

Book The Art of Learning

A Journey in the Pursuit of Excellence

Josh Waitzkin Free Press, 2007

Recommendation

Author Josh Waitzkin has mastered two complex, esoteric disciplines: chess and tai chi, a martial art. He won national chess titles as a youth, and national and world championships in "push hands," or partner tai chi. In this book he presents his theories about learning and high-level performance, using as a case study his own rise to excellence in highly competitive sports. Even without the theoretical speculation his story is engaging – but his theories make the book useful to anyone trying to learn a new skill. *BooksInShort* recommends it to those who wish to raise their level of performance, find out about mind-body connections or enjoy a good story.

Take-Aways

- Becoming proficient in one disciple will make transferring the experience to other fields easier. Gain a sensitivity to thematic connections between disparate pursuits.
- Aim for depth over breadth. Working on the skills of one discipline improves your learning process across the board.
- Being driven by processes makes you strong; fixating on an outcome makes you weak.
- · Don't attribute your abilities to something fixed or ingrained, like talent. You can master anything if you take it step by step.
- Use the things that inspire you to help you to build a learning and performance strategy.
- Once you've internalized the fundamentals, the complex moves will emerge intuitively.
- Don't be afraid to fail. Losing is part of reaching a high level of quality.
- Learn to perform in the face of adversity by incorporating distractions, emotions and other "imperfections" into your process.
- Dissolve mental walls by addressing the technical and psychological aspects of your errors and observing the patterns that connect different aspects of your life.
- Identifying and taking on your weaknesses is a good thing—but don't make it an obsession. Instead, address your weaknesses through the prism of your strengths.

Summary

Chess and Martial Arts: They're Not as Different as They Seem

At first glance, chess and the tai chi practice of push hands – practicing with a partner – have few similarities. Chess is a densely intellectual board game of European origin in which various pieces move and interact in complex patterns. Tai chi is a Chinese system of movement training that improves spiritual and physical health and enables practitioners to defend themselves. However, beyond these surface differences, the two practices have much in common, especially the lessons they teach about how to learn.

"Confidence is critical for a great competitor, but overconfidence is brittle."

Both push hands tai chi and chess are stylized abstractions of combat. In chess, the pieces move like troops, and the players must think as strategically as they would on a battlefield. In push hands, each opponent tries to upset the other's balance, within defined limits. Both distill competition down to its essence. In the games' limited fields of engagement, players can analyze their interactions with their opponents, identifying and improving their tactics and techniques.

Investing in Loss

The best way to improve in both chess and push hands is by playing with superior opponents. You must "invest in loss," or be willing to lose, if you want to sharpen your skills. Thus, your opponents are in many ways your benefactors: they help you get better.

"Once you know what good feels like, you zero in on it, search it out regardless of the pursuit."

For beginners, though, losing can feel devastating. One loss can lead to another and another, creating a "downward spiral" that corrodes performance and ultimately even ruins the careers of some players – especially young ones. Once they realize they've miscalculated, they fall apart, even though they could probably save the situation if they keep a cool head. The pressure disrupts their focus, and they end up making larger and larger errors.

"The key to pursuing excellence is to embrace an organic, long-term learning process, and not to live in a shell of static, safe mediocrity."

Thus striving for perfection and trying to control everything leads to loss of composure and focus. By obsessing on your failures you create worse ones. Instead, learn to break the psychological downward spiral. Some people can do it simply by taking a few deep breaths; others may need to retrain themselves to respond to stress differently.

The "Tell"

Even the best players of both chess and tai chi often have a characteristic tell, an unconscious action or reflex that lets their opponents know what's going on inside them. And since players at the highest levels of both games play from their essences, their tells reveal their entire game strategies. If you're aware of your opponents' tells, you can manipulate them. For example, you may perceive that a push hands opponent is accustomed to being powerful. Give your challengers what they want. By setting them up to push too hard, you can throw them off balance. Of course this sort of reading and manipulation applies to far more than push hands tournaments or chess matches. You can approach any negotiation this way. The more aware you are of both your own patterns and those of your counterparties, the greater your advantage in closing a deal.

"I realized that in top-rank competition I couldn't count on the world being silent, so my only option was to become at peace with the noise."

Chess masters often sink deeply into their own minds, clicking through moves and countermoves until they find the best choices. Conversely, in push hands, the best players act and react kinesthetically, faster than thought. However, the intellectual and intuitive skills of each discipline apply to the other. For example, good chess players don't only analyze the flow of the game intellectually; they feel it. And push hands players know inside out the vocabulary of moves their opponents may use. Even more important, though, is the fact that mastering any discipline teaches you the experience of excellence. You know what you must do to succeed and how success feels once you attain it.

The "Art of Learning"

Learning one discipline teaches you how to cultivate others. These two principles apply to just about any field:

1. "The study of numbers to leave numbers"

In chess, beginners memorize how each piece moves and how many points it's worth: a bishop is worth three times as much as a pawn, for example, so if you get a chance to swap a pawn for a bishop, you take it. Early on, you do this counting consciously, and because you're constantly adding up numbers, you tend to focus on individual exchanges. Later, however, you see the entire board at a flash, and you know intuitively whether a move is good or bad. Similarly, beginners at tai chi learn forms – sequences of moves – and practice them over and over. Even when they move on to working with a partner in push hands, they start with limited, basic exchanges. In time, though, the forms go away. The moves flow intuitively.

2. "Making smaller circles"

To learn how to punch in tai chi you start with a big gesture. You move your arm in a large and obvious circle. Initially your gesture has no power. You hit the punching bag and nothing happens. So you work on your form, correcting your "body mechanics" and making sure your feet are always in the right place. Soon, you can transmit force through your body and hit the bag hard every time. But you're not done yet. Once you've learned the structure of the gesture, miniaturize it. Edit out all unnecessary movement and make it as efficient as possible. Once you've found its essence, you can punch with little external movement but great power.

Systems and Styles

Broadly speaking, you can take one of two routes to learning a discipline such as chess. One is to train according to a rigid system. The teacher forces each student into the same mold, with the goal of developing all talents comprehensively and methodically.

"Mental resilience is arguably the most critical trait of a world-class performer, and it should be nurtured continuously."

The other method is to find your own style and to study those who have styles like yours. The goal is the same, but the approach is different. This path is more organic. However, it doesn't mean that if you can't follow your usual habits, you're lost. Sometimes circumstances force you to change and to develop skills you never thought possible; for example, an injury to your right hand may force you to use your left.

"A key component of high-level learning is cultivating a resilient awareness that is the older, conscious embodiment of a child's playful obliviousness."

Pay attention to your responses to external events. Determine which help you improve and put yourself into similar situations. Learn and grow from crises rather than

allowing them to consume you or make you fall apart.

Two Theories of Learning

Psychologist Carol Dweck says people fall into two broad categories based on what they believe about learning:

- "Entity theorists" These people think intelligence is innate; they say things like "I am smart at this." When they run into trouble, their self-image may shatter: They're not as "smart" as they thought. They blame themselves. Even challenges that once seemed simple seem hard.
- "Incremental theorists" These people acquire subject mastery through practice. They expect success to come through work, so a new situation is just another means of developing mastery. Even if they fail, they feel confident that they've learned something along the way.

"The learning principle is to plunge into the detailed mystery of the micro in order to understand what makes the macro tick."

Of course, no matter which intelligence theory you subscribe to, failure hurts. If you've tried really hard and you lose, you're right to feel downcast. So, if you have children, don't wave away their losses as meaningless. Instead, help them learn through experience.

Accessing Intuition

When you're learning a discipline, whether it's chess, tai chi or business, you go slowly, one move or concept at a time. However, real life moves quickly. You must process huge masses of information instantly, with a lot on the line. This can be daunting. To improve your processing, access your intuition. These two concepts will help you understand time perception:

- 1. "Chunking" Your mind handles masses of data by grouping it into clusters. Find unifying principles and identify relationships.
- 2. "Neural Pathways" When you practice the same thought sequences, as in chess, or moves, as in tai chi, you create a smooth path that you can navigate faster and faster. Your subconscious responds before your conscious mind even recognizes the situation. Practice creates a pathway for intuition, producing "the illusion of the mystical" that many associate with martial arts masters.

Entering the "Soft Zone"

Greatness requires practice. However, even more important than practicing any particular technique is practicing "presence." When you face someone across the chess board or the negotiating table, you cannot just walk through predictable steps.

"Depth beats breadth any day of the week, because it opens a channel for the intangible, unconscious, creative components of our hidden potential."

Instead, you must be completely alive and ready for anything. Your opponents will pressure you and attempt to drive away your essential self, so that only your fears are left. Never allow yourself to be thrown off balance by "random, unexpected events."

In the "hard zone," you're fighting yourself and the world. Your movements feel stiff and brittle, and even a bit of pressure from the outside can push you over. To prepare for real-life encounters, enter the "soft zone," a feeling of flow. When you're completely and smoothly integrated, you'll flex with change like a blade of grass in the wind.

"In my opinion, intuition is our most valuable compass in this world."

Entering the soft zone requires physical training. Even in an intellectual discipline such as chess, players train physically so their bodies won't break down. Learn to expend an appropriate amount of energy, so you don't surge to a victory in a single battle only to lose the war due to exhaustion. Commit entirely to a crucial clash, then relax completely. Build a "rhythm of stress and recovery into all aspects of your life."

Find Your "Triggers"

While having a private, quiet place to meditate is great, you can't take off for your meditation room in the midst of active combat. So, you must learn to find a calm state of mind no matter where you are or what you are doing. Develop triggers that tell you to relax.

"In virtually every competitive physical discipline, if you are a master of reading and manipulating footwork, then you are a force to be reckoned with."

To create your personal trigger, identify a moment when you were performing at your best, so you can carry that feeling into difficult situations. For example, playing with your child may make you feel your best, but you also need to perform well at the office. To prepare for high performance, focus on what you feel like when you are at your best. Capture that state by building a sequence of associated actions – relaxed breathing, favorite music, light exercise – that you go through before the peak state. This is your trigger. Practice this sequence for weeks, so the routine is well-established. Then work on shortening each step, so reaching your peak state takes less and less time. Aim to get to the point where you can enter it almost at will.

"The real art in learning takes place as we move beyond proficiency, when our work becomes an expression of our essence."

Because your competitors' goal is to disrupt your inner calmness and focus, maintaining your peak state is difficult. Take distractions into account. For example, in a negotiation with someone who knows how to push your emotional buttons, trying to resist your counterparty's annoying habits will only divert your attention to the negative emotion. Instead, find a colleague who will engage in the same sort of needling, and practice maintaining your cool in a less charged situation. Once you're able to stay positive no matter what's happening around you, you'll have taken away your opponent's best weapon. Rather than trying to fight your emotions, use them to fuel your performance.

Get Real

To train for excellence, stay rooted in reality. Don't listen to the other side's hype or to your own fears. Instead, learn about every aspect of your discipline. Chess players study the games of the best players as well as those of their likely opponents. Tai chi competitors videotape themselves and their opponents, and study the videos frame by frame.

"The only way to succeed is to acknowledge reality and funnel it, take the nerves and use them."

Practice defining the conflict. Make your challengers play your game; don't play theirs. When you enter the arena, use the knowledge of your opponents that you gained through studying their tells and techniques. Get inside their heads; that's where you'll ultimately win the contest.

About the Author

Josh Waitzkin is a national chess champion and a world champion in tai chi push hands.