Pips-out two-winged fast attack style of play - 2. Basic elements of play

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2.1. Mechanics.

It is important to understand how, in this style, the use of pips determines the basic stroke and the basic position behind the table. Therefore, the mechanics involved are explained first.

2.1.1. Angle of the blade. The flat stroke.

A normal pips-out rubber is incapable of producing enough friction to move the ball upwards by friction alone. If you close your bat the ball will drop off. If you open it, the ball will go high and be easy to attack. Therefore, the bat is held vertical most of the time and contact is made with the backside centre of the ball. This angle is only adjusted when dealing with heavy incoming spin, closing the bat slightly against heavy topspin, opening it a bit against incoming heavy backspin.
Driving the ball you cannot impart a significant amount of topspin with pips, therefore grazing the ball is useless and should be avoided, the more so since it tends to impair precision. To maximize precision and speed, your main stroke must be executed with the blade square to the ball and the motion of the blade must be in the same direction as you wish the ball to go. As such, it is a thrust, not a swing. Since, however, thrusting the blade forward is an unnatural movement for your arm, it is made part of something resembling a swing: the flat stroke. With inverted rubbers the drive is a swing going upwards; with pips it is a swing that is almost horizontal.

2.1.2. Dealing with spin. Using the wrist. Distance to the table.

Even if you will not impart much (top)spin to the ball yourself, you will have to deal with it; you must know how it affects the trajectory of the ball. This trajectory consists of two parts: the trajectory before the ball lands on the table, and the trajectory after that.
In the first part a ball moving forward will follow a curved trajectory, for although its speed will keep it moving forward, gravity will pull it down. It will lose speed due to air resistance. The less forward speed, the faster it will drop. Air will flow over and under a ball which is moving forward. A rotating ball drags air with it; if its backside rotates upward (topspin) the ball will drag air in that direction and push it into the air that is flowing over it. As a result there will be denser air above it than under it, which will force the ball down. This is how topspin makes a ball land sooner on the other half of the table. Faster rotation means more air pressure, so an even sooner landing. Faster rotation also means a more stable trajectory, since a rotating object will tend to keep its axis of rotation at the same angle. If a ball is rotating the other way (backspin), it will drag the air flowing over it downward at its backside and push it into the air flowing under it, thus forming a cushion of denser air below it. As a result the ball will float, pushed upward by the denser air. This is how backspin will make a ball drift over the table if it is hit too hard. Faster backspin means more air pressure under the ball, so more drifting. And again faster rotation means a more stable trajectory. If a ball does not rotate at all, or only slightly, it will neither be forced down, nor will it float; it will go forward until it loses its forward motion due to air resistance, and then it will very suddenly drop – like it is falling from the air. This is called a dead ball or knuckle ball. The 40 mm ball loses its forward speed relatively fast (compared to the old 38 mm ball), which means dead balls are produced relatively easy. Knuckle balls or dead balls do not only “drop dead”, they may also have an unstable trajectory because of the lack of rotation.
If a ball drops down on the table it will bounce. It will make friction with the table. If it is rotating with topspin it will make friction pushing itself forward; once aloft again, it will still have topspin and therefore it will follow a fast sinking trajectory. All in all, this ball will bounce lower than a non-rotating (dead) ball. If it is rotating with backspin it will make friction with the table pushing itself backward; it will bounce up still having backspin and therefore be slow in falling down again. Therefore, this ball will bounce higher than a non-rotating ball.
Short pips are generally not very sensitive to incoming spin, but it does have an effect. If you hold your bat vertical, a straight incoming topspin ball will bounce up from it slightly, a backspin ball will drop off it; a dead ball will just bounce back.
There is more. Rotation is imparted by friction. Friction depends on surface contact. With a short pips-out rubber the ball will make contact with the pips. The surface of the pips, taken together, is much less than the surface of a smooth (inverted) rubber. The amount of rotation that can be imparted by a pips-out rubber is, therefore, also much less than the amount that can be imparted by an inverted rubber and will normally not be enough to make a ball land significantly faster than a non-rotating ball. However, if there already is spin on the ball, a pips-out rubber will not stop it, because the lack of friction on surface contact. Incoming topspin continues therefore to some degree as backspin when the ball is returned; incoming backspin continues as topspin. This is called spin-reversal and it is an essential part of your play.

As you will want to attack and, therefore, to produce fast balls that are going low over the net before they land on the table, you have to find a way to deal with the incoming spin.
An incoming backspin ball will drop off your bat, but if you take the ball early, when it is coming up from the table, you can use its upward motion to cancel its tendency to drop off. The backspin may to some extent reverse into topspin,

which will help the ball land fast on the other half of the table. As your stroke is flat, you cannot facilitate spin reversal by swinging upwards; therefore you can only use your wrist. A penholder-grip is perfectly suited for this; a shakehander-grip is not, but you must make the most of it. At the beginning of your flat swing you cock your wrist downward and you straighten it sharply when making contact with the ball.

An incoming topspin ball will bounce up from your bat; in this case, if you take the ball early, the upward motion of the ball will be added to the upward motion caused by the topspin, and you would produce a high ball; to prevent this, you must take the ball just before or on the top of its bounce, using only the topspin-bounce to get the ball over the net. If you do not want the topspin to reverse into backspin too much, which might cause the ball to float over the table, you will have to scrape at least part of the spin off. Again, as you cannot do this by swinging upward, you will have to use your wrist, cocking it at the beginning of your flat swing and straightening it when making contact with the ball.

This also limits the distance a pips-out player can be from the table: he must never be further away from it than the point where he can hit the incoming ball before it starts to drop after its bounce on the table.

2.1.3. The ready position. Grip. Footwork.

In order to be able to execute the flat swing with ease and precision you must be loose and well-balanced – all the time. Your neck, shoulders and upper arms should be completely relaxed. Have your weight equally divided over your legs and stand very lightly, on the ball of your feet. Bend your knees and slightly bend forward, so you can see over the net about a third of the other half of the table. This will make it easier to judge the trajectory and the height of the bounce of the incoming ball; it will also increase the reach you have for play over the table. Stand with your left foot about half a foot further forward than the right foot, feet as far apart as your shoulders are wide, left hip close to the left sideline of the table (top-players stand behind the corner, as they are so fast that they can reach the forehand corner in time), about as far back that you touch the baseline with the tip of your bat when you reach out with it. Your right upper arm hangs down; your underarm is raised forward, at an angle of about 90 degrees with the upper arm. Hold your left arm in the same way. The elbows are about 15 centimetres from your side. Your right arm wrist is loose, ready to be cocked. Your bat is pointing forward and is well above the surface of the table. Think of it this way: you must be ready to move your bat as fast as possible into the path of the incoming ball (before it drops) without hitting the table and you should be equally ready to return the ball with your backhand as with your forehand.

Hold your bat in such a way that its grip is about parallel to your underarm. Use your wrist only for imparting spin to gain control over the ball or for facilitating spin-reversal; that is, you can use your wrist to move your blade up and down, but not back or forth. It is very important in this style that you do not use your wrist to impart speed to the ball, because when you do you will not be able to control the angle at which you make contact. Speed (or the lack of it) must come from the movement (or the lack of it) of the body and the underarm alone. Every attacking stroke must resemble as closely as possible a thrust straight forward, that is, your blade must hit the ball squarely. It is a simple straight head-on collision between bat and ball, which is made part of a flowing curved motion of the underarm.

Good footwork is essential, because you do have to get to the ball in time – always. Keep your feet apart even when moving from side to side behind the table, stay on the balls of your feet, stay low, and keep in touch with the floor when you go from one side to the other. If you move gracefully, you will be in control; if you jerk and jump, you are not. Elegance is a sure sign of success with this style.