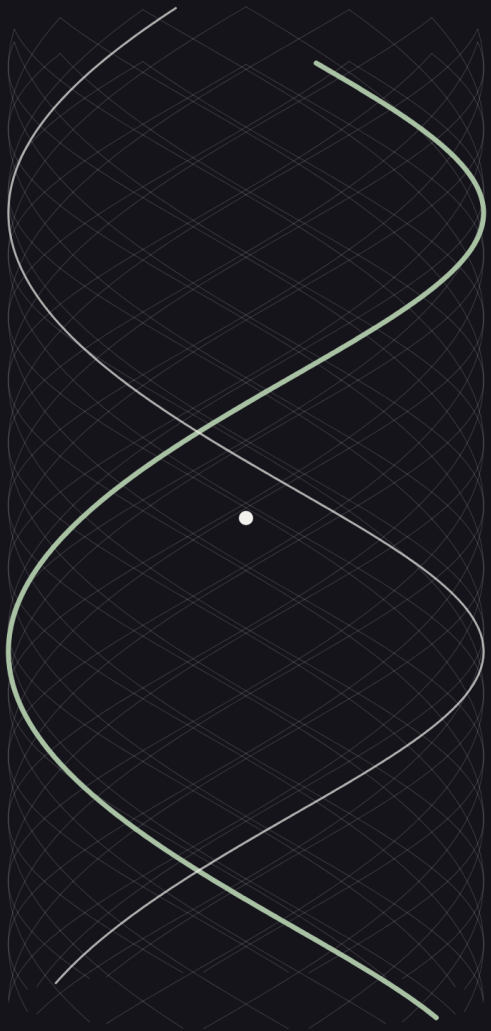
BOOK 3 · COMPANIONS TO THE SYSTEM OF INEVITABILITY



Shape *and* Choice

EVERYDAY GEOMETRY, CALM PRESENCE, AND THE SCIENCE OF A CHOOSING MIND

An evidence-based companion to the System of Inevitability

COMPILED BY CORY MATTHEW SNELL

FREE TO SHARE · CC BY-NC-SA 4.0

Shape *and* Choice

EVERYDAY GEOMETRY, CALM PRESENCE,
AND THE SCIENCE OF A CHOOSING MIND



An evidence-based companion to the System of Inevitability

BOOK 3 OF THE COMPANIONS TO THE SYSTEM OF INEVITABILITY

COMPILED BY CORY MATTHEW SNELL

System of Inevitability originated by Uki (@ukigigi)
An independent, unofficial work

FREE TO SHARE · CC BY-NC-SA 4.0 · FIRST EDITION 2026

Free to Share

Shape and Choice: Everyday Geometry, Calm Presence, and the Science of a Choosing Mind *Book 3 of the Companions to the System of Inevitability*

Compiled by **Cory Matthew Snell**. The System of Inevitability was originated and developed by **Uki (@ukigigi)**, stonemason and martial artist.

First edition, November 2026. Also in this series: Book 1, *Walking and Turning: Iron, Spirals, and the Science of a Practicing Mind*; Book 2, *Wave and Return: The Bent Fist, the Figure-Eight, and the Science of a Restrained Hand*; Book 4, *Lens and Lattice: Altered Perception, the Internal Arts, and the Science of a Curious Practice*; and Book 5, *Nucleus and Orbit: Atoms, Necessity, and the Science of an Interwoven Practice* (all 2026), released under the same license.

This book is a gift. It is released under the **Creative Commons Attribution–NonCommercial–ShareAlike 4.0 International License (CC BY-NC-SA 4.0)**. You are free to:

- **Share**: copy and redistribute this book in any medium or format;
- **Adapt**: remix, translate, transform, and build upon it;

under these terms:

- **Attribution**: credit the compiler (Cory Matthew Snell) and the system's originator (Uki, @ukigigi), link to the license, and indicate if changes were made;
- **NonCommercial**: do not use the material for commercial purposes;
- **ShareAlike**: if you remix or build upon it, distribute your contributions under the same license.

License text: https://creativecommons.org/licenses/by-nc-sa/4.0/

Print it, email it, read it aloud, translate it, and give it away. That is what it is for.

Independence notice. This is an independent, unofficial work. It is not written, reviewed, or endorsed by Uki, and it does not speak for him. Descriptions of the System of Inevitability's philosophy are drawn from a project document, compiled in November 2026, that consolidates an extended conversation about the system's principles, training, philosophy, energetics, and visual language. Quotations attributed to the system come from that document. Where this book suggests practices, tests, stop rules, or ethical guidance, those are the compiler's suggestions based on the general scientific literature, not Uki's teaching. The geometric plates in this book are original drawings made for it. They are inspired by a written description of the system's visual language, and they are not reproductions of any designs by the originator.

Health, safety, and legal notice. This book is for education and inspiration. It is not medical, psychological, legal, or self-defence instruction, and it does not replace a physician, physiotherapist, qualified coach, therapist, or lawyer. Training alone with heavy tools carries real risk of injury. Striking or restraining people can injure, disable, or kill them, and it can carry serious legal consequences. Laws about self-defence differ between countries and states. You train at your own risk, and you alone are responsible for how you use what you learn.

About the science. Every study cited here was checked against its published record (authors, year, journal, and DOI) at the time of writing, and the findings reported were checked against the published abstracts. No study, number, or quotation has been invented. Where the evidence is thin or absent, the text says so.

For everyone who has ever felt the wave rise and let it pass.
And for the calm people, who make the rooms they enter a little safer.

Contents

How to Read This Book *7*

Foreword *9*

PART I · THE SHAPE OF DAILY LIFE

1 An Invitation to Choice 12

2 Wax On, Wax Off 17

3 The Two Speeds of the Mind 23

4 The Real Geometry of Movement 28

PART II · PRACTICE WITHOUT A PARTNER

5 Imagined Opponents 34

6 The Risks of Training Alone 39

PART III · PRESENCE

7 Mushin, Flow, and the Quiet Self 46

8 The Calm That Spreads 51

PART IV · THE BRAKE

9 The Inventor's Warning 58

10 No Opponent, No Enemy 63

11 Training the Brake 69

12 How to Test the Philosophy 76

13 Inevitability, Reconsidered 82

Appendix A · Practices and Logs *86*

Appendix B · The Evidence at a Glance *91*

Glossary *93*

References *95*

About This Book *104*

How to Read This Book

This is the third companion to the System of Inevitability. The first, *Walking and Turning*, was about the system's conditioning tools: iron balls, a spinning ring bar, and the brain that learns. The second, *Wave and Return*, was about the hand as a striking tool. This one is about the **mind** behind both: the system's philosophy of everyday geometry, solitary practice, presence, and "inevitability."

That makes it the most philosophical book in the series, and the one where honesty matters most. Claims about the mind are easy to make and hard to test. Some of the system's ideas have strong scientific cousins. Some are untested. A few, if taken literally, point somewhere dangerous. So you will again see three kinds of marked boxes:

> ● EVIDENCE: WELL-ESTABLISHED
>
> **Well-established.** Supported by multiple independent studies, systematic reviews, or meta-analyses with reasonably consistent results. You can lean on these.

> ◐ EVIDENCE: SUGGESTIVE · EMERGING
>
> **Suggestive or emerging.** Supported by real peer-reviewed research, but the studies are few, small, indirect, or debated. Promising, but hold them loosely.

> ○ PRACTITIONER EXPERIENCE · PHILOSOPHY
>
> **Practitioner experience and philosophy.** Ideas, claims, images, and experiences from the System of Inevitability or other traditions that have not been directly measured. They may be meaningful. They have not been tested.

And the box you should never skip:

> ⚠ CAUTION
>
> **Caution.** Practical safety information, for your body, for other people, and for your judgement. Read these.

Citations appear as author and year, for example (Lally et al., 2010). The full list, with journal details and DOIs, is in the References. A sentence that makes a factual claim with no citation and no box is the compiler's reasonable summary or opinion.

A word about the words. The project materials speak of a "living toroidal/helical geometric field," of "frequencies" that smooth, of a "Venus flytrap" latch, of a "universal overlay," of "inevitability as lived state." This book treats that language as what it is: the poetry of a practitioner trying to describe an inner experience. It does not treat it as physics or physiology. Wherever such a phrase appears, the text asks what ordinary, measurable process might sit underneath it, and labels the rest as untested.

A word about the danger. The source document is unusually candid. In the originator's own framing, once the system "engages," moderation becomes "nearly impossible," and the philosophy of "no opponent" can remove "natural psychological brakes." This book does not admire that possibility. It takes it seriously, sets it beside what science knows about stress, automatic behaviour, and moral disengagement, and then builds the opposite: a practice in which choice, proportion, and compassion live *inside* automatic skill.

A word about the "upgrade in human consciousness." The owner of this project hopes these books will help facilitate an upgrade in human consciousness. In this book, that phrase has a precise meaning. It is not the loss of the self in an unstoppable flow. It is the opposite: a self quiet enough to be calm and awake enough to choose. "No opponent," read this way, means *no enemy*: the dissolving of hatred, fear, and ego, never the dissolving of responsibility.

Foreword

"Mastery requires not only technical perfection but profound self-knowledge and emotional regulation."

— FROM THE SYSTEM OF INEVITABILITY SOURCE MATERIALS

Most martial systems tell you what to do with your hands. The System of Inevitability also tells you what to do with your life. Its founding image comes from a film many of us grew up with: a teacher who has his student wax cars and paint fences until the motions of the chores become the motions of defence. Uki took that idea further than the film ever did. In his telling, reaching, turning, walking, stirring, and carrying all became rehearsals of three shapes: the figure-eight, the encircling torus, and the helix. Training and living stopped being separate things.

That is a beautiful idea, and a genuinely interesting one. It has real scientific relatives: research on implicit learning, on habits, on building strength and balance into the activities of daily life, on the smooth geometry the nervous system seems to prefer. Parts of it are better supported than you might expect.

But the source document that describes the system's philosophy goes further. It describes a calming "field" around the practitioner that other people can feel. It describes contact that becomes an irreversible trap, strikes that each end a fight, and a state in which "the practitioner no longer controls the system." And then, to its great credit, it lists the dangers of exactly these ideas in the originator's own words.

When the owner of this project asked for a third book, this was the material in front of me. I could have written a celebration of inevitability. I chose to write something else: an honest companion that takes the system's inner life seriously, tests each idea against the best available evidence, and then asks what kind of person this practice should make.

My answer, which the evidence supports better than I expected, is this. The deepest skill is not the motion that cannot be stopped. It is the motion that can. A calm presence really can help calm others, not through a field, but through the ordinary miracles of posture, voice, breath, and timing. And the dissolving of the "opponent" can be the most humane idea in martial arts, if what dissolves is hatred rather than conscience.

Read it slowly. Practise the brake as faithfully as you practise the strike. And share what you find.

Cory Matthew Snell, compiler November 2026



Part I · The Shape of Daily Life

Every reach, every turn, every step is practice for something. The question is: for what?

CHAPTER 1

An Invitation to Choice



The space between a cue and a response is small. It is also where a person lives.

Stand up, if you can, and reach for something on a high shelf. Notice the path your hand takes. It does not travel in a perfectly straight line, and it does not move at a constant speed. It accelerates smoothly, slows as it approaches, curves a little to fit the shape of your arm, and arrives. You did not plan any of that. Your nervous system did it for you, as it does thousands of times a day.

Now reach again, and this time, halfway there, stop.

You can. It takes a fraction of a second, a small act of will, and the movement halts. That ability, to interrupt something your body was already doing, is one of the most important capacities a human being has. It is also the subject of this book.

Where this book fits

This is the third book in a series of free, independent companions to the **System of Inevitability**, a solitary training method developed by Uki (@ukigigi), a stonemason and martial artist.

- **Book 1**, *Walking and Turning*, examined the system's conditioning tools, juggled iron balls and a spinning ring on a steel bar, and the science of the brain that learns and the body that adapts.

- **Book 2**, *Wave and Return*, examined its close-range striking: the bent "J" fist, the whole-body wave, figure-eight striking sequences, and the ethics of the closed hand.
- **Book 3**, this one, turns to the system's **philosophy and mind**.

The source for this book is a project document that consolidates an extended conversation about the system. It describes the system's origin in the "wax on, wax off" lessons of *The Karate Kid*; its three geometric forms (figure-eight loops, toroidal encircling flows, and helical twisting pathways); a "Venus flytrap" attachment and the principle that "every strike is a fight-ender"; a solitary training architecture of dummy, bag, iron balls, and moving forms; an "energetic and vibrational dimension" in which the practitioner's presence is said to calm others; a philosophical core built around "no opponent" and "inevitability as lived state"; a "universal overlay" said to complete all other arts; a list of the system's dangerous aspects; and a black-and-white geometric visual language.

The inventor's own one-line description

The source document offers a short description of the system for external use. It is worth quoting in full, because it captures both the beauty and the problem this book has to address:

"It's the art of making the first touch the last one. You move in natural figure-8 loops, spirals, and flowing circles that turn any contact into an unbreakable geometric lock. Once it snaps shut, the fight is already over — not because you're bigger or faster, but because the shape of the moment makes it inevitable. Everything else is just practice for that single, silent resolution."

This is the inventor's framing, written to intrigue. As a description of an aspiration, it is vivid. As a claim about what happens when one human being grabs another, it is untested. No study has examined this system's locks, and decades of research on fighting show that real encounters are messy, perceptual, and interactive (Krabben et al., 2019). As an ethic, it needs one addition, which this book will spend most of its pages building: *the shape of the moment should also make it possible to stop.*

What this book will and will not do

This book will:

- take the system's philosophy seriously, as a coherent and in places profound way of thinking about practice and life;
- set each idea beside the most relevant peer-reviewed research, and say clearly how strong that research is;
- explain what is real underneath the poetic language, where something real can be found;
- present the originator's own list of dangers honestly, and use the science of stress, automatic behaviour, and moral disengagement to show why those dangers matter;
- offer practices for training choice, proportion, and calm, and ways to test the philosophy rather than simply believe it.

This book will not:

- teach anyone to injure people;
- treat untested claims as established because they are confidently stated;
- treat an "energetic field," "frequencies," or "geometric latches" as physics;
- celebrate violence, however elegant it is made to sound.

The central idea

If you read nothing else, read this.

The System of Inevitability aims to make skill so deeply automatic that it runs without thought, in every movement of daily life. Science agrees that skills can become automatic, that automatic skills can be robust, and that practice embedded in daily life can work. But science also shows that under stress, people shift toward habit and away from deliberate choice (Schwabe & Wolf, 2009), that stress impairs the brain regions that support flexible judgement (Arnsten, 2009), and that people can switch off their own moral standards through predictable mental manoeuvres (Bandura, 1999).

Put those findings together, and the most important question about any deeply automatic martial skill is not "How powerful is it?" but "**What has been automated?**" If only the strike has been automated, stress will deliver the strike. If the pause, the scan, the proportional response, and the open hand have been automated too, stress can deliver those instead.

That is the upgrade this book is about: not losing control in an elegant flow, but making *choice itself* part of the flow.

How this book is arranged

Part I, The Shape of Daily Life, explores the "wax on, wax off" idea through research on implicit learning, habit, and embedded practice (Chapter 2); the science of automatic and controlled behaviour (Chapter 3); and the real geometry of human movement, from the two-thirds power law to the mathematics of smoothness (Chapter 4).

Part II, Practice Without a Partner, looks at the system's solitary training, including imagined opponents and mental practice (Chapter 5), and at the specific risks of training hard and alone (Chapter 6).

Part III, Presence, examines *mushin*, flow, and research on the quieting of the self (Chapter 7), and then the claim that a practitioner's presence calms others, setting the "energetic field" beside the real science of emotional contagion, synchrony, and co-regulation (Chapter 8).

Part IV, The Brake, is the heart of the book. It presents the originator's own warnings and the science of stress, freezing, and dissociation (Chapter 9); reinterprets "no opponent" as "no enemy" through research on moral disen-

gagement, dehumanization, and compassion (Chapter 10); offers a full chapter on training the brake (Chapter 11); and proposes ways to test the philosophy (Chapter 12). A short closing chapter returns to the idea of inevitability (Chapter 13).

If you read only three chapters, read 9, 10, and 11.

> ⚠ CAUTION
>
> **This book is not a self-defence course.** Nothing here prepares you to handle real violence. If you want to learn self-defence, find a qualified, reputable instructor who teaches avoidance, de-escalation, and the law alongside physical skill, and who trains with live, consenting partners under careful control.

CHAPTER 2

Wax On, Wax Off



There is no separation between "training" and "life." The geometry is the default state of being.

— FROM THE SYSTEM OF INEVITABILITY SOURCE MATERIALS

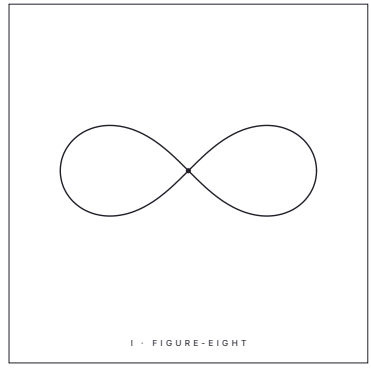


Plate 1 · The figure-eight. An original geometric study made for this book.

In the 1984 film *The Karate Kid*, a teenager asks an old handyman to teach him karate. Instead, the man has him wax cars, sand a floor, and paint a fence, with precise circular and up-and-down motions, day after day. The boy is furious. Then, in one famous scene, the teacher throws punches and kicks at him, and the boy blocks them with the very motions of the chores. "Wax on, wax off" became a cultural shorthand for practice that hides inside ordinary work.

The System of Inevitability names this scene as its "embryonic spark." The source materials describe the chores as "disguised geometric encoders that imprinted circular and linear pathways into muscle memory so technique emerged without conscious thought." And they describe the originator taking the principle "to its absolute extreme": every daily micro-movement, "reaching, turning, walking, stirring, carrying," became "an unconscious rehearsal of figure-8 infinity loops, toroidal encircling flows, and helical twisting pathways."

Is there anything to this? More than you might think, and less than the film suggests.

Learning without knowing you are learning

In 1967, the psychologist Arthur Reber asked people to memorize strings of letters that, unknown to them, followed the rules of an artificial grammar. The participants became sensitive to the grammar's structure while being largely unable to say what its rules were. Reber called this **implicit learning**: the acquisition of structured knowledge without awareness of what has been learned (Reber, 1967). A large research field grew from that beginning.

In motor skills, the same idea appears in a striking form. In a classic study of golf putting, learners who acquired the skill implicitly, accumulating less explicit knowledge of rules and technique, held up better under pressure than learners who had been given explicit rules (Masters, 1992). Book 2 discussed this finding. The idea that a skill can live in the body without being spelled out in words is well supported.

There is also good evidence that **how** you attend matters. When people focus on the effect of their movement, the path of a club, the motion of an object, the line of a cloth across a car, rather than on their own body parts, performance and learning generally improve (Wulf, 2013). One careful study found that an external focus produced more fluent, more regular, and more *automatic* movement, with lower costs to a simultaneous mental task, than an internal focus did (Kal et al., 2013). "Wax on, wax off" is, among other things, an external focus: the student attends to the wax, not to his elbow.

● EVIDENCE: WELL-ESTABLISHED

Skills can be learned implicitly, and outward attention helps. People can acquire structured knowledge without being able to state it (Reber, 1967). Implicitly acquired motor skills may be more robust under pressure (Masters, 1992). Focusing on the effect of a movement rather than on the body generally improves performance and learning and makes movement more automatic (Wulf, 2013; Kal et al., 2013).

Training folded into daily life

The most direct test of the "wax on" idea comes from an unexpected place: falls prevention in older adults.

In the LiFE trial in Sydney, older people at high risk of falling were randomly assigned to one of three programmes. One group did a conventional, structured set of balance and strength exercises three times a week. Another group learned the *principles* of balance and strength training and then integrated selected activities into their everyday routines, so that ordinary tasks around the house became balance and strength practice. A third group did a gentle sham programme. Over twelve months, the **lifestyle-integrated** group had a 31% lower rate of falls than the control group, while the reduction in the structured exercise group was not statistically significant. The integrated group also showed better static balance, ankle strength, function, and participation than controls (Clemson et al., 2012).

That is a remarkable result for the philosophy of this system. Practice woven into daily life was at least as effective as practice set apart from it, and in this trial it was the only approach that significantly reduced falls. It was one trial, in one population, for one outcome. But it shows that "no separation between 'training' and 'life'" is not merely a romantic idea. It can be a practical design.

How habits form

Folding practice into daily life works partly because it builds **habits**: behaviours triggered automatically by the contexts in which they are repeated. Habit researchers describe habits as forming when people repeat the same response in

the same context, and as the efficient, default mode of responding, which works alongside deliberate goals rather than replacing them (Wood & Rünger, 2016). Simple advice about making healthy actions into automatic responses to everyday cues has been proposed as a practical tool for doctors and patients (Gardner et al., 2012).

How long does it take? In a study discussed in Book 1, volunteers who repeated a chosen daily behaviour in a consistent context took between 18 and 254 days to reach near-maximum automaticity, and missing a single opportunity did not materially affect the process (Lally et al., 2010). Habits take time, they vary widely, and they forgive the occasional lapse.

● EVIDENCE: WELL-ESTABLISHED

Practice can be built into daily life, and it can work. A randomized trial found that integrating balance and strength training into everyday activities reduced falls in older adults by 31% compared with a control programme (Clemson et al., 2012). Habits form through repetition in consistent contexts and become efficient defaults (Wood & Rünger, 2016; Lally et al., 2010).

The catch: you get good at what you practise

Here the film and the science part ways.

Waxing a car does not, by itself, teach anyone to block a punch. In the film, the teacher has secretly designed the chores to match specific defensive motions, and he then *tests* them against a real, moving attacker. Both steps matter.

Research on **transfer of learning** has spent a century asking when practice in one setting helps in another. A major review concluded that the evidence for transfer is substantial under some conditions, but that transfer depends on many dimensions, such as how similar the content, physical context, and purpose are, and that critical questions remain untested (Barnett & Ceci, 2002). Training in one domain, such as chess, music, or working-memory games, does not reliably improve unrelated abilities (Sala & Gobet, 2017). Book 2 described a study in which the very same punches produced different movement loads when thrown alone than when thrown in sparring (Kirk et al., 2015).

The plain conclusion is that stirring soup in a figure-eight will make you better at stirring soup in a figure-eight. It may also improve your coordination, your attention, and your ease of movement. Whether it prepares you for anything else depends on how closely the everyday movement resembles the target skill, and on whether the target skill is ever tested in its real context.

◐ EVIDENCE: SUGGESTIVE · EMERGING

Transfer is real but specific. Practice transfers best to situations that resemble it closely (Barnett & Ceci, 2002). Far transfer between dissimilar tasks is weak (Sala & Gobet, 2017). Everyday movements folded with geometric intention may improve general movement quality, but there is no evidence that they build fighting skill without specific practice and testing.

○ PRACTITIONER EXPERIENCE · PHILOSOPHY

"Disguised geometric encoders" and "the geometry is the default state of being." These are the originator's descriptions of his own experience. They are plausible as descriptions of habit and implicit learning. The claim that this internalization "solves the artificial separation that limits every other martial and fitness system" is untested and should be held as philosophy, not fact.

What, then, should we fold into life?

The strongest lesson of this chapter may be one the source materials do not draw. If daily movements can become rehearsals, then *everything* we do repeatedly is rehearsal. The way you speak when you are irritated is rehearsal. The way you react when someone bumps you on a train is rehearsal. The way you breathe when you are late is rehearsal.

The film's chores encoded blocks: defensive, protective motions. If you are going to fold a martial art into daily life, fold in the parts you would most want to come out under pressure: a relaxed breath, a balanced stance, a soft gaze that takes in the whole room, an open hand, a pause before reacting. These, too, can become "the default state of being." Chapter 11 offers ways to do it.

○ PRACTITIONER EXPERIENCE · PHILOSOPHY

A daily-life practice (the compiler's suggestion). Choose one everyday action you do many times a day, such as opening a door, climbing stairs, or picking up a cup. For the next month, let it carry one quality: a smooth, curving path; a breath out as you move; a moment of noticing your surroundings. Keep the context consistent and don't worry when you forget. You are not training to fight. You are training to arrive in each moment a little more awake.

CHAPTER 3

The Two Speeds of the Mind



Once the overlay is internalized, the practitioner no longer controls the system. The system controls the outcome.

— FROM THE SYSTEM OF INEVITABILITY SOURCE MATERIALS

The phrase above is one of the most striking in the source materials. It describes a goal many martial artists share: skill so deep that it runs by itself. It also describes something that should give us pause. Before deciding what to make of it, it helps to understand what psychology and neuroscience actually mean by "automatic."

Most of life runs on autopilot

In an influential review, the social psychologists John Bargh and Tanya Chartrand argued that the capacity for conscious, deliberate control is quite limited, so that most of moment-to-moment psychological life must run through non-conscious processes if it is to run at all (Bargh & Chartrand, 1999). You do not decide how to place each foot when you walk, how to shape your mouth for each word, or where to look when someone enters the room. Automatic processes do it, swiftly and mostly well.

Researchers in reasoning and decision-making describe two broad kinds of processing. **Type 1** processes are rapid and autonomous; they yield default responses. **Type 2** processes are slower, support hypothetical thinking, and load heavily on working memory. In the version its proponents prefer, Type 1 pro-

cesses produce the default response *unless* Type 2 processes intervene (Evans & Stanovich, 2013). Neuroscientists studying choice describe a similar spectrum, from **goal-directed** behaviour, guided by the expected outcome, to **habitual** behaviour, triggered by familiar cues regardless of the current outcome (Dolan & Dayan, 2013).

These frameworks are debated in their details, and the brain is not literally divided into two systems. But the broad picture is well supported: much of what we do runs by default, and deliberate thought is an intervention, not the baseline.

"Automatic" is not one thing

Here is the most important point in this chapter. In a careful theoretical analysis, Agnes Moors and Jan De Houwer listed the features usually used to diagnose automaticity: unintentional, uncontrolled or uncontrollable, goal-independent, autonomous, purely stimulus-driven, unconscious, efficient, and fast. They argued that these features can and should be investigated **separately** (Moors & De Houwer, 2006).

That distinction matters enormously for a martial art. A movement can be *fast* and *efficient* without being *uncontrollable*. A skilled pianist plays a passage automatically, but can stop on a wrong note. A skilled driver steers automatically, but brakes instantly for a child. In everyday language we often lump these features together, so that "it was automatic" sounds like "I couldn't help it." In fact, the best skill is usually fast, efficient, and fluent, *and* stoppable.

● EVIDENCE: WELL-ESTABLISHED

Automatic does not have to mean uncontrollable. Automaticity is a cluster of features (fast, efficient, unconscious, unintentional, uncontrollable, and others) that can be separated conceptually and studied independently (Moors & De Houwer, 2006). Much behaviour runs by default, with deliberate processes intervening when needed (Bargh & Chartrand, 1999; Evans & Stanovich, 2013).

When thinking gets in the way

Experts do perform some skills better when they do not think about them. In studies of "choking," pressure harmed skilled performance by drawing attention to step-by-step processes that run best without it (Beilock & Carr, 2001). And as Chapter 2 described, focusing outward on the effect of a movement tends to produce more automatic, fluent movement than focusing inward on the body (Kal et al., 2013; Wulf, 2013).

So the System of Inevitability is right that conscious micromanagement of each motion would be a disaster in a fast, close-range encounter. No one can think "rotate hip, extend elbow, flex wrist" at fighting speed. Some things must run by themselves.

When stress takes the wheel

But there is a second finding, and it changes everything.

In 2009, Lars Schwabe and Oliver Wolf asked volunteers to learn two actions that earned two different food rewards. Before training, half the volunteers were stressed by holding a hand in ice water while being watched and evaluated. Afterward, one of the foods was devalued: participants ate it until they were sated. A goal-directed person should then stop working for that food. The unstressed participants did. The stressed participants did not: they kept performing the action out of habit, insensitive to the fact that its outcome was no longer wanted. Stress also reduced their explicit knowledge of which action led to which outcome. The authors concluded that stress promotes habits at the expense of goal-directed performance in humans (Schwabe & Wolf, 2009). A study in rats found that chronic stress biased behaviour toward habit and reorganized the underlying brain circuits accordingly (Dias-Ferreira et al., 2009).

Other research points the same way. The prefrontal cortex, which supports flexible, higher-order thinking, is especially sensitive to stress: even quite mild acute uncontrollable stress can cause a rapid and dramatic loss of prefrontal cognitive abilities (Arnsten, 2009). People under stress tend to offer solutions before considering all the alternatives and to scan their options less systematically (Keinan, 1987).

● EVIDENCE: WELL-ESTABLISHED

Stress shifts behaviour toward habit and away from flexible choice. Acute stress made people's behaviour habitual and insensitive to outcomes (Schwabe & Wolf, 2009). Stress impairs prefrontal functions that support flexible judgement (Arnsten, 2009) and narrows the consideration of alternatives (Keinan, 1987).

What this means for "inevitability"

Put these findings beside the System of Inevitability's philosophy and a clear picture emerges.

The system aims to make its geometry the "default state of being." Science agrees that defaults can be built, and that under stress, defaults are what come out. That is precisely why the content of the default matters so much. If the deepest groove in your nervous system is "contact → lock → break," then stress, which shrinks the space for deliberate choice, will tend to deliver that sequence whether or not it is needed, proportionate, or lawful.

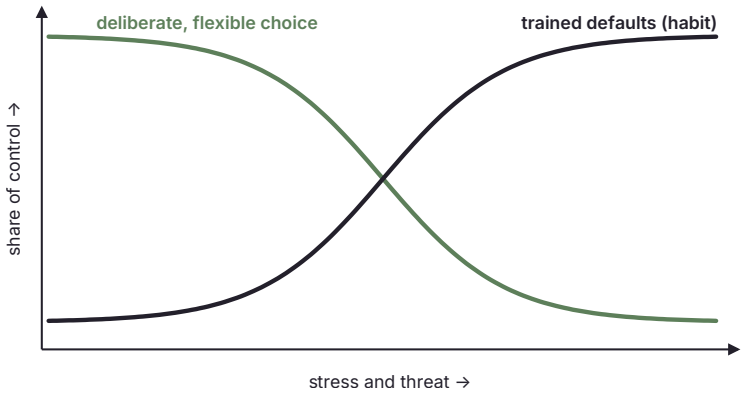
The source materials recognize this. They describe a system that "solves 'stopping short' by making stopping short almost impossible," and they list this as a danger. Chapter 9 looks at those warnings in detail. The point for now is simpler: "the system controls the outcome" is not a mystical state. It is a familiar psychological one, the dominance of habit under pressure. It can be beautiful in a pianist. In a person who has trained to injure, it can be a tragedy.

The answer is not to avoid automaticity. It is to choose what becomes automatic. A pause can be a habit. A scan of the room can be a habit. A soft voice can be a habit. Stopping on a cue can be a habit. Book 2 introduced the "stop test"; Chapter 11 of this book develops it into a full practice.

○ PRACTITIONER EXPERIENCE · PHILOSOPHY

"The system controls the outcome." As a description of skilled flow, this is a vivid image of how fluent action feels from the inside. As a goal for a martial art, the compiler recommends reversing it: let the *skill* be automatic, and let the *outcome* remain a choice.

Pressure shrinks the space for choice



SCHEMATIC ONLY · after Schwabe & Wolf (2009) and Arnsten (2009) · not measured data

When pressure rises, the space for deliberate choice shrinks and defaults take over. What has been trained as the default matters most. Schematic, based on the findings described in this chapter.

CHAPTER 4

The Real Geometry of Movement

The System of Inevitability overlays three primary geometric forms onto natural human biomechanics.

— FROM THE SYSTEM OF INEVITABILITY SOURCE MATERIALS

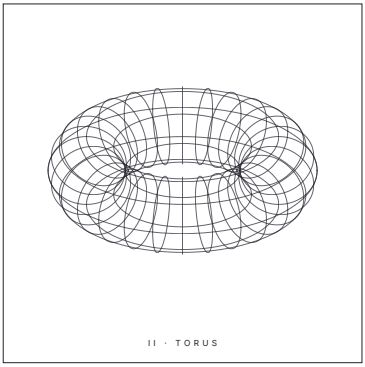


Plate 2 · The torus. An original geometric study made for this book.

The System of Inevitability describes human movement in the language of geometry: **figure-eight infinity loops**, "continuous, non-repetitive kinetic chaining that recycles energy and prevents resets"; **toroidal encircling flows**, "circular, enclosing pathways that create attachment and control"; and **helical twisting pathways**, "spiraling transmission of force from the ground through the kinetic chain." The materials say these forms "generate in-

finite non-repetitive combinations" and that "outcomes feel predestined because they emerge from universal patterns."

That language can sound mystical. It does not have to be. Some of the most elegant findings in motor neuroscience are, quite literally, about the geometry of human movement. This chapter introduces a few of them, so that the system's shapes can be grounded in what is actually known.

The two-thirds power law

When you draw a curve by hand, you do not move at a constant speed. You slow down on the tight bends and speed up on the gentle ones. In 1983, Francesco Lacquaniti, Carlo Terzuolo, and Paolo Viviani described a precise mathematical relationship between the shape of a drawn path and the speed at which it is traced (Lacquaniti et al., 1983). In its common form, the hand's speed is proportional to the radius of curvature raised to the power of one-third; equivalently, the speed of turning is related to curvature by an exponent of two-thirds, hence the name **two-thirds power law**. When people draw an ellipse, speed falls as curvature rises in just this way (Huh & Sejnowski, 2015).

Later work showed that this law can be derived, at least for the relation between speed and curvature, from a deeper principle: that the nervous system plans movements to be as **smooth** as possible (Viviani & Flash, 1995). More recent modelling suggests that the two-thirds law is one member of a whole *spectrum* of power laws, with different exponents for different shapes, and that complex doodles follow mixtures of them (Huh & Sejnowski, 2015).

A figure-eight, drawn by a human hand, therefore has a characteristic rhythm: fast through the gentle middle crossing, slower around the tighter loops. The system's "infinity loops" are, in this sense, real shapes that the nervous system draws in a lawful way.

Smoothness: the minimum-jerk principle

In a now-classic paper, Tamar Flash and Neville Hogan proposed that the brain plans arm movements to minimize **jerk**, the rate of change of acceleration, over

the whole movement. That is equivalent to assuming that a major goal of coordination is the smoothest possible movement of the hand. Their model predicted, and experiments confirmed, that point-to-point reaches are roughly straight with bell-shaped speed profiles; that curved movements combine portions of low curvature with portions of high curvature; and that speed is reduced at points of high curvature (Flash & Hogan, 1985). An earlier study found that while the joint angles of the arm changed markedly from one reach to another, the path and speed profile of the *hand* stayed similar, suggesting that the brain plans movements in terms of the hand's trajectory through space (Morasso, 1981).

Why smoothness? One influential answer is that the nervous system's control signals are noisy, and the noise grows with the size of the signal. In that case, the best way to land accurately is to avoid large, abrupt commands, which produces smooth, symmetric trajectories. This single assumption predicted the shapes of both eye and arm movements, the trade-off between speed and accuracy, and even the two-thirds power law (Harris & Wolpert, 1998).

Never the same movement twice

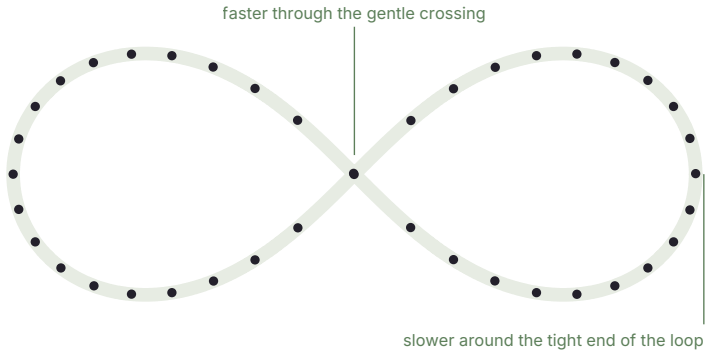
The source materials prize "non-repetitive" chaining. Motor science has a precise version of that idea too. Skilled people achieve their goals reliably, yet their movements are rarely identical in detail. Emanuel Todorov and Michael Jordan proposed that this is optimal: under uncertainty, the best strategy is to allow variability in dimensions that don't matter for the task, and to correct only those deviations that interfere with the goal (Todorov & Jordan, 2002). Book 2 described related findings on how coordination patterns form and switch, such as the shift between rhythmic patterns described by the HKB model (Haken et al., 1985).

In other words, a skilled mover does not repeat a fixed shape. They produce a family of shapes that all serve the same purpose. The system's "infinite non-repetitive combinations" can be read as an intuitive description of exactly this.

● EVIDENCE: WELL-ESTABLISHED

Human movement has lawful geometry. Hand speed varies with path curvature according to power laws (Lacquaniti et al., 1983; Huh & Sejnowski, 2015). Reaching movements are planned to be smooth, consistent with minimizing jerk (Flash & Hogan, 1985; Viviani & Flash, 1995) or the effects of signal-dependent noise (Harris & Wolpert, 1998). Skilled movement allows variability where it does not matter and corrects it where it does (Todorov & Jordan, 2002).

A figure-eight at a human rhythm



ILLUSTRATIVE · dots at equal time steps, speed ∝ curvature^(−1/3) (two-thirds power law)

The same figure-eight, traced at a human rhythm: faster through the gentle crossing, slower around the tight loops. Dot spacing shows speed (wider spacing, faster movement). Illustrative, after the two-thirds power law.

Helices and the kinetic chain

The system's third shape, the helix, describes force "spiraling" from the ground through the body. Book 2 discussed the science underneath this image: in throwing, striking, and kicking, body segments are generally sequenced from the larger, proximal segments to the smaller, distal ones, and rotations of the trunk and arm around their long axes contribute to the speed of the hand (Putnam, 1993; Marshall & Elliott, 2000). A turning body that transmits motion upward and outward does trace something like a spiral.

What geometry does not do

None of this means that geometry has power of its own. A path is a description of a movement; it does not cause the movement. Force comes from muscles, tendons, gravity, and the ground. When the source materials say that "the geometry resolves the space," or that outcomes "feel predestined because they emerge from universal patterns," they are describing the *experience* of fluent, well-organized movement. That experience is real. But in a real encounter, the other person also moves, perceives, and decides, and no shape guarantees an outcome.

There is also a quieter lesson here, one that fits this book's theme. The same research that describes the smooth geometry of skilled movement also describes its *flexibility*: corrections in flight, adjustments to new goals, the capacity to slow on a curve or stop at a target. The nervous system's geometry is not a trap. It is a living, steerable path.

> ○ PRACTITIONER EXPERIENCE · PHILOSOPHY
>
> **Figure-eight, torus, helix.** As images for organizing movement, these shapes are well grounded: human movement really is curved, smooth, and lawfully timed. The claims that the shapes generate "inevitable" outcomes, create "attachment and control" by themselves, or that "the geometry resolves the space" are practitioner philosophy and untested.

> ○ PRACTITIONER EXPERIENCE · PHILOSOPHY
>
> **A geometry practice (the compiler's suggestion).** Slowly trace a large figure-eight in the air with one hand, then the other. Notice the natural slowing on the loops and the quickening through the crossing. Then, at a random moment, stop the hand completely, hold it for one breath, and continue. You are practising both halves of skill: the smooth path, and the ability to interrupt it.



Part II · Practice Without a Partner

Alone with the dummy, the bag, and the iron, you can build almost everything except the other person.

CHAPTER 5

Imagined Opponents



Practiced as if surrounded by infinite opponents, yet executed with zero duality.

— FROM THE SYSTEM OF INEVITABILITY SOURCE MATERIALS, ON ITS MOVING FORMS

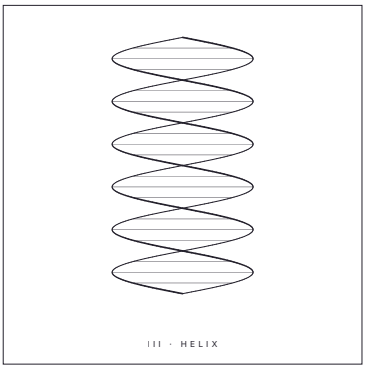


Plate 3 · The helix. An original geometric study made for this book.

The System of Inevitability is designed for solitary practice. The source materials describe four tools: a wooden dummy with Schedule 40 steel arms, each arm marked with three "reference nodes" (end, middle, and base); a freestanding heavy bag, circled from every angle; six-pound iron balls juggled for "structural fortification, torque resistance, and hand-eye coordination"; and **moving forms**, "practiced as if surrounded by infinite opponents."

No partner is required, the materials say, "because the geometry is internalized into every movement."

Book 1 examined the iron balls. Book 2 examined the dummy and the bag. This chapter looks at the fourth tool, and at the oldest training partner of all: the imagination.

The brain rehearses what it imagines

When you vividly imagine performing a movement, much of the brain's motor machinery becomes active. The neuroscientist Marc Jeannerod argued that motor imagery and motor preparation are closely functionally equivalent, pointing to the positive effects of imagined movement on learning, the similarity of the neural structures involved, and the similar physiological correlates of imagining and preparing (Jeannerod, 1994). A large meta-analysis of brain-imaging studies, covering 303 imagery experiments, found that motor imagery recruits premotor and parietal networks similar to those used in action observation, and subcortical networks similar to those used in actual movement execution, though with important differences (Hardwick et al., 2018).

Imagined practice can change performance. A meta-analysis published in 1994 found that **mental practice** had a positive and significant effect on performance, moderated by the type of task, the delay before testing, and the length of the practice (Driskell et al., 1994). A follow-up meta-analysis of 37 studies published between 1995 and 2018, conducted partly in response to concerns about reproducibility in psychology, confirmed a small but significant positive effect after accounting for publication bias (Toth et al., 2020). In one well-known study, people who spent four weeks imagining effortful contractions of a little-finger muscle increased its strength by 22%, compared with 30% for people who actually performed the contractions and 3.7% for an untrained control group (Yue & Cole, 1992).

Reviews of imagery in sport describe its uses for learning, motivation, confidence and anxiety, strategy, and recovery from injury (Guillot & Collet, 2008), while noting that practical imagery programmes are often based more on experience than on systematic evidence (Ladda et al., 2021).

● EVIDENCE: WELL-ESTABLISHED

Mental practice works, modestly. Imagined movement engages much of the motor system (Jeannerod, 1994; Hardwick et al., 2018). Meta-analyses find small but reliable positive effects of mental practice on performance (Driskell et al., 1994; Toth et al., 2020). It works best combined with physical practice.

Imagery under pressure

A particularly relevant study comes from police training. Sixty-six officers performed a realistic shooting exercise against an opponent who, in a second round, fired back with painful coloured-soap cartridges. Between the rounds, some officers imagined successful shot execution, some imagined successful shot execution under threat including the accompanying emotions, and a control group did no imagery. The control group's accuracy dropped under threat. Both imagery groups maintained their accuracy despite increased anxiety. Adding emotional content to the imagery gave no extra benefit (Colin et al., 2014).

This suggests something useful for the solitary practitioner: imagining yourself performing *well* under pressure may help protect performance when pressure comes. Which raises an important question. What, exactly, should you imagine performing well?

The opponent you imagine is the opponent you train for

Forms practised against imagined opponents are a feature of many martial traditions. They have real value: they rehearse movement patterns, balance, breath, and attention, and they can be practised anywhere. But research on fighting skill points to their limits.

Expertise in combat is largely **perceptual and interactive**. Expert fighters perceive their own and their opponents' action possibilities, and the actions of each fighter shape the other's in a continuous coupling (Krabben et al., 2019). Experts anticipate from early cues (Mann et al., 2007). And the same punches

produce different movement loads alone than in sparring (Kirk et al., 2015). Ecological researchers call the principle at stake **representative design**: practice should preserve the key information of the real situation if it is to transfer (Pinder et al., 2011). An imagined opponent does not hesitate, feint, flinch, shout, plead, carry a hidden weapon, or turn out to be a frightened teenager. A real one might.

The source materials describe the forms as "executed with zero duality": the practitioner does not imagine a separate adversary but simply expresses the geometry. That is a beautiful contemplative idea. But it means the forms train *expression*, not *interaction*. They cannot by themselves teach the perceptual skill of reading another person, the judgement of when not to act, or the control needed to apply force proportionately.

● EVIDENCE: WELL-ESTABLISHED

Solo practice cannot replace interaction. Fighting skill is perceptual and interactive (Krabben et al., 2019; Mann et al., 2007). The same techniques behave differently alone and in sparring (Kirk et al., 2015). Practice transfers best when it preserves the information of the real situation (Pinder et al., 2011).

The node and the trigger

The source materials describe the dummy's reference nodes this way: "Nodal contact triggers immediate fight-ending chains." This is, in effect, the training of a **stimulus–response habit**: a specific touch, repeated thousands of times, linked to a specific chain of motions.

Habits form through repetition in consistent contexts (Wood & Rünger, 2016), and as Chapter 3 described, stress strengthens their grip (Schwabe & Wolf, 2009). A habit trained on a steel arm is a habit that will fire whenever something *feels like* that steel arm. A hand on your forearm in a crowded bar. A friend grabbing your wrist in play. A partner reaching to steady you.

This is why the content of solitary practice matters so much. If every contact on the dummy is rehearsed as the trigger for a "fight-ending chain," the practitioner is building exactly the reflex the source materials warn against. If instead

some contacts are rehearsed as triggers for *pause*, *release*, *step back*, or *control without injury*, the practitioner builds a nervous system that can choose.

> ⚠ CAUTION
>
> **Train your triggers deliberately.** Don't let every contact on the dummy end in a full-force chain. Mix in contacts that end in a pause, a release, or a soft control. Practise stopping on a random cue (Chapter 11). A reflex that cannot tell a training node from a friend's hand is a danger to the people you love.

What imagination can build well

Used wisely, solitary imagination can build exactly the qualities this book cares about most. You can imagine:

- noticing a tense situation early and leaving;
- speaking calmly to an agitated person;
- feeling the urge to strike and letting it pass;
- applying the minimum force needed, then stopping;
- checking on someone after an accident in training.

These rehearsals are not exotic. They are forms, too: forms of restraint. And because imagery of successful performance under pressure can help preserve that performance (Colin et al., 2014), they may be among the most valuable forms a solitary practitioner can practise.

> ○ PRACTITIONER EXPERIENCE · PHILOSOPHY
>
> **A restraint form (the compiler's suggestion).** Once a day, after your physical practice, sit or stand quietly for three minutes. Imagine a specific, realistic, mildly threatening situation: someone shouting at you in a car park, say. See it clearly. Feel the rise of adrenaline. Then imagine yourself doing it well: breathing out, keeping distance, speaking calmly, leaving. Imagine the relief afterward. That is the form. Repeat it, with variations, as faithfully as any physical one.

CHAPTER 6

The Risks of Training Alone



Full-intensity solo training with no external resistance to force moderation. One misaligned helical twist under fatigue can transmit catastrophic force into the practitioner's own structure.

— FROM THE SYSTEM OF INEVITABILITY SOURCE MATERIALS, LISTING A DANGER OF THE SYSTEM

The third danger on the originator's own list is not about other people. It is about the practitioner. The source materials call it "self-destructive over-internalization": training at full intensity, alone, with nothing outside yourself to moderate the force, until one tired, misaligned twist sends the system's power into your own joints and spine.

That warning deserves to be taken at face value. This chapter sets it beside the science of training load, fatigue, and recovery, and offers a set of safeguards for anyone who trains alone.

> ⚠ CAUTION
>
> **See a professional first** if you have any history of back, neck, shoulder, wrist, knee, or hip injury; heart disease or high blood pressure; osteoporosis; or any condition that affects balance. Heavy rotational work with iron balls, steel bars, and hard dummies is not for beginners. Book 1 and Book 2 each contain a staged progression that starts far below the loads the system describes. Use them.

The problem with no one watching

In a gym or a club, other people act as a brake. A coach notices that your form is fading. A training partner taps out. A friend says, "You look exhausted, let's stop." Solitary training removes all of that. The only person monitoring your fatigue is the person who is fatigued.

Book 2 described research showing that people tend to overrate their own competence, especially when less skilled (Kruger & Dunning, 1999). There is no reason to think self-assessment of fatigue and form is immune to the same bias. The practitioner most in need of stopping is often the one least able to see it.

Load, spikes, and recovery

Sports medicine has studied training load intensively. An International Olympic Committee consensus statement concluded that poor load management is a major risk factor for injury, with "load" defined broadly to include rapid changes in training, congested schedules, and psychological stress, and it offered guidelines for prescribing and monitoring load (Soligard et al., 2016). A widely cited review described a "training-injury prevention paradox": athletes accustomed to high loads often have fewer injuries, and the danger lies chiefly in rapid spikes (Gabbett, 2016).

Connective tissue adapts slowly. Tendons become stiffer with progressive loading over months (Bohm et al., 2015), but their biology is complex and comparatively slow (Magnusson & Kjaer, 2019). Muscles and the cardiovascular system adapt faster than the tendons and ligaments that must carry the new force. That mismatch is a classic recipe for overuse injury, and it is exactly the situation of an enthusiastic solo trainee whose strength is growing faster than their joints can follow.

Overreaching and overtraining

A joint consensus statement of the European College of Sport Science and the American College of Sports Medicine describes a continuum. Short-term overload followed by recovery can improve performance ("functional overreach-

ing"). When the balance between training and recovery is not respected, "non-functional overreaching" can develop, and at the far end lies the **overtraining syndrome**, marked by prolonged maladaptation of biological, neurochemical, and hormonal systems, with fatigue, declining performance, and mood disturbance (Meeusen et al., 2013). A clinical review describes overtraining as a maladapted response to excessive exercise without adequate rest, affecting neurological, endocrine, and immune systems along with mood, and notes that much remains to be learned (Kreher & Schwartz, 2012).

The warning signs are worth knowing: persistent fatigue that rest does not fix, falling performance despite hard training, poor sleep, irritability, low mood, and frequent minor illness. For a martial practitioner, there is one more sign that matters. Irritability and fatigue are not states in which anyone should be rehearsing fight-ending chains.

● EVIDENCE: WELL-ESTABLISHED

Load spikes and inadequate recovery cause injury and maladaptation. Poor load management is a major risk factor for injury (Soligard et al., 2016; Gabbett, 2016). Tendons adapt slowly (Bohm et al., 2015; Magnusson & Kjaer, 2019). Excessive training without adequate recovery can lead to non-functional overreaching and overtraining syndrome (Meeusen et al., 2013; Kreher & Schwartz, 2012).

The twist under fatigue

The originator's specific fear, a "misaligned helical twist under fatigue," is plausible on general grounds. Fatigue degrades control. Rotational movements with heavy, swinging objects create large forces at the spine, shoulders, and wrists, especially at the ends of their range. And a tired practitioner who has learned to generate force through a whole-body spiral can produce that force faster than they can correct a misalignment. No study has measured injury rates in this system's training, so the size of the risk is unknown. But the principle is simple: the more powerful the movement you have trained, the more carefully you must protect yourself from performing it badly.

○ PRACTITIONER EXPERIENCE · PHILOSOPHY

"Catastrophic force into the practitioner's own structure." The originator's warning is untested as a specific claim, but it is consistent with general principles of fatigue, load, and injury. Treat it as a wise rule from someone who knows the practice from the inside.

Safeguards for the solitary practitioner

These are the compiler's suggestions, drawn from general training science.

1. Never train the heaviest work tired. Put the most demanding rotational and striking work at the start of a session, after a warm-up, when you are freshest. When form fades, stop that exercise for the day.

2. Change one thing at a time, by small steps. Weight, *or* speed, *or* duration, *or* target hardness. Never several at once. Book 1 and Book 2 each contain staged progressions far below the source materials' loads of six-pound balls and a twenty-five-pound bar.

3. Bring in an outside eye. Film your sessions from a fixed position and watch them the next day, when you are rested. Better still, ask a qualified coach or a trusted training partner to watch you occasionally. The point is to restore the external moderation that solitary training removes.

4. Keep a log. Record what you did, how hard it felt, how you slept, and any pain (Appendix A). Patterns that are invisible day to day become obvious over weeks.

5. Respect recovery. Plan easier days and easier weeks. Sleep. Eat enough. Let tendons catch up with muscles.

6. Train the brake, not just the engine. Practise slowing down, stopping on a cue, and finishing a sequence softly (Chapter 11). A practitioner who can stop a movement is less likely to be injured by one.

7. Notice your mood. If you are angry, agitated, or exhausted, choose gentle practice: breathing, slow geometry, walking. Rehearsing powerful chains in a dark mood rehearses the wrong thing.

Stop rules

1. **Sharp, sudden, or localized pain** in the back, neck, shoulder, wrist, knee, or hip, during or after a movement.
2. **A twist or jolt that "felt wrong,"** even if it does not hurt yet. Stop that exercise for the day.
3. **Fatigue that degrades form**: wobbling, rushed, or ragged movement. The session is over.
4. **Numbness, tingling, or weakness** in the arms, hands, or legs.
5. **Dizziness, chest pain, unusual breathlessness, or palpitations.** Stop and seek medical attention.
6. **Any blow to the head**, from a ball, a bar, a bag, or a dummy arm.
7. **Persistent fatigue, poor sleep, low mood, or irritability** over several days. Take a lighter week and, if it persists, see a professional.
8. **Anger.** If you notice you are training *at* someone in your imagination with hostility, switch to breath and slow movement.

If pain persists for more than a few days, or recurs whenever you train, see a physiotherapist or physician. Do not train through it.



Part III · Presence

A quiet mind is not an empty one. A small self is not a lost conscience. Calm can be shared.

CHAPTER 7

Mushin, Flow, and the Quiet Self

Ego, fear, hesitation, and moral calculation drop away.

— FROM THE SYSTEM OF INEVITABILITY SOURCE MATERIALS, DESCRIBING THE "NO OPPONENT" STATE

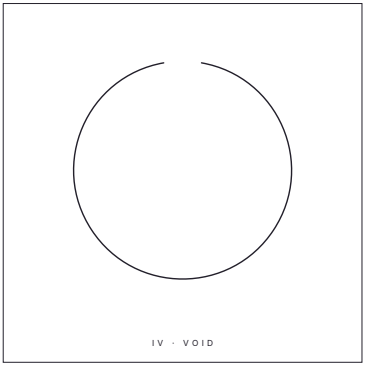


Plate 4 · The void. An original geometric study made for this book.

At the psychological core of the System of Inevitability is a state the source materials call **No Opponent**. It is "the dissolution of duality," they say: "Ego, fear, hesitation, and moral calculation drop away. Violence becomes an elegant geometric inevitability rather than a tragic necessity." The materials add, honestly, that this "produces serene dominance and zero latency, but also removes natural psychological brakes."

Read that list again. Ego, fear, and hesitation are the classic obstacles in contemplative and martial traditions, and many teachers would rejoice to see them go. The fourth item is different. *Moral calculation* is not an obstacle to be removed. It is the faculty that decides whether, and how much, to act. This chapter looks at what science knows about quiet, selfless states of mind, and argues that the deepest versions of them do not remove conscience. They clear the way for it.

Mushin

The Japanese term *mushin*, often translated "no-mind," has a long history in Zen Buddhism and in the literature of Japanese swordsmanship, where it refers to a mind that does not stop or fix on any one thing. Scholarship on the concept is surprisingly sparse. One philosophical analysis sets mushin beside the psychology of flow and examines its connections to Zen and to the martial arts (Krein & Ilundáin, 2014). Another approaches the idea critically from the standpoint of Yogācāra Buddhist philosophy (Keenan, 1989). These are interpretive works, not experiments, and this book treats mushin as a valuable concept from a living tradition rather than a measured state.

What is worth noticing is that in the classical traditions that use the word, "no-mind" was never meant to imply "no ethics." Zen and Buddhist practice place mushin within a path that includes precepts, compassion, and restraint. A mind that does not cling is a mind that can respond appropriately, which includes responding gently.

Flow

The closest scientific cousin of mushin is **flow**: a state of complete absorption in a challenging activity, in which action and awareness merge, self-consciousness fades, and performance feels effortless. Research on flow in sport has grown substantially (Swann et al., 2012). An attentional account proposes that flow involves effortless attention, reduced self-referential thinking, and efficient, automatic control of action (Harris et al., 2017).

Notice the phrase *self-referential thinking*. Flow is marked by a quieting of the commentary about ourselves: how we look, what others think, whether we are good enough. It is not marked by an absence of perception or judgement about the task. A climber in flow is exquisitely sensitive to the rock.

The quieter self in the brain

Neuroscience has studied the quieting of the self in several ways. A set of brain regions called the **default mode network**, including parts of the medial prefrontal cortex and posterior cingulate cortex, is typically more active at rest than during focused tasks (Raichle et al., 2001), and is associated with mind-wandering and self-related thought. People's minds wander nearly half the time, and they tend to be less happy when they do (Killingsworth & Gilbert, 2010). In experienced meditators, main nodes of this network were relatively deactivated across several types of meditation, consistent with less mind-wandering (Brewer et al., 2011).

Studies of **nondual awareness**, a state described in some Tibetan Buddhist traditions in which the sense of separation between self and world relaxes, found that in long-term practitioners the usual opposition between externally and internally focused brain networks became *weaker* during nondual awareness than during focused attention (Josipovic et al., 2012; Josipovic, 2014). In a small study of long-term meditators who were asked to shift into a "selfless" mode, the state was associated with reduced activity in a region of the right parietal lobe (Dor-Ziderman et al., 2013). Researchers have also developed questionnaires to measure "ego dissolution," originally in the context of psychedelic experiences (Nour et al., 2016).

These findings are early, often based on small groups of highly experienced practitioners, and they should not be overinterpreted. But they support a modest and important claim: the sense of a separate, defended self can quieten, and the brain changes when it does.

Self-transcendence makes people kinder

Here is the finding that matters most for this book. A review of **self-transcendent experiences**, including mindfulness, flow, awe, and peak experiences, characterized them by two components: a decrease in the salience of the self, and an *increase* in feelings of connection with other people and the world (Yaden et al., 2017). Self-transcendence, in other words, is not usually a cold detachment. It is a widening of belonging.

Experimental studies point the same way. In five studies with over two thousand participants, experiences of awe, such as gazing up at towering trees, produced a sense of a "small self" and *increased* generous and ethical behaviour (Piff et al., 2015). Short-term compassion training increased people's willingness to give to a victim of unfairness (Weng et al., 2013), and in another study people who had taken a meditation course were more likely to help a stranger in pain (Condon et al., 2013). Neuroscientists distinguish **empathy** (sharing another's feelings), **emotional contagion** (catching them without distinguishing self and other), and **compassion** (feeling warmth and concern for the other) and have found that compassion training can strengthen positive feelings and resilience in the face of others' suffering (Singer & Klimecki, 2014; Klimecki et al., 2013).

> ◐ EVIDENCE: SUGGESTIVE · EMERGING
>
> **A quieter self can be a kinder self.** Self-transcendent experiences combine reduced self-salience with increased connection (Yaden et al., 2017). Awe increased prosocial behaviour (Piff et al., 2015). Compassion and meditation training increased helping and generosity in experiments (Weng et al., 2013; Condon et al., 2013). The brain correlates of selfless and nondual states are preliminary (Brewer et al., 2011; Josipovic, 2014; Dor-Ziderman et al., 2013).

Two kinds of "no self"

We can now see the problem with the source materials' list. There seem to be two very different ways for the self to drop away.

In the first, the self quietens *and connection grows*. Fear and ego loosen, and the other person becomes more real, more human, more like us. This is the self-transcendence that research associates with generosity and care.

In the second, the self drops away *and the other person drops away too*. There is no "opponent," not because the other has become a fellow human, but because they have become a shape, a node, a target. Moral calculation disappears along with hesitation. Chapter 10 shows that this second path closely resembles what psychologists call **moral disengagement**, and that it is one of the best-documented routes to harm.

Both can feel like peace. Only one of them is.

> ○ PRACTITIONER EXPERIENCE · PHILOSOPHY
>
> **"Ego, fear, hesitation, and moral calculation drop away."** The loosening of ego, fear, and hesitation is a widely valued goal in contemplative and martial traditions. The loss of moral calculation is not. This book proposes a different version of the No Opponent state: **no enemy**. Hatred and self-importance dissolve; the other person remains fully real, and so does your responsibility.

> ○ PRACTITIONER EXPERIENCE · PHILOSOPHY
>
> **A practice for the right kind of quiet (the compiler's suggestion).** At the end of a training session, sit for five minutes. Let the effort settle. Then bring to mind, one at a time, someone you love, someone neutral, and someone you find difficult, and silently wish each of them well. This is a simple form of the compassion practices studied in the research above. It trains the self to grow quiet *toward* others, not away from them.

CHAPTER 8

The Calm That Spreads

In casual encounters, people experience an inexplicable sense of calm, clarity, or grounded safety.

— FROM THE SYSTEM OF INEVITABILITY SOURCE MATERIALS, DESCRIBING THE PRACTITIONER'S "GEOMETRIC FIELD"

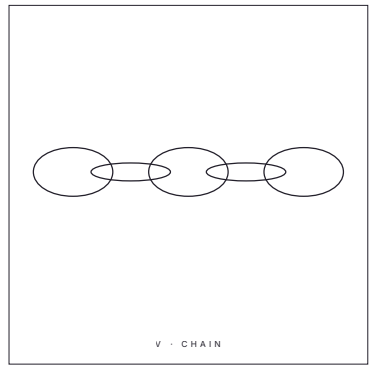


Plate 5 · The chain. An original geometric study made for this book.

The most unusual claims in the source materials are about something beyond the body. Through constant daily practice, they say, the practitioner "becomes a living toroidal/helical geometric field." In casual encounters, people "experience an inexplicable sense of calm, clarity, or grounded safety. Anxious frequencies begin to smooth. Agitated individuals may experience spontaneous de-escalation." The Venus flytrap principle, the materials continue, "operates energetically: first micro-contact initiates a gentle, irreversible

geometric latch." The field is described as "magnetically attractive to coherence while quietly disruptive to incoherence."

This chapter takes these claims seriously in two ways. First, it says plainly what is not supported. Then it describes what *is*: a substantial body of research showing that calm, and its opposite, really do pass between people, through channels we can name and measure.

> ○ PRACTITIONER EXPERIENCE · PHILOSOPHY
>
> **The "energetic field."** There is no scientific evidence for a geometric or energetic field projected by a person, for "frequencies" of anxiety that can be smoothed by proximity, or for an "irreversible geometric latch" that acts on others. These are practitioner philosophy. They are presented here as the originator's description of an experience, not as facts about physics or physiology. Chapter 12 describes how the experience itself could be tested.

Emotions are contagious

It is well established that emotions spread. Researchers use the term **emotional contagion** for the tendency to catch others' emotions, often by automatically mimicking their facial expressions, voices, and postures (Hatfield et al., 1993). The mimicry can be fast and unconscious: in one experiment, people's facial muscles responded to happy and angry faces shown for only 30 milliseconds and immediately masked, so quickly that participants did not consciously see them (Dimberg et al., 2000). Contagion has even been studied at enormous scale online, in a Facebook experiment that reduced the positive or negative content of users' news feeds and observed small shifts in the emotional tone of their own posts (Kramer et al., 2014). That study was later published with an editorial expression of concern about consent, and it is a reminder that the power to influence others' feelings carries ethical weight.

Stress is contagious too

Stress spreads in the body, not just in mood. In one study, mothers were separated from their infants and randomly assigned to a stressful task or a non-stress-

ful control task, then reunited with their babies. The infants' physiological reactivity mirrored their mothers' (Waters et al., 2014). In another, simply watching a stranger or a partner undergo a stressful evaluation was enough to raise many observers' own stress hormone, cortisol: 26% of observers overall showed a significant rise, 40% when watching an intimate partner, and 10% when watching a stranger (Engert et al., 2014).

Calm can be shared

If stress is contagious, so, it seems, is safety. Psychologists describe **co-regulation** as a process in which relationship partners form a shared emotional system, an oscillating pattern of arousal and calming that helps keep both partners stable (Butler & Randall, 2013). In a well-known brain-imaging study, married women facing the threat of a mild electric shock showed reduced threat-related brain activity when holding their husband's hand, and the higher the quality of the marriage, the less threat-related activation they showed (Coan et al., 2006). The hearts of mothers and their three-month-old infants coordinate their rhythms within lags of less than a second, especially during moments of shared affect and vocal synchrony (Feldman et al., 2011).

Bodies also synchronize in other settings. A systematic review of **physiological synchrony** found it in many kinds of relationships, while noting that the literature is fragmented and the methods varied (Palumbo et al., 2017). During a fire-walking ritual in Spain, the heart rhythms of fire-walkers synchronized with those of related spectators, but not with unrelated ones (Konvalinka et al., 2011). In a series of psychotherapy sessions, synchrony in breathing, heart rate, and heart-rate variability between a therapist and patients was associated with the quality of their working relationship (Tschacher & Meier, 2020).

Moving together brings people closer. People who tapped in synchrony with an experimenter later liked that person more (Hove & Risen, 2009), and acting in synchrony increased cooperation in group economic games (Wiltermuth & Heath, 2009). A meta-analysis of 42 experiments found that moving in synchrony increased prosocial behaviour, perceived social bonding, and positive feelings, with small to medium effects (Mogan et al., 2017).

● EVIDENCE: WELL-ESTABLISHED

Feelings and arousal pass between people. Emotional contagion and rapid, unconscious mimicry are well documented (Hatfield et al., 1993; Dimberg et al., 2000). Stress spreads to observers and infants (Engert et al., 2014; Waters et al., 2014). Close partners co-regulate emotion and physiology (Butler & Randall, 2013; Coan et al., 2006; Feldman et al., 2011). Synchrony increases liking and cooperation (Hove & Risen, 2009; Wiltermuth & Heath, 2009; Mogan et al., 2017).

◐ EVIDENCE: SUGGESTIVE · EMERGING

But the effects depend on relationship. Many of the strongest effects appear between people who are close: mothers and infants, spouses, relatives (Coan et al., 2006; Feldman et al., 2011; Konvalinka et al., 2011; Engert et al., 2014). The evidence that a stranger's calm reliably calms others nearby is much thinner (Palumbo et al., 2017).

Through what channels?

None of this requires a field. Calm and stress travel through ordinary channels: facial expression, tone and pace of voice, posture, breathing, the rhythm and tension of movement, and the words we choose. A practitioner who has spent years cultivating slow breathing, relaxed shoulders, a soft gaze, and unhurried movement will, quite plausibly, broadcast those signals. Book 2 described evidence that slow breathing can shift the body toward calm and reduce reported anxiety (Zaccaro et al., 2018; Lehrer & Gevirtz, 2014). Heart-rate variability, a measure of the beat-to-beat changes in heart rhythm, has been linked to the brain's capacity to regulate emotion and attention (Thayer & Lane, 2000), and researchers have published guidance on measuring it well (Laborde et al., 2017).

Words matter too. In an analysis of police body-camera footage from routine traffic stops, computational analysis of officers' language found consistently less respect toward Black community members than toward white ones, even after controlling for the officer's race, the severity of the offence, the location, and the outcome of the stop. The authors note the implications for trust

between police and the communities they serve (Voigt et al., 2017). The tone of the first words in an encounter is something that can be studied and trained.

A word about popular theories

Two popular ideas often appear in discussions of calm presence, and both deserve caution.

The first is **polyvagal theory**, which links the evolution of the vagus nerve to emotion and social engagement and proposes that a sense of safety is signalled between people through face, voice, and heart (Porges, 2007). The theory has been influential in therapy, but its physiological and evolutionary premises have been strongly criticized. Critics argue that the measure it relies on, respiratory sinus arrhythmia, is not equivalent to overall vagal tone, and that each of its five basic premises is untenable or highly implausible in light of the available evidence (Grossman & Taylor, 2007; Grossman, 2023). This book does not rely on it. The research on contagion, co-regulation, and synchrony stands on its own.

The second is the idea that adopting "powerful" postures changes hormones and behaviour. A large replication attempt found no effect of power posing on hormones or risk tolerance (Ranehill et al., 2015). Posture certainly communicates. Whether a posture can transform the poser's body chemistry is far less clear.

> ◐ EVIDENCE: SUGGESTIVE · EMERGING
>
> **Popular theories deserve caution.** Polyvagal theory's core premises have been strongly challenged (Grossman & Taylor, 2007; Grossman, 2023). A large study found no hormonal effects of power posing (Ranehill et al., 2015).

From latch to invitation

The source materials describe the practitioner's influence as a "latch," "irreversible," and "magnetically attractive." Even in its gentlest form, that is the language of capture. The research suggests a better image: an **invitation**. Calm can

be offered through breath, voice, posture, and pace. Others may accept it, especially those who trust us. They may also refuse it, and that is their right. A presence that *must* capture others is not calm. It is control.

There is a further lesson. The same research that shows calm can spread also shows that fear, hostility, and stress spread. A practitioner who walks through the world rehearsing fight-ending chains, braced for an opponent behind every encounter, may broadcast exactly the opposite of calm. The deepest form of calm presence is not projected. It comes from not seeing enemies everywhere.

> ○ PRACTITIONER EXPERIENCE · PHILOSOPHY
>
> **A calm-presence practice (the compiler's suggestion).** In your next ordinary tense conversation (a queue, a disagreement, a phone call), try three things. Breathe out slowly before you speak. Lower your voice slightly and slow its pace. Soften your shoulders and your gaze. Then notice, without forcing anything, whether the other person's tone changes. You are not latching anyone. You are offering.



Part IV · The Brake

Anyone can learn to start. The art is in the stopping.

CHAPTER 9

The Inventor's Warning

Mastery requires not only technical perfection but profound self-knowledge and emotional regulation.

— FROM THE SYSTEM OF INEVITABILITY SOURCE MATERIALS, CLOSING ITS LIST OF DANGERS

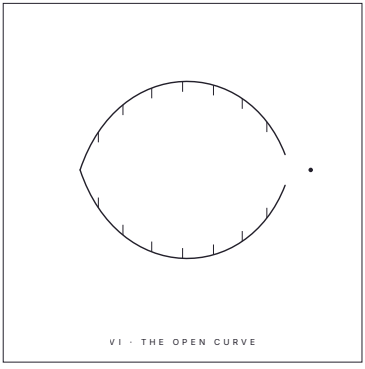


Plate 6 · The closing curve. An original geometric study made for this book.

Few martial arts publish a list of their own dangers. The System of Inevitability does, and it deserves credit for that. Its source materials describe the system's attachment mechanism, the **Venus flytrap principle**, this way: "Escape becomes geometrically improbable... There is no 'light touch.' Once the overlay engages, moderation is nearly impossible." Under the heading "Every Strike Is a Fight-Ender," they add: "There are no setup strikes. Every motion within the infinite kinetic chain is engineered as a terminal outcome."

Then they list three dangers. The third, the risk to the practitioner's own body, was the subject of Chapter 6. This chapter takes the first two at face value and asks what research says about them.

○ PRACTITIONER EXPERIENCE · PHILOSOPHY

The Venus flytrap and "every strike is a fight-ender." These are the originator's descriptions of the system's intent and feel. No study has tested whether its contact "latches" in a way that makes escape "geometrically improbable," or whether its strikes end encounters. They are untested claims. What is notable is that the originator presents them not only as strengths but as dangers.

Danger one: a system without a dimmer switch

> **Irreversible Structural Collapse Once Attachment Occurs.** De-escalation becomes geometrically improbable once the Venus flytrap engages. The system solves "stopping short" by making stopping short almost impossible.

Most of the violent encounters an ordinary person might face call for very little force, or none: a shove in a crowd, a drunk relative grabbing an arm, a frightened stranger lashing out, a misunderstanding. A response system that has only one setting, full and final, is badly matched to that reality.

The consequences can be grave. Book 2 described an Australian study that identified 90 deaths between 2000 and 2012 from single punches to the head, in which the victim fell unconscious from the blow itself or from the head striking the ground; most occurred near pubs and hotels late at night (Pilgrim et al., 2014). A single strike is not a fight-ender in any sense worth celebrating. It can be a life-ender, for the person struck and, in a different way, for the person who struck.

Danger two: the vanishing opponent

> **Complete Dissolution of the Concept of "Opponent."** Under extreme stress the system can induce a detached, automatic resolution that feels predestined rather than chosen. Real-world variables (weapons, multiple threats, legal aftermath) can be underestimated because the geometry has already "solved" the space.

This warning is remarkably consistent with what research shows about human beings under extreme stress.

Perception narrows and distorts. In detailed accounts by 80 police officers of 113 incidents in which they shot someone, officers reported a wide range of sensory distortions, and the great majority reported two or more distinct kinds (Klinger & Brunson, 2009). Under stress, people tend to choose before considering all their options and to scan the alternatives less systematically (Keinan, 1987).

Dissociation is common. In a study of soldiers in U.S. Army survival training, 96% reported dissociative symptoms, such as feeling detached or unreal, in response to acute, uncontrollable stress; elite Special Forces soldiers reported fewer symptoms than general infantry (Morgan et al., 2001). Across studies, dissociation during and immediately after a traumatic event was the strongest of the predictors of later post-traumatic stress disorder that were examined (Ozer et al., 2003). The "detached, automatic resolution that feels predestined" may be, at least in part, a description of dissociation.

Fear tilts decisions toward harm. In a video-based test, 36 police officers chose whether to shoot at suspects who either drew a gun or surrendered. When a "shootback cannon" could fire small plastic bullets at them, the officers showed a bias toward shooting, firing more often at suspects who were surrendering. Their gaze behaviour did not change; instead, they seemed to act on threat-related expectations rather than what was in front of them (Nieuwenhuys et al., 2012). In a follow-up, three weeks of practice did not remove the effect of threat on false shootings (Nieuwenhuys et al., 2015). Other research has shown that split-second shoot decisions can be biased by a target's ethnicity,

through cultural stereotypes rather than personal prejudice (Correll et al., 2002).

Habit takes the wheel. As Chapter 3 described, stress shifts behaviour from goal-directed choice to habit, and impairs the prefrontal functions that support flexible judgement (Schwabe & Wolf, 2009; Arnsten, 2009). A practitioner whose deepest habit is a fight-ending chain will, under stress, be most likely to perform it.

● EVIDENCE: WELL-ESTABLISHED

The originator's warning is consistent with stress research. Under extreme threat, perception distorts (Klinger & Brunson, 2009), choices narrow (Keinan, 1987), dissociation is common (Morgan et al., 2001), anxiety biases decisions toward shooting (Nieuwenhuys et al., 2012), and the bias resists brief practice (Nieuwenhuys et al., 2015). Stress shifts behaviour toward habit (Schwabe & Wolf, 2009).

Not every body fights

It is also worth knowing that "fight" is not the only response to threat, and that our bodies do not always obey our training. Defence responses in animals and humans include freezing, a form of behavioural inhibition with a slowing heart rate, which acts as a brake on the motor system while the body prepares for action. Flexibly shifting between freezing and active fight-or-flight depends on connections between the frontal cortex and the amygdala (Roelofs, 2017; Kozlowska et al., 2015). In extreme situations, some people experience **tonic immobility**, an involuntary, temporary paralysis: in a study of 298 women seen at an emergency clinic after sexual assault, 70% reported significant tonic immobility during the assault (Möller et al., 2017). And researchers have proposed that stress responses, particularly in women, include patterns of **tending and befriending**, protecting others and seeking social support, alongside fight-or-flight (Taylor et al., 2000).

This matters for two reasons. First, no one should ever be blamed for freezing; it is a normal biological response, not a failure of character or training. Second, it shows that the body under threat is not a simple machine that ex-

ecutes its programming. It has many possible responses, and the one that emerges depends on context, history, and the brain's ability to shift between them. Training can shape that ability. It cannot guarantee it.

Danger three, revisited: invisible variables

The originator's list ends with "real-world variables (weapons, multiple threats, legal aftermath)." Each of these deserves a sentence.

Weapons can be hidden, and anxiety can lead people to act on expectations of a threat rather than on what is actually there (Nieuwenhuys et al., 2012). **Multiple threats** mean that a practitioner locked into one person may be exposed to others. **Legal aftermath** is real: in most legal systems, the force a person uses in self-defence must be necessary and proportionate, and a response that would have been justified at one level of threat may be a serious crime at another (Chapter 11). There is a fourth variable the list does not mention: the other person may not be a threat at all.

What the warning teaches

The originator's own conclusion is the right one: "Mastery requires not only technical perfection but profound self-knowledge and emotional regulation." Research suggests one more ingredient. Self-knowledge and emotional regulation must themselves be *trained*, and trained into the same automatic layers as the techniques, because under stress the automatic layers are what remain. The next two chapters describe how.

> ⚠ CAUTION
>
> **If you have trained a one-setting response, add settings.** If your practice has built a reflex of full-force chains, do not test it on the street. Begin the brake drills of Chapter 11, slowly and with supervision, and give yourself months. A reflex is not a character. It can be retrained.

CHAPTER 10

No Opponent, No Enemy

Violence becomes an elegant geometric inevitability rather than a tragic necessity.

— FROM THE SYSTEM OF INEVITABILITY SOURCE MATERIALS, DESCRIBING THE "NO OPPONENT" STATE

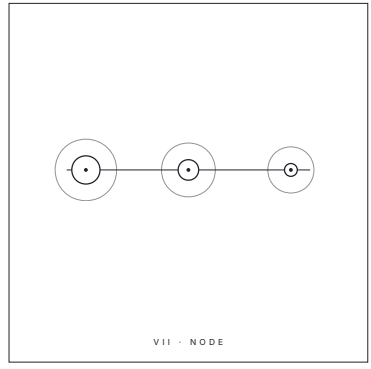


Plate 7 · The node. An original geometric study made for this book.

The sentence above is the most important one in the source materials, and the most dangerous. It is honest about its own consequence: the materials add that the No Opponent state "removes natural psychological brakes." This chapter explains, with some of the most robust research in social psychology, why those brakes matter and how they can be removed. Then it proposes a different reading of "no opponent," one that keeps everything valuable in the idea and leaves the danger behind.

How good people do harm

The psychologist Albert Bandura spent decades studying a puzzle: how ordinary people, with ordinary moral standards, come to do harmful things without feeling that they are betraying those standards. His answer was **moral disengagement**. Moral standards regulate behaviour only when they are activated, and there are many psychological manoeuvres by which people switch them off (Bandura et al., 1996; Bandura, 1999). The manoeuvres he identified include:

- **moral justification**: reframing harm as serving a worthy purpose;
- **sanitizing language**: describing harm in neutral or technical terms;
- **advantageous comparison**: making harm look small beside something worse;
- **displacement and diffusion of responsibility**: "I was ordered to," "everyone did it," "it just happened";
- **minimizing or disregarding the consequences** of one's actions;
- **blaming and dehumanizing** the people who are harmed.

These are not exotic. They are everyday thought patterns, and they predict real behaviour. A meta-analysis of 27 samples including 17,776 children and adolescents found a consistent positive relationship between moral disengagement and aggressive behaviour (Gini et al., 2014).

> ● EVIDENCE: WELL-ESTABLISHED
>
> **Moral disengagement enables harm.** People can disengage their moral standards from harmful conduct through justification, sanitizing language, displacement of responsibility, minimizing consequences, and dehumanization (Bandura et al., 1996; Bandura, 1999). Moral disengagement is consistently associated with aggression in children and youth (Gini et al., 2014).

People as shapes

Dehumanization, perceiving others as less than fully human, comes in more than one form. In an influential review, Nick Haslam distinguished an "animal-

istic" form, which denies people uniquely human qualities such as refinement and reason, from a "mechanistic" form, which denies them the warmth and emotion of human nature and represents them as *objects or automata*. He argued that dehumanization is not only a feature of war and genocide but an everyday social phenomenon, rooted in ordinary thinking (Haslam, 2006; Haslam & Loughnan, 2014).

A striking series of experiments found that dehumanization does not increase all kinds of violence. It increases **instrumental** violence, harm done to achieve some other goal, but not violence that perpetrators see as morally righteous. Using dehumanizing rather than humanizing language made participants more willing to harm strangers for money, and participants spontaneously dehumanized strangers when they imagined harming them for money (Rai et al., 2017).

Now read the source materials again with these findings in mind. The other person becomes a set of nodes. Contact is a "latch." Joints are "compromised." Violence is a "geometrical resolution," an "inevitability," something the system does rather than something the practitioner chooses. The outcome "feels predestined rather than chosen."

This is, almost point for point, the vocabulary of moral disengagement: **sanitizing language** (resolution, compromise, overlay), **displacement of responsibility** (the system controls the outcome), and **mechanistic dehumanization** (the opponent as geometry). The originator does not intend harm, and the materials themselves flag the danger. But a philosophy that renders violence "elegant" and "inevitable" is giving its practitioners exactly the psychological tools that research shows make harm easier.

◐ EVIDENCE: SUGGESTIVE · EMERGING

The language of inevitability resembles the language of disengagement. This is the compiler's analysis, based on established research (Bandura, 1999; Haslam, 2006; Rai et al., 2017). No study has examined the System of Inevitability's language or its effects on practitioners.

What martial arts culture can do

The culture of a training community matters. Book 2 reviewed this evidence in detail. In one classic study, teenage boys taught traditional Tae Kwon Do, with its psychological and philosophical teachings, became less aggressive, while those taught a "modern" version without those teachings became more aggressive (Trulson, 1986). In intervention studies with young people, martial arts training reduced aggression (Harwood et al., 2017), while other meta-analytic evidence finds no benefit or even harm, especially with intense training (Gubbels et al., 2016). A school-based Tae Kwon Do programme improved children's self-regulation and prosocial behaviour (Lakes & Hoyt, 2004). The same physical techniques can make people gentler or harsher, depending on what is taught alongside them.

In policing, researchers have compared a "warrior" mindset, in which officers see themselves as fighting crime, with a "guardian" mindset, in which they value working with the public. Survey data from two police departments found that these are distinct but related orientations, and that the guardian mindset was associated with placing greater priority on communication during encounters with citizens (McLean et al., 2020). Book 2 also described a randomized evaluation in which de-escalation training was followed by substantial reductions in use-of-force incidents and in injuries to both citizens and officers (Engel et al., 2022).

> ● EVIDENCE: WELL-ESTABLISHED
>
> **Culture shapes what technique becomes.** Martial arts training can reduce or increase aggression depending on how and in what culture it is taught (Trulson, 1986; Harwood et al., 2017; Gubbels et al., 2016). A guardian orientation in policing is associated with prioritizing communication (McLean et al., 2020), and de-escalation training was followed by fewer use-of-force incidents and injuries (Engel et al., 2022).

From no opponent to no enemy

There is a version of "no opponent" that is profound and beautiful. It is found in many contemplative and martial traditions, and it resembles the self-tran-

scendence described in Chapter 7. In it, the practitioner does not hate. They do not need to prove anything. Fear and ego are quiet. The person in front of them is not an enemy to be destroyed but a human being in a difficult moment, perhaps frightened, drunk, desperate, or mistaken.

This version dissolves **enmity**, not **personhood**. It removes hatred, not responsibility. And far from removing the brakes, it makes them stronger, because it is much easier to stop striking a person you see as human than a shape you see as a node.

Here is the distinction this book proposes:

	No opponent (as written)	No enemy (as proposed)
What dissolves	Ego, fear, hesitation, moral calculation	Ego, fear, hatred, the need to win
What remains	Geometry, inevitability	The other person; your choice
Who decides	"The system controls the outcome"	You do, every moment
Force	Total, terminal	The least that is necessary
Afterward	Resolution	Care, accountability, reflection

Re-humanizing practice

Compassion can be trained. Short-term compassion training increased how much money people chose to redistribute to a victim of unfairness (Weng et al., 2013), and compassion training strengthened positive feelings in the face of others' suffering (Klimecki et al., 2013). Neuroscientists distinguish compassion, a warm concern for another's welfare, from empathic distress, which can lead to withdrawal (Singer & Klimecki, 2014). A compassionate practitioner does not have to collapse in distress at another's pain, and does not have to stop seeing it.

○ PRACTITIONER EXPERIENCE · PHILOSOPHY

Re-humanizing practices (the compiler's suggestions).

- **Change the words.** Describe your training in human terms. Not "node," but "his wrist." Not "resolution," but "injury." Not "inevitable," but "what I chose."
- **Give your imagined partner a face.** In solitary forms, sometimes imagine a specific, real person you would never want to harm, and practise controlling without injuring them.
- **Remember the afterward.** At the end of a session, spend one minute imagining the moments after a real encounter: the other person's family, the police interview, your own feelings the next morning.
- **Practise the compassion meditation** of Chapter 7 regularly.

The originator's own phrase deserves to be turned around. Violence is never an "elegant geometric inevitability." At its very best, it is a tragic necessity, which is exactly why every skilled person should spend a lifetime making it less necessary.

CHAPTER 11

Training the Brake

The system solves "stopping short" by making stopping short almost impossible.

— FROM THE SYSTEM OF INEVITABILITY SOURCE MATERIALS, LISTING A DANGER OF THE SYSTEM



Plate 8 · The lattice. An original geometric study made for this book.

This is the most practical chapter in the book, and the one the series has been building toward. Its argument is simple. If a skill can be made automatic, so can the ability to stop it. The brake is not the opposite of mastery. It is part of it.

The brain has a brake

Cognitive scientists study stopping with a simple laboratory task. People respond quickly to a "go" signal, and on some trials a "stop" signal appears shortly afterward, telling them to withhold the response. Gordon Logan and William Cowan proposed that what happens next is a **race**: the stop signal starts a stopping process that races against the processes driving the ongoing action. If stopping wins, the action is inhibited; if the action wins, it runs to completion (Logan & Cowan, 1984). This **stop-signal paradigm** has become one of the most widely used tools for studying how behaviour is controlled (Verbruggen & Logan, 2008).

Brain research has identified a network, centred on a region of the right inferior frontal cortex together with circuits through the basal ganglia, that its leading researchers describe as best characterized as **a brake**. Importantly, this brake can be applied in different ways: *totally*, to suppress a response outright, or *partially*, to pause it; and it can be triggered *externally*, by a stop signal or something salient, or *internally*, by one's own goals (Aron et al., 2014).

Two lessons follow for martial practice. First, stopping is a race, and the further a movement has progressed, and the more strongly it is driven, the harder it is to win. Second, the brake has settings. A full stop and a partial pause are both available, and both can be cued from outside or inside.

● EVIDENCE: WELL-ESTABLISHED

Stopping is a trainable race. Response inhibition is modelled as a race between stopping and going (Logan & Cowan, 1984; Verbruggen & Logan, 2008). A frontal–basal-ganglia network acts as a brake that can stop an action totally or pause it partially, cued from outside or by internal goals (Aron et al., 2014).

Why the brake must be automatic too

Chapter 3 showed that stress shifts behaviour toward habit, and Chapter 9 that it can tilt decisions toward harm. A brake that depends on slow, deliberate reflection is likely to fail exactly when it is most needed. The brake therefore has to be built into the same layers as the techniques: rehearsed thousands of times, in

context, under gradually increasing pressure, until stopping is as natural as starting.

There is good evidence that pressure-specific practice helps. In police training, officers who practised shooting against an opponent who could fire back no longer performed worse under that pressure, while a comparison group did; the benefit was still present four months later (Oudejans, 2008; Nieuwenhuys & Oudejans, 2011). Officers who received training in physiological control during stressful incidents made more correct use-of-force decisions in realistic scenarios (Andersen & Gustafsberg, 2016). Self-defence training that rehearsed complete violent situations, including the moments before physical contact, improved officers' communication, proportionality, and control (Renden et al., 2017).

There is also a sobering limit. In the study described in Chapter 9, three weeks of practice did not remove the effect of threat on officers' mistaken decisions to shoot (Nieuwenhuys et al., 2015). Brakes take a long time to build, and no brake is perfect. That is one more reason to avoid situations in which one is needed.

The brake drills

The following drills are the compiler's suggestions, drawn from the research above. They are designed to be practised slowly at first, and with a qualified partner or coach where partner work is involved.

1. STOP ON CUE (SOLO)

At the dummy or the bag, perform a flowing sequence at slow speed. Have a phone app or a recording give random audio cues. On the cue, **freeze completely** and hold for one breath, then step back. Over weeks, raise the speed. Keep a log of how often you stop cleanly and how far each movement travels after the cue (Appendix A). Then add a second cue meaning *pause*, a partial stop, followed by continuing softly. You are training both settings of the brake.

2. TOUCH, DON'T STRIKE

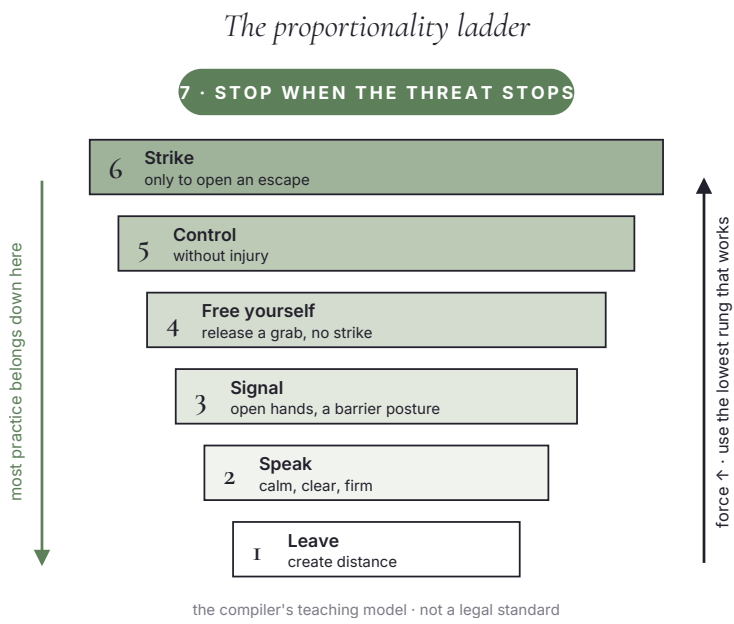
On the bag or dummy, deliver every technique as a light touch that stops at the surface. Then at one centimetre short. Then, occasionally, at a half-power target. The goal is not to remove power but to make the *amount* of power a choice. The source materials say there is no "light touch"; this drill builds one.

3. THE PROPORTIONALITY LADDER

Picture a ladder of responses, each one more forceful than the last:

1. Leave, or create distance.
2. Speak: calm, clear, firm.
3. Signal: open hands, a fence, a barrier posture.
4. Free yourself from a grab, without striking.
5. Control without injury.
6. Strike, only to create an opening to escape.
7. Stop, as soon as the threat stops.

In solitary practice, rehearse each rung on its own. In partner practice, the partner (at a pre-agreed, safe intensity) presents a scenario, and you respond with the *lowest rung that would work*, then step back. Most of your repetitions should be on the lower rungs, because most of life is.



The proportionality ladder: the least force that works, and stopping as soon as the threat ends. The compiler's teaching model, not a legal standard.

4. THE RELEASE

Whenever the system's "latch" engages in training, whether a trap, a lock, or a wrap, practise **letting go** on a cue from your partner. Then practise letting go *without* a cue, as soon as your partner relaxes. Releasing should become as automatic as engaging. This is the antidote to the "irreversible" attachment the source materials describe.

5. THE FIRST WORDS

In partner scenarios, begin every encounter with words, not hands. Practise a few calm sentences until they are automatic: "I don't want any trouble." "Let's both step back." "I'm leaving now." The first words of an encounter shape what follows; this is part of what modern de-escalation training teaches (Engel et al., 2022).

6. RESTRAINT IMAGERY

Each day, rehearse in imagination one realistic scenario in which you choose a low rung, or leave (Chapter 5). Imagery of successful performance under threat helped officers preserve their performance (Colin et al., 2014). Make the successful performance a restrained one.

7. PRESSURE, GRADUALLY

When the drills are reliable at low intensity, raise the pressure gradually: more speed, more noise, a little fatigue (never to the point of degraded form; see Chapter 6), a partner who is louder. Pressure training is what makes skills hold under pressure (Oudejans, 2008). It is what will make the brake hold too.

> ⚠ CAUTION
>
> **Partner work must be controlled.** Agree on intensity, a tap-out signal, and a stop word before every session. Never practise locks or breaks on a partner at speed. Have a qualified instructor present for any partner work involving joints or strikes. The point of partner practice in this chapter is control, not victory.

The law, in general terms

This book cannot give legal advice, and the law varies widely between countries and states. But some broad principles are common to many legal systems, and every practitioner should know them in general terms and learn the specifics where they live.

- **Necessity.** Force in self-defence is generally permitted only when it is necessary to prevent a threatened harm.
- **Imminence.** The threat generally has to be present or immediately about to happen, not a past wrong or a future possibility.
- **Proportionality and reasonableness.** The force used is generally expected to be reasonable in proportion to the threat. In the United States, for example, the Supreme Court held in 1989 that police use of force must be judged from the perspective of a reasonable officer on the scene (as described by Klinger & Brunson, 2009); civilian standards differ by state.

- **When the threat ends, the force must end.** Continuing to strike someone who is no longer a threat is generally no longer self-defence.
- **Retreat.** Some jurisdictions expect a person to retreat when it is safely possible; others do not.
- **Training can be held against you.** In some legal systems, a trained person's actions may be judged differently because of what they knew and could do.

A system that makes "stopping short almost impossible" is, in these terms, a legal danger as well as a moral one. Learn the law where you live from a qualified source.

> ○ PRACTITIONER EXPERIENCE · PHILOSOPHY
>
> **The law is not a brake on its own.** The legal principles above are general and not legal advice. They are included because the source materials themselves list "legal aftermath" as a danger, and because the habits trained in this chapter (necessity, the least force, stopping when the threat ends) are the habits most legal systems expect.

CHAPTER 12

How to Test the Philosophy



Let the claim be beautiful. Then let it be tested.

— THE COMPILER

Every book in this series ends its practical section with the same invitation: if a claim matters, test it. This chapter designs simple, honest tests for the philosophy of the System of Inevitability, especially its most extraordinary claims: that a practitioner's presence calms others, that contact "latches," and that the system "completes" other arts. It also designs tests for the qualities this book has argued matter most: the brake, proportionality, and calm.

None of these tests has been run. They are the compiler's proposals. Anyone, including the originator, is invited to improve them, run them, and publish the results, positive or negative.

Why testing matters

We are poor judges of ourselves. People who perform poorly often overestimate their performance, partly because the skills needed to do well are the skills needed to recognize doing well (Kruger & Dunning, 1999). **Expectation changes outcomes.** Placebo effects have been reported across many sports (Beedie & Foad, 2009). **Measurements wobble.** Any measure varies from day to day, and real change must be distinguished from that noise (Hopkins, 2000). And a practitioner who sees people grow calm around them may be noticing the times it happens and forgetting the times it does not.

None of this means the experiences are false. It means they need checking by methods that protect us from our own hopes.

● EVIDENCE: WELL-ESTABLISHED

Self-assessment is unreliable; expectation matters. People tend to overestimate their own competence (Kruger & Dunning, 1999). Expectations can produce placebo effects on sports performance (Beedie & Foad, 2009). Measures need to be reliable enough to detect real change (Hopkins, 2000).

Test 1: Does calm presence spread?

Claim: "In casual encounters, people experience an inexplicable sense of calm, clarity, or grounded safety."

A simple version. Recruit volunteers who do not know the purpose of the study. Each spends a few minutes in a neutral, structured activity (a short conversation from a script, say, or a shared puzzle) with a partner. Some partners are long-term practitioners; others are matched non-practitioners of similar age, sex, and manner. Neither the volunteers nor the person collecting the data know which partner is which. Afterward, volunteers rate how calm, safe, and at ease they feel, on standard scales, before and after. Others' reports, gathered blind, are the heart of the test.

Making it stronger. Add a mildly stressful task (a short public-speaking preparation, for instance) so there is anxiety to calm. Record heart rate and heart-rate variability in both people, following published guidance on measurement (Laborde et al., 2017). Repeat with many practitioners and many non-practitioners, so that the results don't depend on one charismatic person. Write down the predictions, the measures, and the analysis before collecting any data, so that results cannot be reinterpreted afterward.

What would count. If volunteers reliably feel calmer with practitioners than with matched controls, that is evidence that the practice cultivates a calming presence, which would be a valuable finding. It would not, on its own, show anything about a "field."

Test 2: Is the calm carried by ordinary channels?

Claim: the calm is carried by "a living toroidal/helical geometric field."

The ordinary explanation (Chapter 8) is that calm travels through breathing, voice, face, posture, and movement. The two explanations make different predictions. If calm is carried by ordinary channels, it should weaken or disappear when those channels are blocked, and it should be reproducible by non-practitioners who learn to breathe, speak, and move calmly. If it is carried by a field, it should persist when the practitioner is present but unseen and unheard, and the volunteer should not need to know they are there.

A blinded design. A volunteer sits completing a stressful task, with physiological recording. On randomized trials, a practitioner sits silently behind a screen in the same room, or the chair is empty. Neither the volunteer nor the experimenter in the room knows which condition is running; sound masking prevents cues. The prediction of the field claim is that the volunteer becomes calmer on practitioner trials. The prediction of the ordinary explanation is no difference.

> ○ PRACTITIONER EXPERIENCE · PHILOSOPHY
>
> **A fair test of the field claim.** This design is the compiler's proposal. A null result would not show that calm presence is unreal; it would show that it is carried by ordinary, learnable channels, which is good news, because anyone can learn them.

Test 3: Do two nervous systems synchronize?

Physiological synchrony between people can be measured (Palumbo et al., 2017), and it has been linked to relationship quality in psychotherapy (Tschacher & Meier, 2020). A practitioner and a volunteer could both wear heart-rate monitors during a structured interaction, and synchrony could be compared between practitioner pairs and control pairs. Because two people doing the same task may synchronize simply because they are doing the same task, a careful analysis would compare real pairs with "pseudo-pairs," recordings from people who were never together. Note that strong effects in past research have mostly appeared between people who are close (Chapter 8).

Test 4: Does the brake work?

This is the most important test, and the easiest to run.

Stop latency and overshoot. Film the stop-on-cue drill of Chapter 11 from the side at a known frame rate, with an audible or visual cue that appears in the video. Measure the time from cue to complete stop, and how far the hand or foot travels after the cue. Repeat monthly. Improvement means the brake is getting faster.

Stop under pressure. Repeat the measurement with added pressure: more speed, noise, mild fatigue, an unpredictable partner. Pressure-specific training is what makes skills hold under pressure (Oudejans, 2008), so this is where the brake is really tested.

Clean release. In controlled partner work, measure the time from a partner's release signal to the moment the practitioner fully lets go.

Test 5: Proportionality

Using scenarios like those of Chapter 11, have a trained partner present a range of situations, from mild to serious, in random order. Have qualified observers who do not know the practitioner's training history rate each response for proportionality and control on a simple five-point scale, a method like the one used to assess police self-defence skills (Nieuwenhuys et al., 2009). A practitioner who meets mild scenarios with mild responses is showing the brake at work. One who meets every scenario with the same full-force chain is showing exactly the danger the originator warned of.

Test 6: Does the overlay "complete" other arts?

Claim: "Any technique or movement becomes more efficient, structurally inevitable, and injury-resistant once the geometric overlay is applied."

This is the broadest claim in the materials, and the hardest to test as stated. A fair version would pick one specific skill (a particular throw, a sprint start, a golf swing), recruit people who already practise it, randomly assign half to learn the overlay and half to an equal amount of ordinary extra practice, and measure

performance and injuries afterward. Research on transfer suggests caution in advance: skills tend to transfer to closely related tasks, and far transfer is rare (Barnett & Ceci, 2002; Sala & Gobet, 2017).

> ○ PRACTITIONER EXPERIENCE · PHILOSOPHY
>
> **"It completes them."** The universal-overlay claim is untested. It may contain a real insight, that attention to smooth, curved, whole-body movement can improve many activities, but "every technique" and "structurally inevitable" are not claims evidence can currently support.

A summary of tests

Claim or quality	Test	What would support it
Calm presence	Blinded volunteer ratings with practitioners vs matched controls	Calmer ratings with practitioners
"Geometric field"	Practitioner unseen and unheard behind a screen, randomized	Calmer physiology on practitioner trials
Co-regulation	Paired heart-rate recording vs pseudo-pairs	More synchrony in real pairs
The brake	Filmed stop latency and overshoot, with and without pressure	Fast, clean stops that hold under pressure
Proportionality	Blind expert ratings across mild and serious scenarios	Responses scaled to the scenario
Universal overlay	Randomized trial in one specific skill	Better performance or fewer injuries than equal extra practice

What a good result looks like

The most hopeful outcome of all these tests is not proof of a field or an inevitable lock. It is a practitioner who is measurably calm, whose presence helps others feel safe, who can stop any movement on a cue, who meets mild provoca-

tions with mild responses, and who can say, honestly, “I chose.” That would be a result worth sharing.

CHAPTER 13

Inevitability, Reconsidered



The space between a cue and a response is small. Practice can make it wider.

— THE COMPILER

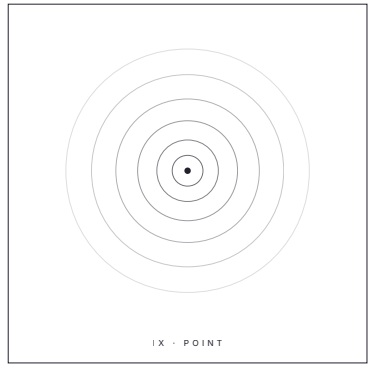


Plate 9 · The point. An original geometric study made for this book.

The System of Inevitability begins with a boy waxing a car. It ends, in its own telling, with "a deep sense of predestined resolution." Between those two points lies one of the most interesting ideas in martial practice: that the movements of everyday life can become the training ground for a whole art, that skill can be so complete it no longer needs a partner, and that a practitioner's calm can be felt by others.

This book has tried to honour that idea, and to tell the truth about it.

What the science supports

Much of the system's foundation is sound. Skills really can be learned without explicit rules (Chapter 2). Practice woven into daily life can work (Clemson et al., 2012). Habits really do form through repetition in context, and they really do become the default (Chapter 3). Human movement really does have lawful, curved, smooth geometry (Chapter 4). Imagined practice really does engage the motor system and improve performance, modestly (Chapter 5). The self really can grow quiet, and when it does, people often become kinder (Chapter 7). Calm and stress really do pass between people, through face, voice, breath, posture, and the rhythms of the body (Chapter 8).

What the science questions

Other parts of the system are untested, and some are contradicted by what we know. There is no evidence for an energetic field, for anxious "frequencies," or for an irreversible latch on others' minds. The Venus flytrap, the fight-ending strike, and the universal overlay have never been examined. And the deepest part of the philosophy, the state in which "the practitioner no longer controls the system," turns out to be a familiar psychological condition, the dominance of habit under stress, which research associates not with wisdom but with narrowed choices, distorted perception, and decisions tilted toward harm (Chapter 9).

What the originator saw

It is worth saying again: the originator saw this. The source materials list the dangers plainly. They say the system "removes natural psychological brakes." They warn that de-escalation becomes improbable, that real-world variables can be underestimated, and that solitary intensity can turn the system's power against the practitioner's own body. And they end with a sentence that could stand as the motto of this whole series: "Mastery requires not only technical perfection but profound self-knowledge and emotional regulation."

This book has simply tried to take that sentence seriously, and to show what research says self-knowledge and emotional regulation require.

The upgrade

The series these books belong to was written in the hope of contributing, in some small way, to an upgrade in human consciousness. What would that mean here?

It would not mean a mind that acts without choosing. It would mean a mind in which **choosing has become as fluent as acting**: in which pausing, scanning, speaking softly, releasing, and stopping are as automatic as any strike. Not "no opponent," in the sense of no person. **No enemy**, in the sense of no hatred. Ego quiet, fear quiet, and conscience awake.

That is, perhaps, the real inevitability worth training for. Not that every contact ends in a lock. But that every contact, every encounter, every ordinary moment of reaching, turning, stirring, and carrying, becomes a small rehearsal of care: the hand that moves smoothly, and can stop; the presence that is calm, and invites rather than captures; the person who is skilled, and chooses gently.

Wax on, wax off

Return, for a moment, to the scene where all of this began. A boy is frustrated by chores that seem to have nothing to do with fighting. He discovers that they have been training him all along. The lesson most people remember is that practice can be hidden in ordinary life.

There is a second lesson in the same story, easy to miss. The skill the boy learns is taught to him by someone who has already learned restraint, and the teaching includes when *not* to fight. Whatever the geometry, the teacher is the one who decides what it is for.

Every practitioner becomes, sooner or later, their own teacher. The question this book leaves with you is the question it began with. Not "How powerful is what I have automated?" but:

What have I automated, and does it include the ability to choose?

○ PRACTITIONER EXPERIENCE · PHILOSOPHY

A closing practice (the compiler's suggestion). Tomorrow, choose one ordinary movement (opening a door, setting down a cup, reaching for a hand) and make it, for one day, a practice of care. Move smoothly. Pause before you finish. Notice the other people around you. That is the whole system, in miniature: everyday geometry, calm presence, and a choosing mind.

Appendix A · Practices and Logs

Copy or print these pages. Fill them in honestly. Film what you can. The point of a log is to let your future self see what your present self cannot.

The daily practices, in brief

- **Everyday geometry** (Chapter 2): one ordinary chore a day, done with smooth, curved, unhurried movement.
- **The interrupted figure-eight** (Chapter 4): trace slowly; stop completely at a random moment; continue.
- **The restraint form** (Chapter 5): three minutes imagining a tense situation handled calmly, at a low rung.
- **The right kind of quiet** (Chapter 7): five minutes of settling, then wishing well to a loved one, a neutral person, and a difficult one.
- **Calm presence** (Chapter 8): breathe out, lower and slow the voice, soften shoulders and gaze.
- **Re-humanizing words** (Chapter 10): describe training in human terms.
- **The brake drills** (Chapter 11): stop on cue, touch-don't-strike, the proportionality ladder, the release, the first words, restraint imagery, gradual pressure.

Brake drill log (weekly)

Stop latency in video frames from cue to complete stop; overshoot in cm from the wall scale. Ten cued trials per condition.

Date	Speed (1–5)	Pressure added	Clean stops /10	Latency (frames)	Over-shoot (cm)	Pauses / 10	Notes

Proportionality scenario log (with a partner and observer)

Rung chosen from the ladder in Chapter 11 (1 = leave … 7 = stop). Observer rates proportionality and control, 1–5.

Date	Scenario	Severity (1–5)	Rung used	Propor-tionality (1–5)	Control (1–5)	Release time	What I learned

Solitary session and recovery log

Date	Work done	Min	Effort (1–10)	Mood before	Sleep (h)	Pain next morning	Stopped early? Why?

Calm-presence rating form (for volunteers, Test 1)

To be completed by the volunteer, who should not know the purpose of the study. Circle one number for each line, before and after the interaction.

Item	Before (1 = not at all, 7 = completely)	After (1–7)
I feel calm	1 2 3 4 5 6 7	1 2 3 4 5 6 7
I feel safe	1 2 3 4 5 6 7	1 2 3 4 5 6 7
I feel at ease with this person	1 2 3 4 5 6 7	1 2 3 4 5 6 7
I feel tense	1 2 3 4 5 6 7	1 2 3 4 5 6 7
I feel clear-headed	1 2 3 4 5 6 7	1 2 3 4 5 6 7

Appendix B · The Evidence at a Glance

A summary of the main claims discussed in this book, how strong the evidence is, and where to look. "●" marks well-established findings, "◐" suggestive or emerging ones, and "○" practitioner claims that have not been tested.

Claim	Strength	Key sources
Skills can be learned implicitly, without explicit rules	● Established	Reber, 1967; Masters, 1992; Kal et al., 2013
Training woven into daily routines can work	◐ Suggestive (one strong trial in older adults)	Clemson et al., 2012
Habits form through repetition in a consistent context	● Established	Lally et al., 2010; Wood & Rünger, 2016
Automatic does not have to mean uncontrollable	● Established (theory)	Moors & De Houwer, 2006
Stress shifts behaviour toward habit	● Established	Schwabe & Wolf, 2009; Arnsten, 2009
Movement follows lawful geometry (power laws, smoothness)	● Established	Lacquaniti et al., 1983; Flash & Hogan, 1985; Huh & Sejnowski, 2015
Mental practice improves performance, modestly	● Established	Driskell et al., 1994; Toth et al., 2020
Imagery helps preserve performance under threat	◐ Suggestive (one police study)	Colin et al., 2014
Solo forms replace interactive practice	○ Not supported	Krabben et al., 2019; Pinder et al., 2011
Load spikes and poor recovery cause injury	● Established	Soligard et al., 2016; Meeusen et al., 2013
A "misaligned twist under fatigue" can injure the practitioner	◐ Plausible, untested specifically	Chapter 6

Claim	Strength	Key sources
Selfless states have measurable brain correlates	◐ Suggestive (small samples)	Brewer et al., 2011; Josipovic, 2014
Self-transcendence increases connection and kindness	◐ Suggestive	Yaden et al., 2017; Piff et al., 2015
Emotions and stress spread between people	● Established	Dimberg et al., 2000; Engert et al., 2014
Close partners co-regulate physiology	● Established	Coan et al., 2006; Feldman et al., 2011
A stranger's calm reliably calms others	◐ Thin evidence	Palumbo et al., 2017
A "geometric field," "frequencies," or "energetic latch"	○ No evidence	Chapter 8
Polyvagal theory explains social safety	◐ Contested	Porges, 2007; Grossman, 2023
Venus flytrap: escape "geometrically improbable"	○ Untested	Chapter 9
"Every strike is a fight-ender"	○ Untested; single punches can kill	Pilgrim et al., 2014
Extreme stress distorts perception and biases decisions	● Established	Klinger & Brunson, 2009; Nieuwenhuys et al., 2012
Moral disengagement and dehumanization enable harm	● Established	Bandura, 1999; Gini et al., 2014; Rai et al., 2017
Martial arts culture shapes aggression	◐ Mixed evidence	Trulson, 1986; Harwood et al., 2017; Gubbels et al., 2016
Response inhibition works as a trainable brake	● Established (lab)	Logan & Cowan, 1984; Aron et al., 2014
De-escalation training reduces force and injuries	◐ Suggestive (one strong evaluation)	Engel et al., 2022
The universal overlay "completes" every art	○ Untested	Chapter 12

Glossary

Automaticity — The quality of a process that runs fast, efficiently, and with little conscious attention. Its features (unintentional, uncontrollable, unconscious, efficient, fast) can be separated.

Co-regulation — A process in which two people form a shared emotional system, each helping to stabilize the other's arousal.

Default mode network — A set of brain regions, including parts of the medial prefrontal and posterior cingulate cortex, that is typically more active at rest and associated with self-related thought and mind-wandering.

De-escalation — Words, posture, distance, and choices that reduce the intensity of a conflict and the likelihood of violence.

Dehumanization — Perceiving others as less than fully human, either as animal-like or as objects and automata.

Dissociation — A sense of detachment from one's surroundings, body, or experience, common under acute extreme stress.

Emotional contagion — The tendency to catch others' emotions, often through automatic mimicry of their faces, voices, and postures.

Flow — A state of complete absorption in a challenging activity, in which self-consciousness fades and action feels effortless.

Goal-directed behaviour — Behaviour guided by its expected outcome, which changes when the outcome is no longer wanted. Contrasted with habit.

Habit — A behaviour triggered automatically by a familiar context, learned through repetition, and relatively insensitive to its current outcome.

Heart-rate variability (HRV) — The beat-to-beat variation in heart rhythm, linked to the regulation of emotion and attention.

Implicit learning — Learning that happens without awareness of what is being learned, or without the ability to state it.

Mental practice / motor imagery — Rehearsing a movement in the imagination without performing it.

Minimum jerk — A model in which the brain plans movements to be as smooth as possible, minimizing the rate of change of acceleration.

Moral disengagement — Psychological manoeuvres by which people switch off their moral standards in relation to harmful conduct.

Mushin — Japanese, "no-mind": in Zen and the martial traditions, a mind that does not stop or cling.

No enemy — This book's proposed reading of "no opponent": the dissolution of hatred and ego, without loss of the other person's humanity or one's own responsibility.

Nondual awareness — A contemplative state in which the felt separation between self and world relaxes.

Physiological synchrony — Coordination of bodily signals, such as heart rate, between people.

Polyvagal theory — A theory linking the evolution of the vagus nerve to emotion and social behaviour. Its core premises are strongly contested.

Proportionality — Using force reasonably in proportion to the threat; a principle common to many legal systems and to ethical practice.

Representative design — Designing practice so that it preserves the key information of the real situation in which a skill will be used.

Stop-signal paradigm — A laboratory task for studying response inhibition, in which a signal tells a person to withhold an action already under way.

Tonic immobility — An involuntary, temporary paralysis that can occur under extreme threat.

Two-thirds power law — A relationship between the curvature of a drawn path and the speed at which it is traced: speed falls on tighter curves.

References

Every reference below was checked against its Crossref record (authors, year, title, journal, and DOI), and the findings cited were checked against PubMed, publisher, OpenAlex, or Semantic Scholar abstracts, in November 2026. Works without an available abstract are cited only for what their titles and records establish.

Andersen, J. P., & Gustafsberg, H. (2016). A Training Method to Improve Police Use of Force Decision Making: A Randomized Controlled Trial. *Sage Open*, *6*(2), 2158244016638708. https://doi.org/10.1177/2158244016638708

Arnsten, A. F. T. (2009). Stress signalling pathways that impair prefrontal cortex structure and function. *Nature Reviews Neuroscience*, *10*(6), 410–422. https://doi.org/10.1038/nrn2648

Aron, A. R., Robbins, T. W., & Poldrack, R. A. (2014). Inhibition and the right inferior frontal cortex: one decade on. *Trends in Cognitive Sciences*, *18*(4), 177–185. https://doi.org/10.1016/j.tics.2013.12.003

Bandura, A. (1999). Moral Disengagement in the Perpetration of Inhumanities. *Personality and Social Psychology Review*, *3*(3), 193–209. https://doi.org/10.1207/s15327957pspr0303_3

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Mechanisms of moral disengagement in the exercise of moral agency. *Journal of Personality and Social Psychology*, *71*(2), 364–374. https://doi.org/10.1037/0022-3514.71.2.364

Bargh, J. A., & Chartrand, T. L. (1999). The unbearable automaticity of being. *American Psychologist*, *54*(7), 462–479. https://doi.org/10.1037/0003-066X.54.7.462

Barnett, S. M., & Ceci, S. J. (2002). When and where do we apply what we learn?: A taxonomy for far transfer. *Psychological Bulletin*, *128*(4), 612–637. https://doi.org/10.1037/0033-2909.128.4.612

Beedie, C. J., & Foad, A. J. (2009). The Placebo Effect in Sports Performance: A Brief Review. *Sports Medicine*, *39*(4), 313–329. https://doi.org/10.2165/00007256-200939040-00004

Beilock, S. L., & Carr, T. H. (2001). On the fragility of skilled performance: What governs choking under pressure? *Journal of Experimental Psychology: General*, *130*(4), 701–725. https://doi.org/10.1037/0096-3445.130.4.701

Bohm, S., Mersmann, F., & Arampatzis, A. (2015). Human tendon adaptation in response to mechanical loading: a systematic review and meta-analysis of exercise intervention studies on healthy adults. *Sports Medicine - Open*, *1*(1), 7. https://doi.org/10.1186/s40798-015-0009-9

Brewer, J. A., Worhunsky, P. D., Gray, J. R., Tang, Y.-Y., Weber, J., & Kober, H. (2011). Meditation experience is associated with differences in default mode network activity and connectivity. *Proceedings of the National Academy of Sciences*, *108*(50), 20254–20259. https://doi.org/10.1073/pnas.1112029108

Butler, E. A., & Randall, A. K. (2013). Emotional Coregulation in Close Relationships. *Emotion Review*, *5*(2), 202–210. https://doi.org/10.1177/1754073912451630

Clemson, L., Fiatarone Singh, M. A., Bundy, A., Cumming, R. G., Manollaras, K., O'Loughlin, P., & Black, D. (2012). Integration of balance and strength training into daily life activity to reduce rate of falls in older people (the LiFE study): randomised parallel trial. *BMJ*, *345*(aug07 1), e4547–e4547. https://doi.org/10.1136/bmj.e4547

Coan, J. A., Schaefer, H. S., & Davidson, R. J. (2006). Lending a Hand: Social Regulation of the Neural Response to Threat. *Psychological Science*, *17*(12), 1032–1039. https://doi.org/10.1111/j.1467-9280.2006.01832.x

Colin, L., Nieuwenhuys, A., Visser, A., & Oudejans, R. R. D. (2014). Positive Effects of Imagery on Police Officers' Shooting Performance under Threat. *Applied Cognitive Psychology*, *28*(1), 115–121. https://doi.org/10.1002/acp.2972

Condon, P., Desbordes, G., Miller, W. B., & DeSteno, D. (2013). Meditation Increases Compassionate Responses to Suffering. *Psychological Science*, *24*(10), 2125–2127. https://doi.org/10.1177/0956797613485603

Correll, J., Park, B., Judd, C. M., & Wittenbrink, B. (2002). The police officer's dilemma: Using ethnicity to disambiguate potentially threatening individuals. *Journal of Personality and Social Psychology*, *83*(6), 1314–1329. https://doi.org/10.1037/0022-3514.83.6.1314

Dias-Ferreira, E., Sousa, J. C., Melo, I., Morgado, P., Mesquita, A. R., Cerqueira, J. J., ... Sousa, N. (2009). Chronic Stress Causes Frontostriatal Reorganization and Affects Decision-Making. *Science*, *325*(5940), 621–625. https://doi.org/10.1126/science.1171203

Dimberg, U., Thunberg, M., & Elmehed, K. (2000). Unconscious Facial Reactions to Emotional Facial Expressions. *Psychological Science*, *11*(1), 86–89. https://doi.org/10.1111/1467-9280.00221

Dolan, R. J., & Dayan, P. (2013). Goals and Habits in the Brain. *Neuron*, *80*(2), 312–325. https://doi.org/10.1016/j.neuron.2013.09.007

Dor-Ziderman, Y., Berkovich-Ohana, A., Glicksohn, J., & Goldstein, A. (2013). Mindfulness-induced selflessness: a MEG neurophenomenological study. *Frontiers in Human Neuroscience*, *7*. https://doi.org/10.3389/fnhum.2013.00582

Driskell, J. E., Copper, C., & Moran, A. (1994). Does mental practice enhance performance? *Journal of Applied Psychology*, *79*(4), 481–492. https://doi.org/10.1037/0021-9010.79.4.481

Engel, R. S., Corsaro, N., Isaza, G. T., & McManus, H. D. (2022). Assessing the impact of de-escalation training on police behavior: Reducing police use of force in the Louisville, KY Metro Police Department. *Criminology & Public Policy*, *21*(2), 199–233. https://doi.org/10.1111/1745-9133.12574

Engert, V., Plessow, F., Miller, R., Kirschbaum, C., & Singer, T. (2014). Cortisol increase in empathic stress is modulated by emotional closeness and observation modality. *Psychoneuroendocrinology*, *45*, 192–201. https://doi.org/10.1016/j.psyneuen.2014.04.005

Evans, J. S. B. T., & Stanovich, K. E. (2013). Dual-Process Theories of Higher Cognition: Advancing the Debate. *Perspectives on Psychological Science*, *8*(3), 223–241. https://doi.org/10.1177/1745691612460685

Feldman, R., Magori-Cohen, R., Galili, G., Singer, M., & Louzoun, Y. (2011). Mother and infant coordinate heart rhythms through episodes of interaction synchrony. *Infant Behavior and Development*, *34*(4), 569–577. https://doi.org/10.1016/j.infbeh.2011.06.008

Flash, T., & Hogan, N. (1985). The coordination of arm movements: an experimentally confirmed mathematical model. *The Journal of Neuroscience*, *5*(7), 1688–1703. https://doi.org/10.1523/JNEUROSCI.05-07-01688.1985

Gabbett, T. J. (2016). The training—injury prevention paradox: should athletes be training smarter and harder? *British Journal of Sports Medicine*, *50*(5), 273–280. https://doi.org/10.1136/bjsports-2015-095788

Gardner, B., Lally, P., & Wardle, J. (2012). Making health habitual: the psychology of 'habit-formation' and general practice. *British Journal of General Practice*, *62*(605), 664–666. https://doi.org/10.3399/bjgp12X659466

Gini, G., Pozzoli, T., & Hymel, S. (2014). Moral disengagement among children and youth: A meta-analytic review of links to aggressive behavior. *Aggressive Behavior*, *40*(1), 56–68. https://doi.org/10.1002/ab.21502

Grossman, P. (2023). Fundamental challenges and likely refutations of the five basic premises of the polyvagal theory. *Biological Psychology*, *180*, 108589. https://doi.org/10.1016/j.biopsycho.2023.108589

Grossman, P., & Taylor, E. W. (2007). Toward understanding respiratory sinus arrhythmia: Relations to cardiac vagal tone, evolution and biobehavioral functions. *Biological Psychology*, *74*(2), 263–285. https://doi.org/10.1016/j.biopsycho.2005.11.014

Gubbels, J., van der Stouwe, T., Spruit, A., & Stams, G. J. J. M. (2016). Martial arts participation and externalizing behavior in juveniles: A meta-analytic review. *Aggression and Violent Behavior*, *28*, 73–81. https://doi.org/10.1016/j.avb.2016.03.011

Guillot, A., & Collet, C. (2008). Construction of the Motor Imagery Integrative Model in Sport: a review and theoretical investigation of motor imagery use. *International Review of Sport and Exercise Psychology*, *1*(1), 31–44. https://doi.org/10.1080/17509840701823139

Haken, H., Kelso, J. A. S., & Bunz, H. (1985). A theoretical model of phase transitions in human hand movements. *Biological Cybernetics*, *51*(5), 347–356. https://doi.org/10.1007/BF00336922

Hardwick, R. M., Caspers, S., Eickhoff, S. B., & Swinnen, S. P. (2018). Neural correlates of action: Comparing meta-analyses of imagery, observation, and execution. *Neuroscience & Biobehavioral Reviews*, *94*, 31–44. https://doi.org/10.1016/j.neubiorev.2018.08.003

Harris, C. M., & Wolpert, D. M. (1998). Signal-dependent noise determines motor planning. *Nature*, *394*(6695), 780–784. https://doi.org/10.1038/29528

Harris, D. J., Vine, S. J., & Wilson, M. R. (2017). Neurocognitive mechanisms of the flow state. In *Progress in Brain Research* (pp. 221–243). Elsevier. https://doi.org/10.1016/bs.pbr.2017.06.012

Harwood, A., Lavidor, M., & Rassovsky, Y. (2017). Reducing aggression with martial arts: A meta-analysis of child and youth studies. *Aggression and Violent Behavior*, *34*, 96–101. https://doi.org/10.1016/j.avb.2017.03.001

Haslam, N. (2006). Dehumanization: An Integrative Review. *Personality and Social Psychology Review*, *10*(3), 252–264. https://doi.org/10.1207/s15327957pspr1003_4

Haslam, N., & Loughnan, S. (2014). Dehumanization and Infrahumanization. *Annual Review of Psychology*, *65*(1), 399–423. https://doi.org/10.1146/annurev-psych-010213-115045

Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1993). Emotional Contagion. *Current Directions in Psychological Science*, *2*(3), 96–100. https://doi.org/10.1111/1467-8721.ep10770953

Hopkins, W. G. (2000). Measures of Reliability in Sports Medicine and Science. *Sports Medicine*, *30*(1), 1–15. https://doi.org/10.2165/00007256-200030010-00001

Hove, M. J., & Risen, J. L. (2009). It's All in the Timing: Interpersonal Synchrony Increases Affiliation. *Social Cognition*, *27*(6), 949–960. https://doi.org/10.1521/soco.2009.27.6.949

Huh, D., & Sejnowski, T. J. (2015). Spectrum of power laws for curved hand movements. *Proceedings of the National Academy of Sciences*, *112*(29). https://doi.org/10.1073/pnas.1510208112

Jeannerod, M. (1994). The representing brain: Neural correlates of motor intention and imagery. *Behavioral and Brain Sciences*, *17*(2), 187–202. https://doi.org/10.1017/S0140525X00034026

Josipovic, Z. (2014). Neural correlates of nondual awareness in meditation. *Annals of the New York Academy of Sciences*, *1307*(1), 9–18. https://doi.org/10.1111/nyas.12261

Josipovic, Z., Dinstein, I., Weber, J., & Heeger, D. J. (2012). Influence of meditation on anti-correlated networks in the brain. *Frontiers in Human Neuroscience*, *5*. https://doi.org/10.3389/fnhum.2011.00183

Kal, E. C., van der Kamp, J., & Houdijk, H. (2013). External attentional focus enhances movement automatization: A comprehensive test of the constrained action hypothesis. *Human Movement Science*, *32*(4), 527–539. https://doi.org/10.1016/j.humov.2013.04.001

Keenan, J. P. (1989). Spontaneity in Western martial arts: A Yogācāra critique of mushin (no-mind). *Japanese Journal of Religious Studies*, *16*(4), 285–298. https://doi.org/10.18874/jjrs.16.4.1989.285-298

Keinan, G. (1987). Decision making under stress: Scanning of alternatives under controllable and uncontrollable threats. *Journal of Personality and Social Psychology*, *52*(3), 639–644. https://doi.org/10.1037/0022-3514.52.3.639

Killingsworth, M. A., & Gilbert, D. T. (2010). A Wandering Mind Is an Unhappy Mind. *Science*, *330*(6006), 932–932. https://doi.org/10.1126/science.1192439

Kirk, C., Hurst, H., & Atkins, S. (2015). Comparison of the Training Loads of Mixed Martial Arts Techniques in Isolated Training and Open Sparring. *Journal of Combat Sports and Martial Arts*, *6*(1), 15–20. https://doi.org/10.5604/20815735.1174226

Klimecki, O. M., Leiberg, S., Lamm, C., & Singer, T. (2013). Functional Neural Plasticity and Associated Changes in Positive Affect After Compassion Training. *Cerebral Cortex*, *23*(7), 1552–1561. https://doi.org/10.1093/cercor/bhs142

Klinger, D. A., & Brunson, R. K. (2009). Police officers' perceptual distortions during lethal force situations: Informing the reasonableness standard. Criminology & Public Policy, 8*(1), 117–140. https://doi.org/10.1111/j.1745-9133.2009.00537.x

Konvalinka, I., Xygalatas, D., Bulbulia, J., Schjødt, U., Jegindø, E.-M., Wallot, S., ... Roepstorff, A. (2011). Synchronized arousal between performers and related spectators in a fire-walking ritual. *Proceedings of the National Academy of Sciences*, *108*(20), 8514–8519. https://doi.org/10.1073/pnas.1016955108

Kozlowska, K., Walker, P., McLean, L., & Carrive, P. (2015). Fear and the Defense Cascade: Clinical Implications and Management. *Harvard Review of Psychiatry*, *23*(4), 263–287. https://doi.org/10.1097/HRP.0000000000000065

Krabben, K., Orth, D., & van der Kamp, J. (2019). Combat as an Interpersonal Synergy: An Ecological Dynamics Approach to Combat Sports. *Sports Medicine*, *49*(12), 1825–1836. https://doi.org/10.1007/s40279-019-01173-y

Kramer, A. D. I., Guillory, J. E., & Hancock, J. T. (2014). Experimental evidence of massive-scale emotional contagion through social networks. *Proceedings of the National Academy of Sciences*, *111*(24), 8788–8790. https://doi.org/10.1073/pnas.1320040111

Kreher, J. B., & Schwartz, J. B. (2012). Overtraining Syndrome: A Practical Guide. *Sports Health: A Multidisciplinary Approach*, *4*(2), 128–138. https://doi.org/10.1177/1941738111434406

Krein, K., & Ilundáin, J. (2014). Mushin and Flow. In *Philosophy and the Martial Arts* (pp. 139–164). Routledge. https://doi.org/10.4324/9781315780788-10

Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: How difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of Personality and Social Psychology*, *77*(6), 1121–1134. https://doi.org/10.1037/0022-3514.77.6.1121

Laborde, S., Mosley, E., & Thayer, J. F. (2017). Heart Rate Variability and Cardiac Vagal Tone in Psychophysiological Research – Recommendations for Experiment Planning, Data Analysis, and Data Reporting. *Frontiers in Psychology*, *08*. https://doi.org/10.3389/fpsyg.2017.00213

Lacquaniti, F., Terzuolo, C., & Viviani, P. (1983). The law relating the kinematic and figural aspects of drawing movements. *Acta Psychologica*, *54*(1-3), 115–130. https://doi.org/10.1016/0001-6918(83)90027-6

Ladda, A. M., Lebon, F., & Lotze, M. (2021). Using motor imagery practice for improving motor performance – A review. *Brain and Cognition*, *150*, 105705. https://doi.org/10.1016/j.bandc.2021.105705

Lakes, K. D., & Hoyt, W. T. (2004). Promoting self-regulation through school-based martial arts training. *Journal of Applied Developmental Psychology*, *25*(3), 283–302. https://doi.org/10.1016/j.appdev.2004.04.002

Lally, P., van Jaarsveld, C. H. M., Potts, H. W. W., & Wardle, J. (2010). How are habits formed: Modelling habit formation in the real world. *European Journal of Social Psychology*, *40*(6), 998–1009. https://doi.org/10.1002/ejsp.674

Lehrer, P. M., & Gevirtz, R. (2014). Heart rate variability biofeedback: how and why does it work? *Frontiers in Psychology*, *5*. https://doi.org/10.3389/fpsyg.2014.00756

Logan, G. D., & Cowan, W. B. (1984). On the ability to inhibit thought and action: A theory of an act of control. *Psychological Review*, *91*(3), 295–327. https://doi.org/10.1037/0033-295X.91.3.295

Magnusson, S. P., & Kjaer, M. (2019). The impact of loading, unloading, ageing and injury on the human tendon. *The Journal of Physiology*, *597*(5), 1283–1298. https://doi.org/10.1113/JP275450

Mann, D. T. Y., Williams, A. M., Ward, P., & Janelle, C. M. (2007). Perceptual-Cognitive Expertise in Sport: A Meta-Analysis. *Journal of Sport and Exercise Psychology*, *29*(4), 457–478. https://doi.org/10.1123/jsep.29.4.457

Marshall, R. N., & Elliott, B. C. (2000). Long-axis rotation: The missing link in proximal-to-distal segmental sequencing. *Journal of Sports Sciences*, *18*(4), 247–254. https://doi.org/10.1080/026404100364983

Masters, R. S. W. (1992). Knowledge, knerves and know-how: The role of explicit versus implicit knowledge in the breakdown of a complex motor skill under pressure. *British Journal of Psychology*, *83*(3), 343–358. https://doi.org/10.1111/j.2044-8295.1992.tb02446.x

McLean, K., Wolfe, S. E., Rojek, J., Alpert, G. P., & Smith, M. R. (2020). Police Officers as Warriors or Guardians: Empirical Reality or Intriguing Rhetoric? *Justice Quarterly*, *37*(6), 1096–1118. https://doi.org/10.1080/07418825.2018.1533031

Meeusen, R., Duclos, M., Foster, C., Fry, A., Gleeson, M., Nieman, D., ... Urhausen, A. (2013). Prevention, diagnosis and treatment of the overtraining syndrome: Joint consensus statement of the European College of Sport Science (ECSS) and the American College of Sports Medicine (ACSM). *European Journal of Sport Science*, *13*(1), 1–24. https://doi.org/10.1080/17461391.2012.730061

Mogan, R., Fischer, R., & Bulbulia, J. A. (2017). To be in synchrony or not? A meta-analysis of synchrony's effects on behavior, perception, cognition and affect. *Journal of Experimental Social Psychology*, *72*, 13–20. https://doi.org/10.1016/j.jesp.2017.03.009

Möller, A., Söndergaard, H. P., & Helström, L. (2017). Tonic immobility during sexual assault – a common reaction predicting post-traumatic stress disorder and severe depression. *Acta Obstetricia et Gynecologica Scandinavica*, *96*(8), 932–938. https://doi.org/10.1111/aogs.13174

Moors, A., & De Houwer, J. (2006). Automaticity: A Theoretical and Conceptual Analysis. *Psychological Bulletin*, *132*(2), 297–326. https://doi.org/10.1037/0033-2909.132.2.297

Morasso, P. (1981). Spatial control of arm movements. *Experimental Brain Research*, *42*(2). https://doi.org/10.1007/BF00236911

Morgan, C. A., Hazlett, G., Wang, S., Richardson, E. G., Schnurr, P., & Southwick, S. M. (2001). Symptoms of Dissociation in Humans Experiencing Acute, Uncontrollable Stress: A Prospective Investigation. *American Journal of Psychiatry*, *158*(8), 1239–1247. https://doi.org/10.1176/appi.ajp.158.8.1239

Nieuwenhuys, A., & Oudejans, R. R. D. (2011). Training with anxiety: short- and long-term effects on police officers' shooting behavior under pressure. *Cognitive Processing*, *12*(3), 277–288. https://doi.org/10.1007/s10339-011-0396-x

Nieuwenhuys, A., Caljouw, S. R., Leijsen, M. R., Schmeits, B. A. J., & Oudejans, R. R. D. (2009). Quantifying police officers' arrest and self-defence skills: Does performance decrease under pressure? *Ergonomics*, *52*(12), 1460–1468. https://doi.org/10.1080/00140130903287981

Nieuwenhuys, A., Savelsbergh, G. J. P., & Oudejans, R. R. D. (2012). Shoot or don't shoot? Why police officers are more inclined to shoot when they are anxious. *Emotion*, *12*(4), 827–833. https://doi.org/10.1037/a0025699

Nieuwenhuys, A., Savelsbergh, G. J. P., & Oudejans, R. R. D. (2015). Persistence of threat-induced errors in police officers' shooting decisions. *Applied Ergonomics*, *48*, 263–272. https://doi.org/10.1016/j.apergo.2014.12.006

Nour, M. M., Evans, L., Nutt, D., & Carhart-Harris, R. L. (2016). Ego-Dissolution and Psychedelics: Validation of the Ego-Dissolution Inventory (EDI). *Frontiers in Human Neuroscience*, *10*. https://doi.org/10.3389/fnhum.2016.00269

Oudejans, R. R. D. (2008). Reality-based practice under pressure improves handgun shooting performance of police officers. *Ergonomics*, *51*(3), 261–273. https://doi.org/10.1080/00140130701577435

Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Bulletin*, *129*(1), 52–73. https://doi.org/10.1037/0033-2909.129.1.52

Palumbo, R. V., Marraccini, M. E., Weyandt, L. L., Wilder-Smith, O., McGee, H. A., Liu, S., & Goodwin, M. S. (2017). Interpersonal Autonomic Physiology: A Systematic Review of the Literature. *Personality and Social Psychology Review*, *21*(2), 99–141. https://doi.org/10.1177/1088868316628405

Piff, P. K., Dietze, P., Feinberg, M., Stancato, D. M., & Keltner, D. (2015). Awe, the small self, and prosocial behavior. *Journal of Personality and Social Psychology*, *108*(6), 883–899. https://doi.org/10.1037/pspi0000018

Pilgrim, J. L., Gerostamoulos, D., & Drummer, O. H. (2014). "King hit" fatalities in Australia, 2000–2012: The role of alcohol and other drugs. *Drug and Alcohol Dependence*, *135*, 119–132. https://doi.org/10.1016/j.drugalcdep.2013.11.019

Pinder, R. A., Davids, K., Renshaw, I., & Araújo, D. (2011). Representative Learning Design and Functionality of Research and Practice in Sport. *Journal of Sport and Exercise Psychology*, *33*(1), 146–155. https://doi.org/10.1123/jsep.33.1.146

Porges, S. W. (2007). The polyvagal perspective. *Biological Psychology*, *74*(2), 116–143. https://doi.org/10.1016/j.biopsycho.2006.06.009

Putnam, C. A. (1993). Sequential motions of body segments in striking and throwing skills: Descriptions and explanations. *Journal of Biomechanics*, *26*, 125–135. https://doi.org/10.1016/0021-9290(93)90084-R

Rai, T. S., Valdesolo, P., & Graham, J. (2017). Dehumanization increases instrumental violence, but not moral violence. *Proceedings of the National Academy of Sciences*, *114*(32), 8511–8516. https://doi.org/10.1073/pnas.1705238114

Raichle, M. E., MacLeod, A. M., Snyder, A. Z., Powers, W. J., Gusnard, D. A., & Shulman, G. L. (2001). A default mode of brain function. *Proceedings of the National Academy of Sciences*, *98*(2), 676–682. https://doi.org/10.1073/pnas.98.2.676

Ranehill, E., Dreber, A., Johannesson, M., Leiberg, S., Sul, S., & Weber, R. A. (2015). Assessing the Robustness of Power Posing: No Effect on Hormones and Risk Tolerance in a Large Sample of

Men and Women. *Psychological Science*, *26*(5), 653–656. https://doi.org/10.1177/0956797614553946

Reber, A. S. (1967). Implicit learning of artificial grammars. *Journal of Verbal Learning and Verbal Behavior*, *6*(6), 855–863. https://doi.org/10.1016/S0022-5371(67)80149-X

Renden, P. G., Savelsbergh, G. J. P., & Oudejans, R. R. D. (2017). Effects of reflex-based self-defence training on police performance in simulated high-pressure arrest situations. *Ergonomics*, *60*(5), 669–679. https://doi.org/10.1080/00140139.2016.1205222

Roelofs, K. (2017). Freeze for action: neurobiological mechanisms in animal and human freezing. *Philosophical Transactions of the Royal Society B: Biological Sciences*, *372*(1718), 20160206. https://doi.org/10.1098/rstb.2016.0206

Sala, G., & Gobet, F. (2017). Does Far Transfer Exist? Negative Evidence From Chess, Music, and Working Memory Training. *Current Directions in Psychological Science*, *26*(6), 515–520. https://doi.org/10.1177/0963721417712760

Schwabe, L., & Wolf, O. T. (2009). Stress Prompts Habit Behavior in Humans. *The Journal of Neuroscience*, *29*(22), 7191–7198. https://doi.org/10.1523/jneurosci.0979-09.2009

Singer, T., & Klimecki, O. M. (2014). Empathy and compassion. *Current Biology*, *24*(18), R875–R878. https://doi.org/10.1016/j.cub.2014.06.054

Soligard, T., Schwellnus, M., Alonso, J.-M., Bahr, R., Clarsen, B., Dijkstra, H. P., ... Engebretsen, L. (2016). How much is too much? (Part 1) International Olympic Committee consensus statement on load in sport and risk of injury. *British Journal of Sports Medicine*, *50*(17), 1030–1041. https://doi.org/10.1136/bjsports-2016-096581

Swann, C., Keegan, R. J., Piggott, D., & Crust, L. (2012). A systematic review of the experience, occurrence, and controllability of flow states in elite sport. *Psychology of Sport and Exercise*, *13*(6), 807–819. https://doi.org/10.1016/j.psychsport.2012.05.006

Taylor, S. E., Klein, L. C., Lewis, B. P., Gruenewald, T. L., Gurung, R. A. R., & Updegraff, J. A. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review*, *107*(3), 411–429. https://doi.org/10.1037/0033-295X.107.3.411

Thayer, J. F., & Lane, R. D. (2000). A model of neurovisceral integration in emotion regulation and dysregulation. *Journal of Affective Disorders*, *61*(3), 201–216. https://doi.org/10.1016/S0165-0327(00)00338-4

Todorov, E., & Jordan, M. I. (2002). Optimal feedback control as a theory of motor coordination. *Nature Neuroscience*, *5*(11), 1226–1235. https://doi.org/10.1038/nn963

Toth, A. J., McNeill, E., Hayes, K., Moran, A. P., & Campbell, M. (2020). Does mental practice still enhance performance? A 24 Year follow-up and meta-analytic replication and extension. *Psychology of Sport and Exercise*, *48*, 101672. https://doi.org/10.1016/j.psychsport.2020.101672

Trulson, M. E. (1986). Martial Arts Training: A Novel "Cure" for Juvenile Delinquency. *Human Relations*, *39*(12), 1131–1140. https://doi.org/10.1177/001872678603901204

Tschacher, W., & Meier, D. (2020). Physiological synchrony in psychotherapy sessions. *Psychotherapy Research*, *30*(5), 558–573. https://doi.org/10.1080/10503307.2019.1612114

Verbruggen, F., & Logan, G. D. (2008). Response inhibition in the stop-signal paradigm. *Trends in Cognitive Sciences*, *12*(11), 418–424. https://doi.org/10.1016/j.tics.2008.07.005

Viviani, P., & Flash, T. (1995). Minimum-jerk, two-thirds power law, and isochrony: converging approaches to movement planning. *Journal of Experimental Psychology: Human Perception and Performance*, *21*(1), 32–53. https://doi.org/10.1037/0096-1523.21.1.32

Voigt, R., Camp, N. P., Prabhakaran, V., Hamilton, W. L., Hetey, R. C., Griffiths, C. M., ... Eberhardt, J. L. (2017). Language from police body camera footage shows racial disparities in officer respect. *Proceedings of the National Academy of Sciences*, *114*(25), 6521–6526. https://doi.org/10.1073/pnas.1702413114

Waters, S. F., West, T. V., & Mendes, W. B. (2014). Stress Contagion: Physiological Covariation Between Mothers and Infants. *Psychological Science*, *25*(4), 934–942. https://doi.org/10.1177/0956797613518352

Weng, H. Y., Fox, A. S., Shackman, A. J., Stodola, D. E., Caldwell, J. Z. K., Olson, M. C., ... Davidson, R. J. (2013). Compassion Training Alters Altruism and Neural Responses to Suffering. *Psychological Science*, *24*(7), 1171–1180. https://doi.org/10.1177/0956797612469537

Wiltermuth, S. S., & Heath, C. (2009). Synchrony and Cooperation. *Psychological Science*, *20*(1), 1–5. https://doi.org/10.1111/j.1467-9280.2008.02253.x

Wood, W., & Rünger, D. (2016). Psychology of Habit. *Annual Review of Psychology*, *67*(1), 289–314. https://doi.org/10.1146/annurev-psych-122414-033417

Wulf, G. (2013). Attentional focus and motor learning: a review of 15 years. *International Review of Sport and Exercise Psychology*, *6*(1), 77–104. https://doi.org/10.1080/1750984X.2012.723728

Yaden, D. B., Haidt, J., Hood, R. W., Vago, D. R., & Newberg, A. B. (2017). The Varieties of Self-Transcendent Experience. *Review of General Psychology*, *21*(2), 143–160. https://doi.org/10.1037/gpr0000102

Yue, G., & Cole, K. J. (1992). Strength increases from the motor program: comparison of training with maximal voluntary and imagined muscle contractions. *Journal of Neurophysiology*, *67*(5), 1114–1123. https://doi.org/10.1152/jn.1992.67.5.1114

Zaccaro, A., Piarulli, A., Laurino, M., Garbella, E., Menicucci, D., Neri, B., & Gemignani, A. (2018). How Breath-Control Can Change Your Life: A Systematic Review on Psycho-Physiological Correlates of Slow Breathing. *Frontiers in Human Neuroscience*, *12*, 353. https://doi.org/10.3389/fnhum.2018.00353

About This Book

Title. *Shape and Choice: Everyday Geometry, Calm Presence, and the Science of a Choosing Mind.* Book 3 of the Companions to the System of Inevitability.

Compiled by Cory Matthew Snell. **System originated by** Uki (@ukigigi). First edition, November 2026.

Also in this series. Book 1: *Walking and Turning: Iron, Spirals, and the Science of a Practicing Mind*, on the iron balls, the ring bar, and the brain science of juggling and skill. Book 2: *Wave and Return: The Bent Fist, the Figure-Eight, and the Science of a Restrained Hand*, on the system's striking: the bent (J) fist, whole-body wave energy, figure-eight motion, breath, safe progression, testing, and the ethics of restraint. Book 4: *Lens and Lattice: Altered Perception, the Internal Arts, and the Science of a Curious Practice*, a harm-reduction companion on practising the internal arts with curiosity in altered states, responsibly, and on the science of psilocybin, perception, touch, pattern finding, and integration. Book 5: *Nucleus and Orbit: Atoms, Necessity, and the Science of an Interwoven Practice*, on the system's atomism, its 3-6-9 architecture, and its quantum language set beside the real science of atoms, necessity, chaos, the fractal body, and interdependence, tying the series together. The series continues.

Independence. This is an independent, unofficial work. It has not been reviewed or endorsed by Uki. Descriptions of the System of Inevitability are based on a project document, compiled in November 2026, that consolidates an extended conversation about the system's origin, training, philosophy, and dangers. All practices, drills, tests, stop rules, and ethical guidance in this book are the compiler's, drawn from general psychology, motor-learning, exercise, and violence-prevention science.

Method. Every peer-reviewed study cited was checked against its Crossref record (authors, year, title, journal, volume, pages, DOI), and the specific findings reported were checked against the published abstracts. Where no abstract was available, the study is cited only for what its title and record establish, and no numbers are given. Numbers are reported as the original authors reported them. Where a claim is untested, the text says so. No quotations have been invented; quotations from the source materials are reproduced as written.

Illustrations. The nine plates are original geometric studies created for this book, loosely inspired by the themes of the system's black-and-white card designs; they are not reproductions of those designs. All diagrams are original schematics. Diagrams marked illustrative show shapes, not data. No figure depicts any real person.

Typography. Set in EB Garamond and Cormorant Garamond, with Inter for labels.

License. Creative Commons Attribution–NonCommercial–ShareAlike 4.0 International (CC BY-NC-SA 4.0). https://creativecommons.org/licenses/by-nc-sa/4.0/

Suggested citation. Snell, C. M. (Comp.). (2026). *Shape and choice: Everyday geometry, calm presence, and the science of a choosing mind* (Companions to the System of Inevitability, Book 3; 1st ed.). Free edition, CC BY-NC-SA 4.0.

Not advice. Nothing in this book is medical, psychological, or legal advice. Laws on self-defence and the use of force differ between countries and states.

Corrections. Science moves. If you find an error, or a new study that bears on anything here, please share it, and share a corrected copy under the same license.