist tight (flat fingers) |  | Wrist loose (flat fingers) |
|  | Wrist tight (pronounced) |  | Wrist loose (pronounced) |
|  | Wrist tight (curved) |  | Wrist loose (curved) |
|  | Wrist tight (high) |  | Wrist loose (high) |

Torso

| | |
|---|-------------------------------------|
|  | Torso (+ arms) |
|  | Torso sway (right) |
|  | Torso sway (left) |
|  | Torso tilt forward |
|  | Torso tilt backward |
|  | Torso turn sideways (back and legs) |

Arm



Arm outward (left)



Arm inward (left)



Arm placing torso in front of right hand

Elbow



Elbow sideways

Some Fingers Deeper In Keys

3 fingers:

| | Flat Fingers | Pronounced Fingers | Curved Fingers |
|-------------------------------------|---------------------|---------------------------|-----------------------|
| Mid finger deeper in keys | | | |
| Outer fingers deeper in keys | | | |
| Right finger deeper in keys | | | |

4 fingers:

| | |
|--|---------------------------------------|
| | Flat / outer fingers deeper in keys |
| | Curved / outer fingers deeper in keys |
| | Curved / 3rd finger deeper in keys |

Composites

To demonstrate some possibilities for flexibility.

| | |
|--|---|
| | Fall in and then raise out of key |
| | 3 fingers: flat, pronounced and curved |
| | Curved wrist flapping, mid finger pressed |



Curved wrist hopping. 1st and last note pressed. Middle note moved toward black keys, pressed with 3rd finger.