

On the Principles of Aikido

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You can't learn much about aikido just by reading. Many hours of practice and experiment are needed before the ideas presented here will have much meaning. On the other hand, almost from the outset, it may be helpful to have certain concepts in mind as you practice. Accordingly, what I attempt in this paper is to pull together some basic ideas and principles of this art to orient beginners during their first few years of training. I don't attempt to explain specific aikido techniques; such descriptions are readily available elsewhere, and must be learned from an instructor and practice partners in any case. Rather, I will try to explain some ideas and principles behind the art – ideas that make aikido techniques effective, and that make the style what it is. They also happen to be the ideas and principles that make aikido truly meaningful and useful today, because they can be applied off the mat, in ordinary life situations where hand-to-hand combat is not a serious possibility.

It scarcely needs saying that what follows is just one practitioner's view. Though I have practised, taught and thought about aikido for 35 years, I would scarcely claim to understand its principles fully, still less to apply them perfectly in the instant of an attack, whether physical or verbal. Therefore, what I write will be, in part, a display of ignorance, whatever else it is. My excuse, if it is one, is that to-date, I have not found a comparable treatment of these basics in a bookstore or on the Web. If the piece clarifies my understanding, helps students more than it confuses them, and irritates someone more competent into doing a better job, it will have served its purpose.

The paper is not intended for complete beginners, who are likely to find it overwhelming, but primarily for students who have had a year or so of training. Students at this stage will have learned to survive on a tatami, and will know (more or less) where their hands and feet go in executing basic techniques. However, they will still be inclined to think of aikido in just that way – as so many techniques. They have little awareness as yet of the unity of the art, nor of the factors that make the difference between a well and a poorly executed technique, nor of the need to transcend technique altogether. In short, they will

not have had more than a glimpse of what aikido has to teach. My intention, therefore, is to offer my own understanding of the art's theory in a more compact and coherent way than would be possible on the mat. Please be patient with yourself (and with your instructor) if many of these ideas go over your head on a first reading. I did not get them all at once like this, and neither did anyone else. To use this paper to best advantage, I'd suggest you read it through, taking what you can from it, and comparing what is said here with what you have heard from your instructor. Then use it for reference, or re-read it from time to time, when you feel need to do so. Discuss any issues that occur to you with your instructor and/or a senior student.

At the minimum, what I hope to convey is a sense of how rich the art is, and how it is possible to spend a lifetime in it without learning all there is to know about it, nor exhausting its fascination. The practice of aikido is as deep, challenging and frustrating as any art I know of. Here's why.

The first thing to say is that aikido is a *Japanese* martial art. This is to say much more than that it originated in Japan. Rather, the student should be aware that aikido is deeply rooted in ancient Japanese culture and traditions, and that it deliberately and systematically encodes the ideals and thought patterns of that tradition for transmission to modern people. Thus, for Westerners to practice aikido is, among other things, to be exposed to a great and rather alien culture, indeed to a culture that exists no more, even in modern Japan. Accordingly, not the least of what the art has to offer is precisely, the culture-shock involved. Practising aikido, for however many years, will never turn you into a samurai; but it will make you see your own culture differently – as just one way that human beings can live, not as the only natural and proper way. Aikido is certainly not unique in this respect but, unlike many other things you might do with your spare time, it will offer serious challenge to stuff you learned as a child about how to be an acceptable person.

The second point, perhaps a paradoxical one, is that although aikido is a martial art and a very effective one, it is not about learning how to fight. Rather, one could say, it is about how **not** to fight – how to confront and deal with aggression and violence without oneself becoming violent or aggressive. As we'll see below, a large part of what gives this style its interest is its rejection of violence and competition as paradigms of conflict. Rather we start from the idea that the differing of interests and volitions is a necessary and even **positive** aspect of human life – necessary because inescapable, and potentially positive because conflict, for all the appalling waste and suffering it may cause, is a spur to effort, and creative novelty. Nature is notoriously indifferent to waste and suffering. It is a human problem, however, to keep the costs of conflict to a minimum and to resolve its issues as bloodlessly as possible.

In this context, it should be remembered that the Japanese samurai, like the knights of medieval Europe, were much more than professional fighting men – but land-holders, local authorities, and courtiers, as well. For these men, competently applied violence was a necessary instrument of government, as is still the case today. But the problem was and remains to wield power as creatively as possible, and to minimize its cruel, destructive aspect: to keep the peace and protect the productive economy. What we can understand, then, is that the ultimate martial art is not about winning and losing fights but, most fundamentally, about meeting and dealing creatively with volitions in conflict with your own. This was the gist (insofar as I would claim to understand it) of O-sensei's experience of enlightenment. In his own words: "*True budo is protective love for all living beings in a spirit of reconciliation. Reconciliation means allowing everyone to carry out and complete his own mission.*"

1 Philosophical Background

The name of the art does not translate precisely into English. It is comprised of three Japanese words *ai*, *ki* and *do*, none of which has an exact English equivalent because each has deep roots in Japanese and oriental thought. To understand where aikido comes from, what its name means, and what it is about, one needs to know something of the traditions of thought behind it.

Do (identical to the Chinese *Tao*) means roughly a path or way or method. The word has profound philosophical connotations, however. In the ancient thought of Lao Tzu and Chuang Tzu, the *Tao* is the Way of Nature – the way things naturally are. Where Lao Tzu speaks of *zi-ran* – the self-so – we think of ecology and the theory of open, self-organizing systems. Where Lao Tzu praises *wu-wei* (doing nothing), we would speak of being efficient and effective – getting the job done with minimal effort. The meaning of *do* in aikido is “to carve reality at the joints” (so to speak), obtaining “maximum effectiveness with minimum effort.” In every movement, every situation, you try to avoid direct opposition to the opponent's force, but rather to accept his force, merely adding the vector of your own intention and movement, so as to re-direct his power to your advantage.

In aikido's central concept of *ki*, our Western physics, physiology and psychology come together – or rather, have not yet been separated out. In the ancient vitalist conception, *ki* is an amalgam of numerous modern notions: force, energy and momentum, breath and life, intention, attention, volition, mind and charisma. The English word *spirit* comes closest in meaning, especially if we remember that this word also means “ghost,” and is cognate with “respiration” which means “breathing.” Quite simply, *ki* is the Japanese word for an ethereal substance that makes the difference between a living thing and

an inanimate or dead one. More below on the uses of this little word.

The first term, *ai*, means something like unity or harmony. Its written character suggests a household or family dwelling together under a single roof. With a dash of optimism, one imagines that they are dwelling harmoniously, reconciling differences as they arise. Thus, the name *aikido* means something like, “a method for practising how to dwell in harmony with the Way of Nature, and with the flow of (possibly divergent) intentions around you.” More simply, the name can be translated “the way of unified spirit,” or even as “the art of getting things together.” Its core idea is the reconciliation of divergent volitions into a coherent whole.

The role of vitalism and Taoism in aikido will be apparent throughout this paper. The whole practice is about handling the opponent without making a struggle of it – with as little effort as possible. The central technical concept, one could say, is to have the *Tao* – Nature’s Way – as an ally. This involves a unifying or harmonizing of *ki* – intention, breath, movement, and life itself – on three levels: To begin with, the *aikidoka* learns to use his own body as a unified whole. Instead of brute force, he uses perfect coordination to make his techniques work. Also, he learns to synchronize the movements of his own body with the movements and intentions of his opponent. Third, he seeks to work in accordance with “the *ki* of the universe” – with what Western people would call “the will of God” or “the laws of nature.” One need not get terribly mystical about all this. It turns out that the ancient vitalist language of *ki* is a convenient way of thinking; a good way to conceptualize the vectors of intention, and the flow and power of movements.

Aikido’s debt to Zen must be deferred to Section 5 on “no-mind” (*mu shin*). What should be said here is that although aikido is not a religion as Westerners understand the concept, yet it is – or has the potential to be – a profound spiritual practice, with close affinities to formal Zen practice. The student is not asked to believe anything at all; yet the art itself nudges unmistakably in a direction that can be considered “spiritual” if one likes to think it so, or otherwise, just plain clear-headed and centred. In origin, Zen is a sect of Buddhism emphasizing presence, clarity and spontaneous responsiveness through a practice based on unfocussed meditation. It became influential amongst the warrior caste of Japan who, for obvious reasons, needed and responded to the values it put at point.

During the ‘sixties and after, Zen and its related arts (including aikido) gained a significant following in the Western world. The same cannot be said of Shinto which, for the most part, remains opaque to Western sensibilities. However, three objects that it takes as sacred – the sword, the mirror and the *magatama* – a jewel cut to suggest a spiral – are also part of aikido’s philosophical background, and may still hold meaning for its practitioners today.

For warriors everywhere, the sword was a symbol of honour, duty and status. But in Shinto it is something more than that. I once asked Nakazono sensei why we bow to the *bokken*¹ before we begin to practice with it. He replied, “*Bow to sword because sword is symbol of intellectual judgment. To say the word ‘head’ is to separate head from body. That is function of sword.*” In other words, the sword can be taken to represent the mind’s wonderful faculty of distinction and categorization. In Shinto, it plays a role like that of the *Logos* or “Creative Word” in Greek and Western thought. “Out of nothing came one; out of one came two; out of two came the ten thousand things.” In aikido, as we’ll see later, your own spine is thought of as a kind of “sword” that divides the world before you into a left side and a right, arcing back and then forward to generate power. Later on, picking up a *bokken*, you discover that the weapon must be used as an extension of the spine, and that chopping downward with the shoulders spoils the cut.

The spiral, represented in Shinto by the *magatama* jewel, is the general pattern of growth and natural movement. It is the pattern that results when any cyclic process – of feedback, metabolism, physical rotation, or whatever – produces some cumulative result. For example, the spiral is a general pattern in all learning: One practices something over and over, and gets progressively better at it. Or one lives with a question day after day, studying it by whatever method, and gains a deepening understanding of its complexities. Often the completion of one cycle is just a tick in some larger cycle. The days and years go by, and one lives one’s life. It turns out that most aikido movements have a spiral shape. The beginner cannot yet see this shape, but thinks only of where to put his feet and how move his arms. Gradually, he learns to think in terms of lines, then circles, then spheres, then spirals – then finally in terms of a spiral coiled up so tightly that it lies inside his own centre. As difficult as it is to reach this level, aikido becomes very simple once you are there. There is no longer need to think about the hands and feet; there is no need to think at all. Automatically, from the beginning of an opponent’s movement, you extrapolate and join to its continuation – just as you would run under a ball to catch it, intuitively judging the end of the trajectory from its beginning.

The mirror is a symbol of Mind – more specifically, of the relationship between a given mind and its world. In aikido, it is also suggestive of the relationship between practice partners, as we’ll discuss later. More generally, the mirror can be seen as a symbol for any sort of relationship, whether symmetrical or complementary, and for the idea of relationship as such. In relationship, after all, the related entities respond and come to “reflect” one

¹ A wooden practice sword meant to simulate the two-handed, razor-edged weapon used by Japanese samurai.

another as a mirror reflects what is placed before it. In relationship, two or more separate things become one new thing: a single system.

As a principle, then, the mirror is just the opposite of the sword – its reflection, in fact. Where the sword distinguishes and divides, the mirror connects and unites. The “ten thousand things” all make a single world, a single cosmos whose dynamic principle is the cyclic interplay of centripetal and centrifugal forces – of *Yin* and *Yang*, as the Taoists called them – generating an endless evolutionary spiral. The world as One, and the world as Many are just two seemingly opposite ways of saying the same thing.

These ideas, though ancient and framed poetically, are by no means primitive. Modern science, speaking a different language, is far more powerful in some respects, but does not contradict them at all, so far as I can tell. For certain purposes, they remain the language of choice, more or less present in the background to each aikido technique and to the system as a whole – and more or less emphasized by your instructor, depending on his own taste and temperament and on the interest of his students. Some instructors talk a lot about the principles of aikido. Others talk very little, leaving students to find the principles in their reading or intuit them on their own. They are especially suggestive, I would say, for students who wish to take their aikido off the mat, into their daily lives. The crucial point here is that our practice can be seen as a metaphor for life and for the ordered Cosmos as a whole – and that it was so seen by its founder: All life is movement. All life has an underlying harmony (an ecology, we’d now say), experienced by living creatures as universal conflict. All life is an open self-organizing system, dynamically balanced on the edge of chaos.

What must be said here is that to attempt to unpack aikido as metaphor is to follow O-sensei beyond his technical insights, toward his intellectual and spiritual ones. There is no necessity to do this. Certainly, there is no demand to swallow a whole belief system on faith. Rather the opposite: The aikido student must learn to feel for himself the difference between a good movement and a poor one; and must then find language, as best he can when, in his turn, he tries to teach. The ideas introduced here are suggestions only.

2 Concepts of Movement

Aikido movement is smoother, more relaxed and more elegant than combat has any right to be, and our practice may easily look like dance to a spectator who does not understand what he is seeing. But it is not a dance – or if it is, it’s a potentially lethal one. The attacks should be as real as you and your partner can handle, remembering that the speed of your fall will match the speed of your attack. After all, your purpose in practice is to learn and to help your partner learn – and to avoid getting hurt. Within these limits, you should attack

with sincerity, and fall because you have to, or because it is your best escape from a dangerous situation.

In aikido there is no sparring, as in boxing or karate; and there is no grappling as in judo. In aikido practice there is no actual contention even, because no antagonism – no symmetry of opposing intentions – is allowed to form. Rather, there are two roles – one person (called *uke*) who attacks, and another (called *nage*) who defends himself. *Uke* wants a fight (presumably) because he doesn't like the situation as it is. *Nage* would prefer to avoid a fight, if possible. And for reasons that we'll consider later, *uke*, the man who attacks, is at a theoretical disadvantage in such an encounter. With "best play on both sides," *uke* should not succeed. Basic aikido practice explores this fundamental asymmetry; and we can therefore see that aikido differs from most other styles in its central paradigm. It specifically rejects the notion of combat as a contest, to see who is stronger or shrewder. It hopes to resolve conflict without injury to either party. It sees violence as a disruption of peace, to be contained and cleaned up as economically as possible. This ethical intention and rejection of any sportive dimension to combat are what give the style its character.

In normal aikido practice, *uke* attacks, gets thrown, and rolls out, if he can, so that he can attack again. *Nage* skilfully avoids the attack, but in such a way as to keep control of the situation and to leave *uke* off balance and vulnerable. After the initial contact, a movement develops to its logical conclusion, with *uke* and *nage* following each other until someone (usually *uke*) gets thrown or pinned. There are variations on this basic pattern, as we'll see, but we can ignore them for the time being. What we have are two bodies moving in relation to one another, which become a single system when they come together, and then evolve as such until a resolution is found. In fact, *nage* should put all thoughts of throwing *uke* out of his head, and move intuitively to sustain and augment his initial advantage. When the movement is ripe, *uke* will fall by himself, and attempts to force the throw will only ruin it. At best, *nage* will find himself doing more work than necessary, in violation of Taoist minimalism and the style's aesthetic. At worst, *nage* will find himself becoming the *uke* of the situation, and flying through the air from a well-performed counter-technique. In time, the practice partners come to understand that an aikido technique is not something that one person does to another. Rather, it is just one possibility that might occur when one person invades another person's space.

A funny sign we used to see captures the idea perfectly. "I'd like to help you out. Which way did you come in?" The spirit of aikido movements is to help the intruder out of your personal space and discourage him from trying again. To do this without unnecessary force, one has to respect the line of his

momentum and intention – precisely, that is, to observe how he is coming in, since it is a matter of basic physics that altering the momentum of any physical object requires force, and the art of the thing is to use as little force as possible. Always the trick is to add your own component to the existing movement so as to steer it to your advantage; never to allow a direct collision, to oppose force directly. And the addition of your vector should always be done as smoothly as possible, to avoid warning your opponent that his situation is changing, that his intentions are being subverted, and that his balance is going. . . going. . . gone. If all this can be done, *uke* will find himself falling before he knows what has gone wrong, and the movement as a whole will have a flowing, rhythmic quality that is both very gentle and very powerful.

Several points in the last paragraph should be expanded . To begin with, there is the problem of respecting the opponent's intention without allowing collision. Where many other styles work in combinations of block-and-counterattack, aikido prefers a method known generically as “body displacement,” or *tai sabaki* to use the Japanese term. The idea is to get out of the way of the attack without disturbing it, but in such a way as to leave the attacker off balance, under your control, and well set up for the continuation that will send him flying, or dispose of his aggression in some other way. There are several basic footwork patterns for doing this, all designed to accomplish these two things.

These need not be described here since, in any case, they must be learned from an instructor. But it is worth explaining that the *tai sabaki*, and techniques that follow from them, fall into two groups, because the motion of any physical body has two components – a rotation around some axis, and a displacement of the centre of mass. Accordingly, the patterns of *tai sabaki* are of two basic kinds: There are the so-called positive or *omote* movements whereby a linear displacement of your body causes the opponent's body to turn and go off balance. There are also the negative or *ura* movements whereby a pivoting, rotary movement of your body induces your opponent's body to run around your body, also more and more off balance. It turns out that almost every aikido technique exists in both a positive and negative version.

The technique called *ikkyo*, for example, makes an excellent defence against a punch to the head. The spiral motion of *uke*'s arm, with the fist shooting out and turning palm downward, is picked up and amplified so that his whole upper body follows. *Uke* then finds himself bent at the waist, hopelessly off balance and falling down, mostly because of gravity but under your encouragement and control. The initial *tai sabaki*, however, has two forms so different from one another that beginners cannot easily see how what follows could be the same technique: In *ikkyo*'s positive version, you enter in a straight diagonal across *uke*'s punch and toward his inside, thus turning him back in the

direction he was coming from. In negative *ikkyo*, by contrast, you spin behind *uke*, **outside** the line of his attack, allowing him to continue moving forward but destroying his balance all the same. Positive and negative *ikkyo* lock up *uke*'s shoulder in the same way, so that all slack is taken up, and the movement of your body is directly communicated to his; that is why they are considered the same technique. But the way of making power and the movement communicated are entirely different: In the positive version, there is a simple translation of your centre of mass, and *uke* is turned by the linear momentum of your entry across his line. In the negative version, your body rotates tangent to his line of attack, and it is your angular momentum that he acquires. The use of the body, and the relationship established are not the same at all.

Another point made earlier – that the transfer of forces should be as smooth as possible – is also worth developing: What this means, in particular, is that aikido movements should have no cusps and no direct collisions. In the mathematician's language, they are always differentiable curves, having a well-defined tangent. You never meet your opponent's force directly. You never force an abrupt change of direction. You try to steer your opponent – to smoothly re-direct his movements and suggest directions to his mind, not to cause things to happen to him. You want to allow him to be the cause of his own downfall; you want to avoid taking this responsibility away from him.

It will help the beginner to imagine aikido as much like driving on an icy road, where any abrupt turn of the wheel, sudden acceleration or hard braking, would throw the car into a skid – possibly with fatal results. In aikido, the result of an abrupt move is just such loss of control. As in driving, everything must be done gently and gradually; with *uke*'s current intention and momentum respected at all times. This, of course, is not at all what the novice is expecting to hear. People come to martial arts to become fast and strong and tough, not to be told to be more gentle! So it comes as something of a shock when your instructor asks you to be softer and more sensitive, and tells you that the speed and power will come by themselves as by-products of refined technique. It is true nonetheless, and for the same reason that the most powerful cars must be driven delicately. That reason is Newton's First Law of Motion: "A body in motion tends to remain in motion at the same speed in the same direction; a body at rest tends to remain at rest." It takes a force (given by the Second Law, $F = ma$) to produce a change in velocity. But it is just the point of this art to use as little force as possible.

Other features of aikido movement can be seen to manifest the Shinto emblems of sword, mirror and spiral. The sword motif is seen in the anatomical necessity to transfer power through the spine (as will be discussed further below), and in the corresponding need to work on the centre line and keep control of it. It can be seen in the shomen attack, in certain techniques (e.g.

shiho nage, *sankkyo* and *yonkkyo*) and in *tegatana* – literally, “hand-sword” – the use of the hand as a blade.

The principle of the mirror is manifest in the relationship that *nage* establishes and maintains with *uke*, as will be discussed in Section 4 below.

The principle of the spiral is everywhere – most easily seen in the twist of a punch (the *tsuki* attack), and in techniques like *nikkyo*, *sankkyo*, *kote gaeshi* and (writ large) in all those techniques like negative *ikkyo* where *uke* spirals to the ground around *nage*'s centre. In every case, the spiral develops from a combination of thrust and torque – a linear force and a twisting force. The Japanese terms for these forces are *tate* and *yoko* – which make an interesting metaphor, as these are also the Japanese weaving terms for the warp and woof threads respectively. One way to analyse an aikido movement is to consider the distribution of these two forces and how they are applied. For example, in the *sankkyo* control, the *tate* force, up through *uke*'s forearm, is applied by the extensor muscles of *nage*'s legs, while the *yoko* force, twisting the wrist comes from the turn of the hips. By contrast, in *kote gaeshi*, the *tate* force out through *uke*'s arm comes from the turn of *nage*'s hips, while the *yoko* is a combined effect of *uke*'s momentum and *nage*'s weight, focussed through *uke*'s locked wrist.

Finally, it is worth emphasizing that much of the effortlessness of aikido movement is a matter of precise timing (*de-ai*) and rhythm. If the timing is accurate, power is transferred smoothly, like two precisely timed waves that reinforce each other without interference. When the timing is off, the effect is more like waves timed to different frequencies that produce turbulence when they cross.

A simple analogue for the use of rhythm in aikido might be pushing a child on a swing. You will find that a push at just the right moment, even with your little finger, adds its quantum of energy to the system and makes the swing go higher. A push too late adds nothing. A push too soon may get your finger broken. An attacker's movements are not nearly as predictable as a child on a swing, but they do have a certain rhythm that can be caught and used. One reason *uke* is at a theoretical disadvantage is that he must give his intentions and his rhythm away, to a *nage* sensitive enough to catch them. When you catch the rhythm, a minimum force at just the right instant is enough to throw an opponent much larger and more powerful than yourself.

3 Use of the Body

The movements of aikido need only minimal force, but that minimum still needs to be generated somehow. On one level, therefore, aikido is simply about learning to use your body in the most efficient way. In this respect, its basic principles are common to many arts and styles, though each will make its trade-

offs differently, depending on what it wants the human body to do. Human anatomy and physiology are the same for all of these, as are the laws of mechanics. Only the specific tasks to be accomplished will vary from style to another.

Correct use of the body is too subtle for verbal explanation. In any case, understanding of how to move is not the same thing as skill, which must be learned from a competent teacher, with a lot of trial-and-error. Accordingly, what I'll try to cover here is just the rationale behind aikido's use of the body. Practice is more interesting and you will learn faster if you understand what you are working toward, and why your instructor is so demanding about so many details. It turns out that the speed and power of your movements depend almost completely on their precision and accuracy. Paradoxically, therefore, to develop speed and power, you must begin by slowing down and practising very gently – giving yourself the chance to feel the difference, in exquisite detail, between a good movement and a poor one.

Stance, Mobility and Power

You will find yourself working on basic footwork for the next 30 years, and still feel that there is room for improvement.

A dilemma common to all martial arts is the trade-off between mobility and power. The feet and legs anchor the body on the earth and enable us to move around. In any style, the patterns of stance and footwork must be chosen to attain the best combination of stability and speed as needed. For two-legged creatures like ourselves, these values compete heavily: A wider stance is slower but much stronger and more stable; a narrow stance is swifter but weaker. In aikido, the feet are usually positioned just slightly more than shoulder width apart in the 'T' position called *hanmi*. Ideally, they never fully leave the ground, but glide along the mat as the weight shifts and the hips turn. An attack is received, or power is transmitted for an atemi or a throw, along the axis of the two feet. This is a consequence of Newton's Third Law: With every force, there will be equal force in the opposite direction; at the instant of transmission, the forces must be grounded if your techniques are to have any power. When you push on someone, or when someone pushes on you, the force must be transferred through the arm and shoulder, down through the spine to the pelvis and thence through the back leg and foot into the ground. If the feet are too close together, or if the body's alignment is wrong, then your push will be weak and your balance will be broken.

On the other hand, if your stance is too wide and low, it will be very solid, but also static. For aikido you have to be able to move and change direction instantly, and the *hanmi* stance is designed to let you do this. By turning your hips, and pivoting on the balls of the feet – first the front foot and

then the back – it is easy to turn 180° without lifting your feet off the ground. This must be practised carefully, however. If your heels remain planted, or if the timing is wrong, it is easy to strain the knee joint. If your feet are not properly aligned your legs will get tangled after the turn. If your posture is poor, the movement will be slow, and you may throw yourself off balance.

The *hanmi* stance takes some getting used to. When the feet are planted in correct position, it feels most natural to hold your body turned sideways. Some styles, notably Western fencing, actually use a kind of *hanmi* (called by another name, of course), but with the hips turned sideways so as to be ready to lunge, and to minimize the target offered. In aikido, by contrast, the hips and body are turned forward, as if to use a two-handed sword. If your feet are lined up toward *uke*, the centre line of your body is covering him, and you could cut him down with a *shomen* strike – if you had a sword. As well, in this stance, with the front of your body facing him, you offer *uke* a deceptively tempting target. You may look rather exposed. In reality, you can deflect a punch just by turning your hips a little, and the same movement is the beginning of a *tenkan* that will take you outside the line of attack. Or you can step to the inside, sweeping the punch the other way with an *irimi* or a back *tenkan*. You will learn these patterns from your instructor. The point is that from a good *hanmi* you have a choice of several efficient escaping movements, and are a whole lot less vulnerable than you appear to be.

The aikido way of walking is different from what you are used to. In a normal walk, the right arm comes forward with the left leg and the left arm with the right leg, counter-balancing each stride on the body's opposite side. On the mat, arm and leg on each side of the body move together – first one whole side of the body, then the other. This method of walking allows the feet to glide along without ever leaving the ground. It also allows each arm and shoulder to come forward with the body's momentum behind it – as in the *tsuki* attack, or in techniques like *sumi otoshi* or *irimi nage*. Finally, it allows the rapid pivoting motion of *tenkan*, that brings the body around to face in the opposite direction. You can try doing *tenkan* while walking normally, to see how clumsy this would be.

Mechanical Power and Breath Power

When most people think of being strong, they think primarily of upper body strength – strength in the arms and shoulders and back. To learn aikido, you have to get over this idea. Not that upper body strength is a bad thing. The problem is that beginners who have it tend to rely on it, which gets in the way of learning about other kinds of power. In aikido, the arms and hands are never used to generate force, but only to transmit forces generated by body movement (*tai sabaki*), by gravity, and also with “breath” – the powerful

respiratory muscles of the chest and belly. The arms are also used as sense organs, to feel what the opponent is doing, so as to adjust your own position with his movement. Attempting to exert power with the arms and shoulders interferes with both these uses. Since all of us have been trained from childhood to sit still and manipulate objects with our hands – pushing or pulling them in relation to our stationary bodies – the habit of making power with the arm muscles is hard to break. Yet so long as the student tries to make the techniques work by pushing and pulling *uke* around, he will never learn to use his body to full advantage.

The most efficient way to generate mechanical power is to recruit gravity as an ally. When *uke* is sufficiently off balance, he falls down of his own weight. When you connect yourself to him so that he bears your weight at an impossible angle, he goes off balance and falls down. You can also lead an *uke* off balance by inviting him to over-reach himself, to follow his own momentum and intention beyond what he intended.

In connection with gravity, and the breaking of balance, the so-called “dead point” should be mentioned. If you think of *uke*’s feet as the base of a triangle, the dead point is the vertex of the equilateral triangle extending behind him from that base. Quite a few techniques – notably *sumi otoshi*, *ten chi nage*, and some forms of *irimi nage* – begin by breaking *uke*’s balance into the dead point of his stance. Most techniques leading to a back fall end by dropping him into that point.

Among its many other uses, the human head can be manipulated to break its owner’s balance. There are various ways of doing this: In a technique like *irimi nage*, the head can be pushed forward by the hand on *uke*’s neck, threatening to send him into a forward roll, or actually doing so. Alternatively, the head can be turned to one side and tipped back, setting up a backward throw. Sometimes *atemi* is used for the same purpose: As *uke* tips his head to avoid getting hit, his timing and balance are ruined, setting him up for the technique to follow.

Conversely, poor posture disturbs your own balance, making your techniques weaker and slower, and the counter-techniques easier for your opponent. In particular, when the head and upper body are canted forward, your *tenkan* will be slow,² and will tend to pull you off balance (because your body mass is not evenly distributed around its axis of rotation). We tend to think of body posture as the concern of Victorian governesses and finishing schools, but for any dancer or martial artist it is the basis of technique and no mere social convention. Good posture is good because it is efficient – requiring

² Due to increased angular momentum when upper body mass is not held on and around the axis of rotation.

the least muscular effort to hold the body upright, move, and turn. It is therefore also the most relaxed and comfortable – once you are used to it. There's the rub: The human nervous system is so made that whatever you are used to feels natural and comfortable; what you are not accustomed to, theoretically superior as it may be, feels stiff and awkward. This is just one of the reasons – there are many – why aikido is difficult to learn.

You can also generate mechanical power for a technique with your own linear or angular momentum. In a positive (*omote*) movement, your linear momentum cutting across uke's momentum creates the pattern of forces known in mechanics as a *couple* – a lever arm around a pivot point. In a negative (*ura*) movement, *uke* is drawn into your angular momentum, adding his own momentum to the whole system. Either way, it is your body in motion, and no particular group of muscles that does the work.

When you do need sheer muscle power, (It happens!), you use the core muscles of the thighs and pelvis rather than those of the arms or back. You get under *uke* and lift with the legs. You get behind him and push with the hips. And you use the so-called “breath power,” based on the powerful respiratory muscles, that we'll come to in a moment.³ In most techniques, gravity and momentum are arranged to work together, with just a little help from the core and respiratory muscles. No aikido technique I can think of is done by pulling with the arms. (But there are some in which uke's balance is broken by pulling straight back with the pelvic mass while you do **not** pull with the arms.) No technique is done mainly by pushing with them, though the extensor muscles of the arms are used with the flexors relaxed, to transmit power, and to hold *uke* at bay.

In every case, if you find yourself pulling or pushing *uke* with the strength of the arms and shoulders, you are not really doing aikido. It may work anyway – until you run across someone stronger or more skilful than you are. But it is not what you should be practising.

As already mentioned, one of the meanings of the word “*ki*” is “breath.” Aikido (like *tai chi chuan*, for example) is classified as an “internal” style, meaning (as you may hear) that it relies on “breath power” (*kokyu*) rather than “muscle power.” But the expression “breath power” is something of a

³ The pelvic and abdominal region is simultaneously the body's centre of mass, the source of its movement, and of abdominal breathing as well. The Japanese word for this region – *hara*, literally meaning “belly” – also connotes will power and strength of personality. The aikidoka thinks of a point about 2" under the navel as the centre from which techniques originate. In yoga, this point is recognized as one of the body's chakras (energy nodes), specifically, as the locus of the will. In colloquial English too, we praise an individual's courage and persistence by saying say that he or she has “guts.”

misnomer, making the thing sound more mysterious than it really is. We do not actually bowl *uke* over by breathing on him, though it may look that way to a third party. Rather, what happens is that powerful respiratory muscles in the belly, chest and back are used to generate a standing wave that flows up the spine and along the arm to *uke*'s body. It is no great trick to generate power with the out-breath, as considerable forces are exerted automatically. The problem is to transfer these forces so they do useful work, in addition to their main task of emptying the lungs. This takes a lot of practice, as the beginner's tendency rather is to tense his shoulders and arms, blocking the wave of "breath power" that must be transferred to *uke* through the spine, shoulders and arms.

In *kokyu ho* (the breath-power exercise) *uke* and *nage* kneel facing each other in the Japanese sitting position (*seiza*), with *uke* holding on to *nage*'s wrists. *Nage* then tries to push *uke* over with his "breath power," while *uke* tries to ground that power through his own body, playing "tree" to *nage*'s "wind." But the object is not really for *uke* to show that the wind cannot push him over. Rather *uke*'s purpose here as elsewhere is to help his partner practice – in this case, by giving the best feedback he can as to the power and precision of his partner's *kokyu*.

As you practice *kokyu ho* to develop breath power, you will also be told to coordinate your techniques with your breathing – breathing in to receive the attack; breathing out with the actual throw, as the technique's power is transferred. Then, as you develop real *kokyu*, you will find that the out-breath does not just accompany the throw, but greatly contributes to it: launching it, so to speak, and sending it on its way by sharply adding the wave of breath to *uke*'s existing momentum and to the other forces acting on him. When you can do this, you will find that your technique happens as if by itself – with you as a facilitator of *uke*'s fall, but not its direct cause. In fact, the only direct cause of *uke*'s fall is *uke*'s attack.

It is one thing to generate power, something quite different to apply it with precision. To avoid unnecessary labour, both the timing and direction of force must be controlled exactly. The "magical" effortlessness of aikido technique is a consequence of applying correctly generated force in the right direction (or along the right arc) at the right time. The problem here is that our instinctive responses are wrong. When someone pushes you, the natural response is to push back in the opposite direction, until either you or your opponent (depending on who is stronger) are wrestled into submission. A lot of force is needed, and for a relatively long time since the contest is to see who can hold out longest. When adversaries behave this way, what you get is a system in deadlock, with enormous efforts expended to maintain a *status quo*. Trench warfare worked this way, and so do a lot of marriages.

The ideal strategy – if you can bring it off – is to deter combat and

remove its causes. The next best, if your opponent insists on fighting, is to rig the situation so that his own aggressive persistence takes him off balance, and vulnerable to a precise application of force. Either way, the capacity to apply power is treated as a scarce, very costly resource, to be husbanded carefully and invested where it will do the most good, not squandered in futile contests. The techniques of aikido suggest various ways of doing this.

As regards timing, the basic problem is to stay in control and wait for the instant of ripeness. In every aikido movement there is just one instant for the decisive application of power: *Uke* is off balance; any slack in the movement has been taken up; his joints are locked. At this point the wave of your out-breath or any movement of your centre will be communicated directly to his centre. Too soon, or too late, and the movement will misfire, like an explosive charge detonated before its packing is complete, or before its real target is on location. The charge is spent; its power is dissipated; but the job it was supposed to do is still unfinished. On the other hand, if you pack the charge with precision, and time the detonation right, then the results of the explosion may be out of all proportion to the costs involved.

Before that moment of ripeness, your task is to guide or lure *uke* into position in the gentlest way possible, without alerting him that anything is happening. After that moment is the *zanshin* – literally “the remainder” or follow-through – in which the throw is already complete, and there is nothing left except to finish the action and recover from it. In between is just that critical instant, when gravity, momentum and breath all come together and the actual work of the throw gets done.

The matter of direction is more difficult to describe. You must learn to feel where your opponent is strong and where he is weak, and to apply force only against his weakness, never against his strength. Instructors often use the analogy of walking through a wall that has a door in it. If you want to go from one room to the next, you do not push through the wall. Rather, you feel your way along the wall until you find the doorway. Then you walk through it.

This much is obvious, but it would be impossible in this piece to try to explain where the openings are, or how to look for them. What can be said is that you must learn to feel them for yourself, and that you will not be able to do this while trying to make the movement work by brute force. Openings there will be, because it is impossible for anyone to be strong in all directions at once. Usually, the best way to find an opening is to concede a little to *uke*'s attack so as to avoid opposing it directly. You can then redirect that attack, altering your own vector gradually until you feel *uke*'s power disappear. That is the doorway, and you now know where to enter.

Suppose the attack is *katate tori* – a wrist grab. The vector of your response (conveniently thought of as the direction of your *ki*) will usually follow

one of the fingers of your hand – typically, the index finger, little finger or thumb. Which finger gives the vector of entry will depend on the specific nature of the attack and the position in which you allow your hand to be grabbed. Sometimes the vector of entry changes from one finger to another in the course of the movement.

What the beginner must learn is that the direction of entry is never just a generic push against the hand that grips. Rather, it is a very precise attempt:

1. to *present* your own hand in a favourable position;
2. to push the seized wrist firmly into the opponent's grip to establish a solid connection;
3. to turn the hand in some clear direction (sending *ki* through one finger or another) so as to unbalance uke and find a "doorway" for entry;
4. to enter in the available direction, still following the line of *ki* in some definite direction, and then allowing the movement to develop until a critical point is reached, at which power can be transferred to maximum effect;
5. actually transferring the power at that critical moment when *uke* is off balance and all slack is gone, so that your two bodies are instantaneously a single dynamical system.

Of course, these 5 steps, which took you a few minutes to read and me perhaps half an hour to write, are executed in no more than two seconds every time you do a movement. *Nage* has no time to think what he is doing; but no two movements are ever exactly the same, and each one requires innumerable minute choices. To speak of habit, then, or automatic proficiency, would not do justice to the trained practical intelligence that must eventually function at extraordinary speed, and well below the surface of consciousness. More on this later.

Looking and Feeling

There is a series of Japanese films, (I'm writing this shortly after seeing the last one), about a character named Zatoichi who is blind, but has developed an extraordinarily acute sense of hearing, and an exquisite sense of touch. With his clever hands, he earns his living as a masseur. He is also phenomenally "lucky" as a gambler, able to guess the roll of the dice by their rattle in the cup. What actually keeps him alive, however, is the hidden blade in the long staff that he uses to pick his way. For, with his uncanny hearing and touch, he is also a matchless swordsman. All the bad guys who pick on the poor old blind man are in for their last surprise.

Zatoichi is a send-up, but it is true that we rely on our eyesight more than we need to, to the neglect of other senses. Two of these are of particular

importance in aikido.

First is the kinaesthetic sense, so basic that we scarcely think of it as a distinct sense at all. Close your eyes. Slowly touch the little finger of your left hand to the tip of your nose. Touch your navel with your right thumb. Now touch your two index fingers together behind your head. You can do these things because special sensors in the muscle fibres report on patterns of muscular stretch and compression, from which the brain maintains a rather accurate map of the position of the limbs. With blindfold practice we learn to trust this sense, which then enables us to keep track of our own movements while leaving our eyes free to track opponents.

Second is the sense of touch, which allows us to acquire an accurate grip without fumbling, and to recognize when a joint is locked.

The eyes themselves must be used correctly; and there are (at least) two very bad habits connected with their use that need to be gotten over. First is the habit of looking back over your shoulder in *ura* movements to find a grip or see whether *uke* is following. (Beginners do this a lot with negative *kote gaeshi*). To do these movements properly, you need to look where you are going, and know by feel whether *uke* is following. It's almost impossible to look to the left while turning right, or vice versa.

Another bad habit is to look directly at any part of your opponent's body, or at his weapon, if he has one. For one thing, looking in some particular direction can "telegraph" your movement, giving warning of what you are about to do. As well, when you are paying attention (e.g.) to the knife in his hand, you are not paying attention to his other hand, or to his feet, or to the other guy behind you. Finally, the peripheral vision is much more sensitive to movement than the foveal region at the centre of the vision field; and it is movement, not fine detail, that concerns you. Hence it is much better to de-focus the eyes and just take in the pattern of movement than to look at any one thing.

The broad point to be made here is that tensed muscles and fixation of the senses deprive you of needed information. Contrary to what the beginner expects, an aikidoka's body is not primarily an instrument for the generation and transmission of forces, but rather an instrument for gathering information, and for the organizing of responsive, agile movement. What the beginner needs, then, is a fairly radical change in working philosophy: A good aikido throw is not something that you do. It is something you perceive and cooperate with as it develops, contribute to (but only ever so slightly), but mostly just allow to happen. When a technique is done well, you will not feel strain at any point, and will not feel especially strong. Your *uke* seems to be moving you much more than you are throwing him. It is not you, but the developing logic of his own attack that causes him to fall.

Getting It All Together

The first meaning of *ai-ki*, then, is coherent use of the whole body. We use alignment and coordination, not muscular strength, to make the power in our techniques. This means that hips, legs, spine and arms all work in sync with each other, with the breathing and with the opponent's movement. There is a rhythm to all of this which you may experience as a standing wave that passes from his body through yours, into the ground, and then back up and out again. I think the rhythm is something you can look for and work on; I think the wave feeling is something that has to come by itself, when your movements are smooth and relaxed and all the technical points fall into place. So let me just say some further words about the rhythm of *aikido* movements.

Recall again, from a few pages back, the image of pushing a child on a swing. This is a system with a very clear natural rhythm to it, a rhythm that must be felt and respected. Otherwise, the swing may hit you; or, in any case, your efforts will not have the desired effect. Now, what the aikidoka should understand is that, like the swing, all processes of the body have their natural rhythms. In particular, *uke*'s attack will have a rhythm to it, as do your own movements and your breathing. Much of a movement's power, as we've seen, is obtained through exact alignment of these rhythms.

Now, this feature of aikido technique – the matching and use of rhythm – requires a lot of practice. This means that the beginner's habit of slowing down for the difficult bits while doing the easy ones as fast as he can is a very inefficient way to learn. It also means that in a practice situation, *uke* and *nage* must work together on the unfamiliar movement, to create not only the technique being practised, but the natural rhythm of that technique. Your instructor will demonstrate that rhythm. Sometimes he will try to explain it. But it is up to you and your partner to find it together. In doing so, you will discover that the natural rhythm of any technique depends on accurate footwork, and on *nage*'s complete presence and responsiveness to *uke*'s movement.

It depends on accurate footwork for the obvious reason that it is impossible to find any clear rhythm in a movement if you're shuffling around with your feet. It depends on *nage*'s close responsiveness to *uke* because the rhythm of the movement is fundamentally *uke*'s prerogative. *Uke* controls the timing of his attack. He is an autonomous "swing" that *nage* has to push. It is *nage*'s problem to catch and control *uke*'s rhythm by superposing his own rhythm upon it. Practice in line, doing the same technique against a succession of *uke*, is an excellent way to learn this skill because the rhythm of each attack is different while the shape of the movement to be created with it is roughly constant.

Practising with rhythm and the matching of rhythms, we find that every

cyclic process has a phase of collection followed by a phase of dispersal – a *yin* phase and *yang* phase, as the Taoists called them. In breathing there is an in-breath and an out-breath. In the work performed by any group of muscles, there is a cycle of tension followed by relaxation. In the analogy of the child on a swing, there is a phase of gathering speed, and a phase of slowing down. The only exception I can think of would be a perfectly circular orbit, or some similar process, in which the *yin* of gathering and the *yang* of dispersal occur at the same time.

In matching rhythm to rhythm, the critical moments occur when one phase is changing over to the other. In the example of the swing, the top of the arc, when the swing is highest but slowest, is the instant to give a push; the moment at the bottom, when the swing is lowest and fastest, would be the instant of maximum impact, when the most energy would be transferred to you. Obviously, that is the moment to be out of the way. Aikido movements too must be timed to the phases changes of *uke*'s movements: when the foot comes down, just before the weight is transferred; when the arm is raised, just before it begins to descend; when the punch breaks, just before the arm retracts to strike again.

On the level of movement, *ai-ki* means an alignment of the rhythms within your own body and an alignment of these with the rhythm of the attack. On the level of mind, as we'll now see, *ai-ki* has quite a different, complementary meaning.

4 Correct Relationship

To the best of my knowledge, aikido is unique among the martial arts in treating combat as a human relationship, subject to ethical and existential considerations as well as tactical ones. The culture it came from had its own version, as we've seen, of Clausewitz' doctrine that war and diplomacy are two aspects of the conflict relationship, and aikido takes this thought very seriously. As Sun Tzu put it, "The highest form of victory is to win without fighting." As one Japanese proverb has it, "A sword is useful so long as it remains its scabbard." Another says that "Amateur tactics cause grave wounds." All these sayings convey an idea that violence is what happens when normal power relationships break down, and that the correct aim of war as of politics is to keep the peace in a stable system of power relationships – and then to restore stability as bloodlessly as possible when only competent handling of violence will do the trick.

I have written elsewhere on *Aikido as Political Theory*, treating this art as a metaphor for conflict relationships in general, with *uke* and *nage* – the source of *ki* and the shaper of *ki* – as familiar roles of everyday life. My focus here is on some aikido concepts of relationship in the combat situation itself.

The most central of these, to which the others are subordinate, is that of *ai-ki* itself.

Ai-ki, the harmonizing of intention and “vital energy,” can be seen as a political value (in negotiation or mediation, for example), but it is also a tactic of combat. As a tactic, its basic idea is to avoid wasteful contests of strength but to **join in order to lead** – not to throw *uke* with your own strength, but rather, to connect with him and add your intention to his so as to lead him into a fall. To lead an attacker’s mind in this way implies a certain relationship between you; and aikido chooses to frame the problem of self-defence as the maintenance of correct relationship. The problem is not to defeat the enemy but to neutralize his hostility, and re-direct it, if possible, along more positive lines – more positive for yourself, at least, but hopefully for him as well. To do this, you need to keep control of the terms of association and of the situation as a whole. Above all, you need to keep your freedom and self-control – however, *uke* loses his own, and whatever he attempts.

Mutual Distance (*ma-ai*) and the Line of Centres

What we mean by relationship is mutual regard and responsiveness. Two persons in relationship are watchful of one another, and they respond to one another. One way they preserve a positive and comfortable relationship is by keeping clear boundaries and a certain distance between them. “Good fences make good neighbours,” as the saying goes. As a female friend of mine once put it, “There is a fine line between feeling loved, and feeling squished!”

In aikido, we imagine the person as a locus of autonomous intention and agency organized around and moving from a centre – the *hara* – and as existing within a sphere of defended personal space, also organized around this centre. We imagine relationship as organized around the line between two such centres. We can imagine an attack as a threatening closure of distance along that line.

The term *ma-ai* literally means “harmony of space” or “mutual distance.” It might be used for the actual distance between you and your opponent, but it is usually used to mean “correct distance” – the safe but fully engaged distance to maintain with respect to that opponent. It is sometimes used in yet a third sense of “critical distance” – the range at which pre-emptive attack becomes necessary. These three concepts are closely related, but the confusion among them is unfortunate. Distance is a variable of combat that both parties will try to use to advantage. The correct distance (from your perspective) will vary with the situation, and may sometimes be either well outside, or well inside the critical distance at which actual combat begins.

Forget aikido for a moment. Imagine two gunslingers in a Western, walking toward each other from opposite ends of the street. Until they get fairly close they are out of each other’s range, since a hand gun is not a very

accurate weapon. But a moment will come when one or the other will feel obliged to draw and shoot, forcing the other to do so too. That is the critical distance. It will vary according to the speed and skill of the shooters, and the accuracy of their revolvers; and it can be manipulated accordingly. For example, if one of the men is confident that he is faster on the draw, he can force the other to draw first, so as to be able to claim “self-defence.” If one knows that he has a more accurate gun and is a better shot, he can draw and shoot while still out of the other’s effective range. Or he can hold his fire, forcing the other to draw, shoot first and miss – and then be shot in self-defence. Distance is similarly a factor in any combat situation, with whatever weapons or with empty hands. It can work for you or against you, and that you must judge and use.

To use distance skilfully in combat, you must perceive how it controls the time available for response to an opponent’s moves, and how it can be used to determine who becomes the *uke* of the situation. In real life or in free practice, these roles are not pre-arranged. *Uke* is the man who over-commits, and thereby puts himself at a disadvantage. *Nage* is the man who induces his opponent to over-commit, and is skilled enough to exploit that disadvantage. Otherwise, *uke*’s attack may succeed, or he may steal the movement with a counter-technique (*kaeshi waza*). You can see, then, that in playing with distance, the aim is to force your opponent to accept the disadvantages of the attacking mode – or give up his will to fight. It is also possible to go to meet your opponent, rapidly closing the distance between you, without making yourself the *uke*. What counts is the balance of intention at the point and instant of contact. If you are pushing on your opponent at that moment, you become the *uke* – giving him the advantage, if he is good enough to take it. If you provoke him to push on you, you make him the *uke*, seizing that advantage for yourself.

Beginners mostly ignore *ma-ai* and, indeed, have plenty of other things to think about. But, for any martial art including aikido, it is of utmost importance. This is especially clear when you defend against an armed opponent – as in the *jo dori*, *tachi dori* or *tanto dori* techniques, for example.⁴

Ma-ai in its descriptive sense – the actual distance between adversaries – is measured along the line of centres. But in every aikido movement and every relationship, one might say, there are actually **three** centres to think about: there is your own centre; there is your opponent’s (or your partner’s) centre; and there is the centre of your relationship as a whole – the point round the

⁴ Against staff, sword and knife, respectively.

movement turns. If you think of the straight line connecting your centre to your opponent's centre, and then think of the vertical plane that contains this line, you will find that the common centre of movement lies somewhere in this plane. The reason is that both you and your opponent will need to work on the centre line of your own bodies, as it is not possible to achieve much power or accuracy anywhere else. When you try doing *shomen uchi* with a weapon, or even with your bare hand, you quickly see that the cut must be an extension of your spine, continuing the mid-line of the body.

Now, the techniques of some martial arts are designed to fight it out and prevail along the line of centres: A punch comes at you; you deflect it with a sharp block, and throw a counter punch into the opening that your block created. Aikido uses the centre line differently: If you can pre-empt that line straight off, you do. If your opponent leaves that line open, or if you can occupy it before he does, there is no need to get fancy. Otherwise, if your opponent takes the centre line you can flank him by moving either to the outside or the inside of his line of attack. You can turn the line by entering diagonally across it, as in positive *ikkyo*, for example. Or you can wind up his line with a *tenkan* or *irimi-tenkan*, e.g. as in negative *shiho-nage*.

Finally, the actual throws depend on controlling the common rotational centre of a movement, or physically occupying it with your own centre. The latter is the basis of all the hip throws (*koshi nage*), while the former – in one way or another – is the basis of every technique I can think of. In particular, stealing the movement's common centre is the basis of all counter-technique, all *kaeshi waza*, where *uke* takes *nage*'s movement away from him. What you work for, then, is instinctive awareness of how that common centre is moving, and instinctive skill in taking that centre under your own control.

As you can see, it takes pages merely to list the possibilities of relationship along the line of centres, and it will take you many years to explore them. However, one idea that you can take from this paper will improve your practice immeasurably, and at once: This is that aikido movements have a strong geometry to them, of circles, spheres and spirals organized around the three centres we've been discussing. The techniques are only superficially about the placement of feet, and the twisting of wrists and arms; and so long as you think and work on that anatomical level, the whole business is impossibly complicated. By contrast, as you begin to grasp the geometry and underlying rhythm of aikido movements, everything becomes very simple. At that point, hands and feet go to the right place automatically – merely following a movement that, in imagination, you easily extrapolate to its end. You don't have to think what to do next – which is good, because you don't have time to think. At every moment, *uke* himself, and the logic of your evolving relationship are telling you what to do.

Welcome

When someone invades your space, even for the purpose of hurting or killing you, the first thing is to make him welcome – prepare to receive him as an honoured guest, but on your own terms. There are good tactical reasons for this: You can't afford to be afraid of him, if you hope to defend yourself effectively; and you don't want to let him know you are afraid of him, even if you are. The message you want to send to a potentially violent man is that he has no reason to be afraid of you unless he forces you to defend yourself. In which case you will deal with him – possibly in a lethal way – but with no intention to become violent yourself.

The idea of aikido, my teacher used to say, is to make yourself a person who cannot be attacked. First, by being open and generous in your dealings, you avoid giving people the desire to attack you. Second, in your demeanour you convey the message that you are not going to start any fights, but that attacking you might not be such a good idea. Finally, for anyone silly enough to attack you, you have a suitable welcome prepared – intended to show him his mistake without injuring him more than necessary. You come to meet the attack; you greet it; and you neutralize it. You don't hang around to spar with it. That's not the game you're training to be good at.

Coming to meet the attack means closing the distance and offering your opponent one shot at his target. Greeting the attack means allowing the attacker into your space, but in a way that withdraws his target and takes away his balance. Neutralizing the attack is then the aikido technique itself – the last step and the easiest once the set-up has been accomplished.

When you welcome someone into your space – make him your guest, so to speak – you have to entertain him somehow. If you leave him to his own devices, you don't know what mischief he may get into. It is much better to keep him preoccupied with something harmless: Give him an arm to grab, or a nice juicy target to stab or punch (a target you take away at the last instant). The idea is to focus his attention in a predictable way, on something you can control. In just this way, the toreador waves his cape in front of the bull to catch and hold his attention, while he gets himself off the line of danger. To extent you can manage your opponent's intentions, you avoid having to guess at them. You can make his own hostile intention work in your favour. That is what *ai-ki* means.

In general, every aikido movement has two phases marked by the in-breath and out-breath respectively. The out-breath, we've seen, is used to make power. When you exhale, the rib cage closes and the arms close and thrust forward. The in-breath prepares an out-breath, of course, but it also takes ownership of the space around you, and it creates a sense of expansive generosity, welcoming *uke* into that space. When you take a full breath, your

rib cage expands and your arms tend to open wide as if you were greeting your long-lost brother. According to the samurai way of thinking, that is the way to greet a man who wants to kill you. It lets the attacker know that you are ready are ready for him, and the oxygen rush in fact makes you joyfully ready for whatever happens. If this is going to be your last breath, make it a good one!

Connection (*ki no musubi, ittaika*)

The notion of *ki no musubi* – literally the knotting up or tying up of *ki* – is the joining of your own intention and energy to that of your opponent. It describes the subtle connection that locks your opponent onto you, and induces him to follow. What happens might be described as a joining in order to lead. At the outset, you **obey** *uke* – you allow his movement to tell you what to do. Then you add something of your own to that joint movement, so smoothly that *uke* has no chance to realize he is no longer in charge. You **subvert** *uke*'s intention with your own. A solid join at the point of contact helps greatly in doing this, and it is this join that the idea of “knotting” seems to catch.

In part, it's a question of taking up whatever slack exists in the grip (regardless of who is holding whom), and in the play of wrist, elbow and shoulder joints, so that any movement of your body is communicated to the opponent's whole body, and not just to a wrist or arm. This precise mechanical linkage of bodies has a technical name, *ittaika* – literally, “one bodyness.” When the slack is taken up and the connection is established *uke* and *nage* move together without awareness of the hand grip, nor any transfer of power through it.

In part too, *ki no musubi* is a psychological connection that makes *uke* want to follow your lead – as the bull follows the matador's cape. The timing of this connection must be precise: If you withdraw the target of his attentions too soon, *uke* will shift his mind elsewhere; if you are too late, *uke* will nail you. But if you get it right, you can sometimes throw him without touching him. In these so-called *kokyu nage*, or spirit-power throws, *uke* follows because he wants to, held by nothing but his own mind. He could let go at any time, but does not do so until it's too late.

Before connection is established *nage* and *uke* are separate systems. In the *zanshin*, after the throw is completed, they become separate systems again. But, for a short time *nage* and *uke* in body and mind become a single dynamic system; and we can take that expression “knotting up of *ki*” as a metaphor of this connection.

Lead

When the bodies and minds are joined with all slack taken up, it becomes possible to lead your *uke* – whether by your grip on him, or his on you – as

you might walk a horse, leading it by its bridle. You can't push or pull an animal who is much stronger than you are. Using force at all would just provoke resistance. Your best hope is to enlist the animal's cooperation and show it where to go.

The use of lead in a simple kokyu nage is typical of the application of lead throughout aikido, and elsewhere for that matter. Suppose that *uke* has grabbed your wrist and is trying to control you through it, and use that control to hurt you. Your response now is not to throw him, but to lead him into a fall. The first step, as we've seen, is to allow yourself to be led. To lead your *uke* you begin by following him. You have to catch and match his intention and rhythm before you can add your own. The method for doing this might be a *tenkan* – a pivot just tangent to his line of attack, neither faster nor slower than he is coming. Once it is clear that you are going along with him, just a shade more readily than he had expected, a strong suggestion: **“You will go there!”** (pointing at the right spot on the mat) may be enough to finish the movement. *Uke* goes along with this suggestion for much the same reason that a horse follows you – because it represents, for him, the line of least resistance. He is already holding on to you and trying to follow you in order to control you. He is already almost going in that forward, downward direction. You give him no reason to change his mind. So he hangs on and follows, and is already falling before it can occur to him to let go and try something else. From that point it must be his own initiative to take the fall as best he can.

Essentially the same technique can be done in other ways – by pushing *uke* downward with your weight, displacing him sideways with a kind of body check, drawing him into a circle around you and relying on centrifugal force, and by combinations of these methods. Indeed, most techniques can be driven by various sources of power, and sometimes by almost no power at all. But a throw by pure leadership, by *ai-ki*, actually happens from time to time, when you are good enough.

Atemi

We have to mention the use of *atemi* (striking techniques) in this section because their chief use in aikido is to seize and maintain control of the combat relationship. At need, *atemi* can be turned back into real blows to vulnerable parts of the body; and at that point, our style returns to its roots in Daitoryu and other forms of jujitsu. However, in friendly aikido practice – and even in real but sub-lethal encounters – they need not be intended to damage the opponent's body. Striking movements can be used instead to draw a desired response from the opponent, to distract and unbalance him, to control his centre line.

Control of the centre line and of the whole combat relationship is

necessary if we hope to deal with violence without becoming violent ourselves. The idea is not to let the fight turn into a fight – not to leave *uke* any opening to attack, if you can help it. There is no idea at all of allowing a “fair” fight. Aikido proposes to take control of the situation at the very beginning of violence, and not to relinquish control until the adversary has changed his mind about fighting. To achieve this, you often compel *uke* to defend against a strike, even when you have no intention of hitting him!

Aikido is sometimes called the pacifist’s martial art. This is correct up to a point, but aikido’s “pacifism” is largely misunderstood. It is true that aikido seeks to keep the peace and believes that coercive force should be a last resort. It is true too that the *aikidoka* prefers not to harm his opponent if he can avoid doing so. It is true that aikido affords some technical means to respond to violence in relatively gentle fashion, to the extent this may be possible. All that said, it should be remembered that aikido accepts the sometime necessity of fighting in self-defence, that we spend half our time in aikido practising to attack, and that in real combat, the roles of *uke* and *nage* are not decided in advance, but only at the instant of contact. As well, it should be remembered that when violence breaks out, aikido seeks to gain and keep a complete dominance of the situation, using actual or threatened *atemi* as needed to help in doing so.

All in all, the picture that emerges is rather different from Gandhian pacifism. Aikido is not so much about peace *per se*, as about “peace, order and good government.”

Some aikidoka say that you cannot choose not to strike if you have not first mastered the art of striking. Part of the “aikido ethic,” they insist, is the ability to make this choice; and the capability must exist before there can be either a meaningful threat, or an ethical choice not to do harm.

Ai Nuke

The phrase *ai nuke* means “mutual escape.” Originally it meant the outcome of a duel where each participant escapes harm. By extension, it means the resolution of conflict without injury to either party. Such win-win resolution is considered the ideal of aikido which may, on one level, be understood as a kind of non-verbal discourse on the difficulty of that ideal.

Accepting that interests and values will differ, our attitude toward conflict changes. We no longer dream of a static peace, but of able diplomacy punctuated by episodes of measured, adroitly handled conflict. The theory is that adversaries encounter each other, measure each other’s strengths, survive their trial, and find some mutual accommodation to each other’s interests and power. There is a saying that *budo* begins with respect and ends with respect. This alludes both to the bow at the beginning and end of practice, and to the mind-set that permeates the art. If we remember that *budo* was originally the

competence and ethic of a governing caste, then the idea is that respect is the indispensable pre-condition of competent governance. Respect is the safeguard against *hubris* – against the over-reaching that causes “grave wounds,” quite probably to yourself. Respect means measuring your opponent’s power and your own correctly, so as to find the correct balance. *O-sensei’s* words may be quoted once again: “*True budo is protective love for all living beings in a spirit of reconciliation. Reconciliation means allowing everyone to carry out and complete his own mission.*”

Aikido’s approach to conflict is both realistic and ethical. At the same time, it helps us understand how difficult the problems of conflict and government really are – how wide a gulf separates the utopian society of the *dojo* from the appalling waste and cruelty of real-world politics.

Many beginners come to martial arts with fantasies of invincibility and power. I know I did, once upon a time; and as an instructor I have seen such fantasies repeatedly ever since. If aikido gave nothing but a deeper understanding of the conflict relationship, and of the limits of one’s own power over and against the power of others, the trip would still be worthwhile.

5 No-Mind

As a Zen art, the *koan* of aikido is surely this: The sword is coming at your head, and the next split second will make the difference between life and death. What will you do? If you hesitate you are a dead man; but with so many excruciating details to think about, it’s a wonder the *aikidoka* can move at all.

To this point, we’ve been talking about aikido technique. There is a lot of it, taking a lot of patient, conscious effort to learn. Like much simpler skills, however – like walking or driving, or riding a bike – those of aikido don’t become really effective until they are “second nature” – until they can be performed, as we say, “instinctively,” in any situation. What counts is just what you can do when it counts – when the attack is on its way, and you have just that split second to respond. This is why free-style practice against multiple opponents is so important: It is the test of what your training might amount to in a real situation.

Like the centipede who was asked how he kept track of his legs, the *aikidoka* is in a double bind – made to become extremely self-conscious about every detail of posture and movement, while being told to forget his ego and move spontaneously. The way out of this bind is found only with years of practice, when every detail is a matter of habit. At that point, you no longer do aikido techniques as such, except when you need to think or talk about them. You just move as the situation directs, leaving your conscious mind to catch up when it has time.

From one perspective, then, what the Zen masters meant by “no-mind” is

not especially mysterious. Today we'd call it "the unconscious." If your aikido is to be useful for self-defence, you have to practice until you can do the movements almost literally in your sleep – until the unconscious mind can make all choices as needed. For we know today that the unconscious mind truly is a mind – not just a rubbish heap of repressed memories. It feels and knows and plans – often in conflicting, mutually inconsistent ways. It's a sophisticated parallel processor, capable of weighing its options in real time, under the pressure of events, to decide on and coordinate the most complex patterns of movement. In fact, it is much better than the sequential, articulate, conscious mind at doing so. It is very concrete, however, and does best with thoroughly familiar situations, which is why conceptual familiarity with aikido means so little without the practice that makes it truly a part of you.

From a different perspective – because, at its own good pleasure, it either carries out or utterly subverts the conscious mind's intentions – the unconscious is for each of us an ultimate mystery, teeming with images and impulses and conflicts we scarcely dare acknowledge as our own. To domesticate that mind, come to terms with it, call its energies into our service, is what aikido and all authentic spiritual practices are finally about.

In the Zen tradition, a famous series of drawings depicts the process of integration of a conscious mind with its unconscious. These are known as the "Ox-herding Pictures," or "Ten Steps in the Taming of a Bull."⁵ This Bull – powerful, fierce, concrete and without much foresight – is a symbol of the unconscious. The man in these drawings, who seeks, tames and rides that Bull, and finally becomes one with him, is the conscious individual – lost and alienated in the first drawings, but finally at home in the world. What the drawings suggest to me is that integration of the mind itself is yet another level of meaning for the word "*ai-ki*." When O-sensei said that the greatest warrior is the one who wins the victory over himself, this may have been what he meant.

It's easy to see why the samurai were attracted to Zen with its doctrine of "no-mind" (*mu-shin*). The teachings of cognitive openness, presence, instantaneous response and freedom from fear or anxiety were just what they needed to live up to their duties, fight fiercely – and die calmly, when their time came. In real combat there is no time for technique, or fear, or second-guessing. Life and death are decided, we might say, on the level of pure *ki* – intention, breath, will and spontaneous movement – and there is nothing else to say. To the extent aikido wishes to remain a real *budo* it must keep something of this spirit alive even for today's students, who are more likely to be cut down

⁵ These pictures are easily available on the Internet and in books about Zen. For example, see <http://www.zen-mtn.org/zmm/gallery3.htm>. The drawings there are by Master Jikihara; the verses by Master K'uo-An.

by cancer or a coronary than a *katana*.

6 Learning to Learn

Over the years, students have asked many times what I have learned in aikido – what I have gotten out of it to justify all the time and work that I’ve put in. This is a difficult question, because, on one level, the answer must be that I’ve learned nothing at all. I’m still the same person as when I started more than 35 years ago, with all the same basic attitudes and the same faults. I think this is typical: aikido people seem to become more integrated, more thoroughly themselves, but do not really **change** in any radical way. But I could also say that in all those years I have learned something about knowledge and about learning to learn – what Gregory Bateson called second-order, or deuterolearning. In fact, I believe some understanding of the learning process is the most valuable thing aikido has to teach.

Certainly, you can learn the skills and attitudes of learning through persistent study of almost anything at all. Any authentic art or discipline will take you through the same issues, if you stay with it long enough. For this reason, beginners with previous training in some other discipline are easy to recognize, because they come to aikido without some typical beginner’s hang-ups. What they have already learned elsewhere about how to learn now stands them in good stead. By the same token, what we learn about learning in aikido we take with us wherever we go:

- to perceive the difference between ignorance and knowledge;
- to have confidence in our ability to learn and develop;
- to practice mindfully;
- to care about details;
- to doubt, question and experiment;
- to learn by teaching others;
- to value mastery;
- to cultivate “beginner’s mind”;
- to enjoy it all – to live for the process more than the achievement.

But, as my teachers warned, and as I’ve re-learned in my own practice and teaching, there are several specific dangers to be wary of, in this or any other art:

First, beginners should be aware that every form of training is a race between getting good, and wearing yourself out. Practice wisely. Do the techniques safely. Pay attention to technical details that reduce stress on the body. As *uke* attack no faster than you are prepared to fall. As *nage*, especially when you are more experienced than your partner, remember that it is your responsibility to control the situation, and avoid accidents.

More advanced students and instructors need to remember that practice,

and living generally, make you very good at your mistakes. What counts in a real situation is what you can do smoothly, powerfully and naturally – but just because a move works and comes naturally doesn't mean it's an ideal movement, or even a correct one! It really isn't difficult to get trapped at a certain level and stay there for the rest of your life, making the same mistake over and over, with more and more authority as you get older. In fact, this happens to all of us sooner or later; but the trick is to avoid that trap as long as possible.

Closely related is the delusion that there is a single right way to do aikido, or to teach it. There are cruder and subtler ways to do a movement; and some movements are clearly better than others; but that is all that can be said. Aikido is a teaching of possibilities, not of absolute truths. This is especially important to remember when you take classes from other instructors – as you should, by all means, go out of your way to do.

Still another point is that uke and nage are allies in a learning situation. In some sense, this may be true of conflict relationships in general, but it is certainly true of practice on the mat. How to learn by helping someone else to learn is no small part of what aikido has to teach. In general, you will learn more from your practice partners – both less and more experienced than yourself – than from your instructor.

Finally, it is important to realize that one can learn to do aikido very well without becoming especially wise. Worse than that – a trained and liberated fool is still a fool. In the last resort, you practice at your own risk, and with your own taste and judgment; and you remain responsible for what you learn. No guru or sensei takes that responsibility away from you, and none should want to.

One version of the sacred spiral is the great serpent who continually devours himself, and spews himself forth – symbolizing, among other things, the secret of self-creation. The idea is that beginnings are endings and vice versa. Old patterns must be extinguished to make way for new ones. This is the meaning of “beginner's mind,” and it is the secret of mastery in any field whatever. It makes the difference between having twenty years experience, and having four years of experience five times. We resist change, and have a natural reluctance to admit our ignorance, even to ourselves. But we only begin to learn when we can allow ourselves to be aware of how little we actually know.