Ma Long’s Technique

Ma Long, the latest men-single winner in Asian games, has beaten lots of top players in the world. Characteristic of his game is obvious - very good at initiating attack, fast and fierce, consistent and powerful when he is attacking and counter-attacking from close to mid table. His footwork is reasonable in mid-table, also his forehand loop has good arc, speed, power, placement, which make his technique structure complete. His backhand from mid to far away from table is relatively weak, therefore, Ma Long always tries to use forehand to attack after playing passively on backhand. Furthermore, to avoid his own weakness, he will initiate attack on 3rd ball to put pressure on opponent, and he will counter loop the 4th ball when receiving.

We can say that Ma Long’s offensive mind leads to his active style, and his forehand has made up for his weaker backhand to an extent. His backhand is a threat when playing close to the table. Ma Long’s "All-round" offensive technique is a nightmare of every player.
Ma Long's forehand Power Looping Backspin

Power looping backspin is the most common attacking method, and it is one of the most powerful forehand techniques. As it is power loop, the advantage of power must be emphasized; practically, the arc should be low, the ball should have decent amount of topspin and with flexible placement, we can achieve maximum output. But many TT-lovers focus too much on power, the stroke is too big, which disrupt the harmony between arm and body, leads to decrease in consistency.

When we are power looping, we should focus on controlling the arc and the placement of the ball, then we increase the power if, and only if we are consistent. On the other hand, although power looping is powerful, recovering is also important. we should control our swing and ensure body weight is able, so we can recover quickly.

(Caption in Picture 5) Right foot is pushing the ground; the body starts to lean forward
(Caption in Picture 6) Close the bat slightly, keep it stable, hit the lower part of the mid-top of the ball
Forearm is not moving a lot, use your arm primarily
Left foot steps forward using the force generated when body moves forward
(Caption in Picture 7) Close the forearm to make the arc shorter
Left foot pushes the floor to stop the body from hitting the table
(Caption in Picture 8) Waist should turn enough; the body is at the position, because the upper-body should be relaxed; Moreover, it would be easier to deal with a short ball, net ball or edge ball.
Amateur players' biggest problem is their huge swing; it will only make the stroke out of control.

In picture 1, when Ma Long moved from backhand corner to forehand corner, he kept his body very low, his legs were bent, and his upper body was leaning forward. In picture 2, Ma Long back-swinged when his right foot moved. There are 2 main points: firstly, the step should not be too small or too big, so he can hit the ball at the most reasonable point; secondly, don't back-swing too much before the body is at the position, because the upper-body should be relaxed; Moreover, it would be easier to deal with a short ball, net ball or edge ball. Amateur players' biggest problem is their huge swing; it will only make the stroke out of control. In picture 4, Ma Long started to swing faster after he was in the right position. His arm was fully stretched. His right foot pushed the floor to make the body move forward. It is crucial to use the force during the body is moving forward in a power loop. Amateur players also use the power from the twist of the waist, sometimes they jump up when they hit the ball. It will increase the quality of the stroke, but this motion has a disadvantage: if the coming ball is not very fast, or it has a short arc, or anticipation is not precise enough, then we can't use the power of the coming ball, therefore consistency and effect of power looping will decrease greatly. So, before we do this stroke, we should stand a little bit away from the table, and we should lean forward when we hit the ball. (Red text) at the hitting moment, hitting it more forward, close your forearm, control the arc (Black text) Theoretically, to increase the speed of ball, we need to increase the forward force. Although lots of amateur players know that, but they still have problems in matches. Firstly, does increasing forward force means more "hitting" Secondly, does the wrist come in when we power loop? And thirdly, how much should we close our forearm?

I believe we can find some answers from the motion of Ma Long. In picture 5, Ma Long's left foot stepped forward, body leaned forward, using the power when the body moved forward. His bat was close but not much. In picture 6, his bat angle was stable, hitting the lower part of the mid-top of the ball. Brushing is essential, as the ball comes with backspin, we must overcome it, but when we actually do the stroke, we can feel more hitting than brushing. Because we need to generate power/speed, therefore hitting more will give better effect. Also, portion of brushing depends on the height and the spin of the coming ball. Usually the backspin is not very strong if it is pushed, so we don't need to brush a lot. Also, we need to hit the ball at its highest point, with too much brushing; the ball will go over the table. In picture 5-6, it was obvious that Ma Long was generating a forward force, in order to increase the power and speed of the ball. In picture 4, we can see Ma Long's wrist was moving outwards; in picture 7 and 9, his wrist was moving inwards, this means he used wrist. As we hit more than brush in a power loop, wrist movement is critical for controlling the arc. The movement should not be too big, but quick in a sudden, to increase the spin of the ball.

In picture 6-8, Ma Long's forearm movement was obvious. It is mainly for transmitting power from the body to the ball, and controlling the length of arc. The forearm movement can be separated into two parts: at the moment of hitting the ball, the movement was limited, he used mostly his upper arm; just after hitting the ball, the forearm movement increased, so forward force was reduced, and the arc was shortened. This is very important when looping close to the table.

Picture 9-10 shows how Ma Long recovered. His left foot pushed the floor to stop the body from hitting the table; At the same time his arm relaxed, but he kept his body relatively tight.
Attacking half-long balls at wide forehand

Looping half-long balls is a difficult technique. It is difficult because precise determination of the coming ball is required as well as a correct motion. We hesitate when we are determining whether the coming ball is short or half-long. It is hard to do the loop even it feels like attackable. So amateur players push half-long balls much more frequently. But when the level of play improves, it is hard to stop your opponent's attack by controlling. Therefore better players will play half-long balls more aggressively, with various techniques. Even if the ball is actually short, they can adjust quickly. Psychologically, players tend to think pushing half-long ball on backhand is reasonable; if it is on forehand, players would attack if the ball is rather high, but they should push the ball as well; But they are determined to attack if the ball is going wide on forehand side. Below we analyzed Ma Long's motion to find some of his techniques about dealing half-long balls at wide forehand.

(Caption in picture 5) When moving, right foot steps a little bit inwards
(Caption in picture 6) Right shoulder goes downwards, arm relaxes and opens
(Caption in picture 7) Hit the ball above the table level
(Caption in picture 8) Hit upward and forward

Stay close to the table, reduce your swing

Moving into the position is the first thing when returning ball at wide forehand. But in a match we hit the ball without really into position mostly, because we will be slower than we expected when we move. We should try to get ourselves close to the right position. When we are moving to wide forehand, our foot should exert a force rather parallel to the floor. We shall not push the floor too much, as it will make us 'jump' in the air, and we will not move sideways enough. When moving to forehand side, right foot should step forward a little bit, makes the body stays close to the table. In picture 4-6, Ma Long's backswing motion was small, only his right shoulder went downwards; his arm was relaxed, so he could find the best contact point. If his swing was too big, or his body was away from the table, he could only hit the ball when it was dropping, which is too late for looping. Also, if the ball is short, even we want to push it, we won't have enough time to adjust. Here I want to explain that we can attack short ball as well as long ball. What we need to do is hit the ball at its peak. Therefore it is important to stay close to the table when moving. Hit the ball just after its peak, more brushing, focus on hitting the ball forward (Black text) It is difficult to hit a ball at wide forehand at its peak, we usually hit it just after its peak. In picture 6-7, Ma Long swung a little bit earlier to try to catch the ball at its peak. Most TT-lovers are used to wait until the ball goes over the table, therefore they can only hit the ball when it is dropping close to the edge of the table. As the power of the coming ball is weak, they have to generate their own power, plus they need to open the bat and brush upwards to produce an arc, they will miss a lot; Even the ball lands, it is a weak ball that opponents can easily counter-attack. When Ma Long looped, his timing was earlier than normal, such that he could hit the ball just after its peak, using the power of the coming ball. In picture 8, Ma Long brushed sufficiently when looping and he also focus on generating a forward force, so his loop was fast. In picture 6, Ma Long's arm was very low. In picture 7 we can see that he lifted the bat up vertically. In picture 8, his arm was moving horizontally. If we only brush vertically, the arc will be too high and too long; if we only hit horizontally, we may hit the edge of the table, and brushing may not be sufficient. In order to increase brushing, Ma Long added wrist movement which was shown in picture 5-9. We should look closely to those.
**Forehand Counter Looping at mid distance**

Forehand counter looping is an advanced technique which develops from forehand active blocking. Counter looping is essential from professional players; it can greatly improve amateur player's game as well. It is a main weapon to turn defense to attack. Forehand counter looping has 7 main requirements: 1. Precise determination about spin and placement of the coming ball 2. Body must be in position 3. Hit the ball in front of body 4. Control the swing; avoid a very big stroke 5. Hit the ball just after its peak 6. Focus on hitting the ball forward 7. Increase brushing to produce arc.

Most amateur players hit the ball too long when counter looping because they generate too much upward force without enough brushing, which cannot overcome topspin on the coming ball. Also the swing is too big, the contact point is rather behind the body, so an arc is difficult to produce. Ma Long's forehand counter looping is excellent because his determination is great, and his stroke has a lot of control. Counter looping is his biggest advantage.

(Caption in picture 4): Start lower when counter looping; Twist the waist for enough room
(Caption in picture 5): Close the bat and brush the mid-top of the ball
(Caption in picture 6): Contract forearm to shorten the arc; Use the power from waist
(Caption in picture 7): Body weight moves from right to left, use left foot to stabilize the body

(Black text) A topspin ball usually has a higher arc, so we need to lift our body as well. Ball with topspin will also ‘kick’ after hitting the table, therefore a smaller swing can ensure that we can hit the ball appropriately.

In picture 2 and 3, Ma Long's body weight was higher than attacking backspin, his right shoulder was higher as well. Arm will be relaxed if right shoulder is low. It is easier to adjust shoulder movement when attacking backspin, because backspin ball are usually low and spinnny. When facing topspin, we would think the arc is high, then we will forget to 'sink' our shoulder, which is no good. In picture 3, we can see Ma Long's backswing was low, but it didn't mean the contact point was low. When opponent doesn't attack strongly, we can slightly increase the swing because we will have enough time to do so. Ma Long raised his bat in picture 4 to ensure enough forward force can be generated. Starting height is critical when counter looping. If we start too low, we will produce too much upward force which will make the ball go over the table; if we start too high, we will miss the ball.

(Black text) Most players open the bat too much, which will makes the ball go too far if the coming ball has lots of topspin. In picture we can also see Ma Long was really hitting the ball forward. If we can use the power on the ball when we counter loop, it will make it more difficult for your opponent. That's why we need to hit the ball just after its peak. In picture 6-7, Ma Long did 2 important movements: 1. transfer of body weight 2. Contracting forearm. 1 increased the speed, 2 increased the spin of the ball. Consistency is the first thing we need to consider when we counter loop. We should develop counter looping from active blocking. Active blocking involves only forearm and wrist movement, so it is easier. After we master active blocking we can try to add power from the body, and we can counter loop as long as we find the appropriate contact point.
Backhand sidespin flick is not a unusual technique, almost every shake hand looper has learned this technique already. It is commonly used in receiving serves, but rarely in consecutive pushes. It is because this backhand sidespin flick relies on power on the coming ball. It is easier to do sidespin flick when the coming ball has side-back spin. The properties of the spin and placement of this stroke are tricky. But the power of the ball is relatively weak, and placement is limited. If your opponent attacks uncompromisingly, you are in trouble. We can see that in the recent Asian game Men single final: Ma Long always used a side-step counter loop against Wang Hao's sidespin flick. But it is still very useful for amateur players; sometime it can score directly even. When we use backhand sidespin flick we need to be prepared for continuous attack, and we also need to recover quickly for the next stroke.

(Caption in picture 5): Contract abdomen so there will be enough room for back-swing
(Caption in picture 6): Lot of wrist movement for enough power; elbow points to right, so forearm can be flexible
(Caption in picture 7): Forearm moves with elbow as axis; slightly open bat angle, contact mid-left of the ball
(Caption in picture 8): Straighten abdomen to release power from the body; feet should make the body weight stable

Light steps, stable body weight, contract abdomen, enough back-swing. Rhythm should be slow and steady when doing backhand sidespin flick. Amateur players flick too rapid, which disrupt the rhythm. In picture 1-3, Ma Long’s steps were short, and his upper body was relatively straight, so his body weight was stable. Amateur players miss the rhythm not only because they are too rapid, but also due to their positioning ---- they often side-step when receiving serves, so they need to adjust when they want to do backhand stroke. It will make the body too close to the table, and miss the right contact point.

In picture 4-6, Ma Long was contracting his abdomen really tight, and slightly raised his arm, for enough space for back-swing. His wrist movement was very big especially in picture 6. These motions were all for better brushing. We need to highlight spin in backhand sidespin flick, to make it more difficult for opponents. We need to keep the bat horizontal in back-swing. Some player would make the bat vertical because they want to brush the side of the ball, but it will limit the release of power from the wrist. Match abdomen movement with arm movement

In picture 7-9, Ma Long’s sidespin flick was rather powerful; his abdomen was straight to release power from the body. His forearm was moving forward with the elbow as the axis when hitting the ball, and his wrist was turning to brush the ball. In picture 7, Ma Long contacted the ball at mid-left, but this was closer to center, because Ma Long was highlighting topspin rather than sidespin, which matched with Ma Long's style. Amateur players should focus on straightening abdomen. From picture 7-9 we can see that when Ma Long straightened his abdomen he looked like he was crouching. On the other hand, he used his legs to keep the body weight stable. Amateur players should learn this motion to feel how to use power from the body efficiently. It was obvious that Ma Long generated most forward force from his arm motion. Even his wrist was trying to hit/brush forward. Most amateur player generates sideward force in order to increase sidespin. But it will reduce forward force at the same time, which makes the ball slower and easier for opponent. If we want power and spin at the same time, we could adjust wrist and forearm movement: forearm mainly generate forward force, while wrist motion produce the spin. But it takes more time to learn. In picture 8, Ma Long's wrist stopped after hitting the ball, so the power would be released in a instant. If the wrist is loose and turn too much we will lose control. In picture 9-10, his stomping helped him to shorten his follow through motion, so he can recover to ready position quickly. That's what we call good tactical mind. We should be ready for topspin rally after doing the flick. Amateur players can stand a little bit further away from the table and hit the ball at its peak. They should add abdomen motion after mastering wrist and forearm movement. Also they should avoid too much hitting (compare to brushing). Spin is the first priority when doing backhand sidespin flick.
Backhand “flipping flick”
Backhand “flipping flick” is a threatening technique which is Ma Long's special trick. “Flipping flick” is actually a flick with fake pushing motion. It often surprises the opponent. It is not a new technique, but it is not common either because it is difficult to hit and brush enough in a short time. Although this technique can surprise opponents, but its lack of power and spin would give opponents chance to counter-attack if they step backward slightly. Ma Long usually do this flick when opponents push the ball short, because short pushes are not likely to have strong spin, so “flipping flick” can be done consistently. “Flipping flick” requires a lot more forearm and wrist movement than sidespin flick. Amateur players can reference the motion of forehand flick when learning this technique. Brushing is important when flicking because it is necessary to overcome the backspin on the coming ball.

(Caption in picture 5) Open the bat slightly, aiming the mid-bottom of the ball; lower the body
(Caption in picture 6) Shoulder move forward slightly; close the bat and hit the mid-top of the ball; forearm move forward with elbow as axis
(Caption in picture 7) Wrist turn right and up, more brushing, keep the arc low
(Caption in picture 8) relax arm and recover; right foot stomp the floor to make body moves backwards

Lower the body, upper-body lean forward; wrist turn downwards, aim for mid-bottom of the ball.

Before Ma Long did the backhand “flipping flick”, his body was very low just like when he's pushing; but his stand was firmer and lower than pushing the ball. Ma Long stepped forward slightly before his hit the ball . It can lower the body and the eye sight, so the contact point can be more precise. Also a firm stand can ensure quick recovery.

In picture 1-4, Ma Long's motion was exactly the same as he was pushing. Most of his body weight was lying on right leg, therefore his right leg was bent, and it made his body steady. On the other hand, his body and his bat kept a fair distance from the coming ball, so he could have enough time to flick. This is distinctive to a push. When pushing, contact with the ball was usually made just after its bounce, so the power of the coming ball can be used.

In picture 4, Ma Long's wrist turned downwards, bat was opened and aimed at mid-bottom of the ball, there built up power. This motion was also different to a push. If it is a push, the wrist will turn upwards for more brushing. Amateur players can use this to determine your opponent's stroke.

Although we can see the differences between push and flick in these pictures, in fact it only happens at an instant, so it is still difficult to determine what Ma Long's going to do.

Close your bat slightly; hit the ball with power from the wrist (Picture 5-7 showed when Ma Long hit the ball. In picture 5, his bat was slightly opened. Then it became slightly closed in picture 6. The turning of wrist will naturally brush the ball from bottom to top, create some topspin; at the same time forearm generated a forward force to drive the ball forward. In picture 7, his wrist moved rapidly to up right to lower the arc. Wrist movement was the crucial part in “flipping flick”. When practicing “flipping flick”, amateur players should focus on: 1. open the bat and aim for mid-bottom of the ball before contact 2. Keep the body low throughout and stomp the floor by right foot 3. Make contact when the ball is at its peak or just after its peak 4. Wrist should turn inside sufficiently before hitting the ball, but follow through shall be kept short 5. Do not close the bat too much, aim for mid-top of the ball 6. Adjust wrist motion
according to the spin of the coming ball e.g. if the ball has strong backspin, wrist should move more upward to overcome it 7. Do not open forearm fully to increase consistency. Backhand “flipping flick” should be done in a sudden for it to be effective. Amateur players should build this technique from backhand looping over the table. In practical, we can combine backhand looping, backhand “flipping flick” and backhand sidespin flick together, make it more difficult for opponents.