

CANADIAN JIUJITSU

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Jiu Jitsu and Universality of Movement: A Look at Principles Across Martial Arts

Martial arts systems, though visually distinct and rooted in diverse cultural traditions, often converge on shared truths about the human body and how it moves, balances, and interacts with force. The Canadian Jiu Jitsu Council (CJC) has long emphasized six foundational biomechanical principles that provide a framework for effective, efficient self-defence. These principles focus on the mechanics of motion—how to generate power, maintain balance, and apply control.

However, when we expand our lens to include other martial arts traditions—from the soft redirection of Tai Chi to the precision of Wing Chun and the explosive timing of Muay Thai—we encounter complementary concepts that reflect deeper energetic, strategic, and perceptual layers. Lets consider a comparative perspective that honors both the structured biomechanics of Canadian Jiu Jitsu and the nuanced principles from global martial practices.

The Biomechanical Foundations of Canadian Jiu Jitsu

At the core of Canadian Jiu Jitsu are six biomechanical principles: stability, summation of joint forces, continuity of joint forces, thrust (or impulse), direction of force, and grip and control. These principles are designed to maximize physical efficiency and safety while delivering effective

techniques. As we have discussed in previous articles, stability refers to maintaining or disrupting balance through body positioning and centre of gravity, while summation and continuity of joint forces ensure that movement flows from core to extremity without energy loss.

The principle of thrust emphasizes the time component of force delivery, while direction of force speaks to how energy is applied—whether it's to disrupt, redirect, or overpower an opponent. Lastly, grip and control is that connection between practitioners that allows for the application of throws, joint locks, and come-along holds by managing the opponent's structure.



A Broader Martial Lens:

Many traditional and modern martial arts introduce principles that enhanse pure biomechanics. First, the principle of yielding and redirection is central in Aikido, Tai Chi, and Judo. Rather than meeting force head-on, these arts emphasize blending with or subtly guiding an attack off-line. In



Aikido, and Aiki JuJutsu this takes the form of circular movement and harmony with an attacker's energy. Tai Chi speaks of "four ounces deflecting a thousand pounds," illustrating how softness can overcome hardness. Judo, too, applies kuzushi—balance breaking—through redirection. This principle deepens the biomechanical concept "direction of force," highlighting how force can be neutralized or rerouted rather than simply resisted or countered.

The second principle, centerline control, is essential in arts such as Wing Chun, Silat, and Boxing. These systems recognize that call axis of the opponent's body—head, spine, and chest—offers a

controlling the central vertical axis of the opponent's body—head, spine, and chest—offers a strategic advantage. In Wing Chun, both attack and defense prioritize the centerline. Boxers use jabs and crosses along this line to dominate exchanges, while Silat practitioners often use angular entries that target the central axis. While CJC's biomechanical principles address stability and direction, centerline theory adds precision in targeting and strategy.

Economy of motion, is a hallmark of Jeet Kune Do, Boxing, Karate, and Krav Maga. In these systems, practitioners are taught to eliminate unnecessary movement and strike directly. Bruce Lee's philosophy of "absorbing what is useful and discarding what is not" is evident here. The focus is on fast, efficient, and effective movement under pressure—echoing CJC's continuity and summation of joint forces, but adding a strategic minimalism that sharpens response time and reduces energy expenditure.

The principle of timing and rhythm brings a temporal dimension to martial arts. Karate's kime (focused execution), Muay Thai's well-timed knees and elbows, and Capoeira's rhythmic swaying (ginga) all reflect how critical timing is to success. This principle complements the CJC's "impulse" principle by recognizing that power is not only about magnitude and duration—but about precisely when it is delivered.

Structural integrity, is emphasized in internal arts like Tai Chi and Baguazhang. These systems train practitioners to maintain optimal skeletal alignment so that force can travel through the body without collapse. This idea goes beyond simple muscular strength, focusing instead on postural alignment and fascia connectivity. It parallels the CJC's summation principle but adds the idea that structure alone—not just motion—can generate or absorb force effectively.

Finally, mental stillness, often expressed through terms like zanshin or mushin, is emphasized in arts influenced by Zen, such as Kendo, Iaido, and traditional Karate. It refers to a state of relaxed, alert awareness—being fully present in the moment before, during, and after action. While the CJC's framework is rooted in biomechanics, this principle speaks to the psychological readiness that makes physical execution possible. In truth, mental stillness underlies all movement, stabilizing the mind so the body can act with clarity.

Bridging Principle and Practice

What emerges from this comparison is not contradiction, but complementary. The biomechanical principles of Canadian Jiu Jitsu provide a solid foundation for physical execution, while the principles from other martial arts enrich that foundation with subtlety, timing, and perception. When taken together, these principles help practitioners of any style refine their understanding of motion, stillness, and intention.



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