

The Tactical Evolution of Greco-Roman Wrestling Under Contemporary Rule Change

Andrii Danyshchuk^{1*} and Oles Pryshva²

¹Department of Sports and Pedagogical Disciplines, Faculty of Physical Education and Sports, Vasyl Stefanyk Carpathian National University, Ivano-Frankivsk, Ukraine; ²Department of Physical Culture and Adaptive Sports, Faculty of Medicine, Health and Sports, Kherson State University, Ukraine.

* Corresponding author: andriydan11itf@gmail.com

OPEN ACCESS

Citation:

Andrii Danyshchuk, Oles Pryshva (2026). The Tactical Evolution of Greco-Roman Wrestling Under Contemporary Rule Change. *Am. Impact Rev.* 10.66308/air.e2026064

Received: July 23, 2026

Accepted: August 2, 2026

Published: August 4, 2026

DOI:

10.66308/air.e2026064

ISSN: 3071-124X

Copyright:

© 2026 Andrii Danyshchuk. This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0).

Abstract

The reform of Greco-Roman wrestling rules began with an institutionalized crisis. On February 12, 2013, the Executive Board of the International Olympic Committee voted to remove wrestling from the core program of the 2020 Games. Working from official documents, this article reconstructs how the subsequent revisions to the scoring system, passivity mechanism, par terre regulations, and spatial boundaries of the mat altered tactical incentives and, through them, the technical arsenal of elite athletes. The shift from a segmented period format, decided partly by lot, to cumulative scoring removed chance from the outcome and subordinated tactics to the logic of continuous accumulation. Abolishing the draw and re-regulating ordered par terre moved value away from positional waiting toward active contact, while the step-out rule narrowed the working space and raised the stakes of the grip battle near the edge of the mat. Together, these changes restored the competitive viability of grand-amplitude throws - the suplex and the reverse body lock in particular - which carry the highest value on the current scale and which the earlier rules had made too risky for their expected return. The article argues that architecture operates as a hidden determinant of biomechanical choice. Directions for empirical verification are outlined in this section.

Keywords: Greco-Roman wrestling, rule evolution, activity and passivity system, ordered par terre, cumulative scoring, grand amplitude throw, step-out, tactical adaptation, United World Wrestling

Introduction

One constraint separates Greco-Roman wrestling from freestyle: no holds below the waist, and no use of the legs for attack or defense (United World Wrestling [UWW], 2025a). Every force vector is displaced into the upper kinematic chain: shoulder girdle, trunk, and spine (Chaabene et al., 2017; Demirkan et al., 2014; Nikooie et al., 2017). A discipline with an anatomically narrowed action space is unusually sensitive to rule revision. When the permitted actions are few to begin with, any change to the scoring system or positional regulation shifts the calculus of which technical solutions pay off.

Traditionally, the analysis of combat sports has treated rules as a neutral background - the fixed stage on which athletic ability competes. This study adopts a different perspective. Rules function as an active selective pressure. The point scale defines a reward structure, and the athlete and coaching staff optimize the technical arsenal in response to it. Change a rule, and the incentives are rewired; the stylistic shifts that follow are

rational responses to that rewiring.

The central question is as follows: how did successive revisions to the Greco-Roman rules after the 2013 crisis redistribute tactical incentives, and what did that redistribution mean biomechanically and positionally for elite competitive styles? The answer is provided in four steps. First, the pre-reform rule logic is reconstructed, and its principal tactical defects are identified. Second, the 2013 crisis was analyzed as the institutional trigger for reform. Third, individual regulatory levels are examined in turn: cumulative scoring, par terre, passivity criteria, and actions near the boundary. Finally, the theoretical account is set against verifiable empirical reference points, chiefly the contemporary technical-tactical model of Zhan Beleniuk, built on positional control, effective par terre work, and rational management of competitive risk.

Method

This study did not involve primary data collection. It is a documentary-analytical reconstruction with a deductive biomechanical component, and that status is stated plainly here so that interpretive conclusions are not mistaken for the experimental findings. The analysis was performed at three complementary levels.

The first is normative textual. The chronology of regulatory change was reconstructed from successive editions of the governing body's rules (FILA until 2014, then United World Wrestling [UWW], n.d.). Specific dates, point values, and sanction wording were checked against the current edition of the International Wrestling Rules (UWW, 2025a) and official IOC material. Secondary accounts served only as supporting orientations.

The second is deductive biomechanical. It shows how the scale of a given point alters the ratio between the expected reward and the risk of positional loss for classes of techniques. The tools are the basic principles of rigid-body mechanics: rotational moments about joint axes, leverage relations of grips, trajectory of the combined center of mass (CoM) of the attacker-opponent system, and role of isometric axial loading during the lift phase. These principles are well-established. The biomechanical readings of specific throws in the sections below are deductive constructions, not cited empirical measurements.

The third level is empirical and illustrative. The analysis is anchored to verifiable figures and bouts, which serve as reference points rather than statistical samples. The limitation is acknowledged directly: individual career facts illustrate mechanisms and cannot serve as inductive evidence for generalization.

The Pre-Reform Format and Its Tactical Defects To gauge the scale of the post-reform shift, we first reconstruct the format that preceded it. From 2005 until the 2013 reforms, a bout was divided into three periods. Each period was scored as a separate unit, contributing nothing to the total. The defect was fundamental: segmentation severed the link between aggregate advantage across the bout and the result of the bout. A wrestler could dominate in total technical actions and still lose, provided that those actions were distributed unevenly across the periods.

The sharpest flaw lies in the resolution of a scoreless period. If neither wrestler scored, an ordered hold - the clinch - was awarded, and chance determined who took the attacking position. The 2005 edition used a coin toss (USA Wrestling, 2005); later editions in force until 2013 used a colored ball, which was drawn and then displayed to spectators and opponents (USA Wrestling, 2011). The wrestler granted the top position had a fixed interval in which to convert, so a portion of the period was decided by the random allocation of positional advantage. Within months of the format's introduction, FILA acknowledged that a wrestler who lost the clinch draw was all but condemned to lose the period (USA Wrestling, 2005).

The lottery produced perverse incentives. On the feet, it became rational to avoid the risk of active contact, hold the period to zero, and trust the draw. What followed was a passive, reactive manner of wrestling, thin on high-amplitude action - the style later identified as a threat to the discipline's appeal to spectators and, in time, to its institutional survival.

Par terre, under this logic, was not the natural extension of the struggle for advantage on the feet. This was an administratively assigned episode. The top wrestler's arsenal concentrates on the gut wrench as the most reliable means of converting an assigned position into points for turning the opponent into a dangerous position. In response, the bottom wrestler developed defensive framing: isometric fixation of the pelvic and shoulder girdles, lowering and widening the base, and neutralizing the gut wrench's rotational moment by distributing body weight along the axis of the turn. The gut-wrench-versus-frame pairing was technically refined, and it grew precisely because the rules artificially inflated the frequency of par terre.

The 2013 Crisis as Institutional Trigger

Reform was not a planned internal improvement process. This answered an existential threat. The IOC Executive Board's decision of February 12, 2013, to remove wrestling from the core Olympic program (International Olympic Committee [IOC], n.d.-c) converted the accumulated stylistic defects from an aesthetic problem into a question of the discipline's survival. The governing body responded with a rapid change of leadership - Nenad Lalović took over FILA, which was subsequently renamed United World Wrestling (UWW, n.d.) - and with a package of rules aimed at maximizing visible action (UWW, 2015). Wrestling's reinstatement for the 2020 and 2024 Games at the 125th IOC Session in Buenos Aires on September 8, 2013 (IOC, n.d.-b) locked in the reform trajectory: the changes became an irreversible institutional direction rather than a trial (Table 1).

What matters analytically is not the crisis itself, but what it exposes. Greco-Roman rules operate as an action-generating mechanism, and when that mechanism starts rewarding inaction, the viability of the entire discipline is in question. The revisions that followed should be read as a deliberate retuning of incentives in favor of initiatives.

Table 1. Key events in the rule reform (2013 - 2025)

Date	Event	Source
12.02.2013	IOC Executive Board decision to remove wrestling from the core program of the 2020 Games	IOC (n.d.-c)
2013	Change of FILA leadership; Nenad Lalović elected president (federation later renamed United World Wrestling)	UWW (n.d.)
08.09.2013	125th IOC Session, Buenos Aires: wrestling returned to the 2020 and 2024 Games	IOC (n.d.-b)
30.04.2015	Modification of Greco-Roman rules; five-point throw reinstated	UWW (2015)
28.03.2025	New Greco-Roman rule tested at the 2025 European Championships	UWW (2025b)
12.2025	Current edition of the International Wrestling Rules	UWW (2025a)

Cumulative Scoring and the Horizon of Tactical Planning

The change with the deepest consequences was the replacement of the segmented period format with cumulative scoring across two three-minute periods. The winner is decided by the sum of both periods, and earlier, by technical superiority at an eight-point margin in Greco-Roman (UWW, 2025a). Table 2 presents the two formats side by side. The reform restored the direct link between aggregate technical advantage and the result and, in doing so, removed the structural basis for holding a period at zero. Every scoring action now irreversibly enters a common total, so deferring activity stopped being a protected strategy and became a cumulative one.

The horizon of tactical planning has shifted accordingly. Under segmentation, the relevant unit was the period, and under cumulative scoring, it was the bout. This raised the value of scoring early and penalized the waiting start, since a deficit no longer reset at the period boundary. The rules began to reward the density of technical actions per unit of time rather than caution on position. This change laid the groundwork for the return of grand amplitude mechanics to become economically rational.

Table 2. Pre-reform and current Greco-Roman bout formats compared

Parameter	2005 - 2013 format	Current format
Bout structure	Three periods, best of three; each period a separate unit	Two periods of 3 min; single cumulative score
Determination of winner	By number of periods won	By the sum of both periods; early win at an 8-point margin
Scoreless period	Ordered hold (clinch); attacking position by draw - coin (2005), coloured ball (2011 - 2013)	Not applicable; activity enforced through passivity sanctions
Access to par terre	Administratively assigned episode	Passivity sanction: one point and top position to the opponent
Step-out	No separate scoring rule	One point to the opponent for a full step with one foot into the protection area without executing a hold
Dominant tactical incentive	Hold the period to zero and rely on the draw	Density of technical action, early scoring, pressure on the feet

Note. Sources: USA Wrestling (2005, 2011); UWW (2025a).

Par Terre: From Lottery to Behavioral Criterion

Par terre regulations have been revised several times since the reform, and that instability is itself informative: the governing body has been experimenting to find a balance between encouraging action and preserving competitive fairness (cf. UWW, 2025b). The common direction across revisions was to detach the par terre position from chance and attach it to a behavioral criterion, namely, passivity.

Under the current logic, an ordered par terre is assigned by sanction for documented inaction rather than by draw. A wrestler identified as passive in Greco-Roman is placed in the bottom par terre position; the opponent receives a point and the chance to convert from the top position. Freestyle instead uses a 30-second activity period during which the passive wrestler must score; failing to do so awards a point to the opponent (UWW, 2025a). Par terre shifted from an administrative lottery to a functional continuation of the struggle for initiative on the feet - positional advantage became earned behavior.

Biomechanically, the center of gravity of the technical arsenal remains close to its position before the reform. The gut wrench holds its role as the primary converter of the top position, and the bottom wrestler's defensive framing is still built around neutralizing the rotational moment. However, the causality of access has changed. Par terre now rewards whoever imposed the tempo, and that reorients the preparation toward active pressure on the feet as a means of *earning* par terre.

The Step-Out Rule and the Spatial Dimension The step-out rule adds a spatial dimension to the incentive structure, but its mechanism is asymmetric and easily misread. Under the current edition, the point goes not to the wrestler who pushed the opponent out, but to the opponent of the wrestler who steps fully with one foot into the protection area while standing and not executing a hold. Actively pushing an opponent out of bounds

scores nothing in itself; deliberate pushing without a meaningful action only draws a verbal warning. Fleeing the mat is a separate, heavier category that carries caution, one or more points to the opponent, and a restart (UWW, 2025a). The periphery of the mat was a zone of negative risk. What carries a price is not the push but one's own exit - the space conceded.

The consequences of the grip battle are considerable, although their logic is negative rather than rewarding. Contact on the feet acquired an additional function: no longer a tool for pushing directly to a point, it became the means of imposing a movement vector that leaves the opponent choosing between stepping out and entering a disadvantageous position. Regulatory subtlety sharpens this asymmetry. If the attacker enters the protection area first during a hold, he retains the right to points, provided that the action is completed without interruption; a halted or unfinished attack counts as a point for the opponent (UWW, 2025a). This raised the value of inside control - command of the inner line of the grip, which allows the attacker to dictate the direction of movement and walk the opponent to the boundary until he crosses it himself. This asymmetry creates tactical tension. Aggressive pressure toward the edge raises the risk of a counter, being thrown, careless exposure, and the attacker stepping out first. Optimization occurs on the line between controlled spatial coercion and opening oneself to a high-amplitude answer.

The Return of Grand Amplitude Mechanics

The cumulative effect of these changes is the restored competitive viability of the amplitude throw. Under pre-reform logic, the suplex and the reverse body lock were disproportionately risky: the high cost of failure - position lost, initiative conceded before a draw - was not offset by a points scale that already permitted victory through passively holding the period to zero. After the reform, this ratio changed. Both the cost of inaction and the relative return on actions that carry an opponent into a dangerous position through a wide arc have increased. Actions of this class now carry the highest denomination on the current scale, five points, against four for a grand amplitude throw that does not bring the opponent into an immediate danger position and two for a gut wrench in par terre (UWW, 2025a; Table 3). By regulatory definition, a grand amplitude action is one in which the opponent loses contact with the mat entirely, is controlled by the attacker, describes a wide arc in the air, and is brought to the mat (UWW, 2025a).

The biomechanics of this class of technique deserve close attention, as it is the ultimate beneficiary of the normative shift. The suplex and its canonical variation, the reverse body lock, unfold through a sequence of phases, each of which loads a distinct link of the upper kinematic chain. In the gripping and lifting phases, the attacker locks the opponent's trunk and generates isometric axial loading along the spine, bringing his own CoM beneath the opponent's to shorten the resistance arm and prepare the system for the lift. What matters is not absolute strength but the relative placement of the two centers of mass: the lift becomes possible once the attacker has carried the system's combined CoM outside the opponent's base of support, denying him any means to generate a stabilizing moment.

The arching phase rotates the system about a transverse axis running approximately through the attacker's lumbosacral junction. Extension of the hips and posterior chain generates angular impulse, while throwing the head and shoulders back lengthens the moment arm about the axis of rotation. The opponent's body functions as a lever, and the attacker's task is to maximize the system's angular velocity while holding the lock as the sole point of moment transfer. This is where vestibular disorientation sets in: the abrupt change in the orientation of the head in space overloads the semicircular canals, temporarily suppresses reflexive postural correction, and denies the opponent the chance to tuck in time for a safe landing or to control the fall.

The landing and fixation phases determine the value of the action in points. The arc must carry the opponent into a dangerous position, and the attacker must retain control to convert a high-amplitude action into a controlled position of advantage. The risk runs in both directions. A failed lift or a broken lock surrenders

the initiative, while overcommitting to the arch exposes one’s own back. After the reform, the points scale tilted this equation toward the attempt, which is why the contemporary style shows a relative revival of this movement class compared with the scoring economy of the pre-reform period.

Table 3. Current scoring scale for key technical actions (UWW, 2025a)

Technical action	Points
Grand amplitude throws the opponent into immediate danger position	5
Grand amplitude throws without immediate danger position	4
Gut wrench in par terre	2
Opponent’s step-out	1
Opponent’s passivity (Greco-Roman)	1 + ordered par terre

Empirical Reference Points

Zhan Beleniuk offers an instructive point of departure for analyzing the contemporary technical-tactical model. Unlike heavyweights, whose advantages often rest on exceptional strength and the execution of high-amplitude throws, Beleniuk’s style combines distance control, positional wrestling, tactical exploitation of an opponent’s passivity, and productive par terre work. Gut-wrench turns hold particular importance in his arsenal, allowing him to take consecutive points without resorting to risky grand-amplitude throws.

The Tokyo Olympic final at 87 kg illustrates this point. Against Hungary’s Viktor Lőrincz, Beleniuk scored four technical points over two turns in par terre and won 5:1. The result brought him Olympic gold after winning a silver medal at the 2016 Games in Rio de Janeiro. He has also been a world champion twice, in 2015 and 2019. (UWW, 2021a, 2021b)

For this analysis, Beleniuk’s competitive trajectory matters as empirical confirmation of a shift toward a style in which the outcome is determined not by the amplitude of an individual action alone but by the capacity to accumulate advantage systematically through positional control, par terre work, precise timing, and rational risk management. His performances show that the current rules reward activity and technical productivity without necessarily requiring constant recourse to high amplitude techniques. Thus, contemporary Greco-Roman wrestling can be understood as a combination of technical mastery, tactical discipline, and effective adaptation to the normative scoring system.

The contemporary super-heavyweight division is represented by Mijaín López, whose run of five consecutive Olympic titles (2008, 2012, 2016, 2020, and 2024) made him the first athlete in the Games history to win five golds in a single individual event (IOC, 2024). His style illustrates how the post-reform structure rewards pairing positional control of the feet with selective, high-amplitude execution. Setting the two figures, Beleniuk and López, side by side shows how a shared regulatory environment produces different yet equally productive elite profiles. Beleniuk’s style is marked by positional discipline, distance control, tactical contests for activity, and consistent conversion of advantage in the par terre. López’s model rests to a considerable degree on physical dominance, control of space, pressure on the feet, and the capacity to neutralize an opponent’s attacking actions in the heaviest division. The comparison indicates that the current rules do not produce a single optimal style; rather, they create conditions for various combinations of positional control, strength capacity, par terre work, and management of competitive risk. The comparison remains largely illustrative and sketches a hypothesis whose testing would require systematic notational analysis of bouts - the frequency of technical actions, means of scoring, passivity episodes, and productivity on the feet and in par terre.

Discussion

One conclusion runs through the analysis: the style of Greco-Roman wrestling is endogenous to the architecture of its rules. The defects of the pre-reform period - passivity, poverty of high-amplitude action, and dependence of the result on a drawing-were not a deficit of athletic ability. They were rational responses to rules that rewarded caution. The post-reform trajectory set off by the 2013 crisis returned incentives step by step: cumulative scoring restored the link between action and result, tying par terre to passivity removed chance from positional advantage, the step-out rule added a spatial dimension, and the combined effect raised the viability of grand-amplitude mechanics. The fact that the governing body was still testing fine adjustments to victory criteria in 2025 (UWW, 2025b) supports the claim that rules function as a living selective pressure that continues to operate.

This framework has practical implications for the training process. If the technical arsenal is an optimization against the rules, then preparing an elite wrestler should explicitly model the current incentive scale rather than some abstract "correct" style. The return of high-amplitude actions means a greater return on investment in developing the posterior chain and explosive hip extension. The emphasis on the contest for space calls for training the vectored pressure and inside control. The gut wrench's continuing role implies further work on converting par terre. Simultaneously, the instability of par terre and passivity regulations means that part of this optimization is a moving target, which makes adaptability to future revisions a trainable competence.

The limitations are stated directly as follows. The analysis is interpretive and requires two types of empirical confirmation. The first is the continued documentary control of normative details against future editions of the rules; current provisions were checked against the UWW 2025 edition and official IOC sources. The second is a systematic notational analysis of a representative sample of bouts before and after each revision, quantifying the postulated shifts in the frequency of technical classes. Without this second line, the claim of a revival in high-amplitude mechanics remains a well-grounded hypothesis rather than a measured fact.

Conclusions

The architecture of Greco-Roman rules operates as a hidden determinant of biomechanical and tactical choices. The cycle of rule change set off by the institutional crisis of 2013 systematically reoriented incentives from positional waiting toward initiative-based contact and redistributed them in favor of the density of action, spatial pressure, and grand-amplitude execution. The contemporary Greco-Roman style is therefore a rational optimization of the technical arsenal against revised rules. Further work should render this analytical framework measurable through a notational analysis of bouts, matched against a precise chronology of regulatory editions.

References

1. Chaabene, H., Negra, Y., Bouguezzi, R., Mkaouer, B., Franchini, E., Julio, U., & Hachana, Y. (2017). Physical and physiological attributes of wrestlers: An update. *Journal of Strength and Conditioning Research*, 31(5), 1411 - 1442. <https://doi.org/10.1519/JSC.0000000000001738>
2. Demirkan, E., Kutlu, M., Koz, M., Özal, M., & Favre, M. (2014). Physical fitness differences between freestyle and Greco-Roman junior wrestlers. *Journal of Human Kinetics*, 41, 245 - 251. <https://doi.org/10.2478/hukin-2014-0052>
3. International Olympic Committee. (n.d.-b). *125th IOC Session*. Olympics.com. Retrieved July 2, 2026, from <https://olympics.com/ioc/125th-ioc-session>

4. International Olympic Committee. (n.d.-c). *Wrestling*. Olympics.com. Retrieved July 2, 2026, from <https://www.olympics.com/en/sports/wrestling/>
5. International Olympic Committee. (2024, August 6). *Paris 2024 wrestling: All results, as history made in Greco-Roman men's 130kg as Cuba's Mijain Lopez Nuñez becomes first-ever athlete to win five golds in same event*. Olympics.com. <https://www.olympics.com/en/news/paris-2024-wrestling-mijain-lopez-nunez-first-athlete-win-five-golds-same-event>
6. Nikooie, R., Cheraghi, M., & Mohamadipour, F. (2017). Physiological determinants of wrestling success in elite Iranian senior and junior Greco-Roman wrestlers. *The Journal of Sports Medicine and Physical Fitness*, 57(3), 219 - 226. <https://doi.org/10.23736/S0022-4707.16.06017-5>
7. United World Wrestling. (n.d.). History of UWW. Retrieved July 23, 2026, from <https://uww.org/about-uww/uww-history>
8. United World Wrestling. (2015, April 30). *United World Wrestling modifies Greco-Roman rules, reinstates five-point throw*. <https://uww.org/article/united-world-wrestling-modifies-greco-roman-rules-reinstates-five-point-throw>
9. United World Wrestling. (2021a, July 22). #WrestleTokyo Olympic Games preview: 87 kg. <https://uww.org/article/wrestletokyo-olympic-games-preview-87kg>
10. United World Wrestling. (2021b, August 4). Beleniuk moves to top of Olympic podium; Geraei, Kawai strike gold. <https://uww.org/article/wrestletokyo-day-three-finals-preview>
11. United World Wrestling. (2025a). *International wrestling rules: Greco-Roman wrestling, freestyle wrestling* (December 2025 ed.). https://cdn.uww.org/2025-12/wrestling_rules_1.pdf
12. United World Wrestling. (2025b, March 28). *UWW to test new Greco rule at 2025 European Championships*. <https://uww.org/article/uww-test-new-greco-rule-2025-european-championships>
13. USA Wrestling. (2005, March 2). *Letter from FILA concerning Greco-Roman and Freestyle clinch*. TheMat.com. <https://www.themat.com/news/2005/march/02/letter-from-fila-concerning-gr-11871>
14. USA Wrestling. (2011, December 14). New FILA Greco-Roman rules to be used at U.S. Greco-Roman Open in Arlington, Texas this weekend. TheMat.com. <https://www.themat.com/news/2011/december/14/new-fila-greco-roman-rules-to-24479>