

1. The Downward Spiral
 - a. Everybody make mistakes. The first mistake is rarely catastrophic.
 - b. Mistakes are a recognition that you did something wrong. Instead of being on autopilot and doing the same thing again because you “need to catch up”, be stateless. Think/re-evaluate from the new position.
 - c. Don’t lose your cool.
 - d. <http://mindingourway.com/failing-with-abandon/>
2. Entity vs. Incremental theories of intelligence
 - a. Causality aside, it appears that empirically ppl with a incremental theory of intelligence perform better
3. Investment in Loss
 - a. If you never make the same mistake twice, you’ll easily skyrocket to top performance in your field.
 - b. This is impossible.
 - c. But realizing this, you can relish moments where you/other people notice your mistakes.
 - i. You have to accept/embrace frequently losing in order to succeed.
 - ii. Don’t *be* correct
4. The Soft Zone
 - a. Don’t deny your emotions, but learn to use them to your advantage.
 - b. Channel your moods to a higher state of focus.
5. Loving the Game
 - a. Success doesn’t happen because of pure equanimity/Stoicism/sour grapes. Successful ppl put their all into a game, and of course losing hurts.
6. Depth over breadth
 - a. Making Smaller Circles
 - b. It is rarely a mysterious technique that drives us to the top, but rather a profound mastery of what may well be a basic skill set
 - i. Also true of programming interviews
 - c. Waitzkin doesn’t talk about how learning more stuff can help you understand the fundamentals deeply, “overtraining”
7. Using adversity
 - a. If I want to be the best, I have to take risks others would avoid, always optimizing the learning potential of the moment and turning adversity to my advantage.
 - b. Adversity shocks us out of complacency:
 - i. “Easy to get caught up in the routines of our lives and lose creativity in the learning process.”
 - c. Can try to artificially create adversity (“the internal solution”):
 - i. Basketball player can play lefty for a few months
 - ii. In programming, exercises we do at Code Retreat can be similar (eg, force yourself to program in a pure OO/functional paradigm, or with only X lines per function).
8. Slowing Down Time

- a. What is intuition? Bridge between the unconscious and the conscious mind.
 - b. Road to mastery
 - i. Start with fundamentals
 - ii. Get a solid foundation fueled by understanding the principles of your discipline
 - iii. Expand and refine your repertoire, guided by your individual predispositions, while keeping in touch with the essential core of the art
 - c. Chunking
 - i. High-level combinations of low-level concepts, practiced often enough that they become instinctive
 - d. "Curved neural pathways"
 - i. Process of creating chunks and the navigational system between chunks
 - ii. Complex ideas are distilled to the point of unconscious mastery
 - iii. How does this apply to software engineering?
 - 1. In leetcoding, certain techniques become instinctive (eg, representing a graph with a matrix or a dictionary)
 - 2. Probably something similar to other elements of programming, eg, design patterns, protobuf pushing.
 - 3. How does this work at the architectural level??
 - a. Maybe lower-level concepts becomes instinctively obvious and chunked?
 - iv. How does this apply to research?
9. The Illusion of the Mystical
- a. In general, too competitive/game-theoretic for the things I'm interested in (doing stellar programming, research)
 - b. I could use deliberate practice for accent training!!!
10. The Power of Presence
- a. In the absence of continual external reinforcement, we must be our own monitor, and the quality of presence is often our best judge
 - b. Those who excel are those who maximize each moment's creative potential
 - c. We must be prepared by a lifestyle of reinforcement.
 - d. Presence must be like breathing
11. Searching for the Zone
- a. As a teenager, Josh could be hyper-focused enough to crush his competitor, but that takes a lot out of him and makes it v.hard to remain focused for the rest of the tournament
 - b. LGE/Human Performance Institute
 - c. Micro-relaxation/mini-breaks v.helpful in chess and other sports
 - i. Analogous to the benefits of pomodoros/pacing?
 - d. Cardiovascular interval training can have a profound effect on your ability to quickly release tension and recover from mental exhaustion
 - i. Maybe I can see if there are classes at Google

- e. Work to incorporate the rhythm of stress and recovery into every aspect of your life
- 12. Triggers for entering the zone
 - a. Create triggers/rituals for entering a state of flow