Paying Attention to Paying Attention

The Utility of Feedback as a Learning Tool in Aikido

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Perspective is unavoidably shaded by personal experience. Therefore, my view of studying aikido is shaded by both my professional and martial arts background. As an analytical chemist, the scientific method and testing of hypotheses are a huge part of my adult life; not only must something be correct, it must be repeatable. Looking for measurable and verifiable results has strongly influenced my method of training in my chosen martial art. I have been studying Iwama-style CAA Aikido in Yellow Springs, Ohio under Michael McVey for almost six years. Prior to that, I studied Yamate-Ryu Aikijutsu consisting of dynamic, non-compliant, partnered practice with a focus on intention and formality for seven years; Bando Kickboxing involving exhausting solo drills in punching, kicking, covering and footwork combinations for two years; and Isshin-Ryu Karate involving one-on-one instruction in solo kata (a predetermined set of specific moves) for three years. I consider the time spent studying aikijutsu to be my most formative years, cementing my view of what a good technique could and should be. However, those seven years were full of nearly constant frustration because of my inability to adequately understand or reproduce the techniques and principles presented to me. It was only after finding Yellow Springs Aikido that I found a system that suited my overly-analytical learning style. The stepwise teaching methodology allowed me time to reflect on the individual pieces of the techniques. It was here that I learned to pay attention to paying attention.

I enjoy studying aikido because it is difficult; if it were easy, it would not hold my interest. Completion of a puzzle is no fun when the pieces are all laid out in front of you, labeled and in order. People practice aikido for many different reasons, but as long as it is described as a martial art, it must continue to exist within the context of conflict. Many practitioners of aikido often try holding the paradigm of violence at arms' length, but the degree of intent and violent action can increase the difficulty of successfully completing the technique. The philosophy of aikido defines it as a defensive martial art and as such, requires the training partner to commit to an attack. If both participants are defensive in attitude and action, then aikido becomes timid.

Good aikido should effortlessly direct the energy of an attack away from the defender with a disruption of the attacker's mental and physical equilibrium, leaving the attacker relatively unharmed pinned on the ground or thrown a safe distance away.

Aikido is outwardly expressed through its techniques, combinations of different responses to different attacks. Techniques are taught as a means of internalizing the underlying principles of body mechanics and movement. If principles are not explicitly taught, they will none the less be learned intuitively through the action of proper, effective techniques. If one trains with the intention of developing an effective technique, then one supposes that the technique will eventually work with a non-compliant partner. Limited to a strictly training point of view, this defined effectiveness minimizes the likely range, speed, environment, violence and surprise of statistically common assaults as well as the physiological effect of stress-related chemicals on the defender. An effective, albeit sterile, technique has a goal even in the dojo (martial arts school). Aikido's primary goal as I see it is control, not damage. An effective technique establishes control with leverage, torque or manipulation of balance. Learning how to gain and keep control requires one to pay close attention to his partner's balance and feedback verifies effective continuous control during execution.

A teacher is a critical source of instruction and feedback. There can be no substitute to a good teacher in separating aikido theory from practice. "In theory, there is no difference between theory and practice. But, in practice, there is." [Jan van de Snepscheut] The written word is valuable, but learning physical skills require tactile kinesthetic information through practice and repetition. The careful guidance of a teacher will keep his students moving safely forward. All students of martial arts are expected to watch the instructor very carefully and mimic his movements to whatever degree they are able. Students must spend time struggling to replicate the teacher's actions training with their peers; not only replicating the teacher's movements, but also trying to replicate the effect that he had on his partner. There is no substitute for feeling the technique properly done to you, or doing it to someone else. If one is learning to do something, then there is no better way to learn how to do it than doing it. The teacher is a guide, but there are lessons to be learned even in mistakes. Mistakes are said to be

great teachers in that by paying attention to what does not work, one learns the boundaries of what does.

At the most basic stage, it is easy to be overwhelmed with too much information without a compliant partner. Kata practice is a valuable early learning tool for memorizing gross movement, especially for aikido's sometimes counterintuitive multi-directional movement, but it is an inwardly focused exercise and the feedback is all internal. This involves the placement of one's feet and hands, the alignment of the spine and hips, the settling of weight and balance, the loading and connecting of muscles, and the awareness and control of breathing. Practicing whole techniques completely by oneself is difficult in aikido; one can arguably punch the air, but no one can twist its wrist. The use of muscles to successfully control oneself is an important first step, but this is noticeably different when the inertia of a partner with finitely flexible joints, no matter how compliant, is added. If the goal of training is control expressed through a manipulation of the partner's body, then there must be a transition from an inward focus on one's own movement and position to an outward focus on the partner. In training, techniques must be adapted to the partner's body type and structure; the very flexible must be treated differently than the stiff, the short must be treated differently than the tall and the strong must be treated differently than the weak.

Unlike striking arts, the use of aikido will effect a change on one's partner in multiple vectors over a non-instantaneous period of time. Even a totally compliant partner will be in motion as his limbs are pulled, pushed and twisted. His motion is still determined by the direction of his joints, the limits of his flexibility and the placement of his feet relative to the rest of his body; resisting these limits will eventually lead to injury. The partner's compliance helps limit mistakes and achieve the end result, but does not communicate the feedback necessary for learning *how* to get there. If one is outwardly focused on his partner's balance, direction, strength, and speed during a technique, compliance then limits the information he is receiving. Training with minimal feedback, either through over-compliance or lack of instructor correction, makes the task of learning more difficult and can dangerously feed the ego. Practice does not make perfect, it makes permanent. Therefore, a technique practiced improperly can only lead to a well-polished improper technique.

Understanding the limitations and connectiveness of joints is extremely important in jujutsu-related (grappling) martial arts. Only by paying attention can one learn the differences between turning a limb one way to collapse his partner's balance and turning it the other way to overextend it. Valuable feedback requires experimentation and mistakes. Questions asked can include: how much torque to apply to a limb, is there a pressure point to take advantage of, is the point of contact and manipulation closer to my center or his, what is the alignment of his head/shoulders/spine/hips/feet, what is his speed and direction relative to mine, can I limit his options to escape, in which steps am I most likely to lose my balance or my grip, in which step is he most likely to regain his balance or strength, how can I alter a nearly complete technique to allow a more gentle resolution, and how vulnerable am I during a pin. "What happens when I do this rather than that?" Answers are unavailable until questions are asked and feedback received.

The eyes play a vital role in processing distance, direction, speed and environment in most every technique, but the eyes cannot see everything all the time. Most importantly, the eyes cannot see pressure. Tactile feedback is the information one receives through touch as a response to some action. Knowing that the wrist has been gripped strongly and statically in space is different from knowing that the partner's vector and strength has changed in response to a willful action on your part. A good grip, one with a lot of surface area contact and the strength to connect the partner's hand to the rest of his body, is necessary to transmit this information. A grip consisting of only the fingertips weakly holding the wrist is a poor simulation of an attack and neither transmits useful feedback to the nage (one doing the technique), nor will it transfer force to the uke's (one receiving the technique) body.

Effective aikido should overwhelm; it should make the nage strong and make the uke weak from first contact until the final immobilization or throw, never allowing the uke the opportunity to regain his balance. Aikido usually accomplishes this by stealing balance with leverage or torque on the limbs. A body is so interconnected that when a limb has reached its natural limit; the shoulder, hips, feet and spine will automatically adjust to allow more flexibility. When these are out of alignment, the body sacrifices considerable strength to protect a joint or remain standing. This can be demonstrated in the loss of grip strength or directional strength.

Directional strength is required to move or counter movement by connecting the hand to the ground through the muscles of the arms, shoulders, torso, legs and feet. Grip strength only uses the muscles of the fingers, hand and forearm for compression, unconnected to the rest of the body.

Katai (hard) training uses both grip and directional strength as a learning tool, forcing attention on the mechanics and interconnectivity of whole-body movement. The solution to countering strength is to move along the lines of his partner's weakness and is, I think, an excellent means of learning the basic principles of aikido. One should be warned that katai training is only a learning tool, not a simulation of a real attack. Partnered katai practice should not devolve into an ego-based competition to demonstrate dominance by "grounding-out" and purposefully preventing any and all movement because to do so eliminates the purpose of katai training, which is a feedback-intensive learning experience.

Katai training is slow and deliberate. Strength is used by the uke to limit the nage's options, allowing only motion in a direction required by the technique. The technique follows the lines of the uke's weakness and so the more they resist, the more obvious the weak spots become. The deliberate slowness provides more time for principles to be consciously applied and the feedback received to be processed. Multiple angles and directions can be tried until finding the path where the partner is weakest. Motion can be continued slowly until the partner's balance is lost and he is forced to move his center or push his body out of alignment. Torque can be applied slowly following the partner's weak lines until a change in his posture is observed. A danger with katai training is that injury may occur when one resists beyond his body's natural safe limit. An advanced student should be able to sense the tactile cues that a limit has been reached during slow katai training and accordingly not injure his partner. I highlight katai training here only to demonstrate its ability to generate useful feedback. Katai training is only one of many useful methods of training. A variety of methods, each with a different defined purpose, makes for a more well-rounded and effective training regime.

I see spirited randori (sparring) as the best test of aikido skills: technique, strategy, efficiency, balanced movement and awareness. In this exercise, the well-trained techniques and

principles of aikido can be generated spontaneously. After the body has been properly informed, active attention can take a backseat to "being in the moment." Subconscious attention to tactile feedback is necessary to know that one technique isn't working properly and must be altered to something more effective. The same can be said for countering a technique already in motion without undue strength or putting one's own joints in potential danger; feedback is a two-way street. Each participant should be thoroughly involved in the techniques rather than just as a passive reference. The ability to successfully execute henka-waza (altered techniques) or kaeshiwaza (technique reversals) dynamically and without compliance is very advanced and can come only with many hours of serious training with attention to details.

The sterility of the dojo environment is an excellent place to both train and test one's awareness with varying degrees of strength, compliance, speed, complexity and spontaneity. Paying attention is vital to learning aikido and is developed practicing aikido in a reinforcing cycle. While it is easy to get distracted, we should not forget that mindlessly going through the motions during training is to both our and our partner's detriment. I strongly believe that the ability to pay attention to the many levels of feedback offered by a training partner is the single most important aspect in the execution of skillful aikido technique and is the best means for monitoring one's progress.