Do You Want To Know A Secret? "Backward Motion"

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Introduction

After a very short time from starting Taekwon-Do the student will become familiar with the Nine Training Secrets of Taekwon-Do, whether they realise it or not.

If I was to list them one to nine, I would suggest that the diligent student with perhaps only 12 months of training would be able to say, "Oh yeah, my instructor tells me that all the time".

I think it's a bit like the saying, "Can't see the forest for the trees." They are there, it just takes a while to realise.

Even though they would not fully understand them, the nine training secrets are tools used in every training session.

In this essay I would like to concentrate on just one of the infamous nine.

(7) "All movements must begin with a backward motion with very few exceptions. However, once the movements in motion it should not be stopped before reaching the target"

I picked this little gem because it's the one I feel is most understated. This may be because it's not so easy to explain why it's so important.

Backward Motion

How do you explain backward motion apart from the obvious, ("All movements must begin with a backward motion with very few exception. However, once the movements in motion it should not be stopped before reaching the target") as it is written in the nine training secrets.

I googled it, but everything on the internet seemed to head down a scientific track and away from Taekwon-Do and martial arts in general (even though the physical techniques of Taekwon-Do are based on the principles of modern science, in particular Newtonian physics).

There was nothing I could find that specifically explained the backward motion importance in any martial art or fighting sports apart from an article by Mr Brendan Doogan, III dan, that covered some of the training secrets and the different types of motion. (Good article, check it out. I typed "backward motion" into the search engine on the ITFNZ web site), not sure how else to find it.

Even the Taekwon-Do condensed encyclopaedia had little more to offer than the "All movements must begin with a backward motion" statement.

I must say that I'm not great on the computer and research is not my strong point, so I'm sure there are some I have missed. My point is that compared to the theory of power, sine-wave and some of the other physical aspects of Taekwon-Do, backward motion is understated. So the following is me trying to make some sort of sense of it.

Natural

One of the key things I remember in the first few months of my Taekwon-Do journey was my instructor telling me to relax and to make the techniques in Taekwon-Do as natural as possible. (A bit hard to do when you're asking your body to do something that seems so unnatural to start with).

I can remember not long after starting, two different instructors saying things like "*slower but faster*" and "*relax... more power*". I thought *crikee these guys can't make their minds up and they're teaching me martial arts.*

But it's listening and understanding some of these quirky little comments from time to time that allow things to click and fall in place. Sometimes it's not until days or even months later and click, "got it".

If you look at backward motion and analyse how it applies in other areas of sport, work and life in general, it doesn't take long to realise how natural it is.

When I stand back and watch the junior colour belts practicing fundamentals or patterns, anything that allows the time to over think what they're doing and in the majority you will see the backward motion theory go out the window.

I tested this theory some time ago with a few yellow belt students. I held a pad in front of them and just asked them to hit it, slap it, touch it, any way they liked before I could pull it away. Some pretty quick reactions amongst most of them, but when I asked them to make a proper fist and punch the pad with proper technique, reaction, backward motion and good breath control, all of a sudden almost everyone became tense, laboured, and much slower. (*Over thinking the process*)

The natural backward motion I noticed, (even if it was just a flick of the wrist) when they did not have to think about the actual composition of the punch disappeared.

How about this for an example of someone over thinking a natural motion - In 1999 I had my right knee reconstructed and the rehabilitation process was actually learning to walk properly again.

When I first tried I couldn't get my arms and legs to swing alternately (naturally). As I made my way up and down the physio's clinic my right arm and leg would move together, followed by the left arm and leg. Try it, a real weird feeling, (a bit like a gorilla) but I was in protection mode, not to mention pain, and all I could think about was right side left side.

Over time, as the pain eased, I returned to normal, "well, nearly normal"

As a father of four young children I also get to see the different way in which people grow, learn and develop physical skills. Each one is very different and I will use two extremes as an example.

My second eldest daughter Abbey is six. Her abilities with bat and ball are pretty average. If I ask her to throw a ball, her method / style is as follows, with a stiff arm stiff wrist and no backward motion she lets the ball go from just in front of her face. Result, little direction, no power and me having to make a miraculous dive across the driveway to stop the ball from going on the road.

My son Ben is three and ever since he could crawl he has had a fixation with any thing to do with a bat and ball. Ask him to throw the ball and you get a very different result.

He exaggerates the backward motion and there is a noticeable difference in how quickly he picks a ball up and throws it compared to Abbey; (an indication he's not thinking too hard about the actual process). He even has a little wrist flick in his throw from time to time.

Result- pretty good distance and accuracy for a three year old, better technique and consistency than his older sister.

I'm not saying Ben can throw a ball further than Abbey, but believe it or not he has a much higher success rate in hitting his target.

So why is one so much better than the other? Easy answer "practice". Because Ben can't resist the opportunity to kick, throw or hit a ball, he's doing it regularly (the more he does it the less he's thinking about the process). Abbey couldn't give a toss about bats and balls and very rarely plays with them, and that's okay because her interest lies elsewhere, like singing and dancing.

Test yourself... Have a go at throwing a ball just how I described Abbey's throwing action, (remember no backward motion, no wrist flick) and mark how far it goes. Then give Ben's method a go (backward motion, wrist flick) and judge the difference.

This example reinforces the fact in my mind that backward motion is natural. I am not saying punching and blocking is natural, just that once a student becomes more familiar with a technique, the natural motions we use in every day life becomes more apparent in our actions in Taekwon-Do. (*Practice makes perfect*)

Comparisons

As I mentioned backward motion applies in areas of sport, work and life in general.

If we take the time to compare other sport related activities, we will soon notice how much backward motion plays a part in what we do or more to the point how well we do it.

Let's look at a few sports.

1. Snooker; Have you ever watched or played snooker or a similar type of game before? I don't think in all the games I've played or watched I have ever seen a shot played without some sort of backward motion.

Even someone who has never played before on their first attempt to hit the ball, will demonstrate some sort of backward motion. You will find it's harder to get any real momentum, timing or direction in the shot without a backward motion to aid in relaxing the shoulder, elbow and muscles allowing the shot to follow through.

- 2. Darts; this is a good one. I won't even try to explain it (same theory as snooker) all you have to do is give it a go. First no backward motion, (mind your toes) then with backward motion. Spot the difference.
- 3. Fishing; Try casting a line with no backward motion. Hmmmm... Bugger.
- 4. I could go on forever, Cricket, Baseball, Rugby, the list goes on. However, I would like to finish this part with one more sport.

Golf; the reason I picked golf is not only for the obvious backward motion but for the other very important part in training secret number seven. "Once the movements in motion it should not be stopped before reaching the target"

If you observe a golf swing of a good golfer you will notice the club, once in motion, doesn't stop until it fires through its target. At the top of the swing it obviously has to change direction, but the club doesn't actually stop. The theory is the same with Taekwon-Do techniques. The action whether it's attack or defence, **once you start don't stop.**

It's like when you throw ball up in the air, at the apex of the throw it starts to come down, it doesn't stop and hang around in the air for a while.

A ball may help to explain that you don't actually have to stop to change direction, but it won't show the reason why the backward motion needs to be slow (compared to the forward motion) and relaxed.

If I think back to that instructor that said to me, "slower, but faster" you can understand what he was saying when you compare it to the golf swing.

If you have the same speed both ways, it's virtually impossible to remain relaxed or in control. Try swinging the club as fast as you can both ways. You can not relax through the shot and if you do manage to hit the ball, chances are it won't go were you want it to. Now try slowly both ways, it doesn't take a rocket scientist to work out the end result. No speed, no power, no distance and even though your swing is nice and slow you still won't be relaxed or have full control.

If you are not relaxed, you compromise your technique, poor technique, lack of balance, timing and no power... bad shot.

Bringing it back to Taekwon-Do, the slow back fast forward approach allows the body and feet to move and nearly be at the end of the technique before the weapon (attack or defence) fires through, (catching up) bringing the movement of the eyes, hands, feet and breath together in a single coordinated action.

Very few exceptions

It states in training secret number seven "all movements must begin with a backward motion with very few exceptions". What are they? I have to admit I scratched my head with this one. I couldn't

find any written conformation and every time I asked the question I got a different answer, from, "backward motion only really applies to hand techniques" to, "there's no backward motion in skipping and flying kicks".

After a number of different explanations I decided to go with the one I felt held the most logic for me. To reach a conclusion, I had to study a lot of different techniques with backward motion in the forefront of my thought process.

My conclusion and one of the explanations I was given is; the only place there is no backward motion is in releases.

For example, movement seven in Do San Tul (just prior to the spin counter-clockwise to a backfist). You're in walking stance with right finger tip thrust, you push off the back leg rotating the hips towards the attacker moving your body weight forward at the same time twist the right knife-hand counter-clockwise out of the grab. No backward motion.

Movement 15 and 18 in Jung Gun Tul. You're in L-stance with back fist, square up your hips moving towards the attacker slipping the front leg into a walking stance, rotating your wrist downwards and forward out of the grab. No backward motion.

My thoughts in regards to flying kicks, skip kicks, and pretty much any kick, is the shear fact that it's very difficult to generate any momentum without utilising knee spring (sine-wave) constitute backward motion. Is sine-wave a backward motion? I believe it is. I am still not totally convinced on the right answer so hopefully one day someone much wiser than me will be able to settle it once and for all.

Backward Motion - Power?

The components that make up Taekwon-Do are like the components of a finely tuned machine. If one or more of those components under perform, then you will not get the best end result possible and others will have to work harder than necessary to achieve a desired goal.

Even though some of us may think we are like a finely tuned machine, the fact is that there will always be something to improve on.

The theory of power consists of six of the many components we need to refine and I'm sure we would all like to be able to produce more power. In the following I will give my opinion on how backward motion affects each component of the theory of power. Hopefully this will help in understanding how each component relies on the other and how closely linked these six components are.

Speed (*sokdo*)

It may be hard to find or explain how backward motion, or lack of it, affects some of the other components, but speed is not one of them.

As we know the faster you go the bigger the mess. To generate maximum speed you need to be relaxed. The backward motion engages the muscles and gets the weapon of choice moving and allows them to relax. Try punching with a tense arm and no backward motion. Not only will your punch be slower, but you use so much more energy.

Equilibrium (kyun hyung)

Equilibrium is about being balanced throughout a movement, start to finish. One of the key factors in equilibrium is timing. As mentioned backward motion allows the body a chance to bring the movement of the eyes, hands, feet and breath together in a single coordinated action. Timing, timing aids balance. **Equilibrium**

Mass (zilyang)

Mass is aided by speed and as already mentioned to generate maximum speed you need to be relaxed and backward motion helps you relax. The other thing that aids mass is sine-wave. By dropping the body weight into the movement to bring the eyes, hands, feet and breath together in a single coordinated action. That takes us back to equilibrium, which again reinforces how much each component depends on the other for the best end result.

Concentration (*zipjoong*)

Concentration is about applying the impact force onto the smallest target area. To concentrate every muscle of the body towards the appropriate tool to be used at the proper time. Once again we come back to the ability to relax. Tense muscles tend to try and work all at once, each one being counter productive holding the other back. Backward motion aids relaxation, allowing the muscles to perform in a coordinated sequence (*Timing*) concentrating every muscle of the body towards the appropriate tool.

Reaction Force (banding ryok)

We all know there are different types of reaction force. One is when you can utilise an opponent's own mass/body weight against themselves. Another and one that is probably more commonly mentioned by instructors, is your own reaction. Whether attack or defence by pulling the non blocking or attacking hand back to the opposite hip it aids in increasing the power in the attack or blocking tool. Once again timing plays a big part in reaction. What aids timing, relaxation. What helps us to relax and improve our timing, backward motion.

Breath Control (hohup jojul)

If backward motion is one of the biggest contributors to relaxation then maybe breath control is the biggest. (Try holding your breath and see how long you stay relaxed) But don't forget backward motion helps our timing, and timing aids breath control. Instructors quite often use counting as a tool to help a student regulate their timing with the slow back fast forward action. At the same time the student is concentrating on their backward motion theory, they are also regulating breath control in a similar way. Breathing out slowly on the backward motion then expelling the rest of the breath sharply on the forward motion to the point of impact. There are other ways to utilise breath control in assisting us in Taekwon-Do, i.e., absorbing the impact of a strike, different types of motion, fast, continuous, slow. Explaining how we utilise it, is something best left for another time?

Summary

Backward motion obviously plays a big part in a lot of things we do and after observing different aspects of life in general, be it sports or just day to day life, confirms for me how natural it is.

It also becomes clear that when a physical activity is over complicated, relaxation disappears and along with it backward motion. The way to overcome a complicated action is by practice, so the action becomes more natural.

Explaining how to actually perform a backward motion in either attack or defence is best left to the instructor and student. Where does it begin, how far back is correct, is the backward motion bigger in defence or attacking techniques? There will always be questions to ask and things to learn.

One of the great things with this fantastic martial art we practice is no matter what level you are or how long you've been training, it seems there is always something new just around the corner and always room for improvement...

Good luck with backward motion and don't forget, "relax... more power" and "slower but faster"