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3.2 Select hand motion terminology

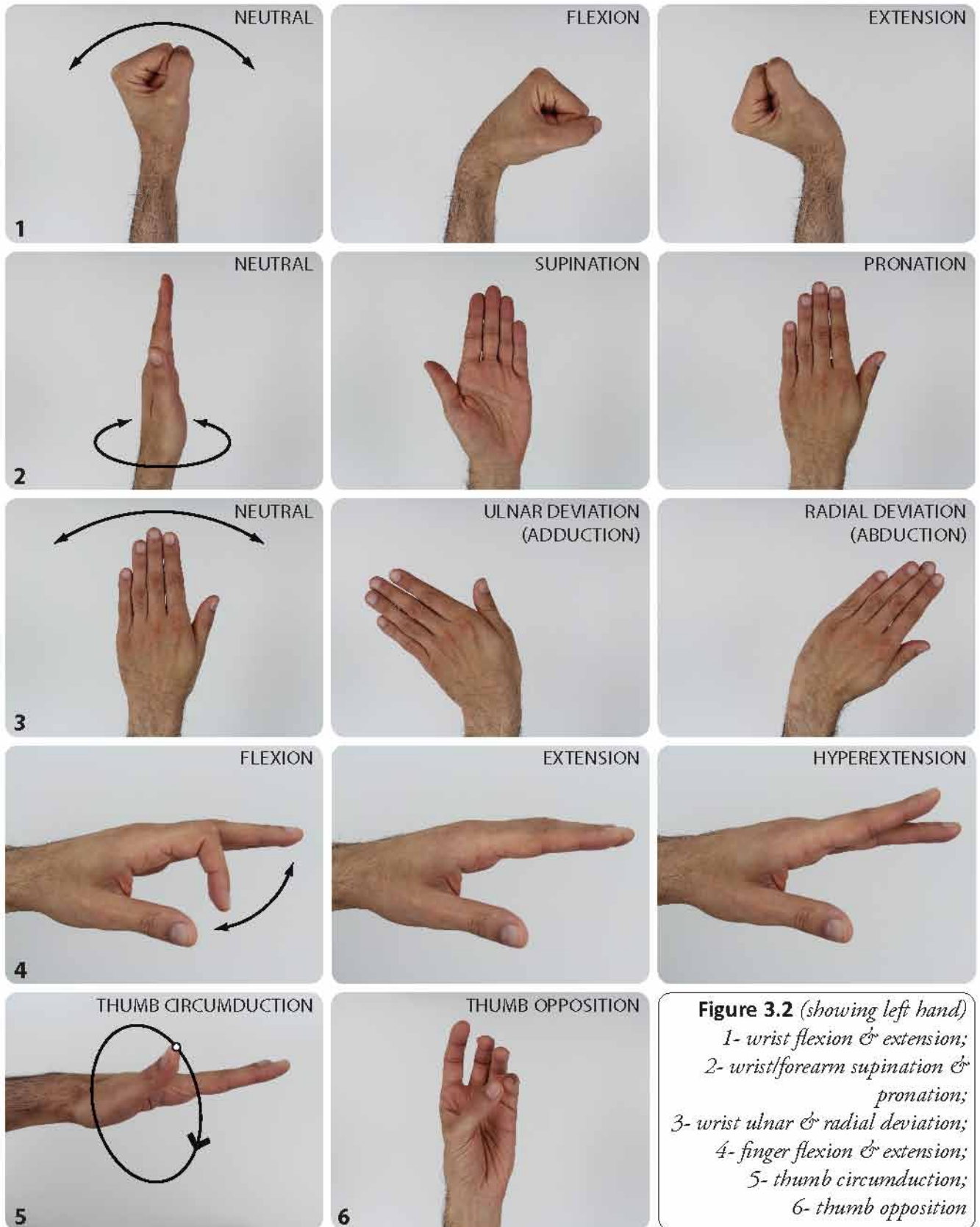


Figure 3.2 (showing left hand)
 1- wrist flexion & extension;
 2- wrist/forearm supination & pronation;
 3- wrist ulnar & radial deviation;
 4- finger flexion & extension;
 5- thumb circumduction;
 6- thumb opposition

5

LEFT HAND & RIGHT HAND

Once the overall posture is in place, left and right hand positions call for a myriad of detail which you are likely to find yourself modifying, polishing, and tinkering with over the years. Understanding why a position is preferred over another and its pros and cons will help you towards the most effective choices for yourself.

5.1 Fret hand position

Finger block position

With your left hand, make a fist, with all four fingers touching each other and the thumb lying between the index and middle finger (Figure 5.1). Slowly open this fist with each finger spreading apart, forming a claw. Take this stance onto the fretboard. Position the thumb on the back of the neck at or slightly above the apex of the neck curve. Position the four remaining fingers starting on the 3rd string, 3rd fret at a right angle with the neck, or with a slight tilt sideways (fingertips pointing towards your eyes—this is a consequence of the natural tendency of the left hand to form an angle vs. horizontal). Just like the claw, do not squeeze the fingers against each other but allow them to spread apart a little. The resulting forearm-hand angle at the wrist is somewhat arched to straight; the less wrist flexion the better. This is a clean fret hand stance on the fretboard (Figure 5.2).

In a nutshell, aim at having fingers loosely parallel to the frets, with the thumb roughly between the index and the middle finger. Only stick your fingers together in certain situations (e.g. string bend) where you can leverage the added support.

This position¹ is well suited for single note playing; of course, what is to be played may call for variation of this stance (e.g. string bends, use of thumb to fret bass strings, low/high register frets). For chords, there is no reference position because there are so many chord shapes. But always keep in mind the claw as a guideline, holding the neck as a delicate object...not gripping it like a hammer!

NOTE Remember that the electric guitar's neck is narrower, thinner, and its fretboard sports a smaller radius (more curved) than the classical guitar. Electric guitars are approximately 1.625"–1.75" wide at the nut whereas classical guitars are 2" wide. The acoustic steel string guitar fits in between, closer to the electric's width. Therefore, it is not surprising that left hand technique for each instrument differs.

1. Such neutral stance of fingers and thumb (no stretch, rotation, or stress) defines the position and fret coverage in *position playing*.



Figure 5.1 *Fret hand reference position: 1- fist; 2- claw; 3- claw on the fretboard*



Figure 5.2 *Fret hand finger block: 1- parallel to fretwire; 2- sideways tilt; 3- back view (parallel to fretwire)*

Thumb position

Despite its low-key profile, the thumb plays an active part within the fret hand. Take the hand position of Figure 5.2. The thumb's reference position is behind the index and middle finger, but its position can shift during play (we'll see that the finger block can also shift, while the thumb remains still). It's often stationed to the left of the index ("hitch-hiker gesture"), like Figure 5.4-3. The thumb counterbalances the finger block.

- The thumb can move over the curve of the neck as much as its tip showing above the fretboard (Figure 5.3-2, Figure 5.3-3). In certain circumstances, the thumb will wrap around the top of the fretboard. The more the thumb wraps over the neck, the less the wrist flexion.
- The thumb can rotate around its main joint (base of thumb / carpometacarpal joint circumduction) and modify its angle with the neck during play: from an almost perpendicular position to the neck to a severely tilted position pointing towards the headstock, near parallel to the neck (Figure 5.4). This can reduce strain on the wrist and enable a more relaxed posture—think about it for single lines and chords.
- Finally, the finger block can shift left or right while the thumb remains in the same position (Figure 5.5).



Figure 5.3 *Thumb behind/above neck & wrist flexion/extension: 1- thumb behind fretboard; 2- thumb peeking above fretboard; 3- thumb wrapping over neck*

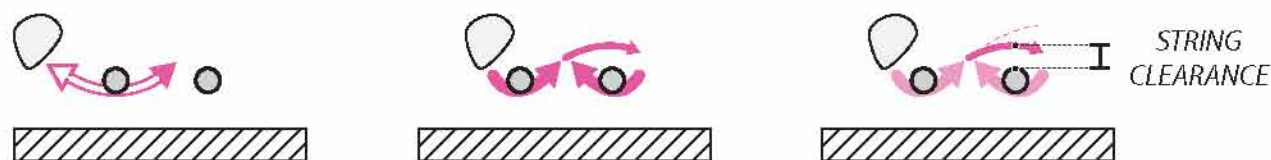


Figure 8.1 Alternate picking (downstroke ➔ upstroke): 1- same string; 2- adjacent strings; 3- string clearance

TIP Rigorous alternate picking is harder than it sounds. For it to become second nature, make a point of following the down-up (or up-down) pattern no matter what, whether the upstroke falls on a downbeat, or strings are skipped, or consecutive notes are picked on adjacent strings (e.g. an ascending arpeggio on adjacent strings is easier with consecutive downstrokes—resist the temptation). Slow down when necessary.

In the previous chapter, we looked at the various parameters defining a pick stroke. In alternate picking, when speed is sought, all the parameters will become smaller (swing range, height and depth). In particular, the swing range or pick excursions should be kept to a minimum.¹ *String clearance* during string crossings or string skipping should also remain small ($\approx 0''-1/2''$). The idea is simple: reduce the distance travelled.

8.2 Inside & outside picking

The inside and outside areas of a string are defined in the context of a pair of strings. Given two strings of interest (adjacent or not), the *inside* of both strings is the side of the strings within the pair of strings, facing each other. The *outside* of both strings is the opposite side (Figure 8.2).

The crossing of one string to another, whether the two strings are adjacent (*string crossing*) or non-adjacent (*string skipping*) can be approached in several ways. As an example, let's assume the first pick stroke is on the G string (String N; G string would be String 3) and the second pick stroke is on the B string (String N-1, ascending strings; B string would be String 2). See Table 8.1.

When ascending strings G to B, the “upstroke ➔ upstroke” scenario results in the longest possible picking motion for crossing the two adjacent strings. It also goes against the string crossing direction: we are globally ascending strings (towards high E string) whereas the two individual upstrokes are in the opposite direction (towards low E string). For this reason, I like to call this: *counter picking* because it is both against the overall hand movement...and counter-intuitive.

The same applies to the “downstroke ➔ downstroke” scenario if the first pick stroke is on the B string and the second pick stroke is on the G string (descending strings).

You'll notice that several types of string crossing have the pick travel over a string before or after striking it, as in Figure 8.1-3. It is preferable to keep the string clearance to a minimum, especially when speed matters.

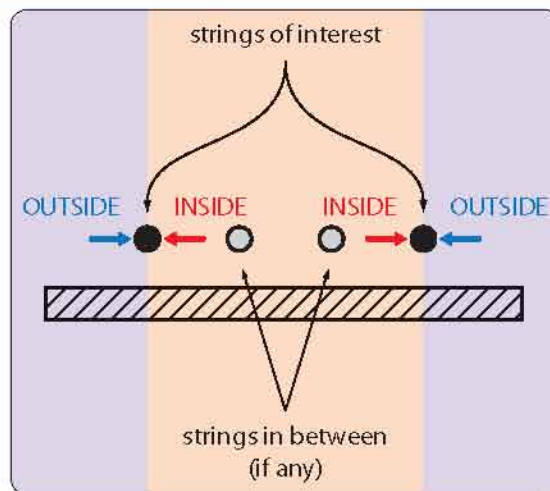


Figure 8.2 Inside & outside of a pair of strings (sectional view from bridge to headstock)

1. Watch the pick excursion of players like Yngwie Malmsteen or Paul Gilbert when they play single string lines. It's minimal.

Exercise 9.9

♩ = 120–200 bpm

Economy picking shines in fast adjacent string scalar runs, ascending or descending strings. String crossings are effortless but timing can suffer. With short scale-like motifs (couple of strings only), this exercise sets the stage for longer linear runs. Shift the motifs to lower and higher strings (different feel/resistance to the pick).

Musical notation for Exercise 9.9, featuring a treble clef staff with a key signature of one sharp (F#) and a 4/4 time signature. The melody consists of four measures of eighth-note scalar runs. The first two measures are ascending, and the last two are descending. Fingering numbers (1, 2, 3) are indicated below the notes. Below the staff is a picking pattern consisting of a sequence of 'V' (downstroke) and 'V-----' (upstroke) symbols. At the bottom, the guitar strings (T, A, B) are shown with fret numbers: T (5-6-7-5-6-7), A (5-6-7-5-6-7), and B (7-5-7-5, 6-5-7-6-5-7).

Exercise 9.10

♩ = 60–144 bpm

Economy picking across several adjacent strings puts your endurance to the test. The third example also has a finger shift and a turnaround that temporarily switches from 3-note-per-string to 5-note-per-string which will challenge your sense of time. Feel free to skip rests and loop this last example (top row picking pattern).

Musical notation for Exercise 9.10, featuring a treble clef staff with a key signature of two sharps (F#, C#) and a 4/4 time signature. The melody consists of four measures of eighth-note scalar runs across multiple strings. Fingering numbers (1, 2, 3, 4) are indicated below the notes. Below the staff is a picking pattern with 'V' (downstroke) and 'V-----' (upstroke) symbols. A note 'same as below' is placed above the pattern in the third measure. At the bottom, the guitar strings (T, A, B) are shown with fret numbers: T (6-7-9, 9-7-6, 7-9-10, 9-7), A (6-7-9, 9-7-6, 6-7-9, 9-7-6), and B (5-7-9, 9-7-5, 5-7-9, 9-7).

Exercise 9.11

♩ = 80–160 bpm

This exercise is borderline sweep picking but in this configuration, it's mostly economy picking. A combination of economy string crossings take you through several arpeggios. Watch out for the inside picking in bar 2, skipping the D string. In bar 3, try FMaj7 instead of Dmin7, fingered 3431 (start with E on string 5 fret 7).

Musical notation for Exercise 9.11, featuring a treble clef staff with a key signature of two sharps (F#, C#) and a 4/4 time signature. The melody consists of four measures of eighth-note arpeggios. Chord names are written above the staff: A Maj7, C# min7, F# min7, D Maj7, F Maj7 / D min7, and A# Maj7. Fingering numbers (1, 2, 3, 4) are indicated below the notes. Below the staff is a picking pattern with 'V' (downstroke) and 'V-----' (upstroke) symbols. At the bottom, the guitar strings (T, A, B) are shown with fret numbers: T (6-9-6, 6-9-6, 6-7-5, 7-5), A (7-6-9-6, 9-7-5-8-7-5, 7-5-8-7), and B (5-9-7-9, 5-9-7-5-8-7-5, 6-5-8-8-8).

13.4 Exercises

For left hand exercises, use any right hand technique. It is okay to pick/strum extra notes in the process.

TIP Problems with (full) barring, when some strings are not quite depressed and sound muted, are frequent. More often than not, it's a finger placement—not pressure—issue. Find a position where the string doesn't fall under a crease of the finger (i.e. under a joint which has less flesh) and where the barring finger is able to exert enough pressure on the strings: shift the barring finger closer to the fret, or move it up or down along the fret.

Exercise 13.5

♩ = 50–100 bpm

A simple chord change exercise with open chords. This is a left hand workout so pick as you wish (strum, rake, fingerpick, arpeggiate). If you fumble, finger the chord in isolation, then with the chord it transitions from.

C	D sus2	G/B	C	A min	E7	F Maj7/C	D	D7	D7/F#	A 7	G
32 1	24	2 4	32 1	231	214	3421	132	213	2 31	1324	21 34

Exercise 13.6

♩ = 50–100 bpm

A little more involved fingerings than Exercise 13.5, this time with open chords and moveable chords.

E7	G/B	C	F	D/F#	G	E7	A min	E	F7	E/D	A min
2 1	2 4	3 1	1 211	1 131	2 4	1324	3111	4	3241	2413	1 111

Exercise 13.7

♩ = 50–120 bpm

Moving up along the neck and quickly changing chord shapes. Triads all along. F#dim can be played with 314 fingering (as written) or 213 fingering. Note that G/F (7th chord with missing root) is Bdim (triad).

A min	F	G/F	E min	C	F	F#°	G
231	321	132	213	111	312	314	312

18.4 Exercises

For these exercises, choose either downstrokes or alternate picking, unless otherwise indicated.

NOTE In music notation, left hand muting is often indicated with **X** in lieu of notes/frets, right hand muting with a P.M. sign (palm mute) spanning the affected notes but notes themselves are unchanged on the staff.

Exercise 18.3

♩ = 60–120 bpm or free

Muting with the left hand. This exercise goes through various types of muting using the left hand only. In bar 2, lift the finger after the 1/8 note but keep it on the string with hardly any pressure so that it chokes the string. In bar 3, simply touch the string on frets 5, 6, 7, then 8, with just enough pressure to mute it; muting is done through tone producing part of finger. In bars 4–6, lift each finger off the strings once it has played its part, so you know that only the fretting finger is doing the muting job, and not a finger positioned behind it. Downpicks are preferred so you can forget about picking and focus on the left hand, but any picking technique is fine. In the last bar, upstrokes are recommended. All notes marked as “X” are picked and correspond to a specific fret number (see standard staff to determine which fret: here frets 5, 6, 7, or 8).

original lift finger light touch mute with tip mute with flesh tip & flesh mute with flesh

The musical notation for Exercise 18.3 consists of a treble clef staff and a guitar staff. The treble staff shows a sequence of eighth notes with various accidentals (sharps and naturals). The guitar staff shows fret numbers 5, 6, 7, and 8 for each note. Some notes are marked with an 'X' to indicate muting. Above the guitar staff, there are picking directions: 'V' for downpick and 'V V V V V V V V' for alternate picking. The exercise is divided into seven bars, each corresponding to a different muting technique as indicated by the labels above.

Exercise 18.4

♩ = 60–120 bpm or free

Muting with the right hand. This exercise goes through several types of muting using the right hand only. Bar 2 is the pick muting technique. For bar 3, use light palm muting and press more assertively on strings in bar 4 (staccato). In bars 5 & 6, let the open strings ring until the arrow, then choke the low open strings with the base of the thumb (bar 5) and the high open strings with the heel of the palm (bar 6, can also be choked with side of pinkie or with knuckles). In the last bar, fully fret the strings at all times (no left hand choking). In all examples, except bars 5 & 6, keep left hand fingers on the string once the note is played so that muting is only performed by the right hand. Picking instructions are like Exercise 18.3.

original mute with pick palm mute heavy palm mute base of thumb heel of palm palm mute

The musical notation for Exercise 18.4 consists of a treble clef staff and a guitar staff. The treble staff shows a sequence of eighth notes with various accidentals. The guitar staff shows fret numbers 5, 6, 7, and 8 for each note, and '0' for open strings. Some notes are marked with 'P.M.' (palm mute) signs. Above the guitar staff, there are arrows pointing to specific notes, indicating where muting should occur. The exercise is divided into seven bars, each corresponding to a different right-hand muting technique as indicated by the labels above.