Coaching Mnemonics for Patterns Chon-Ji to Ge-Baek Matthew Breen NZ-6-10

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Introduction

Every student is different, with individual idiosyncracies or interpretations that may require specific corrections. But what I find is that there are many small errors or inconsistencies which are common – occurring often enough across a variety of students such that I would find myself making the same corrections over and over.

"I should write them down," I thought. And this document is the result. My general filter for inclusion was that if I've had to explain a correction to more than two or three black belt students, it's worth including.

After some brief discussion of some general principles of power and movement, the remainder of the document covers the first twelve patterns. For the most part, I include a description of an error to beware or a performance tip to remember the first time it arises, but not thereafter; thus there are tips for a front punch in Chon-Ji, but not in Hwa-Rang.

A disclaimer – the opinions herein are my own, and describe how I like to see each movement performed. It should be remembered that reading these mnemonics is no substitute for a personal training session with an instructor.

The Correction Cycle

When working with a student on patterns, I separate my corrections into three categories: **Performance**, **Technique**, and **Choreography**.

Issues of **Performance** are broadly applicable to many movements. Examples include lack of power, incorrect sine wave, short stances, poor breath control, inconsistent rhythm.

Issues of **Technique** are specific to particular movements. The intermediate position for double forearm block is incorrect; the knee is dropping during the side piercing kick; the trajectory of the high punch is not straight.

Issues of **Choreography** relate to incorrect movements being performed during the pattern. *Movement 14 is a middle kick, not low. Movements 2 and 3 are not performed in fast motion. Movement 27 is a forearm guarding block, not knifehand.*

Before beginning work on a new pattern with a student, I first look at the **Performance** aspects in the patterns with which she is already familiar. If the stances are incorrect or power is lacking in her lower patterns, the same problems will be apparent in the new pattern, so these should be corrected before proceeding.

Once the **Performance** elements are satisfactory, I next teach any new **Techniques** which appear for the first time in the new pattern. It's important for the student to understand the method and application of a scooping block before being told "Now, in movement 9, you'll execute a scooping block"!

Only now do I introduce the **Choreography** of the pattern. The student learns which movements occur in which order; tools, heights, stances, etc. She can rehearse this in her own time to cement the sequence in her mind and develop muscle memory.

Once the student is confident with the **Choreography** of the pattern, I can correct the execution of individual **Techniques**. *Movement 7 feels rushed*. *Your L stance is too wide after the slide*. *The foot angle on your twisting kick needs adjustment*. The student can record these corrections and, during her own practice, confirm that she is implementing them.

Now we can watch the pattern start-to-finish and evaluate the **Performance**, and determine if there are still aspects of the student's style that require tweaking.

By the time the pattern is displayed for an audience – a grading, a competition, a demonstration – the **Choreography** should be internalised and second-nature, without any need to think about "What comes next?". All of the corrections to **Technique** have been locked in – during *practice*, the student can remember "I'm supposed to keep my off-hand higher on this technique", but during *performance*, she should not be concentrating on those specifics.

Thoughts of **Choreography** or **Technique** should be banished from the student's mind while performing. If she is thinking "I need to remember that this punch is high, not middle", then she will perform the *punch* correctly... but she risks confusing the body's muscle memory, and may find that she suddenly can't remember what movement *follows* the punch. She should avoid thinking about *details*.

What she *can* focus on, however, is one or two broad elements of **Performance**, without risking the correct execution of the pattern. This can take the form of a key word, or a mantra, or a visualisation... a reminder to herself of the important **Performance** element she wants to emphasise. Perhaps she knows she has a tendency to tense her shoulders; she can remind herself to **RELAX** with each movement. Or her techniques are soft when she doesn't focus on them — her mantra could be **POWER** or **STRONG**. The thoughts are generic enough that they don't interfere with the choreography she's so painstakingly ingrained, but the repetition can shore up a known weakness to improve the overall impression the pattern leaves.

Thus, the Correction Cycle is

 $Performance \rightarrow Technique \rightarrow Choreography \rightarrow Technique \rightarrow Performance$

'Power' In Patterns

When we speak of 'power' in patterns, we are usually referencing a combination of factors that lead to a certain perception in the eyes of observers. These factors are not necessarily directly related to an increase in, for example, the number of boards the technique might break — it is possible for a technique which is physically capable of greater destructive effect to appear less 'powerful' to observers, if it fails to meet certain conventions.

A technique delivered with too much tension, particularly in the shoulders, can appear 'sluggish', and therefore weak. The body should appear relaxed while in motion.

A movement should accelerate smoothly from the intermediate position, with the speed peaking just before impact. A technique which moves at one constant speed looks either 'pushy' (if slow) or 'rushed' (if fast). For smooth acceleration, this final execution phase should generally involve the tool travelling in a straight line or a smooth arc, with no sudden changes of direction — radical alteration of a vector results in a rushed look with a weak finish.

There should be some involvement of the hips and abdomen in most movements. Too much can make the motion exaggerated and comical, while too little makes the technique seem rigid and mechanical. The hip motion should be subtle and organic, but complementary to the technique.

General Choi states that one must "bring the movement of eyes, hands, feet, and breath into a single coordinated action". Master Paul McPhail once expressed a similar sentiment in different words: "The secret to good patterns is in the *stop*." For a crisp conclusion to a technique, everything which is moving should stop at the same exact instant — the placement of the foot in the stance, the drop of the body with the sine wave, the primary hand, the reaction hand, the breath, and so on. If any element is out of phase with the others, the illusion of sharpness shatters. Additionally, for optimal results, a sharp finish requires an abrupt stop to rapid movement. It is no good to stop suddenly if the hand was only moving at a moderate pace to begin with. Similarly, a technique which overshoots the mark and 'bounces' back into position is useless for this purpose. The acceleration of the technique should bring it to its maximum speed just before impact... and it must halt perfectly in position.

The only caveat here is that *absolute* perfection can appear contrived. A hint of vibration - not bounce, just a quiver - helps to reinforce the image of great speed, suddenly halted. (Watch the Roadrunner come to a stop some time.) When we step, this vibration is often provided by the impact of our stance with the floor. When we maintain a stance, it can sometimes be necessary to artificially supply the vibration to keep a consistent feel to the power of the pattern.

With outward and inward hand techniques in particular, it is important to understand that it is very difficult to stop a movement crisply from the shoulder. The movement from the shoulder is important to lend authority to the technique, but for the sharp finish, elbow involvement is critical. Usually, a technique proceeds in sequence like a wave, with the hip movement beginning first, then the shoulder, and finally the elbow, with all elements finishing together. This means that in most inward or outward cases, the arm-in-motion will start in the intermediate position with a certain degree of relaxed bend at the elbow, and will bend *more* as the shoulder becomes engaged and the arm starts to move, before extending once more to the final position as the elbow engages to complete the technique. It is unusual for an inward or outward movement to omit this deeper bend during the arm's motion. (The exceptions are primarily inward movements using the inner forearm or reverse knifehand.)

Sine Wave

Sine wave generally consists of three components — an initial 'down', an intermediate 'up', and a final 'down' to complete the movement. The ultimate purpose of sine wave is to increase power via the sharp drop at the moment of impact. Therefore, in order to allow a long final downward movement, it is important to ensure that the 'up' movement lifts the hips sufficiently. By contrast, the initial 'down' movement only serves to prepare for the upward movement, and to smooth out the motion. Unlike the intermediate or final steps, this initial 'down' need not be very large — it should only be deep enough to make the upward movement occur naturally. There should never be a pause at the bottom of this initial dip — it should always flow smoothly into the upward lift.

Sine wave is primarily performed in one of two ways - while moving (sine wave on one leg) or while maintaining a stance (sine wave on two legs). A special case of sine wave while moving is sine wave while changing feet.

While Moving

The immediate goal when beginning to move from one stance to another is to transfer all weight off the foot which is to move. This should be executed smoothly and gracefully - never sharply or abruptly - by means of a bend in the supporting leg, shifting the centre of gravity towards the supporting foot.

This bend also serves the purpose of the 'down' component of the sine wave. By the time the hips begin to dip, there should be effectively no weight on the moving foot, which can now move freely.

As always, the initial 'down' should immediately flow into the intermediate 'up' – the knee cycles from bending to straightening with no pause or sharp movement.

Complete the movement with a strong, deep drop to the final stance. This is a deliberate action - don't simply fall into the final position, but force the hips downward strongly to finish solidly.

While Changing Feet

Under certain circumstances, weight can shift from one foot to the other more than once during a movement - double stepping, certain spot turns, anywhere where the directive begins "Move the left foot to X and then..."

In order to move the left foot, weight must first be transferred smoothly to the right foot. There is no sine wave at this point; though there will be a small amount of natural vertical movement of the hips, this is not intended to facilitate a steep drop, so it is not as overt as when we perform sine wave.

When the left foot reaches X (whether that is 'the line AB', 'the right foot', 'the side front of the right foot', or anywhere else), the weight is transferred back again. Always, the ball of the foot makes first contact with the floor — never the heel, never a flat foot. As weight is shifted to the left foot, the left knee begins to bend — this is the initial 'down' of the sine wave for the technique. At the same time, the heel begins to drop. The instant when the heel touches the floor, the instant when the 'down' smoothly transitions to 'up', and the instant when (if pivoting on the ball of the foot) the left foot reaches its final orientation should all coincide — effectively, the pressure of the heel touching the floor helps to 'turn around' the sine wave from downwards to upwards.

This is essential to maintaining smooth and graceful motion throughout the movement. Whenever the heel strikes the ground, it creates a 'sharp moment' in a movement, which can appear jarring to the observer. By timing it exactly with the nadir of the sine wave, this sharp moment is concealed, and the smooth motion remains undisturbed.

While Maintaining A Stance

The motion differs depending on the stance in question.

For stances with bent legs, the knee spring is used to cycle the motion of the hips smoothly from downward to upward, and the movement is completed with a strong drop back to the original stance. If the heel is on the ground, it remains there throughout the movement.

For stances with straight legs, the use of knee spring is all but imperceptible. The initial 'down' is essentially replaced with a preparatory relaxation; the intermediate 'up' is derived from ankle flex rather than knee spring.

For walking stance and low stance, the initial 'down' uses the knee spring of both legs, with the heel of the rear foot coming off the ground. During the intermediate 'up', ankle and knee of the rear leg combine to raise the hips significantly above their original position. As always, the cycling of the knees ensures that the transition from 'down' to 'up' is smooth and graceful, with no sharp corners or pauses. There will be a natural transfer of some weight from the rear foot to the front foot as a part of this motion, though this should not be over-exaggerated.

During the final 'down', note that use of the rear ankle to cushion the drop - usually through a rolling motion - results in a noticeable decrease in perceived power. Instead, the ankle should provide as little softening of the drop as possible, to ensure a dramatic completion of the movement. The impact of the heel on the floor as the body drops can supply the vibration to the end of the technique that a gentler landing precludes.

Graceful Flow

In most cases, the only part of a technique that should appear 'deliberate' is the final execution — the delivery from the intermediate position to the point of impact. Any motion that precedes this final execution must look natural — even casual — in order to maintain graceful flow.

There should be no abrupt changes in speed or direction – arms and legs should move smoothly. Also, beware keeping everything too closely synchronised. While everything should arrive together at the point of impact, the movements of arms, legs, and body all have their own characteristic speeds, and natural movement means they move at different times throughout the motion. Keeping everything moving at the same speed as everything else results in a cramped, artificial look.

The arms should not move into the intermediate position until the practitioner is ready to perform the final execution. Until this point, the arms maintain a relaxed position in front of the body, usually with the wrists higher than the elbows. At the right moment, the hands move smoothly to the intermediate position and transition into the acceleration of the final execution. In practice, the 'right moment' flows comfortably from the peak of the sine wave – a graceful progression from 'down' to 'up' to 'ready'.

While a foot is moving from one position to another, it must never 'catch' on the floor before reaching its destination — this will break the flow of the movement. To avoid this, always keep the foot parallel to the floor while in motion, and ensure it does not drag; allow the foot to 'float' just above the ground.

Chon-Ji

Parallel Ready Stance

- When moving from attention stance, remember that the right foot pivots on the ball of the foot, and the left foot steps outward.
- Check the angle of the feet (directly forward) and the distance between them (one shoulder width, outside to outside).
- Keep the elbows in the forearms should angle forward, rather than presenting a flat plane.
- Keep the shoulders relaxed.
- 1. Outer Forearm Low Block
 - The knee spring of the right leg allows smooth transfer of weight to the ball of the right foot and provides the initial 'down' element of the sine wave. Remember that this does not need to be very deep only enough to make the intermediate 'up' smooth and natural and there must be no pause at the bottom of the dip.
 - Pivot on the ball of the right foot. The placement of the heel should coincide with the moment of impact. Remember that for a walking stance, the angle of the rear foot is no more than 25 degrees!
 - While the body is in motion, the arms should be relaxed without being 'limp'. Until the moment when they must move to the intermediate position in preparation for the execution of the block, the wrists 'float' at about solar plexus height, at a comfortable distance from the chest. This relaxed position is always in front of the body don't permit the arms to 'lag' as the body turns.
 - At the intermediate position, the hands cross in front of the right chest. The arms are relaxed elbows bent less than 90 degrees, and the cross occurs some 20-30cm from the body. Ensure the intermediate position is neither tense nor cramped.
 - While blocking, keep the elbow close to the body the forearm should be angled forward, rather than presenting 'flat' to the opponent.
 - As an outward movement, the low block shifts from relaxed motion to power in a wave that begins with the hip, continues through the shoulder, and finishes with the elbow. This results in the bend-and-extend angle of the elbow described earlier and contributes to a sharp finish.
 - The technical definition states that there should be 20cm between under forearm and thigh. This can sometimes be tricky to judge while looking down on the block, and the distance may vary depending on the size of the practitioner. A reasonable guideline is that the forearm should be about level with the bottom of the belt, and the knuckles should be about as far forward as the front knee.
 - Ensure the chest is half-facing. Remember, this doesn't always mean 45 degrees in walking stance, it's usually significantly less.
 - The timing of the completion of the movement must be exact. The sudden stop of the block coincides with the arrival of the reaction hand on the hip, the sharp drop of the sine wave, the arrival of the lead foot in the stance, and the exhalation of breath. Any element out of time breaks the illusion of sharpness and results in a loss of perceived power.

- 2. Forefist Middle Front Punch
 - The knee spring of the left leg allows smooth transfer of weight to the ball of the left foot and provides the initial 'down' element of the sine wave. Because the dip and the weight transfer are combined, the sine wave begins while the right foot is still in its initial position, but is free to move. The hips should not drop while there is still significant weight on the rear foot this makes the forward motion and the upward component of the sine wave awkward and ugly.
 - Keep the sole of the right foot parallel to the floor while the body is in motion do not let the ankle tip. An extended ankle risks catching the toes on the floor. The foot should float just above the floor, moving freely with no scraping or dragging. A dragging foot tends to lag behind the body, resulting in poor rhythm and balance, while a floating foot moves naturally with the body.
 - As the body begins to move, allow the hands to naturally assume a 'relaxed' position: left hand at chest height, fist palm-down; right hand forward of the hip, fist palm-up. Both elbows are bent approximately 90 degrees, but the left arm is forward of the body, while the right elbow does not come forward of the hip. It is imperative that this position is never *forced* the movement of the arms from the preceding block to the relaxed position should occur as a natural consequence of the motion of the body, not as a deliberate placement.
 - The intermediate position (left arm extended, right hand drawn back to the hip) must not be assumed until the practitioner is ready to execute the punch. As above, the movement is smooth and unrushed, reaching the correct position just after the peak of the sine wave.
 - The body remains full-facing throughout the movement. However, this does not preclude involvement of the hips and abdominals these can move independently of the chest and shoulders. When the right hand is drawn back to the hip, the right hip also draws back slightly, even as the right foot continues to advance this is preparation for the forward 'snap' of the hip that immediately precedes the execution of the punch with the right arm.
 - Ensure the right fist does not travel up the side of the body the punch should be executed from the hip, rather than chest or armpit. Keep the shoulders relaxed there is a common tendency to attempt to add power by forcing the punch with the shoulder, but the result is a slower punch with less perceived power, and a movement that appears tense and ugly. (One visualisation that may be of use: Imagine giant rubber bands *pulling* the fist from the hip, rather than the shoulder *pushing* the fist.)
 - The hip motion leads the punch: immediately before the moment of impact, the right hip snaps forward to overreach slightly, so that it travels slightly past square (while the chest and shoulders remain full-facing). At the moment of impact, the right hip settles back to square as the foot reaches the walking stance.
 - The final drop of the sine wave should be deep and dramatic, but be careful not to 'lunge', ending up with more than 50% of weight on the front foot. The knee should align vertically with the heel of the front foot; it is common to see the front knee pushed too far forward.
- 3. Outer Forearm Low Block
 - The knee spring of the left leg allows weight to be smoothly transferred to the rear foot while simultaneously initiating the downward movement of the sine wave.
 - Pivot on the ball of the left foot, never the heel.
 - Don't allow the right foot to take too broad a circle this disrupts balance and slows down the movement. The foot floats naturally while turning, just as while stepping.

- 9. Inner Forearm Middle Block
 - The intermediate position has the hands cross in front of the right chest. Ensure the elbows are lower than the wrists if the forearms are flat or, worse, angled downward, the execution of the block suffers tremendously.
 - The intermediate position is primarily relaxed, but there should be some stretch across the shoulder blades. If the muscles of the back incur some stretch immediately before the execution of the block, the acceleration and hence power of the outward movement can be increased. Pushing the elbows slightly forward can help impose this stretch without hunching the shoulders and making the position appear cramped.
 - Remember to avoid holding the elbow rigid and blocking purely from the shoulder. This gives a mechanical, 'pushy' look to the technique. As with the low block, the execution ripples from hip to shoulder to elbow, and throughout the outward movement of the arm, the elbow will initially bend deeper before whipping out again to the final position, providing the sharp finish to the block.
 - Notice that in order to provide any power from the shoulder, the upper arm must be able to move during the execution of the block. This means that at the intermediate position, the elbow must be drawn further across the body than it will finish even if only a few inches.
 - Drop sharply into the L stance to provide a dramatic finish to the movement. Keep the knees well apart don't permit the rear knee to slump inwards. Ensure the stance is not too wide 2.5cm between the heels means that for most people, the front toe will be on the same line as the rear heel.
- 11. Inner Forearm Middle Block
 - Pay particular attention to the angle of the rear foot it is common for the foot to fail to rotate far enough during the turn. Ensure the pivot is performed on the ball of the foot.
- 18. Forefist Middle Front Punch
 - Keep the back straight it's common to over-extend the rear leg's placement and end up leaning forward.
 - Be careful of the timing. The body does not stop moving when the ball of the rear foot touches the floor, but rather the heel. Ensure that the hands and breath coincide with the heel settling to preserve the sharpness of the finish.

Dan-Gun

- 1. Knifehand Middle Guarding Block
 - Ensure the hands turn with the body while they are in the 'relaxed' phase. Don't allow them to lag behind or to go directly to the intermediate position they should be loosely in front of the chest until it is time to execute the block, whereupon they smoothly draw back to the intermediate position.
 - Don't assume an intermediate position with the arms extended too far to the rear, necessitating a circular swing to execute the block. The left hand is in front of the right chest with the elbow relaxed, similar to where it would be for a forearm low block. The right arm extends back at an angle of around 45 degrees, not directly behind; the fist should be barely visible in peripheral vision. If seeing the fist requires turning the head, it's pulled back too far.
 - As usual for an outward movement, the power travels hip to shoulder to elbow, and the elbow should cycle while the arm is in motion from the intermediate position, to more bent as the arm moves, to less bent as the elbow moves sharply into the final position.
 - For a strong knifehand, the fingers bend backward at the first knuckle, then curl forward at the second knuckle. Never let the fingers bend forward at the first knuckle this softens the knifehand unacceptably. The left knifehand should be half-facing the target, rather than presenting the palm squarely.
 - Bend the left elbow so that the fingertips are at shoulder height, and the elbow reaches about the height of the base of the ribcage.
 - Check both wrists are straight. It's common for the front wrist to be bent backward or the rear wrist to curl forward, in particular.
 - Don't allow the rear hand to rest on the body maintain a small distance. Keep the rear elbow in, rather than allowing it to project sideways. (Often this is a signal the shoulders should be more half-facing.)
- 2. Forefist High Front Punch
 - Ensure that the right fist travels in a straight line from the hip to full extension at eye height. Don't allow the fist to swing in an upward arc.

- 9. Twin Forearm Block
 - Both hands remain relaxed in front of the chest through the turn. They should not move to the intermediate position until immediately before the execution of the block, nor should they be permitted to lag behind while the body turns.
 - Pivot on the ball of the foot, never the heel.
 - In the intermediate position, the hands are crossed at chest height, in front of the left chest. (Crossing in front of the right chest as usual for a side block would result in the rising block travelling forward instead of outward.) The position is relaxed, but the elbows should again be used to impose some tension across the shoulder blades. Don't cross too close to the body. Both palms are inward, and the left arm (primary arm) crosses on the inside.
 - In a walking stance rising block, the body is full-facing, and the forearm ends up parallel to the chest and shoulders. In L stance twin forearm block, by contrast, the body is half-facing, and the forearm must not be parallel to the chest and shoulders. Pull the elbow in so that the forearm is instead parallel to the A-B line.
 - The rising block does not rotate upward from the shoulder with a locked elbow. The point of the elbow initially leads the upward motion, with the joint bending more deeply, until the forearm overtakes it in a 'chopping' movement to complete the technique. The forearm moves *outwards* throughout the technique; if performed purely from the shoulder, the movement tends to result in the forearm swinging *backwards* at the end, and this is undesirable. (A useful visualisation: focus on the trajectory taken by the outer forearm, the blocking tool, rather than thinking about the finished position. It should describe a near-straight line to meet the attack.)
- 11. Twin Forearm Block
 - The right hand (primary hand) crosses on the inside. It's not uncommon for a student to cross correctly on one side, and incorrectly on the other always check both carefully!

13-14. Continuous Motion

- The goal of continuous motion is to enhance a sense of *graceful flow* from one movement to the next. The transition is swift but not rushed, smooth rather than hasty.
- Primarily, the difference between these two movements, compared to if they were performed in normal motion, is in the time *between* the techniques. Up until the moment of impact, the low block is performed identically. The stance locks, the block stops perfectly in place, the practitioner exhales.
- This is the point where the difference is seen were this normal motion, there would be a brief but noticeable pause before embarking upon the preparation for the rising block. In continuous motion, there is no pause the body is dropping, and stops at the instant of the block... then immediately begins to drop again as the sine wave of the rising block begins.
- Note that this is not the same as "the body never stops dropping". The body does not drop *through* the walking stance position; rather, it drops *to* the walking stance, *then* drops *past* the walking stance. The low block must stop in the correct position, even if only momentarily.
- This is the first instance of sine wave while maintaining a stance. Unlike sine wave while moving, where the sine wave is performed using the knee spring of only one leg, in this case the knee spring of both legs is utilised. Just as before, it is important to remember that the purpose of the initial 'down' motion is purely to facilitate the smooth and easy intermediate 'up' motion. Do not drop too deeply, and never stop or linger at the bottom of the sine wave. The drop is achieved by the relaxation of the rear knee allowing the rear heel to come off the ground. At the same time, the body shifts from half-facing to full-facing.
- The dip of the rear knee ensures a natural upward motion use the knee spring of both legs and the extension of the rear ankle to lift the hips well above their starting point. The entirety of the sine wave to this point from down to up is one smooth action.
- There is a natural tendency for the body to move forward slightly from its initial position by this point in the sine wave. This is fine, but the forward motion is not the goal, and should not be exaggerated. The goal is *height*, to ensure a strong drop to finish the technique.
- The final drop must not be cushioned by cautious employment of the rear ankle. Instead, drop the body weight firmly onto the rear heel, to provide the 'impact vibration' to the final execution of the technique.
- Two movements performed in continuous motion each have their own exhalation; however, the breathing is not sharply cut off between techniques. Rather, the practitioner links the two strong exhalations with a continuous soft outflow of breath.

14. Rising Block

- The entire movement is performed full-facing do not rotate the chest or shoulders back and forth.
- The intermediate position sees the hands cross in front of the right floating rib. Unlike most intermediate positions, the wrist is slightly lower than the elbow in this position.
- The most common error in the intermediate position is not an error of placement, but an error of *timing*. If the cross occurs in the correct position but too early in the movement, then the natural desire to perform a preparatory motion prior to execution will see the hands move *elsewhere* immediately before the block. In order to *use* this natural desire instead of being tripped up by it, it is critical that the hands remain relaxed in front of the chest until just after the peak of the sine wave, whereupon the hands smoothly reach the correct intermediate position and continue immediately to the execution. Any delay between reaching the intermediate position and the execution is likely to result in blocking from the wrong place.
- As with the twin forearm block, it is essential to engage the elbow in order to correctly 'chop' upward, rather than swinging backward from the shoulder. The point of the elbow initially leads the technique, and the forearm overtakes it to complete the block sharply.
- The centre of the blocking tool the outer forearm should finish on the solar plexus line. This means that the wrist should approximately line up on the right eye. Commonly, rising blocks are performed too wide often with the knuckles instead of the outer forearm to the centre of the body.
- 18. Knifehand Middle Outward Strike
 - Ensure the arms move with the body while turning don't let them lag in order to permit a smooth backward motion immediately prior to the execution of the strike.
 - Keep the elbow relaxed in the intermediate position it should be lower than the wrists.
 - As an outward movement, the strike employs the same ripple of power from hip to shoulder to elbow as other outward movements.
 - Remember that L stance is always half-facing, never side-facing.

Do-San

- 1. Outer Forearm High Side Block
 - Ensure the body is half-facing.
 - From the intermediate position, the block is executed such that power proceeds from hip to shoulder to elbow. As an outward movement, it incorporates the usual flex-to-extend cycle of the elbow joint, so that the elbow bends first more deeply than the intermediate position, before whipping out again to complete the technique sharply.

2. Reverse Punch

- Allow the body to naturally become full-facing as the hips drop to begin the sine wave.
- During the upward motion of the sine wave, lift the hips well above the final walking stance position, to allow a strong drop to finish.
- Do not cushion the final drop by allowing the ankle to roll gently; drop the heel sharply to generate 'impact vibration' in the final execution.
- 2-3. Spot Turn, moving the front foot on the centre line.
 - The front foot moves only a short distance about the length of the foot backwards, and inwards to the centre line.
 - By the time the front foot is replaced, it should have pivoted no more than 45 degrees. The rest of the rotation will occur in contact with the ground.
 - Do not shift the weight so far onto the right foot that the body can easily balance on it. Only shift enough weight that the left foot can move the required distance; this minimises the amount of back-and-forth shifting necessary.
 - Initial contact when the left foot is replaced is with the ball of the foot only.
 - As weight is transferred back to the left foot, the knee bends; this provides the initial downward motion of the sine wave. As the knee bends, the heel begins to drop. At the same time, the body pivots on the ball of the foot.
 - The foot reaches its final angle (no more than 25 degrees outwards, as the rear foot of a walking stance) at the same instant the heel touches down. This contact simultaneously grounds the foot and allows the sine wave to smoothly reverse from downwards to upwards.
 - The hands remain relaxed in front of the chest during the turn, without lagging, and flow naturally to the intermediate position, crossed in front of the left chest, arriving just after the peak of the sine wave.
 - All of these elements placing the left foot, transferring weight back to it, pivoting, the smooth down-to-up motion of the sine wave, and the assumption of the intermediate position occur as a single fluid, graceful action. There must be no 'jagged edges' to the movement.

- 6. Straight Fingertip Thrust
 - During the relaxed and intermediate positions, the hands should be 'loosely open' instead of 'loosely clenched' this is normal for techniques employing the fingertip or palm.
 - The intermediate position has the hands wider than the shoulders, but still forward of the body. Do not pull the hands back behind the line of the chest. The elbows are bent naturally, and remain lower than the wrists. Employ the position of the elbows (which can be further back than the hands) to provide a light tension across the chest; this will be used to provide additional impetus to the forward motion of the thrust.
 - During the execution, the two hands travel in very different trajectories; the left hand, performing the palm downward block, moves in a circular arc, while the right hand, thrusting, travels in a straight line. There is a natural tendency to move both hands in the same way (two arcs or two straight lines); this must be avoided.
 - The left hand sits beneath, but not touching, the right elbow joint, in order to provide protection. Don't allow the fingers to project off into space, but rather shift the whole hand slightly to the left to keep things tidy.

7a. Release

- Do not allow the left foot to slide closer to the right foot; instead, pivot on the balls of both feet and allow the heels to lift.
- Initially, treat the release as though the right wrist is 'fixed in space' it has been grabbed by an opponent. The pivot moves hips and chest from full-facing to half-facing, which in turn causes the right elbow to bend. The bend in the elbow can then be used for an explosive straightening of the right arm to effect the releasing motion in effect, the pivot sends a wave through hip, shoulder, and then elbow resulting in the final execution.

7b. Backfist High Side Strike

- Pivot smoothly on the ball of the right foot until the chest is half-facing. This should occur around the same time as the peak of the sine wave, so that the facing is already assumed by the time the hands reach the intermediate position.
- The hips should not have reached their final position by this point, so that they can still contribute power to the final execution of the technique.
- Keep both hands relaxed in front of the chest during the turn, without permitting them to lag behind. Don't assume the cross of the intermediate position too early; it is necessary to achieve backwards motion by crossing just after the peak of the sine wave.
- Ensure that the elbows are relaxed and lower than the wrists in the intermediate position.
- The striking hand crosses on the *outside*.
- 8. Backfist High Side Strike
 - The striking hand crosses on the *outside*. It's not uncommon for a student to cross correctly on one side, and incorrectly on the other always check both carefully!

- 13. Outer Forearm High Wedging Block
 - Pivot on the ball of the right foot to achieve the correct angle for the stance. The right foot does not step at any time in this movement.
 - The stance faces towards CE; this does not mean exactly 45 degrees. The angle of the stance should be rather closer to the CD line than the EF line, or the pattern will finish forward of the starting mark.
 - Ensure the body is full-facing by the peak of the sine wave. Continuing to turn during the execution of the block will cause unbalanced power in the two arms, so it is important to have completed turning by the time the intermediate position is reached.
 - For wedging block in a left walking stance, the intermediate position has the left arm on the inside of the cross. Both arms cross in front of the chest, palms inwards. Avoid pulling the arms in too close, creating a cramped impression; instead, allow the position to be loose and natural, with the elbows lower than the wrists. Push the elbows forward just enough to create a tension across the shoulder blades, which will be used to add impulse to the outward movement. In practice, the wrists may end up somewhat closer to the chest as part of the fluid backward motion than in many other movements, but this must occur naturally, rather than a forced action that contributes to a tense or rigid impression.
 - As in most outward movements, the arms begin to move from the shoulders first, followed by the elbows. This results in the flex-and-extend cycle of the elbow seen in earlier techniques, used to generate the whipping action and sudden sharp stop of the blocking tools at the conclusion of the movement. This is of particular import in this technique, as the balanced nature of the arms moving in opposite directions precludes the use of hip twist to increase power.
 - The fists should be half-facing the target at the point of impact, rather than square. The wedge-shape of the arms means that as a guideline, the outer forearms and insides of the elbows are approximately on the shoulder lines, meaning that the elbows are wider than the wrists.
 - The application of the movement can be reinforced by a modification of the sine wave. Ordinarily, the final drop occurs when the body is nearly above the final position, yielding a sharp vertical movement of the hips. For wedging block, consider beginning the final drop when the body is further back, meaning that at the attainment of the final position of the stance, the hips are moving forward faster than usual, with less vertical motion.

14. Middle Front Snap Kick

- The left leg should not straighten throughout the movement. A straight supporting leg is unable to provide additional power to the kick, where a bent leg can assist. Keep the left leg bent at all times do not raise the hips and then drop at the moment of impact.
- To maximise perceived power, the right foot should travel in as long and straight a line as possible. It should tuck tightly under the thigh immediately so that by the time it passes the left leg, it is above the height of the knee. If the foot is below knee-height by this point, either a short kick or an upward trajectory will result.
- Keep the back straight. It is common to see either a backward lean or a forward 'crunch' at the moment of impact; both of these detract from the equilibrium and the aesthetics of the kick.
- The power in the kick comes from driving the right knee strongly forward. Both legs contribute to this movement, with the thighs acting first to *pull* the knees together, then to *push* the kicking leg forward. The tightly-tucked lower leg then uncoils and whips to produce the sharp snap at the end of the kick.
- Tilt the ankle forward and pull the toes back to present the ball of the foot strongly.
- As a memory aid to recall the height of front snap kicks and side-front snap kicks in patterns, keep in mind the Two Hand Rule: If both hands are performing the same movement, the kick is middle, otherwise it is low. (For second dans and above, this rule is only guaranteed to be correct up to Eui-Am Tul; in Choong-Jang, it stops working.) The middle front snap kick should reach solar plexus height on impact.
- Recover balance with the left knee still bent before proceeding with sine wave to lead into the next movement.
- 15. Forefist Middle Front Punch
 - The movement is not performed in a stamping motion, so the foot should be near the floor throughout the forward stepping. Part of the relaxation that leads into the sine wave following the front snap kick in the preceding movement includes letting the right foot lower into the appropriate position.
 - A check to confirm correct angle towards CE at this point: an imaginary line drawn through both feet should be parallel to the C-D line.

15-16. Fast Motion

- Fast motion should create a sense of *frantic action*; contrast this with the *graceful flow* of continuous motion. Jagged movement, avoided elsewhere, is acceptable or even desirable to convey this impression.
- The first technique must always be completed in a correct stance. In this case, the walking stance obverse punch should be clear, even if only for an instant. If the body passes straight *through* a correct walking stance without ever properly finishing the first technique, much of the effect is lost.
- There is no initial 'down' component to the sine wave while maintaining a stance for two movements in fast motion. Instead, simply straighten the ankle of the rear leg and use the knee of the front leg to lift the hips. Similarly, the front arm does not cycle from the previous punch, to a relaxed bent position, to an extended intermediate position; rather, go directly from the punch to the intermediate position. (This is a subtle movement, in this instance — only enough stretch applied to the extended right arm and drawn-back left arm to produce some muscle tension to add impulse to the execution of the reverse punch.)
- Maintain a full-facing position through both punches do not allow the chest or shoulders to 'swing' or rotate.
- Enough elevation must be gained with the hips to ensure a strong drop to complete the second technique. Do not allow this to become a primarily forward-back motion with no vertical shift, or worse, absorb all the extension of the rear ankle by letting the rear knee bend.
- As always when maintaining a walking stance, do not complete the sine wave with a cautious rolling motion of the ankle. Drop strongly onto the heel to provide 'impact vibration' to the punch.
- 23. Knifehand Middle Side Strike
 - At the intermediate position, keep the elbow lower than the wrist.
 - Observe the flex-to-extend cycle of the elbow joint throughout the outward motion. However, do not allow the hand to approach the chest too closely this can result in a punching or thrusting feel to the technique, instead of a strike. The outward trajectory must be maintained.
 - Keep the back straight and force the knees outward in the sitting stance. Do not allow the knees to buckle inward or the feet to turn past parallel, and avoid leaning or crunching forward.

24. Knifehand Middle Side Strike

- This is an instance of sine wave while changing feet. A slight tensing of the right thigh allows the left foot to be drawn in smoothly, without a need to 'push off' with the left leg this would result in an undesirable jagged movement.
- The ball of the left foot makes contact first. As weight shifts to the left foot, the left knee begins to bend; as the knee bends, the heel descends. This creates the initial downward motion of the sine wave; the point where the heel touches marks the reversal into the upward motion.
- The right foot travels to the new sitting stance in a slight convex arc, coming forward of the line of the stance before returning.
- The arms are relaxed in front of the chest during the change of feet, only drawing into the intermediate position after the peak of the sine wave. This is a cross in front of the left chest; do not cross too far to the left or back towards the line of the shoulders.

Won-Hyo

Close Ready Stance A

- When moving from attention stance, the right foot pivots on the ball of the foot, and the left foot moves inward.
- Keep the wrists straight don't force the left palm to touch the right fist.
- The right fist is angled slightly forward, neither completely horizontal nor completely vertical.
- 1. Twin Forearm Block
 - The left arm (primary arm) crosses on the inside. Check to be sure!
- 2. Knifehand High Inward Strike
 - When maintaining an L stance, be careful to avoid allowing either heel to come off the ground. The sine wave is entirely generated via the knee spring of both legs.
 - Relax the arms in front of the chest until they move smoothly to the intermediate position after the peak of the sine wave. In the intermediate position, both arms slide outward, wider than the shoulders, but stay forward of the line of the chest both hands should be visible. If the practitioner loses sight of them, they are too far back. The elbows are relaxed and lower than the wrists; they should be pulled backward slightly (and the back arched, also slightly), just enough to impose a stretch across the chest which can provide impulse to the inward movement.
 - Maintain the half-facing of the chest throughout the movement do not use backand-forth swing of the upper body to generate additional power.
 - While a hint of hip involvement may occur naturally, it should be neither forced nor exaggerated.
 - As with an outward movement, the inward movement of the arm begins with the shoulder, and continues with the elbow. Consequently, the same flex-and-extend cycle of the elbow joint applied, allowing for a whipping action of the knifehand to complete the technique.
 - The knifehand finishes on the rear chest line, with the attacking tool at neck level. As with any L stance technique, the final body position is half-facing.
 - Take care that it is the side fist of the left hand pulled in front of the shoulder do not allow it to settle flat so the under fist is closest to the body.
- 3. Forefist Middle Obverse Punch
 - Since the body moves from L stance to fixed stance, sine wave is performed using the knee spring of the right leg only. As the weight is transferred, allow the left foot to float naturally this results in the foot travelling some distance inwards. Do not bring it all the way in to the right foot, however.
 - After the peak of the sine wave, the hands transition smoothly to the intermediate position, with the left hand withdrawn to the hip and the right hand extended. The body will naturally rotate some way towards a full-facing position, but ensure this is unforced.
 - Take care to differentiate the L stance and fixed stance ensure the fixed stance is longer, and be aware of the difference in weight distribution.
 - As with L stance, techniques in fixed stance are always performed half-facing. Do not allow the shoulders to become side facing at the moment of the punch.
- 4. Twin Forearm Block
 - The right arm (primary arm) crosses on the inside. Check to be sure!

7. Bending Ready Stance A

- As in other cases of sine wave while changing feet, the right foot is placed with the ball of the foot making the initial contact. The knee bends as weight is transferred, and the point where the heel makes contact signals the smooth reversal of the sine wave from down to up.
- The left foot floats just off the ground beneath the body until the execution of the block; neither extend nor lift it.
- The arms are relaxed in front of the chest until just after the peak of the sine wave. Extend them smoothly backwards at an angle of around 45 degrees, such that both hands remain visible without need to turn the head, to the intermediate position. The lift of the hips is accompanied by a stretch between the ribcage and the left knee, so that the left foot remains near the floor while maintaining a relaxed left knee; this stretch will provide impulse for the upward movement of the knee to achieve the bending stance.
- During the execution of the technique, the body drops (utilising the bend of the right knee), the left knee lifts, and the arms form a guarding block position. These three movements all finish simultaneously, in time with the exhalation.
- The left foot is held horizontally, with the footsword presented, rather than allowing the ankle to relax and the foot to dangle.
- 8. Middle Side Piercing Kick
 - Perceived power in patterns derives from acceleration of the attacking tool through straight lines. It is therefore essential to lift the foot as high as possible while it is still tucked close to the thigh, to maximise the length of the straight line that can be achieved.
 - Keep the body as upright as possible throughout the kick.
 - Cross the arms in front of the chest in preparation for the high punch that accompanies the kick. It is simple to define the punching motion the fist travels in a direct line from the intermediate position to the target, with no arcs or deviations. It is not necessary for the forefist to be pointed at the target throughout the whole trajectory; nor is it required that the forearm be parallel to the line of travel at all times. At the point of impact, the forefist is correctly oriented and the arm is straight, but prior to this, only the *vector* of the fist's travel is critical.
 - Do not stint on the energy applied to the punch or the reaction hand the sharper the punch, the more crisp the entire kick will appear in the perception of the viewer (as long as the timing is precise, with every element finishing together).
 - Likewise, the foot travels in a direct line to the target. Upward swooping and horizontal deviations are to be avoided. The transition from lifting the foot to driving outwards must be smooth and seamless it must appear as a single action, never two.
 - Both hips pivot to achieve the final position of the kick. The supporting foot rotates to point approximately 165 degrees from the target (by rotating the right hip), and the left leg rolls so that the knee is aligned somewhere below horizontal (20 degrees is about right) and the footsword is presented. Both of these should occur as close to the moment of impact as possible to maximise the sharpness of the movement's completion.
 - The final position should result in a near-straight line from left foot, to left knee, to left hip, to left shoulder, to right shoulder. Beware an angle at the hip, with the body crunched forward or the pelvis thrust backward arch the back and rotate the hips further to correct this. With the body in the correct facing, the target is observed over the practitioner's chest. Looking over the shoulder means the body is over-rotated, while not looking over the chest at all indicates under-rotation.
 - Pose the kick for a count of one (around a third of a second) before retracting the left knee towards the chest. Do not hook the foot away from the line of the kick.

- 9. Knifehand Middle Guarding Block
 - Smoothly lower the foot after retracting the side kick to glide just above the floor as the right knee begins to provide sine wave; don't allow the foot to simply 'fall' into the L stance.

19. Inner Forearm Circular Block

- Bringing the right foot to the left foot is an example of sine wave while changing feet; as usual, a little tension in the left thigh allows the right foot to move smoothly and without any abrupt or forced motions. The ball of the right foot makes first contact; the knee bends as weight shifts to begin the sine wave, and the contact of the heel allows the smooth reversal of down to up. Keep this sine wave subtle too much exaggeration makes the circular block (with its own down-up-down cycle) appear bouncy and comical.
- After the peak of the sine wave, the arms move smoothly to the intermediate position hands significantly wider than the shoulders, a little forward of the chest, with the elbows relaxed and lower than the wrists.
- For the first part of the block, the body and hips are full-facing. The arms travel inwards on a plane parallel to the chest they should not travel forwards or on an angled plane.
- As an inward movement using the inner forearm, the usual flex-to-extend cycle of the elbow is mostly omitted. To emphasise the 'scooping' application of the block, keep the elbow essentially fixed, with the motion occurring from the shoulder. *Do not* perform this initial circular action in slow motion!
- Just as with normal sine wave, the down-to-up portion of the circular block's downup-down cycle is fluid and connected. The initial downward motion is achieved with a bend of the right knee and allowing the right heel to come off the ground, but do not drop too deeply, and never pause at the bottom of the movement. The downward motion only serves to make the upward motion natural!
- The first point of impact of the block occurs just after the down-to-up transition the body is still low, but has begun to travel upward again. The arms reach the second intermediate position crossed in front of the left of the body at solar plexus height just after the body reaches the peak of the down-up-down cycle. Maintain full-facing until this point.
- The hips are raised above the walking stance position at this point, to allow a sharp drop to the final position. Pull the left hip and shoulder back at the moment of impact to achieve the reverse half-facing position. The right fist should be slightly below the right shoulder, in turn slightly below the left shoulder.
- Draw an imaginary line on the floor across the front of the left foot, and a second line forward from the right foot. The right fist should be above the point where these two lines intersect.

20. Low Front Snap Kick

- According to the Two Hand Rule, since both hands are doing different things in the previous movement, this kick is low. This is still around belt height, however don't kick below the waist.
- 22. Inner Forearm Circular Block
 - Unlike the circular block performed while stepping forward in movement 19, do not perform a sine wave in preparation for the execution of the block. With the body stationary, the 'double bounce' effect becomes comical and undesirable. Instead, bring the arms directly out to the intermediate position and execute the block immediately.

- 25. Bending Ready Stance A
 - By the peak of the sine wave, the right foot should be floating beneath the hip, just above the floor with a stretch between ribcage and right knee. Do not extend or lift the foot before the final execution of the block.
- 27. Outer Forearm Middle Guarding Block
 - After the side kick, the right foot is placed closer to B and C than the left foot. In order to find this position in practice, first place the right foot down to form a parallel stance; next, retreat the right foot by about a foot length.
 - Place the ball of the foot first, and pivot smoothly while executing the sine wave.
 - The hands are relaxed in front of the chest during the turn; they draw back smoothly to the intermediate position after the peak of the sine wave.
- 28. Outer Forearm Middle Guarding Block
 - This is not a spot turn bring the right foot all the way to the left foot before performing sine wave while changing feet.

Yul-Gok

- 1. Extend the Fist Horizontally
 - Do not perform this movement in slow motion, but rather in *natural motion*; that is, quickly but without energy or a crisp finish.
 - The exhalation is softer and longer than for normal motion.
 - The left fist arcs up from the vicinity of the right floating rib and across to end on the shoulder line. Extend the elbow naturally through the movement so that it straightens completely by the conclusion.
 - The left arm and right arm should not cross or intersect during this movement.
- 2-3. Fast Motion
 - The first punch begins with a full sine wave while maintaining the sitting stance. This utilises the knee spring of both legs; ensure the heels do not raise off the ground.
 - The first punch concludes with a sharp drop back into the sitting stance position, in time with the moment of impact. Immediately lift the hips by using both knees once more; there is no downward motion to begin this second sine wave. The arms do not move to a relaxed position before preparing for the second punch go directly from the first punch to the prepared position. (As in Do-San, this is a subtle movement, primarily consisting of applying some tension that can be used to add impulse to the second punch.)
 - Ensure the sitting stance locks in place at the instant of impact don't allow any residual bounce, and be precise about the timing.
- 7. Inner Forearm Middle Side Block
 - The stance is formed towards AD, but this does not mean 45 degrees. The angle should be more shallow, closer to A than D.
 - At the intermediate position, ensure that the hands are crossed in front of the left chest, with the elbows lower than the wrists. The body should be half-facing by this point; don't attempt to increase power by swinging the chest and shoulders.
- 8. Low Front Snap Kick
 - According to the Two Hand Rule, since both hands are doing different things in the previous movement, this kick is low.

- 15. Palm Middle Hooking Block
 - The movement is performed in *natural motion*. It must not be slow; it moves quickly, but without energy or a sharp finish.
 - The application of the movement requires the palm to scribe a shallow arc and make contact with the top of the target. Keep the wrist straight but relaxed, and use the elbow to correctly orient the palm. This requires the arm to be bent no more than 15 degrees much closer to straight than most other blocks.
 - In most movements, there is a clear distinction between the smooth movement of the hands into the intermediate position, and the sharp acceleration of the hands *out* of the intermediate position. When utilising *natural motion*, however, this distinction does not apply there is no sharp acceleration to mark the difference. Instead, from the relaxed position with the hands in front of the chest, move the hands *through* the intermediate position (crossed in front of the left ribcage this is a little wider than the more common position in front of the left chest) into the execution of the block in a single smooth action.
 - Keep the arc shallow, without too much exaggerated vertical motion. Most of the required vertical traverse can be generated by the sine wave, without need to use the shoulder to lift the hand up and down.
 - Ensure that the final body position is half-facing.

16-17. Connecting Motion

- Two movements performed in connecting motion utilise a single exhalation. In most cases of connecting motion (as in this case), the first technique is one which is normally performed in *natural motion*; as such, the longer, drawn-out breathing of the connecting motion is not at all foreign to the movement. During the hooking block, the exhalation is essentially as usual for *natural motion*; in the brief period between the end of the hooking block and the moment of impact of the punch, the exhalation softens somewhat, before concluding with a sharp, cut-off breath as the punch reaches the target.
- Two movements performed in connecting motion utilise a single sine wave. The smooth nature of *natural motion* means that the hooking block can occur during the sine wave without appearing awkward or out-of-place it should be in motion, travelling through the intermediate position to the target, during the down-to-up transition of the sine wave, reaching its destination as the sine wave hits its peak. The punch is executed to coincide with the final drop as normal. It is crucial that the peak of the sine wave has the hips raised above the walking stance position, to permit a strong drop into the punch. As always when maintaining a walking stance, do not lower the rear heel gently through a cautious roll of the ankle; drop the hell sharply to generate 'impact vibration'.
- Between the hooking block and the punch, do not extend the right fist into the normal intermediate position for a punch this looks hasty and ungainly. Instead, reaction force is generated by withdrawing the right hand to the hip directly from the hooking block position.
- At the point of impact of the hooking block, at the peak of the sine wave, the body must be in a reverse half-facing position. The punch is performed full-facing.
- The two hooking blocks in movements 15 and 16 should be symmetrical (apart from the difference in stance position). Check to be certain that one elbow is not bent more or less, and that the two blocks are not performed on different lines, and that the shapes of the wrists and hands are equivalent.
- Emphasise the contrast in power and sharpness between the *natural motion* of the hooking blocks, and the strong acceleration and sudden stop of the punch.

- 24. Front Elbow Strike
 - After the side kick is retracted, bring the body full-facing as the sine wave begins. Do not attempt to increase the power through an exaggerated rotational swing of chest and shoulder.
 - Allow the left foot to lower until it nearly touches the floor during the sine wave do not drop the foot directly into the stance from the kick.
 - After the peak of the sine wave, bring the hands smoothly to the intermediate position. The left hand is loosely open and extended forward; the elbow is relaxed, and the knifehand is pointed downward, palm facing naturally (not rigidly) towards the right. The right fist, loosely clenched, is drawn back towards the right armpit, with the elbow raised and extended to the right. The left chest and shoulder remain full-facing throughout the movement; the drawing back of the right hand, however, can pull the right chest and shoulder slightly backward, creating a tension across the right chest that can be utilised to provide impulse to the strike. Note the difference between this slight bowing of the chest (creating tension) and a rotation of the whole chest (generating no tension).
 - Modify the sine wave slightly from normal do not straighten the right leg as far or raise the hips as high as usual. Retain some bend in the rear leg at the peak of the sine wave, and do not permit the body to travel as far forward towards the walking stance by this point. This permits the explosive straightening of the rear leg during the execution of the strike to drive hips and body forwards in a sharp lunging motion, adding an impression of implacable mass to the perceived power of the strike.
 - Utilise the tension across the right chest to drive the elbow sharply forward into the final 90 degree configuration, at the same time moving the left hand into position to provide a target for the strike. The fingertips should meet the end of the forearm don't leave them projecting beyond the elbow. Be certain to have the right backfist oriented to the ceiling do not rotate the forearm so the side fist points downward!

28. Twin Knifehand Block

- Check that the knifehands are in the correct position to perform the blocks. It is not correct to simply take the twin forearm block and open the hands; the arms must shift so that the knifehands cover the same targets that the outer forearms were protecting.
- Ensure that the left arm (primary arm) crosses on the inside.

30. Twin Knifehand Block

• Ensure that the right arm (primary arm) crosses on the inside.

36. Backfist Side Strike

- This movement must be performed with sudden, explosive violence and aggression. This is achieved by making the body cover the full distance of the jump in a single sharp lunge. Unlike a normal stepping movement, do not gradually move the body closer to the final position throughout the movement; instead, perform the initial down-to-up of the sine wave and the preparation of the intermediate position while the body is still balanced over the supporting foot. Thus, once the execution of the strike begins, speed and sudden acceleration are required to reach the X stance in time.
- The sine wave is subtle and does not involve much vertical motion. Keep both legs strongly bent throughout the technique straight legs cannot provide the proper lunging action, and make the movement appear weak or ineffective. Start low, stay low, finish low.
- In the intermediate position, the striking arm (left) crosses on the outside, with the elbows below the wrists. Push the elbows forward to create some tension across the shoulder blades, which will provide impulse to the strike.
- Keep the body half-facing on impact do not over-rotate and assume a side-facing position. Do not stand too high in the X stance keep the knees bent and the hips low.

37. Double Forearm High Block

- General Choi described double forearm block as "one of the most powerful blocks in Taekwon-Do". Unlike most blocks, we do not utilise reaction force to increase power slightly while maintaining the body in equilibrium; instead, we throw everything in the *same direction*. This provides much additional power at the expense of equilibrium. This all-or-nothing attitude should be reflected in the performance of the block — utilise plenty of hip and abdomen, and even some degree of rotation of chest and shoulder, plus the power of the arm itself, in the performance of the block. *Do not allow double forearm block to appear weak or cautious*.
- Pivot on the ball of the left foot, bringing the relaxed arms in front of the chest throughout the turn. By the peak of the sine wave, the chest has not quite reached half-facing, so that there can be some rotation of chest and shoulder in the final execution. Draw the left hip back further than usual in preparation for the hip-to-shoulder-to-elbow progression of power. When the hip snaps back to the right, it should create a tension that helps *drag* the upper body into position.
- The double forearm is thrown in a horizontal arc to drive sideways; never perform the block so that it unfolds forwards or downwards.
- The body finishes in a half-facing position.
- The second knuckle of the left little finger is just alongside the right elbow joint. Don't turn the left arm so the whole forefist rests on the right arm.

38. Double Forearm High Block

• This is not a spot turn – bring the right foot all the way to the left foot before performing sine wave while changing feet.

Joong-Gun

Close Ready Stance B

- Keep the forearms flat and the fist vertical don't let the arms point downward.
- 1. Reverse Knifehand Middle Block
 - At the intermediate position (crossed in front of the right chest, with the blocking arm on the outside), keep the elbows relaxed and below the wrists. This helps ensure the correct trajectory for the block.
 - As with the inner forearm middle block, utilise a slight tension across the shoulder blades to provide impulse to the block.
 - To form the reverse knifehand, keep the wrist straight and curl the fingers slightly as with the knifehand backward at the first knuckle, curled forward at the second knuckle. Keep the thumb well clear of the blocking tool, but do not force it flat against the palm doing so prevents the muscle protecting the bone from properly tensing.
- 2. Low Side Front Snap Kick
 - According to the Two Hand Rule, since both hands are doing different things in the previous movement, this kick is low.
 - The power in the kick comes from a forward-driving motion of the thigh. Consequently, simply lifting the knee upwards results in a weak kick. Instead, the left foot travels in a large C shape, first circling back as the weight shifts onto the right foot, then tucking tightly under the thigh, before uncoiling as the thigh drives forward.
 - Keep the right knee bent throughout the kick, and keep the back straight and body upright.

- 3. Palm Upward Block
 - In most movements, the hands move directly from their relaxed position to the intermediate position. This palm upward block marks the first instance in the patterns of a technique where the hands follow a specific indirect path to reach the intermediate position. In the relaxed position, both hands are in front of the body, palm-down and at about solar plexus height, with elbows relaxed. The left hand must simply prepare to retract to the hip, while the right hand travels a relaxed circular path to the side of the body. This occurs during the down-to-up cycle of the sine wave. Just after the peak of the sine wave, the loosely-open right hand reaches its destination just in front of the right thigh, with the elbow almost fully extended. The elbow is forced gently downward to provide a little tension down the front of the right shoulder, which will add impulse to the upward motion of the block. From this position, the palm can block sharply upwards as the body drops to complete the sine wave.
 - Ensure that the hand circles to the side, never to the rear the hand stays forward of the right hip at all times.
 - By the time the hand reaches the intermediate position, the body is half-facing.
 - Allow the left hand to move naturally as the right hand circles holding it rigidly in place makes the technique appear stilted and awkward. It retracts sharply to the hip as the right hand blocks upward.
 - When blocking with the palm, be certain the thumb is safely to the side of the hand, never in between the palm and the target. Keep the palm and fingers flat for the upward block.
 - By the peak of the sine wave, the right foot should be some inches above its final destination on the floor. The knee spring of the left leg producing the final drop will lower the right foot into place.
 - The rear foot is turned inward 15 degrees (much like an L stance). The front foot is turned slightly more sharply 25 degrees and the heel is raised comfortably. Don't force the heel too high. Rear foot stance is very short only one shoulder width from front toe to rear footsword.
 - The right elbow is turned outward in the final position, so that the arm follows the angle of the front foot.

8. Upper Elbow Strike

- The left foot travels partway back towards the right foot before travelling forward to assume the walking stance. The knee spring of the right leg allows smooth transfer of weight to the right foot, and also provides the sine wave.
- The intermediate position has the right fist near the right hip and palm-down, with the left fist loosely extended to the front. Draw the right fist back far enough that there is a slight tension across the front of the right shoulder.
- The execution of the strike involves a combination of pulling and pushing actions to produce a tight and powerful upward arc of the elbow. Purely pulling results in a trajectory that angles away from the target, and purely pushing yields a sluggish and uninteresting motion. The two acting in concert and opposition gives strong acceleration but keeps the trajectory of the elbow headed for the target.
- The body is full-facing in the final position, and the forearm is flat with the backfist uppermost.

- 11. Twin Fist Vertical Punch
 - The intermediate position has both fists wider than the shoulders, with palms loosely upwards and elbows lower than the wrists. Draw the elbows backwards slightly to produce a stretch across the chest which can be used to add impulse to the punch.
 - There is no rotation of the hip to supply power, as this would unbalance the two hands.
 - The trajectory of the punch is a smooth arc that initially curves inward, so that the final vector of the punches is almost directly forwards.
 - As with most punches, the fists rotate towards the end of the movement. Despite the name, the final position is not exactly vertical; the wrists are rotated slightly to bring the thumbs closer together.
 - The elbows are bent, ending up slightly below solar plexus height.
 - The final position of the arms is very similar to the outer forearm high wedging block, apart from the rotation of the wrists to present the forefists to the target.

12. Twin Fist Upset Punch

- Like the palm upward block, this is a movement where there is a specified indirect path the hands travel from the relaxed to intermediate positions. From the relaxed position with both fists palm-down around solar plexus height, the fists arc backwards (slightly up, then down) to end up just outside the hips, still palm-down. The fists are pulled back far enough to produce tension across the chest, which will add impulse to the punches, but should not end up behind the line of the hips.
- There is no rotation of the hip to supply power, as this would unbalance the two hands.
- The execution of the punches is performed in a straight line. Do not arc the punches. The fists rotate towards the end of the motion. The final position has the fists slightly wider than the hips, and the fists very slightly higher than the elbows; the elbows finish a little forward of the line of the hips.
- Overall, the path the fists travel is a little like a letter D which has fallen over onto its flat side from the relaxed position, the fists trace the curve of the D to reach the intermediate position, and then accelerate along the flat bar of the D to the point of impact.

13. X Fist Rising Block

- This is a spot turn, moving the front foot on the centre line. Remember not to shift the weight too far before transferring the weight back to the right foot, and do not over-rotate the right foot before replacing it (no more than 45 degrees). The ball of the right foot makes first contact; as the weight shifts onto the right foot, the right knee begins to produce sine wave, the right heel begins to descend, and the body pivots on the ball of the foot. Once the foot reaches its final angle (turned outward no more than 20 degrees), the heel touches down, assisting to smoothly reverse the sine wave from downward to upward.
- Both arms are relaxed in front of the chest during the turn don't allow them to lag behind.
- After the peak of the sine wave, the body is full-facing, and the hands draw back to the intermediate position just in front of the line of the hips, and significantly wider than the shoulders. The elbows are pulled back far enough to produce tension across the front of the shoulders, which will be used to add impulse to the upward motion of the rising block. The arms are bent to approximately the degree of the final position around 30 degrees as a guideline.
- There is no rotation of the hip to supply power, as this would unbalance the two hands.
- The execution of the block involves a combination of pushing and pulling actions. There is little engagement of the elbow in this technique – the arms primarily swing from the shoulders, with the elbows essentially locked in the final position throughout the movement. The pushing action serves to keep the trajectory of the blocking tool headed towards the target, while the pulling action yields strong acceleration.
- The fists travel in a hyperbolic arc, from around hip height to the final position somewhere above eye height. These arcs intersect around solar plexus height, and the arms cross just below the wrists, forming the blocking tool which continues the arc upwards. The final position is such that the cross ends up above eye level, sufficient to avoid blocking sight.

14. Backfist High Side Strike

• If the hands do not relax from the position of the previous movement, no backward motion can be generated. However, allowing to hands to relax outward and downward all the way to the common position in front of the chest before bringing them inward to the crossed intermediate position results in a sudden reversal of direction that breaks graceful flow. Allow the hands to travel in a natural arc during the down-to-up component of the sine wave so that they reach the intermediate position just after the peak, with no sharp corners in the path travelled.

- 15. Releasing Motion
 - There is no sine wave or back-to-forth motion of the body; the left foot moves *directly* from L stance to walking stance.
 - While the left arm relaxes before the execution of the releasing motion, the relaxation does not result in movement of the arm. The application assumes that the left wrist has been grabbed by an opponent; therefore the arm cannot move until the release is executed.
 - The right hand, however, is free to move, and can relax forward in preparation for a strong retraction to the hip to provide reaction force during the execution. This natural cycle of the right hand is the only preparatory movement available before the execution of the release.
 - Four elements occur simultaneously at the moment of execution: the left foot moves directly to walking stance; the hips and chest snap abruptly from half-facing to full-facing; the right hand withdraws to the hip; and the left arm rotates and sharply descends to the final position.
 - The release operates through the rotation of the wrist to present the narrowest aspect of the forearm to the weakest part of the grip; the application of leverage or the forearm against the fingers; and the power generated through the sharp motion of the hips.
 - An intuitive understanding of the movement can best be gained by exercising the technique against a partner. A strong grab and application of force demonstrates why no preparatory motion (apart from the right hand) is possible; the grab prevents movement of the left arm, and under practical conditions, it can be easily discovered that removing weight from the left foot results in immediate loss of balance.
- 15-16. Fast Motion
 - After the release, use the front knee and rear ankle to directly raise the hips, and move the hands directly to the intermediate position for the punch. There is no relaxation phase in between the release and the punch.
 - Generate 'impact vibration' by dropping the body weight strongly through the right heel at the moment of impact.
- 16. Forefist High Front Punch
 - Ensure that the right fist travels in a straight line from the hip to full extension at eye height. Don't allow the fist to swing in an upward arc.
- 17. Backfist High Side Strike
 - When bringing the left foot to the right foot (part of sine wave while changing feet), do not square the right foot and align the toes of both feet; place the left foot back half the length of the right foot.
- 20. Double Forearm High Block
 - When bringing the right foot to the left foot, place the right foot back half the length of the left foot.
- 21. Reverse Punch
 - In the intermediate position, withdraw the left hand to the hip and extend the right arm loosely forward, allowing the body to naturally rotate closer to full-facing.
 - As an L stance, the final position of the body is half-facing, never full-facing.

- 22. Middle Side Piercing Kick
 - To maximise straight-line acceleration of the attacking tool, tuck the foot under the thigh as early in the motion as possible. Don't permit the foot to pass the left leg below knee height; if the foot is too low by this point, either straight line acceleration will be disrupted by a sharp angle, or the foot will reach the target in an upward arc.
 - Drive the knee forward and allow the foot to pull the hips around so the foot passes through the same coiled position as the kick from bending stance. Just as with that kick, the motion of the foot must not pause at this point.
 - Do not allow the right foot to travel outside the line of the hips. If the foot swings wide, a turning kick action results.

27. Slow Motion

- The technique is performed in slow motion. Very little changes about the rhythm through the relaxed and intermediate positions; it is in the execution phase that the slow motion asserts itself.
- As with normal motion, the movement accelerates from the intermediate position during the execution to the final position. However, this acceleration is slower and gentler in the case of slow motion. In addition, the sharp completion of normal motion is avoided the technique stops softly and easily, rather than abruptly.
- The exhalation is also softer, and drawn out through a longer fraction of the execution. Like the hand movement, it ends easily rather than abruptly.
- The execution includes the final downward motion of the sine wave as the left foot moves into the low stance. It is important that the body still drops through this phase don't take too much weight on the rear leg through excessive bend of the right knee, resulting in a flat forward motion.
- 'Walking' or 'stutter-stepping' the left foot into the final position must be avoided. This generally occurs when friction causes the foot to 'catch' on the floor part-way to the stance. Should such a catch occur, the best response is to recover and smoothly continue — lift the ball of the left foot ever so slightly, just enough to break contact with the floor, and it can continue to glide. If contact is not broken, 'walking' the foot is the only recourse, and it looks terrible.
- Preferable, however, is to prevent the foot catching in the first place. This is achieved by minimising the effects of friction.
- Friction relates to the surface area in contact with the floor thus, a flat foot (with the entire sole making contact) is more likely to stick than a minimally-raised heel (so that just the ball of the foot makes contact). This can be improved again by tilting the foot inwards slightly, raising the little toe, so that contact only occurs along the inside edge of the ball of the foot, behind the big toe.
- Friction also reacts more strongly to a sudden change in pressure. Rather than suddenly dropping weight onto the left foot part-way through the forward motion, instead apply weight smoothly and gradually. Initially, the foot glides just above the floor; next, it brushes lightly; finally, it begins to take some of the body weight. The increase in weight occurs in time with the smooth acceleration, so that the weight on the left foot is least while the body is advancing the slowest, and by the time nearly half the body weight is on the foot, the body is gliding forward more quickly.
- Slow motion should still feel comfortable and natural, rather than contrived and restrained. A natural, relaxed motion is more likely to reach its destination without catching.

- 27. Palm Pressing Block
 - In the intermediate position, just after the peak of the sine wave, the right hand is in front of the right shoulder, and the left hand is in front of and just below the left hip. A reasonable guideline is that the left hand stays approximately over the left knee throughout the entire movement, and the right hand maintains a similar distance from the body – do not bring the hands too far back at the intermediate position, risking a cramped appearance and too much forward motion in the execution of the block. The hands are loosely open with the palms naturally forward (which should result in the palms angled slightly inward – holding the palms squarely to the front is not a natural position).
 - Keep the body full-facing throughout the movement there is no use of hip or shoulder rotation to power the block.
 - There is not too much elbow engagement in the pressing block with the right palm — most of the vertical motion comes from the shoulder, with the elbow primarily serving to keep the palm oriented flat to the floor. By the conclusion of the movement, the forearm (and hence palm) are angled slightly downward, with the elbow turned a little outward, and the forearm rotated minutely to drop the thumb and raise the little finger. Do not exaggerate this rotation. Relax the right shoulder to keep the arm low.
 - The left hand performs a palm upward block, with the elbow providing most of the vertical motion. The forearm angles gently upward so that the wrist finishes very slightly above the elbow.
 - At the conclusion of the block, both palms are on the shoulder lines. The fingertips of the upward block are further forward from the body than the fingertips of the pressing block. Both wrists are straight orientation of the palm is controlled by the elbow, not the wrist.

30. Forefist Angle Punch

- When moving from a stance with one or two bent legs to a stance with straight legs, no sine wave is performed. Keep the feet flat, apart from pivoting on the ball of the right foot – do not use ankle spring to lift the heels and drop into the stance, but simply place the left foot flat into the close stance.
- Be certain to employ reaction force with the left hand withdrawing to the hip during the execution of the punch.
- The trajectory of the right hand must be such that the forefist crosses the body horizontally in a flat plane with the elbow up. Do not extend the arm forward so that the primary motion of the fist is a curve back towards the body; neither allow the fist to reach its position in an upwards motion, with the elbow raising afterwards.
- The right forefist ends with the knuckles on the left chest line, and the forearm horizontal just below shoulder height. The forearm is parallel to the line of chest and shoulder, with the elbow bent approximately 90 degrees.

- 31. U Shape Block
 - The hands relax to a position in front of the body at or slightly below the height of the solar plexus while the body is in motion, rather than the more common chest height. Travelling from chest height to the relatively low intermediate position results in an exaggerated motion which is undesirable.
 - The hands draw smoothly back to the intermediate position just after the peak of the sine wave: loosely open at around belt height with palms naturally upward, the right hand about level with the left hip and the left arm extended back at around a 45 degree angle. If the right hand is too close to the body, it will make the proper trajectory of the block awkward to execute.
 - During the execution, the right hand drives forward at belt height. In much the fashion of the high punch executed along with a side kick, the crucial factor is to ensure that the hand travels in a straight line the exact orientation of hand and forearm do not become critical until the point of impact. Attempting to orient the forearm too early in the motion makes the movement awkward and comical. The tighter the line of travel comes to the body, the more difficult it becomes to execute the block naturally allow sufficient space for the forearm to rotate smoothly in order to keep the hand on track.
 - The right arm finishes with the forearm flat, the right elbow sitting alongside the right hip (behind the line of the shoulders), and the reverse knifehand presented to the target. Do not point fingers or thumb at the target, and ensure the thumb is curled out of danger. Beware jamming the elbow onto the hip or into the ribs this will disrupt the posture of the body, forcing an excessive lean to align top and bottom hands, and risks having the elbow driven back into the body at the moment of impact.
 - The left arm travels up and forward in a smooth arc so that horizontal forward travel at the end is maximised. The hand should pass in front of the forehead, rather than over the top of the head, ending with a natural bend in the elbow of around 30 degrees, and the forearm flat. The top hand should align with the bottom hand below.
 - While a slight amount of forward lean is acceptable, more than this is unnecessary and undesirable.

Toi-Gye

- 2. Upset Fingertip Thrust
 - At the intermediate position, the body is full-facing. The left arm is loosely extended forward, and the right hand is loosely open, palm forward and a little forward of the body at shoulder height. The right elbow is relaxed downward, reaching a little below solar plexus height; it is unnecessary the 'line up' the forearm in the direction of the thrust until the point of impact.
 - The final position of the fingertip is around belt height don't drop the tool too low.
 - Keep the body full-facing and bring the left side fist in front of the right shoulder. Don't let the fist lie flat with the palm inward.
- 3. Backfist Side Back Strike
 - Moving from a bent-leg stance to a straight-leg stance means no sine wave is employed. Keep the slow motion smooth and graceful use tension in the right thigh to draw the body weight over the right foot naturally, rather than pushing off with the left foot and shifting the weight abruptly. Time the arrival of the left foot in the close stance to coincide with the completion of the strike.
 - The paths of the hands intersect, with the striking hand (right) passing under the left hand at around solar plexus height.
 - The final position of the right hand is at eye height, in the plane of the shoulders. The forearm must not be angled inwards – tilt it very slightly away from vertical. Rotate the wrist to present the first two knuckles to the target, but only a very small rotation is required for this purpose – even ten degrees should be enough.
 - The left arm is extended to the side-downward outside the left hip and a little forward of the body. The arm is straight, but if it is rigidly locked, it presents an awkward appearance keep it straight but relaxed.
 - Remember that slow motion does not mean a single constant speed the strike should gently accelerate throughout the execution. Do not finish the strike abruptly or cut the exhalation off sharply, however.

7. X Fist Pressing Block

- During the sine wave, the hands relax in front of the chest. After the peak of the sine wave, draw them back to the intermediate position wider than the shoulders, a little in front of the line of the chest, palms naturally upwards, fists loosely clenched, and elbows relaxed. Draw the elbows back slightly to impose a little tension across the chest, which will be used to provide impulse to the block.
- There is no rotation of the hip to supply power, as this would unbalance the two hands.
- The trajectory of the block is essentially a punching motion with the forefists leading. Much of the power comes from the triceps pulling the forearms downward and inward, while a pushing action shapes the trajectory of the blocking tools.
- In the final position, the left arm is on the underside of the cross, the right on top. The simple rule for X techniques is that the arm matching the front leg should be further from the solar plexus.
- The block is intended to protect the lower abdomen. If the forearms finish flat, the block will not fulfil this purpose; they must be angled downward at the end of the technique to correctly perform the application.

- 8. Twin Fist Vertical Punch
 - Because movements 7 and 8 are performed in continuous motion, there is no pause after movement 7 completes before the sine wave of movement 8 begins. Ensure that the X fist pressing block is properly completed in a correct walking stance, and then immediately use the knee spring of both legs and the rear ankle to produce the down-to-up cycle of the sine wave, lifting the hips above the walking stance. Meanwhile, relax the arms and bring them smoothly back and out to arrive at the intermediate position just after the peak of the sine wave.
 - Link the breathing of movements 7 and 8 with a continuous soft outflow of breath.

9. Middle Front Snap Kick

• According to the Two Hand Rule, since both hands are doing the same thing in the previous movement, this kick is middle.

10-11. Normal Motion

• After the first punch, take a normal pause before performing a full sine wave while maintaining the walking stance for the second punch.

12. Twin Side Elbow Thrust

- Moving from a bent-leg stance to a straight-leg stance means no sine wave is employed. Do not raise and lower the heels bring the left foot to the right foot with the sole held parallel to the floor throughout the movement.
- At the intermediate position, cross both hands in front of the solar plexus.
- It is important that the trajectory of the elbows is *outward*, towards the targets. Do not let the elbows point or travel backward.
- Remember that slow motion does not mean a single constant speed the thrust should gently accelerate throughout the execution. Do not finish the thrust abruptly or cut the exhalation off sharply, however.

- 13. W Shape Block
 - Unlike most blocks, W shape block gains no effective power from movement of the shoulder or elbow. From the intermediate position to the moment of impact, the arms are essentially motionless relative to the chest.
 - In the intermediate position, the right leg is extended but not straight, directly in front with the foot above knee height similar to the preparation for a front pushing kick. Hips, chest, and shoulders are all square so that the body is perpendicular to the final position. The arms are raised so that the fists are at eye height, with the outer forearms and side fists presented forward; the arms continue the line of the shoulders to project directly to the side, not forward of the chest. The elbows rest a little below shoulder height, and the forearms angle very slightly outward of vertical, never inward.
 - Do not roll the right hip so that the knee points across the body in the intermediate position. This motion will occur as part of the execution, and if it happens too early, the execution suffers significantly. The right leg reaches the intermediate position directly in a straight line, the knee travelling in an upward arc. Do not swing the leg around in a circular motion to reach this position.
 - The power is entirely generated by the swing of the chest in the direction of the block. To make this effective, it is necessary to rotate the chest through a full 90 degrees in an abrupt fashion if the movement is too gentle or controlled, the block is unacceptably weak.
 - Most of the acceleration of the upper body is created by a deliberately exaggerated turn of the hips a little in advance of the execution of the block. This creates strong tension along the flank and lower back which can be used to provide significant impulse to the rotation of the upper body. The timing of these two events is critical if the hips turn too much in advance, the tension begins to dissipate, reducing the power it can provide; if the hips turn too late, then the tension never reaches its peak, and no additional impulse is yielded. The optimal timing can be felt, with practice it is the instant where the 'drag' the hips exert on the torso reaches its maximum.
 - The drive of the right leg to produce the hip rotation must not result in the foot immediately reaching the sitting stance, as it precedes the block; the foot remains in motion so that the final stamping movement coincides with the arrival of the upper body and the block.
 - While, strictly, there is no arm movement independent of the motion of the upper body, adhering too rigidly to this produces a movement that appears lifeless and artificial. There should be a bare hint of engagement of shoulder or elbow at the moment of impact to provide an impression of life and to allow for 'impact vibration'. However, if this movement is exaggerated enough to be apparent to an observer, it is too much. The motion must be subtle enough to achieve the desired effect, without appearing to be a motion at all.
 - Confirm the final position of the arms pulled back in line with the shoulders, rather than forward of the chest; elbows below shoulder height; fists at eye height; forearms rotated to present the side fists and outer forearms forward and angled slightly outward. Check that both arms appear symmetrical.

19. Double Forearm Low Pushing Block

- Ordinarily, the outward appearance of tension in the shoulders is to be avoided; movements should appear strong yet effortless. However, in this case, some tension in the left shoulder immediately preceding the execution can help to reinforce the impression of a pushing motion. The acceleration and the 'stop' of the movement can also be slightly slower — the movement should provide a feeling of inexorable mass, rather than sharp crisp delivery and a single moment of impact.
- Ensure that the movement travels across the body, from right to left, rather than 'scooping' forward.

- 20. Extend Both Hands Upward
 - The movement is performed in *natural motion*. It must not be slow; it moves quickly, but without energy or a sharp finish.
 - As with other movements performed in *natural motion*, the hands pass smoothly *through* the intermediate position, rather than moving *to* and *then* from that position. The intermediate position has both hands loosely open, with the arms relaxed in front of the chest.
 - Hold the hands in a similar position to how one might hold a basketball the palms angled slightly inward and curved naturally, the thumbs held away from the hand but not awkwardly so.
 - The shape of the arms, with the elbows relaxed and bent naturally outward, is very similar to the arms in twin fist vertical punch.
- 21. Knee Upward Kick
 - In the same way that it is difficult to provide a crisp finish to a hand technique delivered purely from the shoulder with no engagement of the elbow joint, a movement delivered from the hip with no engagement of the knee joint tends to appear pushy and sluggish. A kick with the knee precludes any other form of delivery, however. The result is that the perceived power of the technique will tend to be below that of the surrounding movements unless steps are taken to minimise this effect.
 - There is a 'loophole' in the perceptions of an observer that can be exploited to this end. As long as the timing is exact, a crisp movement that finishes at the same time as a 'pushy' movement can trick the viewer into perceiving the entire technique as crisp. The more elements that finish in precise synchrony, the more effective the result. In this instance, there are three motions which can be brought together to enact the illusion: the upward motion of the right knee; the downward motion of the body using the knee spring of the left leg; and the retraction of the hands towards the body.
 - At the intermediate position, prepare to ensure maximum impulse can be provided to each of these three elements. Push the arms gently forward to generate some tension across the back of the shoulders. The left knee straightens almost completely, and as the loosely-bent right leg floats under the hip, the right knee is stretched gently downward to provide tension between knee and ribcage, preparing for both the sharp drop of the body on the left knee, and the strong drive upward of the right knee.
 - The application of the movement sees the hands pulling the opponent off-balance, while driving the knee upward into the opponent's chest. Consequently, the movement of the hands during the execution is not *directly* downward (despite the wording in the movement description), toward the knee, but rather downward and inward. Bring the hands sharply in about halfway from the intermediate position towards the solar plexus, and stop them abruptly at the exact instant that the body ceases to drop, and the knee reaches the point of impact.
- 22. Knifehand Middle Guarding Block
 - Do not rotate the right foot before placing it alongside the left foot after the knee upward kick; the rotation will occur as a pivot on the ball of the foot during the sine wave. As in other cases of sine wave while changing feet, the ball of the right foot makes first contact, and the right knee bends as the weight is transferred and the body begins to pivot. At the point the right foot reaches its final angle (turned 15 degrees inward, for L stance), the heel makes contact, providing smooth reversal of the sine wave from downward to upward.
 - Ensure the hands move with the body during the turn, relaxed in front of the chest. The hands draw back to reach the intermediate position just after the peak of the sine wave, not before.

- 23. Low Side Front Snap Kick
 - According to the Two Hand Rule, since both hands are doing different things in the previous movement, this kick is low.
 - The foot travels in a large C shape, tucking under the thigh before snapping forward, to ensure that the forward drive of the knee can supply power to the kick.
 - Keep the body upright and back straight.

28. Backfist Side Back Strike and Forearm Low Block

- Ensure the body is half-facing by the time of the intermediate position, so that the backfist can travel directly backward in a straight line to the target. If the body is still full-facing, then the rotation during the execution will force the backfist to travel in an arc, preventing it from meeting the target on the correct trajectory.
- In the intermediate position, as with movement 3, the hands cross in front of the right chest at around solar plexus height.
- The elbow leads the backfist initially (so the forearm is angled forward in the intermediate position as the execution begins), allowing the engagement of the elbow joint to snap the backfist into position at the moment of impact, providing a crisp finish.
- The final position sees the right forearm just past vertical don't angle the forearm too far backwards. The upper arm continues the line of the shoulders, rather than extending directly back and imposing unnatural tension on the right shoulder. The backfist finishes at eye height, leaving the elbow reaching approximately solar plexus height in the final position.
- The left arm executes a forearm low block. As in Chon-Ji, keep the elbow in close so that the forearm angles forward, rather than presenting a flat plane to the opponent.

29. X Fist Pressing Block

- Begin the jump by driving the right knee upward and a little forward, in order to drag the hips into the air behind it.
- Continue the take-off by utilising first knee spring and then ankle spring of the left leg, to *push* the hips further upward following the *pull* of the right leg.
- By the peak of the jump, the body should rotate completely to end up full-facing toward A. Bend both legs to lift the knees in front of the hips, and raise the fists upward and outward to the intermediate position for the block, as in movement 7.
- Ensure that on landing, the stance, the block, and the focus of attention are all directly toward A. Do not 'short cut' the preparation for the next movement and land with the body already beginning to angle toward C.
- Keep the knees deeply bent in the X stance, and keep the back straight and body upright.
- The block arrives at the same instant as the landing.
- 31. Knifehand Low Guarding Block
 - Relax the arms in front of the chest throughout the turn don't allow them to lag. Draw them smoothly back to the intermediate position just after the peak of the sine wave. The right arm extends backwards at around a 45 degree angle, not directly back behind the shoulder, to ensure that the trajectory of the block does not need to circle around the body.
 - In the final position, the body is half-facing (as always in L stance); the right knifehand cuts through the knot of the belt; the left hand is essentially in the same position as knifehand low block, angled forward approximately parallel with the left thigh, and slightly inward. Keep the elbow close to the body. Both wrists must be straight. Keep the back straight and the body upright.

- 32. Inner Forearm Circular Block
 - Perform a natural, subtle sine wave as the left foot moves partway back toward the right foot in preparation for the move to walking stance.
- 33. Knifehand Low Guarding Block
 - The left foot moves all the way to the right foot. Perform sine wave while changing feet as normal.
- 35. Inner Forearm Circular Block
 - Do not perform a preparatory sine wave before the block. Pivot on the balls of both feet and bring the arms up and out to reach the intermediate position as the body comes full-facing in a walking stance toward CE.

Hwa-Rang

Close Ready Stance C

- Overlap the hands so the left middle fingertip rests on the right middle fingertip.
- Keep the wrists straight.
- Check that both thumbs and both little fingers lie naturally alongside the other fingers don't allow them to stick out to the side.

1. Palm Pushing Block

- Hold the left hand loosely open in the intermediate position.
- Ensure that the blocking tool travels in a straight line from hip to target don't allow the hand to arc upwards from underneath the final position.
- Finish with the arm extended directly forward from the shoulder palm at shoulder height and on shoulder line.
- Keep the back straight and the body upright.

2-3. Normal Motion

• After the first punch, take a normal pause before performing a full sine wave while maintaining the sitting stance for the second punch. Ensure both heels stay on the floor throughout the movement — the sine wave is generated entirely with knee spring.

4. Twin Forearm Block

- Check that the right arm (primary arm) crosses on the inside.
- 5. Forefist Upward Punch
 - During the initial down-to-up transition of the sine wave, the left hand travels back and down, taking a circular path that initially approximately follows the line of the forearm in the previous position.
 - Just after the peak of the sine wave, the left hand arrives at the intermediate position, palm down and just outside the left hip. The right hand is in much the same position as it was in the previous movement, but do not hold it rigidly in place while the left hand travels allow the elbow a small amount of natural cycle to keep the right arm 'live'.
 - Force the left elbow slightly downward in the intermediate position to create tension across the front of the left shoulder, which will provide impulse to the punch.
 - During the execution, keep the arc of the left fist tight, closer to a straight line than a broad circular motion. The technique finishes with fist at eye height, the forearm just forward of vertical, and the forefist on the rear chest line.

- 6. Forefist Middle Obverse Punch
 - At the peak of the sine wave, keep some bend in the left knee, as this will be required to propel the sliding motion.
 - The right foot leads the sliding motion, and the space between the feet initially becomes longer than the one-and-a-half shoulder widths of the final stance. Once the right foot reaches its final position, the left foot catches up to form the fixed stance. Be careful not to draw the left foot too close; also, check that it faces the correct angle. Letting the foot drag too much while sliding tends to allow the heel to lead, and the foot will face the wrong direction in the final stance.
 - Try to keep the centre of mass midway between the feet throughout the slide. Keeping the body too far over either foot and correcting at the end gives the movement an off-balance appearance.
 - At the intermediate position, the loosely-extended left arm can pull the left shoulder forward closer to full-facing, but ensure that the body is half-facing in the final position. Do not overreach and become side-facing on impact.
- 7. Knifehand Downward Strike
 - This movement frequently appears weak and lacking in energy and sharpness. Special attention must be paid to ensure the observer receives a strong, crisp impression from the technique.
 - The right arm takes a long circular path to reach the intermediate position. As it has so far to travel, it moves faster than normal during the relaxed phase, although it should still travel smoothly and at a single constant speed. This broad, swift circular motion gives the movement a flamboyant appearance. Since there is no sine wave, there is no need to time the intermediate position for just after the peak as usual; instead, the strike can proceed as soon as the hands are in place.
 - Like most striking movements, engagement of both shoulder and elbow joints is crucial to provide the combination of strength and sharpness. It is impossible to engage the shoulder if, at the intermediate position, the elbow is already in its final position. There must be some room for the upper arm to move if the shoulder joint is to be brought into play. Thus, at the intermediate position, the right elbow should be at least eye level.
 - The striking arm travels outside the reaction arm, and the hands cross just above the level of the top of the head.
 - A strong downward drive of the right elbow provides the shoulder engagement, and results in the elbow flexing more deeply than in the intermediate position. This flex provides impulse to snap the knifehand sharply downward and lock the arm in the final position.
 - Provide reaction force by drawing the left hand back to the hip as strongly as possible, and time the arrival precisely with the strike.
 - Moving from a bent-leg stance to a straight-leg stance means no sine wave is employed – do not raise the left heel or allow the right ankle to drop the foot below horizontal. However, it is possible to 'shorten' the right leg by tilting the right hip slightly up; when the hands reach the intermediate position, the right foot should be floating an inch or so above the vertical stance. At the moment of execution, drop the body weight (or, specifically, 40% of the body weight) strongly onto the right heel to provide 'impact vibration'.
 - The final position (as always for vertical stance) is half-facing, not side-facing.

- 11. Bring the Left Palm to the Right Forefist
 - The application assumes that the right wrist has been grabbed. Thus, it is impossible to bring the forefist back towards the body. Instead, the movement of the rear foot and the change from full-facing to half-facing both shift the right hip forward, and therefore the right shoulder, which permits the right arm to bend about 45 degrees without the fist moving in space.
 - The left foot advances about halfway towards the right foot. Keep the toes of the left foot pointed forward, rather than rotating to point the foot backward. The left heel is off the ground and the left knee is naturally bent.
 - The left hand encloses the right loosely and naturally, the fingers across the forefist and the thumb alongside the hand towards the inside of the right wrist. The hand position is not entirely unlike close ready stance A, with the right fist rotated 90 degrees.
- 12. Middle Side Piercing Kick
 - To maximise the straight line acceleration of the attacking tool in a side kick performed with the front leg, initially draw back the right knee in front of the chest while lifting the foot to around hip height, with the knee flexed strongly.
 - Do not pause at this cocked position, breaking the kick into a 'before' and 'after' component; the execution of the kick smoothly overlaps the end of the movement to the cocked position, so that they appear as a single fluid action to an observer.
 - The kick is performed while pulling both hands in the opposite direction. Consider this analogous to pulling back the reaction hand while performing a punch: the movement must be strong; it must coincide exactly with the attack; and it must travel in a long straight line opposing the motion of the attack.
 - In order to ensure the pulling of the hands is strong, while still finishing at the same time as the kick, the pull must be delayed until the kick is in motion. Do not pull the hands while the foot is still lifting to the height from which the kick will primarily be executed. As the foot is travelling upward and inward, relax the body slightly back away from the fist, permitting the elbows to straighten a little without moving the fist in space.
 - During the execution of the kick, pull the hands back sharply in the opposite direction. Initially, this is toward the left hip, but as the hips rotate for the kick, the left hip will move away from the line of travel of the hands. Do not allow the hands to swerve to chase the hip; continue the straight line, so they end up alongside and behind the hip, rather than resting on it. The hands should arrive at the same moment as the kick reaches the target.
- 15. Knifehand Middle Guarding Block
 - Relax the hands in front of the chest during the turn, then smoothly draw back to the intermediate position after the peak of the sine wave.
- 17. Knifehand Middle Guarding Block
 - Shift the weight just enough to move the right foot back a foot length and onto the centre line before performing sine wave while changing feet. Don't exaggerate the back-and-forth shifting of weight.

18. High Turning Kick

- The target for the kick is to the side front, 15 degrees outward from F, and at eye height.
- Lift knee and foot to at least belt height before the knee crosses the line of the hips travelling forward. Don't bring the leg through with the foot down low, and then attempt to lift knee and foot at the last instant.
- Power comes from the forward driving motion of the upper leg. Sharpness comes from the whipping action of the lower leg. Keep the trajectory of foot as flat as possible, on both the advance towards and retreat from the target.
- Keep the left hip and shoulder away from the kick don't permit the body to crunch toward the kick. The hands naturally form a guarding block position towards the target during the execution.
- Allow the left foot to smoothly pivot to keep a natural position don't fix the supporting foot in place.
- Keep the knee on the plane of the kick at all times in particular, don't allow the knee to dip downward as the foot retracts.

19. High Turning Kick

- The two kicks are performed in fast motion. Place the right foot a natural step (about a shoulder width) ahead of the left, and immediately execute the second kick.
- 21. Forefist Middle Obverse Punch
 - Ensure the L stance is not too wide, and the weight is correctly distributed.
 - Align the punch with the solar plexus line.
- 25. Side Elbow Thrust
 - Pivot on the ball of the left foot until the body is half-facing before sliding.
 - Relax the arms and reverse the left and right to bring the right arm underneath in the intermediate position both arms loosely extended forward at ribcage height, slightly outside the line of the right hip.
 - Unlike every other slide, in this case the two feet do not travel along parallel lines. The right foot travels directly towards C, and thus the left foot must cross the line of travel to form the L stance. Do not swing the right foot in an arc.
 - Ensure the right elbow travels directly backward toward the target, without swinging to the left.
 - Check the weight distribution after the slide.

- 26. Inner Forearm Side Front Block
 - Moving from a bent-leg stance to a straight-leg stance means no sine wave is employed. Pivot on the ball of the right foot and do not raise the heels. Turn the body entirely full-facing toward B, and bring the left foot alongside the right and parallel to the floor. Shorten the left leg slightly by raising the left hip, allowing the body weight to be dropped firmly onto the left heel upon execution of the block to provide 'impact vibration'.
 - The arms take a specific path to reach the intermediate position. En route, they pass through another position, with the right arm loosely extended downward, slightly forward and outside of the right hip, and the left arm raised so the fist reaches eye height forward and a little outside of the left shoulder, with both backfists facing forward. The arms continue smoothly through this position to the intermediate position, the fists moving inward so both cross the centre line moving in opposite directions and both elbows are inside the lines of the shoulders. This should create a slight tension across the shoulder blades, which can provide impulse to the outward motion of the block.
 - Do not use rotation of chest or hip to add power to the block, as it lends an ungainly appearance.
 - From the intermediate position, execute the block. The right arm chops back to the right lead with the elbow so that the forearm snaps into place on impact. The left arm cuts inside the right to extend to the side downward. In the final position, the right fist reaches eye height on shoulder line, with the forearm angled very slightly forward of vertical.
- 27. Inner Forearm Side Front Block
 - The arms pass through the same positions en route to the execution as in the previous block. Note that to reach the first position, the arms need only relax slightly outward.
 - While maintaining a close stance, sine wave is achieved by using the ankle spring to raise the heels. There is no true initial downward motion (do not bend the knees); however, by relaxing the body, a similar rhythm to the normal down-to-up cycle can be produced.

Choong-Moo

- 1. Twin Knifehand Block
 - Ensure that the knifehands are protecting the correct targets. Simply forming a twin forearm block position with open hands is insufficient the entire arm must shift to position the knifehands correctly.
- 2. Knifehand High Front Strike
 - As the body relaxes, it becomes full-facing.
 - Relax the arms in front of the chest until they smoothly open outward to the intermediate position just after the peak of the sine wave. The palms are naturally facing forward, with the fists forward of the line of the chest, and significantly wider than the shoulders. The elbows are bent to reach down to around solar plexus height. Draw the elbows back slightly (without moving the fists back behind the line of the chest) to create a tension across the chest this will provide impulse to the inward motion of the strike.
 - As with most inward movements, the power proceeds from hip to shoulder to elbow, and the elbow joint undergoes a natural flex-to-extend cycle. The hip motion is slight and subtle. The engagement of the shoulder means that the elbow will lead the knifehand until nearly the moment of impact, when the engagement of the elbow joint causes the attacking tool to snap into place.
 - The final position of the knifehand is on the solar plexus line, with the attacking tool at neck height. The forearm is angled a little forward of vertical. Don't keep the elbow too close to the chest.
 - The left arm cuts across the forehead from left to right, ending in the same position as a knifehand rising block (with the knifehand centred on the solar plexus line), but travelling in more of a thrusting motion (leading with the fingertips).
 - The combination of impulse from the chest, drive from the shoulder, and whip from the elbow combine to give this movement perceived power. If the strike simply rotates around the shoulder joint with no engagement of chest or elbow, it tends to look bland and weak.
- 6. Bending Ready Stance A
 - Draw the right foot in to float just off the floor under the right hip during the sine wave. Do not lift or extend the right leg until the execution of the block.
- 8. Knifehand Middle Guarding Block
 - After the retraction of the kick, lower the foot toward the floor and smoothly pivot on the ball of the left foot to become half-facing toward D, while performing the sine wave. Don't allow the right foot to *touch* the floor until it reaches the L stance, as this will break the flow of the movement.

- 9. Flying Side Piercing Kick
 - In order to complete the kick cleanly and land with good balance, air time is a critical factor. The technique should be performed with intent to maximise the height attained, so as to have time to finish everything without rushing. While there is some natural forward travel in the jump, do not emphasise forward motion at the expense of vertical jump.
 - In the right L stance at the commencement of the technique, the body is half-facing.
 - During the initial step with the right foot, maintain the half-facing position do not allow the hips to swing full-facing or, worse, past square to end up half-facing to the left.
 - Place the ball of the right foot, not the flat foot or heel immediately. The placement should be a little outside the left foot (do not cross over permit the left foot a clear line to travel forward!), and forward only a shoulder width or so. Taking too long a step at this point converts the motion of the jump naturally into a forward leap, instead of the desired vertical spring.
 - Take the weight on a sprung right knee; do not lock the right leg straight!
 - The upward drive of the left knee provides the majority of the lift in the jump. The further forward the trajectory of the knee is angled, the more the jump becomes a forward leap. However, if the knee travels directly vertically, it applies no drag to the hips, and no jump is achieved. An upward angle steeper than 45 degrees but no more than 60 degrees seems to be optimal in most cases.
 - As the left knee begins to drag on the hips, allow the right knee to straighten explosively, pushing the hips higher. As the right leg is about to be pulled off the ground, add the final push by utilising ankle spring.
 - By this point, the body is still half-facing to the right. Tuck the right foot tightly under the right thigh, and drive the right knee forward something like a front snap kick. Unlike the front kick, however, the hips do not remain full-facing allow the weight of the knee to drag the right hip forward, and let it naturally roll to raise the foot towards hip height. The foot is still travelling on a straight line forward towards the target *do not* allow it to swing to the right outside the line of the hips, or a turning kick will result.
 - Fold the left foot under the pelvis and keep the left knee up to form the tucked position as the right foot drives out in the piercing motion. Complete the rotation of the right hip to correct the orientation of leg and foot (the front of the thigh, shin, and toes angled just below the horizontal, and the footsword presented to the target) at the point of impact. Ensure that the knee locks straight to complete the kick!
 - Keep the body as upright as possible any lean will be a disadvantage for balance on landing. Allow the chest to rotate naturally to the left, but no further than sidefacing — as always with a side kick, the target should be visible over the chest, rather than over the shoulder. Keeping the body too far forward, however, tends to make the kick resemble a front kick.
 - Maintain the arms in a relaxed guarding block position don't flail around in the air.
 - If air time permits, pose the kick for a count of one (around a third of a second) before retracting the right knee towards the chest. Do not hook the foot away from the line of the kick.
 - Utilise the withdrawal of the knee to aid in bringing the body fully upright before landing. Take the shock of landing on the left ball of the foot, and absorb the impact with the knee spring, forming the sine wave for the next movement. Try to make landing, recovery, and sine wave flow together as gracefully as possible.

- 13. Reverse Knifehand High Front Strike
 - Following the knee upward kick, lower the right foot alongside the left. Make contact with the ball of the right foot, and perform sine wave while changing feet as normal.
 - Pivot on the ball of the right foot; by the point that the foot has reached its final angle (no more than 25 degrees outwards), the body should be full-facing towards F. At this point, the right heel touches down, providing for a smooth reversal of the sine wave from down to up.
 - The arms are relaxed in front of the chest throughout the turn don't permit them to lag behind. The arms draw outwards to reach the intermediate position after the peak of the sine wave hands at chest height, palms forward, and significantly wider than the shoulders. The hands are slightly forward of the line of the chest and remain in view at all times if they slip out of peripheral vision, they are too far back. The elbows are naturally bent to about solar plexus height, and are drawn back far enough to impose a tension across the chest that will provide impulse to the inward motion of the strike.
 - Keep the chest full-facing throughout the execution, but the hip and abdomen can be engaged just before the arm movement to add power.
 - As an inward movement with the reverse knifehand, the elbow does not undergo the usual flex-to-extend cycle. Instead, utilise the chest to *pull* the arms inward, and the shoulders to *push*. Without chest engagement, the movement is unacceptably sluggish, and will not finish crisply.
 - By the point of impact, the arm is straight with the elbow solid. Do not lock it rigidly in an *absolutely* straight position, however, as this risks hyperextension when hitting a solid target. With the elbow firmly fixed at an angle of only a few degrees, it is indistinguishable from rigidly straight to an observer, but provides protection to the joint on impact.
 - In the final position, the right hand reaches eye height on the solar plexus line, and the left sits beneath (but not touching) the right elbow joint. Don't let the fingers of the left hand project beyond the arm shift the hand left to align it.

14. High Turning Kick

- Ensure the knee and foot are elevated before crossing the line of the hips.
- Allow the body to pivot naturally on the ball of the left foot, and keep the left hip and shoulder away from the kick. The arms form a natural guarding block position toward the target.
- The kick is aimed 15 degrees outward from directly toward F.

- 15. Middle Back Piercing Kick
 - The two kicks are performed in fast motion. After placing the right foot, begin the execution of the back piercing kick immediately.
 - Allow the body to naturally turn to face F before placing the right foot alongside the left. This permits the kick to be executed without awkwardly maneuvering around the right foot.
 - Keep the hips and chest full-facing away from the target don't pivot any further, or the kick will resemble a side piercing kick.
 - Tuck the kicking foot tight under the left thigh to maximise straight line acceleration don't begin kicking backward directly from the floor, or the kick will travel in an upward arc. *Do not* permit the left knee to lift sideways outside the line of the hips.
 - Drive the footsword directly backward to lock the leg straight with the foot at shoulder height. The front of the thigh, shin, and toes point further downward than in a side piercing kick around 45 degrees downward, rather than slightly below horizontal.
 - The tucking of the foot and the backward drive should flow smoothly together to give the appearance of a single action.
 - Sight the target over the left shoulder by turning the head slightly. Contrast this with the side kick, where the target is sighted over the chest.
 - The arms are relaxed outward to either side, in a similar position to walking ready stance or bending ready stance B.
 - Pose the kick for a count of one (around a third of a second) before retracting the left knee back under the hips toward the chest.
 - Some degree of forward lean in the body is acceptable, but remain as upright as is practical.

16. Outer Forearm Middle Guarding Block

• After the retraction of the kick, lower the left foot smoothly toward the floor while providing sine wave with the knee spring of the right leg. Don't permit the left foot to 'catch' before reaching the L stance.

17. Middle Turning Kick

• This kick is aimed 45 degrees outward from directly toward E. Not 15. Just do it and don't ask.

- 19. Knifehand Middle Guarding Block
 - The 'trick' to achieving the spin and landing comfortably is to maximise air time this permits a slower, more controlled rotation and more time to prepare the landing.
 - The primary goal of the legs is to launch the body *upward*. Do not rely on the legs to provide the rotation this detracts from air time and forces a faster spin, harder to control.
 - Ensure that both legs contribute equally and evenly to the jump, and keep the back straight and body absolutely upright. The body will rotate around an axis from neck to pelvis, and if the torso is on an angle, the rotation will quickly exaggerate that angle and lead to a loss of balance.
 - Throw both arms backward over the left shoulder during takeoff. This serves a dual purpose: firstly, this provides a gentle rotation (though still enough, with sufficient spring in the jump, to complete the full 360 degrees); secondly, it ensures the guarding block is performed from the correct intermediate position.
 - If balance is an issue, try fixing the eyes on the right fist throughout the turn, rather than attempting to watch a stationary point that is not rotating with the body.
 - Tuck the knees upward during the jump to increase the perception of height in an observer.
 - Check the width and weight distribution of the L stance are correct after landing.
- 21. Backfist Side Back Strike and Forearm Low Block
 - This is essentially the same movement as in Toi-Gye movement 28.
 - However, instead of stepping backward to L stance, the front foot is shifting from walking stance to L stance. A shift does not employ a sine wave or a backward motion of the foot; move the foot directly from one stance to the other while moving the weight distribution from 50/50 to 70/30.
 - When a shift is performed, the usual pause between movements performed in normal motion is reduced. The timing more closely resembles fast motion, especially when sine wave is omitted.

24a. Outer Forearm Middle Front Block

- While moving from walking stance to sitting stance, do not swing the right leg in a broad arc the right foot floats under the hip along the way, travelling a direct path.
- By the peak of the sine wave, bring the body full-facing toward C, with the arms relaxed in front of the chest. The arms reach the intermediate position just after the peak of the sine wave left arm extended loosely forward at chest height, and the right extended outward, with the fist at shoulder height and palm forward, the elbow relaxed downward to solar plexus height.
- Keep the left chest full facing, but by drawing the right elbow back, the right shoulder may pull slightly behind the line of the chest. This is acceptable as long as the chest does not rotate to the right. Drawing back the elbow and shoulder provides tension across the right chest, which will add impulse to the inward movement.
- As an inward movement, the elbow joint undergoes the normal flex-to-extend cycle. The pull of the chest and push of the shoulder drive the elbow inward, and then the elbow engages to snap the outer forearm into position. Ensure that the reaction force of the left hand is timed for the moment of impact.
- The right hand finishes on the solar plexus line, with the knuckles at shoulder height. The body is full-facing.

- 24b. Backfist High Side Strike
 - Despite still being movement 24, these two techniques are performed in normal motion, with the usual pause in between.
 - While maintaining the sitting stance, sine wave is supplied by the knee spring of both legs. Do not allow the heels to lift.
 - After the peak of the sine wave, the arms cross in front of the left chest. Ensure the right hand crosses on the *outside*. The elbows are relaxed and lower than the wrists, but push them forward gently to provide tension across the shoulder blades, which will supply impulse to the outward motion of the strike.
 - The body is side-facing in the final position. Turn the head to observe the target.

26. Middle Side Piercing Kick

- After the first kick, place the right foot a natural step in front of the left about a shoulder width. Allow space for the left foot to travel forward do not cross over the line of travel.
- The two kicks are performed in normal motion. Take a moment to recover balance before executing the second kick, although be careful not to break graceful flow.

27. X-Knifehand Checking Block

- After the second kick, place the left foot a natural step in front of the right about a shoulder width making contact with the ball of the foot to perform sine wave while changing feet.
- The body pivots on the ball of the left foot as weight is transferred; the left knee bends, and the heel descends to make contact as the body becomes half-facing toward B and the foot reaches its final position (15 degrees inward). The contact of the heel smoothly reverses the sine wave from down to up.
- The arms are relaxed in front of the chest throughout the turn. After the peak of the sine wave, they reach the intermediate position fists at shoulder height, palms loosely forward, outside the shoulders with elbows relaxed. The elbows can draw back slightly to provide tension across the chest, which will add impulse to the inward motion of the block.
- In the execution of the block, both arms travel inward, with the palms leading. There is essentially no engagement of the elbow in the movement the elbow maintains the same bend from intermediate to final position.
- The body is half-facing. This means that the right shoulder is forward of the left shoulder, and thus the right hand must be at the front of the cross. The general rule for X techniques applies the hand that matches the front leg is furthest from the solar plexus.
- The target of the block is essentially to the front. Do not swing the cross around to align with the centre of the chest.
- The fingertips are at shoulder height in the final position. The elbows reach down to solar plexus height or slightly below do not lift them too high and create too shallow a cross with the forearms.

- 28. Twin Palm Upward Block
 - The body remains full-facing throughout the movement.
 - While the body is in motion, the arms begin relaxed loosely forward at around solar plexus height, palms downward. They follow a specific path to reach the intermediate position just after the peak of the sine wave circling outward and downward (remaining in front of the body), so that by the intermediate position, the arms are nearly straight and approximately parallel with the right thigh.
 - The elbows are forced gently downward to provide a little tension down the front of the shoulders, which will add impulse to the upward motion of the block. Keep the top of the shoulders relaxed, to avoid drawing them upward towards the ears and giving a cramped impression.
 - Use chest and biceps to *pull* the palms upward as the body drops sharply into the walking stance.
- 29. Outer Forearm Rising Block
 - Only shift enough weight onto the right leg to move the left foot inward by a foot length and onto the centre line, not enough to find equilibrium.
 - The left foot turns no more than 45 degrees before it is replaced the rest of the rotation occurs as a pivot on the ball of the foot, as part of sine wave while changing feet.
 - By the peak of the sine wave, the body is full-facing toward A.
 - The intermediate position for the rising block crosses in front of the left ribcage don't lift the hands too high, and ensure that the timing of the intermediate position (just after the peak of the sine wave) is correct to avoid the hands moving out of position before the execution of the block.

Kwang-Gae

Parallel Stance with Heaven Hand

- Overlap the right hand on top of the left to about the depth of the thumbnail and middle fingernail, leaving an open triangle between the hands.
- Place the hands about 30 cm from the face so the thumbs are at eye height, requiring the eyes to look slightly upward to look through the triangle.
- Don't try to present the palms flat to the front; keep the wrists straight so that the hands angle slightly forward on the line of the forearms.

1. Close Ready Stance B

- Break the hands sharply apart to slightly wider than the shoulders, at the same time as the left foot lifts outward a little. Don't lift the foot too high just above ankle height is plenty and only just wider than the left shoulder.
- Avoid (as much as possible) leaning to the right better to shift the hips slightly over the supporting foot if balance is a problem, rather than leaning the whole upper body over.
- Don't let the hands come to a complete stop after the sharp break, before moving into the smooth circular motion; try to blur the transition so that the whole movement flows together.
- Time the movement so that the hands reach their final position as the left foot lands in close stance.
- 2. Forefist Upset Punch
 - Keep the left chest full-facing throughout the movement do not rotate the upper body.
 - Don't overexaggerate the initial downward motion of the sine wave. The downward movement only serves to make the upward movement smooth and natural from the close stance, very little bend of the right knee is required to achieve this.
 - Initially allow both fists to float to a relaxed position in front of the solar plexus, palms downward, elbows naturally bent. By just after the peak of the sine wave, the right first should have circled back to just outside the right hip, still palm down, while the left arm extends slightly in preparation for retraction to the hip. The right elbow is drawn back far enough to pull the right chest and shoulder slightly behind the full-facing line, imposing a slight tension which would ordinarily provide impulse to the punch. (In slow motion, this effect is lost, but the movement should still be performed in the same fashion.)
 - After the circular motion of the fist to the intermediate position, the punch itself travels forward in essentially a straight line, finishing full-facing with the elbow just forward of the hips and the fist very slightly higher than the elbow. Don't swing the punch under-and-up; drive the fist forward. The fist rotates from palm-down to palm-up toward the end of the movement.
 - Keep the slow motion smooth and graceful, with a natural acceleration from the intermediate position to the end. Don't allow the breath, the punch, or the stance to terminate sharply.

- 4. Palm High Hooking Block
 - The double step should be treated as a journey with a single destination. Do not consider the mid-point of that journey (where the left foot touches down) as a stopping point. The body passes smoothly through the mid-point on its way to the walking stance.
 - As the body begins to move forward, turn the right heel outward fifteen degrees.
 - The left foot travels forward and passes a little beyond the right foot do not cross it over in front. The step is short not much space should result between the right toe and left heel.
 - Make contact with the ball of the left foot. Don't let the heel touch until the final stance is achieved, or it will create a jagged moment in the flow of the movement.
 - The body should not be balanced between the feet at the point that the left foot touches down. This will create a pause in the forward motion, and the weight will need to be shifted forward again before forward motion can be resumed. Instead, the centre of gravity should be forward of both feet at the point that the left foot touches, so that forward motion continues unchecked.
 - The sine wave should not be timed so that the low point coincides with the left foot touching down this creates an undesirable 'bouncy' look to the movement. The sine wave flows naturally and independently of the foot movements by the time the left foot touches, the sine wave should already be partway through the upward motion.
 - The body becomes naturally half-facing during the forward movement. Don't allow the upper body to swing back and forth while changing feet.
 - As with other movements performed in *natural motion*, the hooking block passes smoothly *through* the intermediate position (crossed in front of the left ribcage).
 - Utilise the natural vertical movement of the shoulder resulting from the sine wave to provide much of the arcing movement of the hand.
 - Ensure that there is a distinct contrast between the slow motion of movement 3 (soft), the *natural motion* of movement 4 (relaxed), and the normal motion of movement 5 (strong).
- 5. Knifehand Low Guarding Block
 - There is often a temptation in this movement to jerk the hands back too abruptly to the intermediate position. Draw them back smoothly as usual.
 - Keep the back straight and head up in the final position.
 - It is common for a stance to be too short after a slide check to ensure the correct length. The rear leg (which slides first) determines the distance of the slide; the front leg (which slides after) creates the shape of the stance.
 - Make sure the movement is strong to emphasise the contrast with the *natural motion* of movements 4 and 6.
- 6. Palm High Hooking Block
 - The front heel is already turned outward 15 degrees in the L stance, so it is not necessary to rotate it any further while moving.
- 8. Knifehand High Guarding Block
 - By the peak of the sine wave, the left foot floats just above the final position of the rear foot stance; use the drop of the hips at the end of the sine wave to place the foot in the correct spot. The foot reaches the stance vertically, rather than moving forward into place as with most stances.

- 10. Palm Upward Block
 - As with the double stepping earlier in the pattern, the double step turn should be treated as a single movement, with no stopping point where the left foot touches down. Place the ball of the left foot to the side front of the right foot, and smoothly pivot while the body continues to move toward D.
 - Keep both hands relaxed in front of the body at about solar plexus height during the turn don't allow them to lag behind.
 - By the peak of the sine wave, the body should be full-facing. The right hand circles to the side to reach the intermediate position, almost fully extended in front of the right thigh, just after the peak of the sine wave. Ensure it does not circle *backward* both hands should remain in sight throughout the movement.
 - The left hand retracts to the hip, providing reaction force, in time with the block.
 - The ball of the right foot reaches its final position before the moment of impact the body continues to settle backward until the heel touches down. This gives an easier control over the timing of the slow motion than moving forward in walking stance.

12. Knifehand Low Front Block

- Moving from walking stance to close stance, there is no sine wave. Time the placement of the foot for the moment of impact.
- The technique is performed in a *circular motion*. The hands move in front of the forehead (without crossing) before passing through the intermediate position, outside and in front of the shoulders with the elbows relaxed downward.
- As an inward movement, the elbow will perform a flex-to-extend cycle to allow a sharp finish. Ultimately, the path the hands traverse scribes a shape something more like a Valentine's heart than a circle, as the chopping motion from the elbow causes the knifehand to cut across some of the bottom arc.
- The knifehand finishes on the centre line, palm forward, with the arm extended downward. The left hand provides a target ensure the fingertips line up with neither hand projecting beyond the other.
- 13. Outward Pressing Kick
 - The supporting leg remains straight, the foot pointing directly to C, and the hips and shoulders full-facing throughout the kick. Remain as upright as possible while kicking.
 - Lift the left foot alongside the supporting leg to knee height, so that the thigh is level, and drive it directly outward to lock the left leg straight with the footsword presented to the target at knee height. Do not lift the leg higher to stamp downward, and do not allow the foot to swing upward.
 - Lock the final position for a count of one before retracting the knee.

14. Middle Side Piercing Kick

- When retracting the knee after the pressing kick, ensure the foot tucks in as high as possible. If the foot remains at knee height before the side piercing kick, the kick with swing in an upward arc.
- During the pressing kick, the right leg is straight and the hips are full-facing. During the side kick, however, the supporting knee bends slightly and the hips rotate. Ensure these differences between the two kicks are clear and obvious.
- Lock the final position for a count of one before retracting the knee.

- 15. Knifehand High Inward Strike
 - Smoothly perform the sine wave after the kick while moving forward into the L stance. If the knee is retracted past the point of balance, it becomes difficult to smoothly move forward, and there is a tendency in this case to perform sine wave 'on the spot'; instead retract the knee only far enough that the forward motion occurs naturally.
 - Allow the foot to lower so that most of the forward motion occurs with the foot gliding just above the floor, rather than dropping into place from above.
 - By the peak of the sine wave, the body should have reached the half-facing position.

16. Sidefist Downward Strike

- Ordinarily, the intermediate position for this technique would have the striking arm cross on the outside. However, given the relative position of the hands after the preceding inward strike, in this case the striking arm comes from the inside.
- Like most striking movements, engagement of both shoulder and elbow joints is crucial to provide the combination of strength and sharpness. It is impossible to engage the shoulder if, at the intermediate position, the elbow is already in its final position. There must be some room for the upper arm to move if the shoulder joint is to be brought into play. Thus, at the intermediate position, the left elbow should be at least eye level.
- Cross the hands just above the level of the top of the head.
- A strong downward drive of the left elbow provides the shoulder engagement, and results in the elbow flexing more deeply than in the intermediate position. This flex provides impulse to snap the sidefist sharply downward and lock the arm in the final position.
- Provide reaction force by drawing the right hand back to the hip as strongly as possible, and time the arrival precisely with the strike.
- Moving from a bent-leg stance to a straight-leg stance means no sine wave is employed – do not raise the right heel or allow the left ankle to drop the foot below horizontal. However, it is possible to 'shorten' the left leg by tilting the left hip slightly up; when the hands reach the intermediate position, the left foot should be floating an inch or so above the close stance. At the moment of execution, drop the body weight strongly onto the left heel to provide 'impact vibration'.
- The final position is side-facing.

23. Backfist High Side Strike

- It is awkward and unbalancing to execute a stamping motion while the body is rotating, and the sitting stance will suffer for it. Rather than lifting the foot into the stamping motion while the body is still facing toward C, instead draw the right foot toward the left foot and turn the body to face F before beginning to stamp.
- The right foot should travel in an arc from alongside the left foot to at least knee height before stamping into the final sitting stance position.
- The arms cross in front of the left chest after the foot has already begun the arc of the stamping motion. Ensure the right hand crosses on the *outside*. The elbows are relaxed and lower than the wrists, but push them forward gently to provide tension across the shoulder blades, which will supply impulse to the outward motion of the strike.
- The body is side-facing in the final position. Turn the head to observe the target.

- 24. Double Forearm Middle Block
 - Allow for plenty of backward motion with the arms, and provide some body power with hip, chest, and shoulder.
 - The block is *middle*. The fist should finish at shoulder height.
 - The body is half-facing in the final position.

25. Outer Forearm Low Block

- Because the movement is performed with a shift, the usual pause between this movement and the preceding movement is reduced. The timing is more like two movements performed in fast motion.
- In order to prepare for the shift, bend the front knee slightly deeper than its position in the walking stance to transfer a little weight forward. Don't overexaggerate this; it should be just sufficient to move the weight onto the balls of both feet.
- Use the toes to brace against the floor, and use ankle spring to push the body backwards with both feet shifting together. The shift should only cover a few centimetres.
- Snap the hips sharply to change the chest angle from one half-facing to the other.
- Allow the right arm to move naturally with the shoulders; it should retain approximately the same relative position to the chest as it had in the previous movement. Don't throw it wildly out to the side.
- The final position of the blocking arm should be the same as an obverse block. In practising this movement, a useful test is to change feet while retaining everything above the waist in the same position. If the resulting low block appears out of place, correct it and change the feet back to a right walking stance this is where the block needs to be.
- 28. Double Forearm Middle Block
 - The movement of the rear foot makes it important to deliberately emphasise the backward motion of the arms and the use of hip, chest, and shoulder to create power. There is a tendency in this movement in particular to underutilise the body motion.
- 31. Twin Fist Vertical Punch
 - To perform the stamping motion, the right foot must come up to at least knee height. The action is similar to stepping over a low wall the foot should not dangle directly below the knee, but should rather extend forward.
- 34. Knifehand Middle Guarding Block
 - After the front snap kick, place the right foot alongside the left foot. As this is an instance of sine wave while changing feet, the initial contact with the floor should be with the ball of the foot. Perform the initial downward motion of the sine wave by using the knee spring of the right leg, while pivoting on the ball of the right foot; the heel should make contact when the foot reaches the angle required for the L stance. This contact simultaneously grounds the foot and allows the sine wave to smoothly reverse from downwards to upwards.

Po-Eun

- 2. Lifting Both Fists
 - There is no backward motion or preparation prior to execution the right foot moves *directly* from L stance to one-leg stance, and the hands move *directly* from guarding block to lifted position.
 - Consciously relax the shoulders and left knee before executing the movement. This will allow some explosive action in the absence of backward motion.
 - In order to imbue the movement with some sharpness, it is vital that all components of the movement finish precisely together the short upward drive of both hands; the abrupt straightening of the left leg to propel the hips upward; the pulling of the right knee into the one-leg stance position; the snap of the head to face A; and the sharp breath.
 - The left arm should be in line with the shoulders, not forward of the chest.

3. Pressing Kick

- As with movement 2, there is no opportunity for backward motion or preparation. The right foot is already at knee height and does not lift higher. The trajectory of the footsword is a direct horizontal line to the target, not a 'stamping' action.
- Consciously relax the right hip before kicking. The right leg is the only thing that moves; the head, body, arms, and supporting leg take no part in the execution of the technique. It is therefore critical to make the drive of the footsword as abrupt and explosive as possible, because that single motion is the only opportunity to convey perceived power to the audience.
- Pose the pressing kick position for a count of one before relaxing the kick and beginning the sine wave for the next movement.
- 4. Knifehand Side Strike
 - Keep the eyes towards A through movements 2, 3, and 4. Don't look to D then back to A during the strike.
- 5. Angle Punch
 - Maintain a full-facing posture with the chest do not swing the shoulders to generate power. Utilise core and abdomen subtly

6-12. Continuous Motion

- All seven movements have their own exhalation, but are also linked by a continuous soft outflow of breath. It is very important to *breathe in* immediately after the angle punch to ensure sufficient air in the lungs to make it to movement 12. This inhalation should not be dramatic and obvious, however.
- When more than two movements are performed in continuous motion, the second and subsequent techniques do not employ a full sine wave; instead, the hips lift with no initial dip. This should nevertheless be a more gentle, less abrupt action than the similar partial sine wave that accompanies a fast motion.
- Recall that continuous motion should evoke *graceful flow*. It is important to achieve the correct final position for each individual technique, but the transition towards the intermediate position for the next technique should be fluid, not sudden.

- 6. Forefist Pressing Block
 - In the fashion of a straight fingertip thrust, this technique requires one arm to execute a linear movement (the pressing block), and the other to execute a more circular motion (the side-front block). The body's natural inclination is to perform either two linear movements (with the side-front block travelling vertically into position instead of traversing the body horizontally) or two circular motions (with the pressing block chopping outwards like a low block with the forearm). It may be helpful to practise each hand individually to develop a feel for the movement before combining the two hands together.
 - Ensure the pressing block is executed on the solar plexus line, not to one side.
 - Keep the chin and eyes up during the technique; do not look down at the pressing block.
 - Maintain a full-facing posture with the chest; do not swing the shoulders.
- 8. Inner Forearm Wedging Block
 - The block is middle; fists should be shoulder height, one shoulder width wide.
 - Avoid being too quick or deliberate about moving the hands to the intermediate position. The hands must flow naturally and gracefully until it is time to apply power for the final execution of the block.
- 9. Back Elbow Thrust
 - Keep the eyes facing forward and remain full-facing.
- 10. Forefist Front Punch
 - Punch on the solar plexus line, not the shoulder line.
 - Keep the left wrist straight and elbow up; don't allow the arm to 'droop'.
- 12. Horizontal Punch
 - Both hands are palm up in the intermediate position. Don't bring the right hand too close to the chest, or it will be awkward to execute the punch.
 - The right fist travels in a direct line from the intermediate position to the target, with no arcs or deviations. It is not necessary for the forefist to be pointed at the target throughout the whole trajectory; nor is it required that the forearm be parallel to the line of travel at all times. At the point of impact, the forefist is correctly oriented and the arm is straight, but prior to this, only the *vector* of the fist's travel is critical.

- 13. Outer Forearm Low Front Block
 - Remain full-facing throughout the movement do not swing the shoulders to generate power.
 - Open the arms wider than the shoulders with fists around shoulder height in the intermediate position. The arms should not travel inward on the way to this position.
 - When executing the block, the right elbow initially leads the forearm on the inward motion, creating the usual flex-to-extend cycle and resulting in a sharper finish.
 - Use the knee spring of the right leg to drop the hips and complete the sine wave. This dropping motion will also place the ball of the left foot in its final position. Ensure the left foot is not pulled back in line with the right foot; it should be placed forward, so that the left heel approximately lines up with the base of the right toes.
 - Avoid bending the left wrist. Allow the left hand to naturally angle so the finger belly can meet the right under forearm while leaving the wrist straight.

14. U Shape Grasp

- This technique is performed in an L stance, not a fixed stance like the U shape blocks from previous patterns. Check weight distribution carefully.
- Angle the top hand so that the palm faces upward, and check that the hands are vertically aligned.
- The top forearm should pass in front of the forehead, not over the top of the head.

15. Twin Elbow Horizontal Thrust

- When moving from a stance with one or two bent legs to a stance with straight legs, no sine wave is performed. Keep the feet flat, apart from pivoting on the ball of the right foot do not use ankle spring to lift the heels and drop into the stance, but simply place the left foot flat into the close stance.
- Turn the head to face B in time with the slow motion execution of the thrust.
- Relax the shoulders so that the forearms and elbows are slightly below shoulder height. The elbows should finish slightly behind the plane of the chest to ensure they are thrusting outward at the point of impact; if they finish in a rigid line with the shoulders, the power is travelling backward rather than outward at the completion of the technique.

16. Backfist Side-Back Strike

• The position of the hands and execution of the technique is identical to movement 3 of Toi-Gye, save that it is performed in a sitting stance and in normal motion. Beware the common tendency to widen the positions of the hands simply because the feet are wider.

18. Reverse Knifehand Low Guarding Block

- It is very common to see the stance performed incorrectly. Ensure this is a sitting stance and side facing, not an L stance or half facing.
- Check to ensure that the left hand forms a reverse knifehand, while the right hand forms a knifehand. Pay particular attention to the right thumb.

Ge-Baek

- 1. X-Knifehand Checking Block
 - The body is half-facing. This means that the left shoulder is forward of the right shoulder, and thus the left hand must be at the front of the cross. The general rule for X techniques applies the hand that matches the front leg is furthest from the solar plexus.
- 2. Low Twisting Kick
 - To correctly shape the foot position for a twisting kick, the ankle should be rolled inward — that is, if standing in a parallel stance, roll the kicking foot so that the big toe and reverse footsword are on the ground, while the little toe and footsword are off the ground. This ankle position should be maintained at the point of impact to ensure that the ball of the foot is presented to the target.
 - The right heel passes in front of the left knee. Flex the right knee so that there is opportunity to kick outwards without fully straightening the leg.
 - Pull the left hip away from the target at the point of impact to open out the pelvis. Do not allow the left knee to collapse forward.
 - Pose the kick at mid-thigh height with the leg still bent for a count of one before retracting.

7. Double Arc Hand Block

- The movement is performed with no sine wave. Utilise the core and abdomen to generate power by sharply snapping the hips from one half-facing position to the other. If the half-facing posture is not achieved, the stance is likely to buckle outwards at the hip when the block impacts a strong attack.
- For the intermediate position, draw the hands towards the body at chest height, palms in. This flexes the elbows in preparation to launch the block outwards. If the elbows are not engaged, the block becomes a sideways pushing motion from the shoulder; both the application and power are lost.
- In the final position, the right hand is at eye height, and the right shoulder is relaxed so that the body facing allows it to finish slightly below the left shoulder.
- The right elbow is naturally bent to create a smooth curve from shoulder to wrist, a position which allows strength in the application. If the elbow is too straight, the shoulder is in a weak position to resist the impact of the attack; if the elbow is too bent, it will collapse under the impact. The forearm is angled so that the elbow is lower than the hand.
- The thumb of the right hand lines up approximately with the middle of the V of the left arc hand. A helpful visualisation to position the left hand: Imagine that movement 20 of Toi-Gye, *Extend Both Hands Upwards*, is holding a basketball. Rotate the basketball outwards so that the right hand is in the double arc hand block position; the left hand should be in about the right place.
- 8. Bending Ready Stance A
 - By the peak of the sine wave, the left foot should be floating beneath the hip, just above the floor with a stretch between ribcage and right knee. Do not extend or lift the foot before the final execution of the block.

- 9. Palm Scooping Block
 - Keep both hands relaxed in front of the body at about solar plexus height during the turn. The left hand circles to the side, not behind the hip.
 - Keep the palm flat, not cupped.
 - The movement is performed in a *natural motion* as part of a connecting motion with movement 10. It should not move slowly, but it does not have the sharp finish of an upward block. Use the straightening of the knees to provide some of the upward action of the technique.

10. Forefist Front Punch

- This is performed in a connecting motion with movement 9, so it shares a sine wave and a breath. Do not perform an additional backward motion; drop into the sitting stance and execute the punch directly from the scooping block position.
- Emphasise the contrast between the soft action of the scooping block and the crisp power of the punch.

11. Backfist Front Strike

- The left back forearm circles across the body, beneath the right under forearm, and back towards the left shoulder, reaching the intermediate position for the strike in a single smooth action while the hips lift in the sine wave. It is recommended to practise the releasing application with a partner to ensure that the movement is effective.
- The right arm bends naturally during the releasing application and then extends forward to the intermediate position.
- Keep the right chest and shoulder full-facing throughout the movement; the drawing back of the left hand, however, can pull the left chest and shoulder slightly backward, creating a tension across the left chest that can be utilised to provide impulse to the strike. Note the difference between this slight bowing of the chest (creating tension) and a rotation of the whole chest (generating no tension).
- Initiate the execution of the front strike by driving the left *elbow* forward; the backfist lags slightly, allowing a flex-to-extend cycle for a crisp finish as the backfist whips into the final position.
- Ensure the backfist is travelling *forward*, not chopping in from the left. A useful practice drill is to have a partner hold up two hands 10cm apart; the strike must pass between the hands without touching either.
- Keep the forearm just past vertical in the final position; don't allow the elbow to open too far.
- Be careful not to drive the point of the elbow into the back of the right hand!

20. 9 Shape Block

- The body should be full-facing by the time the intermediate position is reached. Don't swing the shoulders to generate power.
- When the 'breaking' application is considered, it is clear that the arms must pass parallel to each other and overlapping. If the arms reach the final position without interacting like this, the application is impossible.
- Push the chest forward slightly in the intermediate position to generate a stretch; this will be used to generate impulse and *pull* the arms towards each other, before they are *pushed* past each other.

- 23. Flying Side Piercing Kick
 - After the turning kick, place the right foot a natural step (about a shoulder width) in front of the left foot. The ball of the foot touches first; as weight is transferred to this foot, let both knees bend in preparation for the jump. Crunch forward very slightly at the waist, but not so much that balance is affected.
 - When the right heel touches the floor, spring upwards. The jump is driven by four motions, occurring in a rapid wave from top to bottom:
 - A roll of the shoulders backward sets the jump in motion. During practice, this can be a swing of the arms, but during the execution of the pattern the arms should be kept under control, maintaining a loose guarding block position.
 - An explosive straightening at the waist from the slightly crunched position to an upright stance gives some upward impulse and ensures balance during the jump.
 - The knees drive from bent to straight. This is the primary source of vertical force for the jump.
 - Finally, the ankles flex straight to add the last push to the jump. Correct timing of the ankle motion makes the difference between a 'light' jump and a 'heavy' jump ideally, the spring should appear effortless.
 - The initial objective of the jump is to gain as much height from the hips, and thus air time, as possible. Only once the jump is fully in motion should attention turn to the kicking action.
 - Tuck the left foot under the body and pull the right knee tightly up in front before the peak of the jump is reached.
 - Kick out sharply, ensuring the right hip rolls sufficiently to present the footsword. If air time allows, pose the kick for a count of one before retracting the knee strongly.
 - If flexibility does not permit the body to remain upright during the kick, be certain to lean back in the line of the kick, *not* forward to form an L shape with the body. Utilise the retraction of the kick to assist in recovering an upright position before landing.
 - Land on the ball of the left foot and absorb the impact with ankle and knee to ensure good balance. Smoothly convert this into the sine wave for the next movement.
 - The jump should travel one stance forward and slightly left, crossing from the Bside of the C-D line to the A-side. Once the walking stance for movement 24 is assumed, the C-D line should run through the centre of the stance.

- 28. Double Forearm High Block
 - This movement must be performed with sudden, explosive violence and aggression. This is achieved by making the body cover the full distance of the jump in a single sharp lunge. Unlike a normal stepping movement, do not gradually move the body closer to the final position throughout the movement; instead, perform the initial down-to-up of the sine wave and the preparation of the intermediate position while the body is still balanced over the supporting foot. Thus, once the execution of the strike begins, speed and sudden acceleration are required to reach the X stance in time.
 - The sine wave is subtle and does not involve much vertical motion. Keep both legs strongly bent throughout the technique straight legs cannot provide the proper lunging action, and make the movement appear weak or ineffective. Start low, stay low, finish low.
 - It is not possible to apply as much twist from hip and shoulder to the double forearm block when finishing in an X stance as compared to a walking stance, while retaining good equilibrium. Exert some outward pressure with the right elbow in the intermediate position to provide a stretch across the right shoulder blade; use this to generate impulse in the execution of the block.
 - Keep the body half-facing on impact do not let the momentum of the block pull the hips into a full-facing position. Do not stand too high in the X stance keep the knees bent and the hips low.

33. Middle Turning Kick

- Keep the left knee bent both for balance and in preparation for the shift as the right leg prepares to kick.
- Lift the right knee and foot to at least belt height before the knee crosses the line of the hips travelling forward. Don't bring the leg through with the foot down low, and then attempt to lift knee and foot at the last instant.
- As the right knee begins to uncoil, launching the foot toward the target, use the left knee to propel the hips to the left (towards A). Stay close to the ground it is not a flying kick, and the left foot merely skims to the left to recover balance under the new centre of gravity.
- Retract the kick immediately along the same plane; do not allow the foot or knee to dip during the recovery.
- After the turning kick, the right foot is placed closer to B and C than the left foot. In order to find this position in practice, first place the right foot down to form a parallel stance; next, retreat the right foot by about a foot length.

35. Middle Knuckle Fist Middle Punch

- Do not confuse this with either an upset or upward punch. It is performed 'in an uppercut motion', driving the middle knuckle fist into the opponent's solar plexus.
- The right arm travels back to the intermediate position (outside the hip, palm down) along a circular path.
- Force the right elbow slightly downward in the intermediate position to create tension across the front of the right shoulder, which will provide impulse to the punch.
- Combine both *pulling* and *pushing* actions in the execution of the punch to generate power. There is very little elbow engagement in the motion, so it is primarily driven by chest and shoulder.

- 37-38. Continuous Motion
 - The sine wave for two movements in continuous motion is down-up-down, down-updown. That is: after the first movement is completed and the sitting stance is attained, the next thing that happens (immediately) is the knees bend slightly *deeper*, dropping the hips a fraction *lower*. Do not come *up* between the execution of the first block and the commencement of the sine wave for the second block.
- 37. Reverse Knifehand Low Guarding Block
 - The movement is not performed 'in a circular motion'. Extend the arms directly from a relaxed position toward the intermediate position, rather than taking a curving path.
 - The intermediate position should be slightly forward of the line of the shoulders. If the arms are pulled back in line with the shoulders, the block must loop around the body to reach the target; starting clear of the body allows straight-line power.
 - Check to ensure that the left hand forms a reverse knifehand, while the right hand forms a knifehand. Pay particular attention to the right thumb.