PRINCIPLE BASED JOINT LOCKS

Setcan

By: Jeff Quail

THE ACCORDION, THE SEE-SAW AND THE BUS DRIVER...

Rethinking how we teach and apply joint locks for subject control.

Decades ago, a strong martial arts influence in the area of subject control resulted in officers being taught numerous joint locks. They relied heavily on the "If-then" philosophy. "If" the subject grabs you here, "then" you apply this specific joint lock. The success rate on the street was minimal because most of the students were not life long martial artists and would not invest the huge hours needed to perform such skills effectively.

Over the last decade, an examination of Hick's Law created a new approach. Hick's law basically states that the more responses to a given stimulus an individual has to choose from, the longer the reaction time. This influenced defensive tactics instructors to limit the techniques taught to decrease reaction time. This was a step forward as students no longer had to learn a laundry list of responses and were able to get more repetitions of the limited number of joint locks being practiced. Unfortunately, if the subject did not resist in the same choreographed fashion that the student had learned, the joint lock failed.

After observing real world encounters, dynamic scenarios and videos of actual field applications by officers, Stress Exposure Training Canada (Setcan Corp.) began examining the effectiveness of officers' application of these joint locks.

Setcan found that officers were successful at applying joint locks under specific conditions, but interestingly, the joint locks did not resemble what was taught to them during training.

Technique Based Joint Locks

This approach is inflexible, specific and unrealistic for the average officer to perform on a resisting individual.

Standing Joint Locks

The difficulty with attempting to apply joint locks on someone who is standing is that they have extremely high body mobility. This can allow them to easily defeat an officer who is attempting to apply a joint lock by having freedom to rapidly move away from pressure and defeat the lock.

Once the body is immobilized, the subject cannot easily defeat the lock being applied.

A closer examination revealed two factors that when combined, had the most dramatic impact on the success of an application. This discovery led to the development of the Setcan Principle Based Joint Lock System™.

Principles allow for infinite applications.

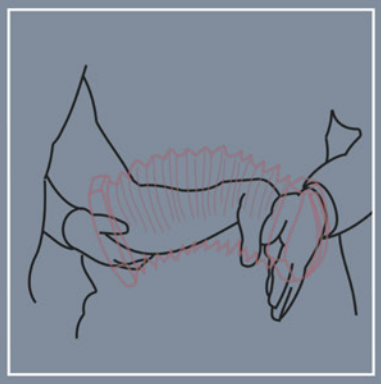
The first factor that was observed was the need for the subject's body to be immobilized before applying the joint lock. This can be accomplished by forcing the subject to the ground, against a wall or by restricting movement with numerous officers. This action alone will dramatically improve the probability of a joint lock being successful. If a joint lock is attempted while the subject can move their body it allows them to twist out, roll out, or move away from the pressure. This is why joint locks often fail when attempted by a single officer on a subject who is standing.

The second factor that increased the success of the joint locks was the officer applying the lock in a manner that was consistent with the principle required to lock the specific joint. This heightened success for the officer regardless if the joint lock was a text book application or not. Almost all officers who where successful with their joints locks could not articulate the principle they were relying on but seem to intuitively understand what was required to lock the joint.

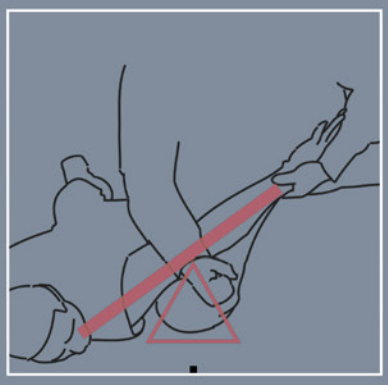
This resulted in a paradigm shift in how to teach joint locks. If officers were taught the principle of how to lock each joint, the need to show a specific technique would become irrelevant. As long as the principle was being applied, each officer could choose a technique that they felt strong and confident with. You can compare the idea of teaching basic math or algebra. If you teach a student that 2 + 3 = 5, then they can only solve this specific equation. However, if you teach them the algebraic formula A + B = C, then they can plug an infinite array of numbers into the equation and come up with a solution.

To simplify these principles further, we utilize three analogies: The Accordion for wrist locks, the See-Saw for arm locks and the Bus Driver for shoulder locks.

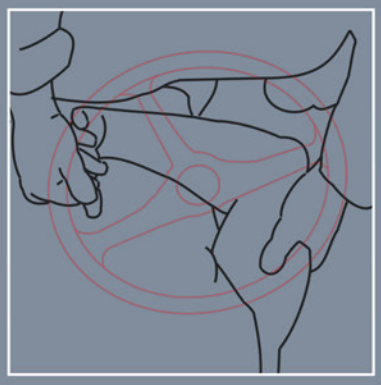
ANALOGIES



THE ACCORDIAN



THE SEE-SAW



THE BUS DRIVER

The Accordion (The Wrist)

The principle taught to lock the wrist is described as "pushing the index knuckle and elbow towards each other." The analogy used to assist in teaching and remembering this principle is by having students visualize the compression of an accordion.

Regardless of what position the wrist is in, if you push the index knuckle and elbow towards each other, the wrist will lock. It is irrelevant how this is accomplished. It may be by simply squeezing the two together with both hands, it might be by securing the elbow with the arm and using the same hand pulling the index knuckle towards the elbow or it might even be accomplished by using the floor against either point. Again, regardless of how the principle is accomplished, the wrist will lock.

The See – Saw (The Elbow)

The principle taught to lock the elbow/ arm is "Immobilize the shoulder, push a fulcrum behind the elbow while pulling the wrist against the pressure of the fulcrum." The analogy used for this technique is a See – Saw with an immovable object on one side.

Again, the focus is on applying the principle, not on a speci c technique. If you examine the straight arm bar or Juji Gatame as it is applied to an individual on the ground you will see the principle being obtained by the legs immobilizing the shoulder, the pelvis creating a fulcrum and the wrist being pulled against the lifting of the pelvic. Since the principle is always being applied in this speci c technique, the joint will lock regardless of whether the position of the person applying the technique is on top, on the bottom, inverted, or in the case of a ying arm bar, in the air. Again, this is only one example of how the principle may be applied, the actual techniques that can achieve this principle are limitless.

The Bus Driver (Shoulder)

The principle for locking the shoulder is "push the wrist towards the neck and the elbow towards the spine." The analogy used is a bus driver turning their steering wheel. Since the shoulder is a ball and socket joint, the joint can be locked in several different directions. This principle is only applicable when the arm is behind the back of the subject. Since this is where the arm needs to be for handcuffing, it is compatible with most subject control programs.

INJURY POTENTIAL

"...Joint locks can carry a very high injury potential."

Most force continuums consider joint locks to be a low level of force. This is troubling since joint locks can carry a very high injury potential. It does not give confidence to a continuum when an individual shows up to court in a cast because of a separated elbow and the officer testifies that they applied a joint lock which is one of the lowest levels of control on their continuum. In order to ensure that students utilize the appropriate level of force, we advocate separating the application of joint locks into to two levels of force.

1. A joint lock applied to point of immobilization.
2. A joint lock moved past the point of immobilization.

The Point of Immobilization

The point of immobilization occurs when the joint lock is applied and moved to the farthest point the subject could naturally move the joint under their own control. At this point the tendons and ligaments are stretched, but not hyper extended, hyper flexed or over rotated. Since the tendons and muscles have been stretched, the ability to move the joint back to a natural position is dramatically weakened and it becomes almost impossible for the individual to move the joint against the lock being applied. No pain is felt by the individual at this point.

Past the Point of Immobilization

Once the joint is moved past the point of immobilization, hyperextension, hyper flexion or over rotation is occurring. This is where pain is felt to varying degrees, depending how far past the point of immobilization the joint is moved and on the individual's own pain tolerance. The injury potential increases dramatically from a joint lock that is only applied to the point of immobilization.

Summary

The Setcan Principle Based Joint Lock System is a simple two step process. First, immobilize the body of the subject. Second, apply a principle based joint lock that works with the officer's strengths and position in relation to the subject's limb.

Lots can be learned by the old maxim "Give a person a fish and you have fed them for a day. Teach a person to fish and you feed them for a lifetime." Instead of teaching your officers a specific technique to lock a joint, teach them the principle of locking the joint and their applications become infinite.

Principle Based Subject Control System

Principle Based Joint Locks are included in the Setcan Principle Based Subject Control Instructor Course.

For more information on how you or your agency can attend an instructor certification, please cotact Setcan Corporation.

P.B.S.C.

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