

Physical activity in science & practice

Conference Proceedings | In celebration
of the 60th anniversary of the establishment
of the Faculty of Physical Education
and Sport, Charles University in Prague
[Prague, 19–21 June 2013]

KAROLINUM

Libor Flemr, Jiří Němec,
Kateřina Kudláčková
[eds.]

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In celebration of the 60th anniversary of the establishment of the Faculty of Physical Education and Sport, Charles University in Prague
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Libor Flemr, Jiří Němec, Kateřina Kudláčková (eds.)

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**SPORT, EXERCISE
AND PHYSICAL EDUCATION
IN THE SOCIAL SCIENCES**

CHARLES UNIVERSITY IN PRAGUE
FACULTY OF PHYSICAL EDUCATION AND SPORT
DEPARTMENT OF KINANTHROPOLOGY AND HUMANITIES

THE PROBLEM OF SAFETY IN MARTIAL ARTS AND MARTIAL SPORTS

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ABSTRACT

On the basis of the differentiation of martial activities according to their meaning for the participants (i.e. close combat, martial arts, martial paths and martial sports) (Martínková & Vágner 2010), I shall distinguish a lethal kind of combat (close combat) from several combat kinds that are not supposed to be lethal (especially martial arts and martial sports). I have three main aims: (1) I shall introduce the reasons and strategies for enabling combat to be peaceful; (2) I shall discuss the role of safety in the two main contemporary kinds of peaceful martial activities (martial arts and martial sports); (3) I shall present the problems that might arise in martial arts and martial sports due to safety concerns. The main focus of enquiry is on the difficulty of maintaining the martial character of these activities whilst restricting the effects of danger.

Key words: close combat, martial arts, martial sports, safety, danger, ethics

INTRODUCTION

Combat has developed over a long period of time, and it is possible to distinguish different kinds of combat according to different criteria. In our earlier work (Martínková & Vágner 2010), we distinguished four main contemporary kinds of combat according to the meaning it has for practitioners. These distinctions were based on the different kinds of combat in Japanese culture (partly inspired by Donohue 2005, who draws on Draeger 1973a, 1973b, 1974), which influenced the mode of combat in the Euro-American cultural context to a great degree. We distinguished the terms ‘close combat’, ‘martial arts’, ‘martial paths’ and ‘martial sports’¹ (though there obviously exist also other kinds of combat according to the same criterion, e.g. see Martínková, Peliš & Veselý 2013, regarding different kinds of combat in Chinese cultural context).

¹ ‘Martial paths’ can also be called ‘martial ways’ and ‘martial sports’ are often referred to as ‘combat sports’.

The aim of these articles was not just to describe modes of combat in specific regions, but to lay the foundations for various kinds of combat according to their meaning for participants – and, indeed, we can find most of these kinds of combat not only in Japan, but also in many other regions, Europe and the Americas not excepted. But even if not all kinds of combat are manifested in all regions, this does not mean that they cannot appear later – so our previous work is a basis for categories that are of an eidetic character, rather than descriptions of the empirical.

Whilst we still have some examples of close combat in our safe societies (mainly in the military sector), I shall examine the two main contemporary kinds of ‘peaceful’ combat (martial arts and martial sports) that have developed out of close combat.² I shall focus mainly on the diminishing of the level of danger to life or of causing serious injury to the participants, and on strategies and consequences of this change.

LETHAL AND PEACEFUL MARTIAL ACTIVITIES

The most basic function of combat is to defeat opponents or to defend oneself from them – this is a kind of combat that we called ‘close combat’ (Martínková & Vágner 2010). This kind of combat is pragmatic and efficient and therefore dangerous – the outcome is often the death or serious injury of one or more of the combatants. Such a necessity to defeat others and/or defend oneself is a basic kind of combat that is to be found in most societies and that is to some extent present even in the relatively peaceful Western societies of post-war times, and we can still find lethal combat for example in the army environment or in street fights and individual attacks on people. These street encounters are often, at least for one participant, involuntary and surprising, and they can be very unequal (e.g. the individual concerned may have had no previous martial training).

However, close combat is not the only kind of combat. There are also other – peaceful – kinds of combat that are supposed to be non-lethal. The change of lethal combat into these non-lethal kinds brings about a change in combat itself. These non-lethal kinds of combat have a different aim – combat here is more educative, voluntary, equal, restricted and therefore much safer; it belongs mainly to free time activities and entertainment. In the next section I shall discuss the change of close combat to martial arts and martial sports, which I shall call ‘safetification’.

SAFETIFICATION OF MARTIAL ACTIVITIES

Historically, the development of various non-lethal kinds of combat flourished especially at the end of the 19th and beginning of the 20th centuries, after the introduction of more efficient means of fighting and killing (tanks, fighting airplanes, nuclear weap-

² However, not every martial art or martial sport necessarily originates directly from close combat.

ons) and with the gradual development of safer societies, in which death as an outcome of fighting is usually justifiable only in self-defence or war. In these circumstances lethal combat becomes relatively redundant, as its use becomes less and less necessary. However, combat can still be recognized as valuable, even without the necessity to defend or kill people, for example, as a means of education – since development through the process of training and the acquisition of martial techniques could have various benefits for people, even in safer societies. But to serve this purpose, combat needs to become non-lethal, i.e. peaceful.

Presently we can recognize two prevailing kinds of such non-lethal (peaceful) combat that are to be found in many societies – martial arts and martial sports (Martínková & Vágner 2010) – even though it is possible to distinguish other peaceful kinds of combat too, such as, for example, martial paths³ (Martínková & Vágner 2010, p. 33), martial shows⁴ (see e.g. Martínková, Peliš & Veselý 2013, p. 17), etc. While it may look illogical to talk about martial arts and martial sports at the same time since they differ in many aspects, it is possible to do so on a general level with respect to the topic of safety, since the relationship of both to safety is very similar – these activities are supposed to use martial techniques, while they are supposed to be educative or developmental, and therefore safe. Let us now distinguish these two kinds of combat in more detail.

Martial arts can be described as martial activities undertaken with the aim of developing oneself in various aspects while learning combat techniques (development of motor skills, character, moral virtues, insights into principles of combat, qualities such as perseverance, patience, etc.), and all this without lethal consequences. So the combat here is relatively safe, and while the practitioners do learn to fight against an opponent, the main aim is self-improvement. Donohue (2005, p. 10) suggests that: “‘martial arts’ are rather ‘martially inspired arts’ with little or no realistic combat utility in the modern world.”

Another popular kind of peaceful combat is called ‘martial sports’ (or sometimes ‘combat sports’). These sports are competitive rule-governed contests that use martial techniques as the activity in which athletes are compared one against another. The aim here is ‘to fight to win’, which requires the overcoming of an opponent in a way that is not proscribed by the rules. The rules of martial sports seek to ensure that the participants are not severely hurt or killed within the bout, and that the competition is balanced and fair. Similarly as all sports, martial sports have their intrinsic values, such as competition values, ascetic values, interpersonal values, self-improvement, moral values, etc. – for which sports are valuable in education – in Physical Education (Pezdek 2012) as well as in Olympic Education (Hadjistephanou, Pigozzi & McNamee 2012).

³ The term ‘martial paths’ highlights the connection of combat to religious, educational and philosophical systems. An example of a martial path is the practice of martial techniques within the context of Zen Buddhism. The aim here is enlightenment (*satori*) – the acquisition of martial techniques is supposed to help with improvement of one’s balance, breathing, flexibility, being in the ‘here and now’, readiness for the unexpected, etc. (See e.g. Herrigel 1971)

⁴ The term ‘martial shows’ denotes the usage of martial techniques for the purpose of presenting symbolic meanings to the audience, such as, for example, in the Chinese ‘lion dance’.

However, martial sports place higher emphasis on competition, which is not of so high value in martial arts. This is one of the reasons why in some cases martial arts practitioners (e.g. in kendo) try to preserve their ‘arts’ from a change into martial sports, which changes their character (see Honda 2007).

Martial arts and martial sports are more or less connected to education and the striving of humans to improve themselves. Both of them are contests, and the interaction is direct, without any barriers between the opponents, while the participants are supposed to engage with each other. The aim is to defeat the opponent – but not in such a way as to defeat him absolutely (to kill him), but rather to give him the opportunity to learn about his/her weak spots that need to be improved. Participants let each other live so that they can further improve and compare their performances again. Martial arts and martial sports necessarily require this ‘con-testing’ (testing oneself against others) and therefore it would not make sense to kill one’s opponents – for there would soon be no more possibility to participate and improve (see ‘sporting families’ in Kretchmar 1975, p. 28). This is a very different aim from the pragmatic aim of close combat, which is to overcome someone with the aim of gaining a benefit or, at least, not losing something, and in which self-improvement is a means to this end.

In both of these non-lethal kinds of combat, the pragmatic aim of combat itself is changed and vastly differs from the real-life fighting of close combat. Aims determine legitimate means and thus also the character of the activity itself. One important aspect of this change (of close combat into more peaceful kinds) lies in making combat more safe. I shall call this the ‘safetification’ of combat. This safetification is brought about by different strategies:

- introduction of rules,
- regulation of techniques,
- regulation of weapons and equipment.

Now, I shall discuss strategies of safetification of combat in more detail – taking the examples of martial arts and martial sports.

STRATEGIES OF SAFETIFICATION OF MARTIAL ARTS AND MARTIAL SPORTS

Close combat is supposed to be efficient with respect to defeating an opponent or defending oneself from him/her, and so it is inherently dangerous. If there are some limits to constrain it, they are represented predominantly by the legal system of the given society and possibly the general approach to human beings (ethos), but the martial activity itself is not limited. Close combat has to be as efficient as possible – as Anglo (2000, p. 35) said: “The only rule that mattered was self-preservation. A man had to be ready to kill his adversary as quickly as possible.”

However, if combat is to be a part of education within a peaceful society, it is important to make sure that its efficiency is limited and therefore modified in various ways. To begin with, for making sure that nobody dies, the creation, application and adherence to rules is necessary. Often, the rules specify conditions of time, place, eligibility and procedure. That is, the rules limit the conditions *when* and *where* martial arts and martial sports can be practised and *who* are the eligible participants, and *how* the fighting is performed. Rules are observed by coaches, referees, judges and timekeepers.

So, the rules about time prescribe an agreed and definite *time* for the contest; and the fight itself is limited by time, or if one of the contestants sustains a severe injury, or is certain to lose. Also, club rules often prescribe for participants certain legitimate times for practice, and institutional rules set the times of contests.

Similarly, the rules set a specific *place* for the contest, so that combat is assured to be safe. While close combat can occur virtually anywhere, the place for martial arts and sports is usually indoors – for example, a gymnasium (or ‘*dojo*’ in the context of Japanese martial arts). The environment of the gymnasium itself is relatively danger-free, with a stable homogeneous surface on which the contestants move without any potentially dangerous objects surrounding them. Martial arts and martial sports practitioners are allowed to use their techniques in these specific conditions, but not in a public space and not against non-trained people.

It is not only *time* and *place* but also *eligibility* – who can participate? Martial arts and martial sports that are part of education are theoretically accessible for everyone. However, not everyone can take part in an actual contest – only those who are relatively equal competitors are permitted to fight against each other. For many martial arts and martial sports, age and weight categories are introduced to make sure that relatively equal fighters fight against each other, and that the fight is fair.

Eligibility sometimes also depends on the state of health of participants. For example, in many martial sports medical approval prior to competition is necessary, to certify that the fighter is eligible to fight. For example, the International Boxing Association (2013, p. 5) requires that: “A Boxer will not be allowed to compete in an international competition unless such Boxer possesses a valid up-to-date Boxer’s AIBA Competition Record Book in which such Boxer must be certified as fit to box by a qualified Medical Doctor as approved by the presiding AIBA Medical Jury Member.” And there are further rules that ensure the medical approval as valid.

And finally, as to *procedure*, it is the technical rules of martial arts and martial sports that ensure how the martial activity is conducted. The main focus is on making sure that fighters do not inflict serious injuries or lethal blows on each other. Thus, another aspect of the safetification of combat is the limitation of various dangerous techniques. This can be done in various ways, such as, for example, removing lethal techniques altogether, or limiting them – stopping one’s blows in front of the opponent, restricting areas of the body where the blows may be placed, etc. Technical rules make the simplicity of efficient fighting more complicated – it is determined with precision what the fighter must or must not do. Rather than learning to use absolutely

the most efficient technique for the given circumstances to defeat an opponent, martial arts and martial sports are restrictive systems of permitted techniques. And a fighter knows that it is only permitted techniques that can be used by and against him or her.

For example, the International Boxing Association (2013, p. 13) determines different kinds of fouls:

“6.1. *Types of Fouls*

- 6.1.1. Hitting below the belt, holding, tripping, kicking, and butting with foot or knee;
- 6.1.2. Hits or blows with head, shoulder, forearm, elbow, throttling of the opponent, and pressing with arm or elbow in opponent’s face, pressing the head of the opponent back over the ropes;
- 6.1.3. Hitting with open glove, the inside of the glove, wrist or side of the hand; ...”

However, even the permitted manoeuvres are safetified – various pieces of protective equipment, such as mouthpiece, belt, box, gloves, etc., make sure that the fight is even safer. And the same is true for weapons – only rebated weapons are allowed for use within martial arts and martial sports (e.g. the introduction of flexible materials for fencing, removal of sharp edges, substitution of a stick for a sword, etc.)

These changes affect the character of the combat. Consider an example from the martial art *kendo*, presented by Donohue (2005, p. 10): “Although popularly understood as the art of Japanese fencing, kendo is not the same art that was practiced by the feudal swordsmen of Japan, the *bushi* or *samurai*. It is a modern system which developed out of the arts of these feudal warriors, but it is very different. Kendo has rules, combat does not. The restriction of kendo blows to eight areas has made a noticeable change in *kendo bogu* (armor) when compared to the war armor of the samurai. The *shinai*, the bamboo foil utilized in kendo, is used differently from a real sword, is shaped and balanced differently from the *katana*, and is (a most important consideration) not a lethal weapon. Kendo’s stance and movements have been conditioned by the fact that *kendoka* (kendo practitioners) typically train indoors on a hardwood floor. Feudal warriors fought on battlefields.”

With respect to martial sports, even more rules are introduced – some changing the sport so that it is more interesting for the audience (e.g. specific clothing or other restrictions are prescribed). Also, anti-doping rules are a part of martial sports rules, one reason for which is to ensure that the athletes do not use harming substances. Finally, in both martial arts and martial sports we find codes of conduct that regulate the acts of participants, in such a way as to enabling them to fight (and live) in a moral way.

While having rules is important for safety concerns, safety does not arise only through *having* rules, but also about *strictly adhering to* them, as studies of injuries in this area suggest (e.g. Critchley et al. 1999). This applies not only to the participants, but also to coaches and others, and it is also strongly supported by strict refereeing conventions.

PROBLEMS ARISING FROM THE SAFETIFICATION OF MARTIAL ACTIVITIES

Changing the lethal forms of close combat into peaceful kinds brings with it various consequences. If, within education, people do not want to cause death or serious injuries to those who are striving to improve, martial activities that are meant for a safe society have indeed to be safe. However, this is in contradiction to what combat is, and some of the consequences are problematic – too much safety can mean a loss of the martial character of martial arts and martial sports altogether.

I shall now discuss three consequences of the safetification of martial arts and martial sports:

1. gradual diminishing of dangerousness,
2. inefficiency of skills and techniques for combat purposes,
3. re-emergence of ‘dangerous combat’ as a result of ‘de-sportization’.

1. Of course, because of the direct interaction of opponents, injuries can happen in both martial arts and martial sports. However, if an injury should occur, it is not because it is an aim of martial arts and martial sports, but rather it is an accident. In the case of a very serious accident, rules are often changed for future participants, in order to avoid a similar accident in the future. Discussions of studies on injuries in combat sports point in this direction. For example, Shirani’s et al. (2010) survey of injuries that occur in combat sports “[...] points out and documents the dangers involved in taking up such sports and stresses the need for safer rules and regulation, and also for better protective gear. These issues may be reflected to influence the Chairman of the Olympic Committee or the Martial Arts Federation.”

However, any change of rules must be done with caution so that martial arts and martial sports keep a certain level of danger, in order that the martial aspect is retained. We should remember that close combat, being the most basic kind of combat, is the almost-forgotten basis of the peaceful kinds of combat, and that some level of danger must remain. Thus the rules have to make sure that a correct tension is kept, so that both martial arts and martial sports retain their martial character whilst, on the other hand, they do not present too much risk and danger to participants. So, safetification should be only partial, and whilst martial arts and martial sports should not be considered lethal, neither should they be considered safe. Participants (and coaches and parents, etc.) should be aware that they are consenting to the possibility of a certain degree of risk and danger. We should see these activities as ‘partially dangerous’.

2. Safetifying martial arts and martial sports makes them artificial and sophisticated systems (especially because of all the rules that have to be followed), and this means also making them less effective, and sometimes even virtually ineffective as real martial systems. Furthermore, they tend to stagnate and can become rigid, since they are not tested in real martial encounters. Also, unlike in close combat, in which

people usually learn more systems, and are taught to be flexible with techniques, martial arts and martial sports are codified systems, and the adherence to one system limits the practitioners, making them less flexible and less ready for any dangerous combat situation that might occur. Therefore, practitioners should not have too high expectations about the combat effectiveness of their martial skills. Participants and masters or coaches should be clear about this and, if they ever find themselves in a really dangerous situation, they should remember that their opponent(s) will not necessarily adhere to the rules of some martial art or sport. Even boxing skills may not be much use in a close-combat bar fight. In these circumstances, one must be flexible, and not to stick to one (possibly ineffective) system. Sometimes just to run away as fast as possible is the best strategy, rather than to rely on a set of acquired sophisticated techniques.

3. The high levels of safetification in martial arts and martial sports have had a possibly unforeseen consequence – the process of the de-sportization of martial sports. The reason for this is that there are those who do not want to be constrained by these safe kinds of combat, but prefer rather to fight outside of any one system, under much simplified rules that permit ‘dangerous combat’, in which a common outcome is injury (e.g. cage fighting, UFC, NHB, MMA). In these cases, rules are reduced, sometimes to minimum – for example, Van Bottenburg & Heilbron (2006) describe the first Ultimate Fighting Championship (UFC) as follows: “With the exception of biting and eye gouging, anything was permissible in the first few UFCs ... The only possible ending was knockout or submission, the latter being signalled by ‘tapping out’ or by the coach throwing a towel into the mesh-rimmed ring” (ibid., p. 260), and the fighting was advertised with phrases such as: “THERE ARE NO RULES” and “THEY FIGHT TO SURVIVE” (ibid., p. 260).

These fights stem from commercial interests and offer the audience fights that resemble close combat. However, the aim here is not a purely pragmatic one (defeat someone or defend oneself), but also to be spectacular and to attract an audience, while manifesting high levels of violence to which both sides agree. So it seems that our safety-conscious society and the safetification of close combat have brought about a new kind of combat, a fight that is very close to a real fight – which is motivated by financial and personal motives, while putting the fighter into dangerous situations. The interest in these fights is high, but authorities have continued to monitor them and control them, and their pressure has led to changes in these combat practices, by which some of them underwent the processes of ‘re-sportization’ and spectacularization to allow these fights to happen, while some did not change and moved underground (Van Bottenburg & Heilbron 2006, pp. 276 f.). However, further de-sportization is still possible, permitting “displays of behaviour and feelings that have been banished from everyday life and social conventions” (ibid., p. 279).

So, in conclusion, it becomes clear that knowing about the problems of the safetification of combat can help those who make the rules of these peaceful martial activities

more sensitive to changes, while it may help participants to be clearer about the nature of what they are doing.

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BIBLIOGRAPHY

- Anglo, S. (2000). *The Martial Arts of Renaissance Europe*. Yale University Press.
- Critchley, R., Mannion, S., & Meredith, C. (1999). Injury rates in Shotokan karate. *British Journal of Sports Medicine*, 33, 174–177.
- Donohue, J. J. (2005). Modern Educational Theories and Traditional Japanese Martial Arts Training Methods. *Journal of Asian Martial Arts*, 14(2), 8–29.
- Draeger, D. F. (1973a). *Classical Budo: The Martial Arts and Ways of Japan, Volume II*. New York: Weatherhill.
- Draeger, D. F. (1973b). *Classical Bujutsu: The Martial Arts and Ways of Japan, Volume I*. New York: Weatherhill.
- Draeger, D. F. (1974). *Modern Bujutsu and Budo: The Martial Arts and Ways of Japan, Volume III*. New York: Weatherhill.
- Hadjistephanou, C., Pigozzi, F., & McNamee, M. (2012). Olympism in Tertiary Education – New Challenges & Opportunities. *Acta Universitatis Carolinae – Kinanthropologica*, 48(1), 76–89.
- Herrigel, E. (1971). *Zen in the Art of Archery*. New York: Vintage Books.
- Honda, S. (2007). The Olympic Way: An Exploration of Problems Faced by Teachers of Kendo when a Traditional Culture is Challenged by Modern Pressures. In H. Sheridan, L. A. Howe & K. Thompson (Eds.), *Sporting Reflections: Some Philosophical Perspectives* (pp. 98–118). Oxford: Meyer & Meyer.
- International Boxing Association (2013). *AIBA Technical Rules*. Retrieved April 20, 2013, from: <http://www.aiba.org/documents/site1/docs/Rules/AIBA%20Technical%20Rules%20-%2011.03.2013.pdf>.
- Kretchmar, R. S. (1975). From Test to Contest: An Analysis of Two Kinds of Counterpoint in Sport. *Journal of the Philosophy of Sport*, 2, 23–30.
- Martínková, I., Peliš, M., & Veselý, T. (2013). Různé podoby čínského wushu. *Česká kinantropologie*, 17(1), 9–20.
- Martínková, I., & Vágner, M. (2010). Terminologické vymezení bojových aktivit v oblasti kinantropologie. *Česká kinantropologie*, 14(1), 29–38.
- Pezdek, K. (2012). Physical Education as a Medium of Communicating Moral Values. *Acta Universitatis Carolinae – Kinanthropologica*, 48(1), 126–133.
- Shirani, G., Kalantar Motamedi, M. H., Ashuri, A., & Eshkevari, P. S. (2010). Prevalence and patterns of combat sport related maxillofacial injuries. *Journal of Emergencies, Trauma and Shock*, 3(4), 314–317.
- Van Bottenburg, M., & Heilbron, J. (2006). De-sportization of fighting contests: The Origins and Dynamics of No Holds Barred Events and the Theory of Sportization. *International review for the sociology of sport*, 41(3–4), 259–282.

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