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## Technical principles of *Atemi-waza* in the first technique of the *Itsutsu-no-kata* in Judo: From a viewpoint of Jujutsu-like *Atemi-waza*

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## Abstract

The purpose of this study is to clarify the following three points, based on Kenji Tomiki's theory, who pointed out properly that the *Atemi-waza* (striking technique) is, in principle, an extension of *Nage-waza* (throwing technique).

- (1) To analyze the most relevant previous studies, in terms of technique, written by Sumiyuki Kotani & Tadao Otaki, chosen among the seven previous studies which describe the teachings of the first technique of the *Itsutsu-no-kata* (forms of five), advocated by Jigoro Kano.
- (2) To demonstrate the first technique of the *Itsutsu-no-kata*, based on the interpretation by Tomiki, who referred, earlier on, to the unique relationship between the first technique of the *Itsutsu-no-kata* and the *Atemi-waza*, and to analyze its video image in terms of technique and biomechanics.
- (3) To clarify the technical principles of the *Atemi-waza* in Jujutsu by synthesizing both of the above mentioned, namely the first technique of the *Itsutsu-no-kata* and the *Atemi-waza*.

The major points clarified are as follows.

- (1) The previous study by Kotani & Otaki (1971) reports that the technical principles in which *Tori* (a person who executes a technique), who touches *Uke* (a person to whom a technique is executed) softly with his palm, and walks, defeats *Uke*, who has turned into a solid matter, reveal the concept of "softness controls hardness," to which Kano attached great importance.
- (2) The interpretation in terms of biomechanics suggested, in a scene where *Tori* makes ceaseless pushing with his palm, followed by consecutive walking, that the reason of *Uke*'s retreat becoming difficult gradually, and thus *Uke* is made to walk with much shorter steps, is because *Tori* has delicate controls over the powers on his thumb or his little finger, and by so doing, *Uke*'s rotation movement on the chest is hindered, and because *Uke* is unable to reflect on his inborn movement or walking. In a scene where *Jizo-tashi* occurs, *Uke* is forced to lose his balance backwards, to a great extent, and as the ground reaction force gradually shifts forward, the backward moment around the *Uke*'s center of gravity applied by *Tori*'s palm, *Uke* is unable to cancel out the reverse moment from the ground reaction force, and thus we finally observed that *Uke* fell off, his center of gravity being rotated, and moving backwards. This movement is considered to be *Jizo-taoshi*.
- (3) Kano argues that *Uke* will surely fall down if *Tori* pushes ceaselessly in an effective direction, whereas Tomiki analyzes this movement precisely, focusing on the palm's force, changing its direction (angle), working on in one-point-one direction, just like the *Atemi-waza*. The essence of Tomiki's discovery is in the fact that the unique character of *Atemi-waza* in Judo lies in the

movement where *Uke* is made to fall down by *Tori*'s movement of soft-touched palm and his manipulation and ceaseless movement of the body. This is interpreted as a sequence of "Touch & Push, Push & Fall down, and Touch & Fall down." This leads to feasibility of realizing *Randori* (free practice) with *Atemi-waza*, which has been an ideal task sought by Kano.

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