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# The Object of Study in Martial Arts and Combat Sports Research – Contributions to a Complex Whole

**Key Words:** hermeneutics, human motricity, motrice action, martial arts, combat sports.

### Introduction

One of the first literary works known in humankind is the Epic of Gilgamesh, a poem from Ancient Mesopotamia that revolves around the life of the demigod King that lived 5000 years ago in Uruk (Sumer). This epic describes a ritual fight between Gilgamesh, semi-god, and Enkido, who was half-wild and become friend of Gilgamesh after the fight.

Differently, the biblical fight between Caim and Abel, belongs to a different kind of nature: it is not ritualized because it could not be repeated by participants – Abel was killed by Caim.

The big difference between the first and the second narratives remains on the sublimation of the fight action. On the first narration, the kill is more symbolic, even if the bodies of the fighters remain the target, as object, and objective of the actions, until the victory and defeat; on the second one, the kill is real. The last narration is the base of war, and the first one is the base of sport and art: when the sublimation of utilitarianism happens and, in a human group, is accepted. This is why sport is social and, in martial arts and combat

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sports, sociology and philosophy, at pair with other sciences, contribute to the theoretical core of sport science studies.

Wushu, Wrestling, Taekwondo, Sumo, Sambo, Muaythai, Kickboxing, Kendō, Karate, Judō, Ju-jitsu, Fencing, Boxing and Aikidō are sports integrated in GAISF (General Assembly of International Sports Federations). A large part of them became institutionalized in Asian countries during end of XIX century and earlier XX century, leaded by Japan with Budō and Sumo. Other ones came from Europe and become part of program in earlier Olympic Games, like Fencing or Boxing. All of them maintain certain noted relationships with fighting techniques used in war or real fight. But ritualizing the dead with institutionalized rules, the objective of the symbolic fight becomes not killing opponent, rather than personal transcendence motivated by practice of fighting actions with common construction or norms, values and symbols on accepted rules, looking for the visibility of a win and a loose, symbolizing the life and dead.

Commonly we found general references to these symbolic and ritualized contexts of human culture as "Martial", "Fighting" "Combat", etc., mixed with "Arts", "Sports", "Activities"... Some times we found also on such denominations precisions as "Traditional", "Classical", "Modern" or even "Sportive"...

It must be noted that similar multi-references are usual with "Sport", "Physical", etc., mixed with "Education", "Culture", "Activities", "Science"... And names as "Kinesiology", "Kineantropology", "Kinetics", "Movement", "Motricity", etc., become references for models in institutions, courses, conferences, etc.

As we said before, because sport is social, different cultures and different historical moments are linked with different names, because the subject looking is different, trying to find similarities in methodological approaches identifying object as for science in positive paradigm (subject – method – object). But science itself is changing rapidly, in an epistemic way with other social constructions as institutions.

The **comprehension** of such phenomenona can be mediated by various **explicative** processes. For a biological approach, sport, combat sports or martial arts, are explained by the way of looking (methodology), probably different from a psychological, social or philosophical approach. Indeed the scientific explanations for sportive human actions give us data to progress on the comprehension of that phenomenon, and the quality of the interpretation of data and context are linked with the hermeneutic exercise [Ricoeur 1981, p. 220] we need to do.

It is noted the increase in number of scientific researchers that are practitioners of Combat Sports and Martial Arts, and as long as they become advanced practitioners, they experience different roles as instructors, directors,

grading judges (for practitioners) or referees (for competitors). We can note the increasing of the scientific look into various areas from biological to socio-axiological aspects of Martial Arts and Combat Sports, doing interpretative exercises, where explanation and comprehension evolves in hermeneutic sense to a certain "praxiological hermeneutic" [Girton 1986] at any organizational level, and usually supported by participant observation [Stoleroff 2000] possible by its observer – observed relation analog to Wacquant [2000].

We have international scientific movements that intend to group research in such adequate contexts: from a general approach as "Journal of Asian Martial Arts", passing to special issues in Combat Sports as "Journal of Sport Sciences and Medicine", we have interesting international conferences and congresses on the last years that become more and more active as this second international conference in Poland in 2008.

To appreciate the significance of martial arts and combat sports is to understand their nature as a complex entity. The interpretation of given data, even respecting Bachelard's [1938] rupture of scientific knowledge, can go deeply to the second rupture common on post modernity paradigm [Santos 1989]. That's why the researcher in that case, as in any of them, must maintain a "double epistemological vigilance" [Figueiredo 2006], that means: be aware to separate from epistemological obstacles, as common sense errors, at the same time he maintains efforts in not missing the global complexity and return to common sense. With John Ziman the *Public Knowledge* [1968], the *Reliable Knowledge* [1978] and *Real Science* [2000] introduce us that the reference about science as social, just as we present sport, mean that "this context includes the whole network of social and epistemic practices where scientific [or sport] believes actually emerge and are sustained" [Ziman 2000, p. X].

During the Bachelard's construction of a "scientific spirit" (translated directly from French edition: "esprit scientifique"), we must have a "criticizing method [...] in front of the known and the unknown, always in guard against the familiar knowledge's [...]". In that way, bachelor appeals to the "spiritual destiny" that any idea must have, more than "existence prove".

We will not hesitate to look as error – or spiritual inutility, what isn't far from being the same thing – every truth that is not the part from a general system, every experience, even just, whose affirmation stays unlinked with a general method of experimentation, every observation that, for real and positive that be it, it is announced in a false perspective of verification [Bachelard 1938, p. 11].

On the same Bachelor context, "the epistemologist must underline, between every cognizance's of an époque, the fecund ideas" [*ibid*], more linked with a multi spatial movement than a chronological construction.

In that way, the construction on broad models for understanding local realities are very important. There are not so many metasport studies and our present communication goes in same broad way as Prof. Taketo Sasaki approach to "Budō" and Prof. Roman Kalina approach to "Combat Sports Theory" (on this same publication). We believe that broad models, when concentrating common benefits to networking in togetherness projects, with support of individuality particularities, become efficient for the purpose they have: representing the reality (not substitute it) with togetherness benefits for researchers and practitioners (pen and sword).

In this way we contribute to reflecting and understanding the "general system" [Bachelard 1938, p. 11], and the "complex whole" [Ziman 2000, p. x]. We will present the construction of this broad model for object of study in Martial Arts and Combat Sports as a subsystem of another one: Sport as complex context of Human Motricity.

### The Martial Art Context

The word "martial" is connoted with Latin "mars" and "martis", roman god of war, and the word "arts" meaning "skill as a result of learning or practice" came from latin "ars" and "artis" meaning "skill method", "technique", "conduct", "character". Even if we know that "Martial Art" doesn't mean necessary Asian, and that's why some more informed people publish journals as "Journal of Asian Martial Arts", in some ways we see that "martial art" expression is connoted with Eastern Martial Arts<sup>2</sup>.

The first English known mention to "martial arts" is registered in an anonymous book from 1639 with a reference of Jo Sotheby to the "[...] famous Martiall art Of fencing. [...]" [Pallas Armata, orig.: 1639].

"Fencing", translated in modern times as "Escrime" in French and "Esgrima" in Spanish and Portuguese, is assumed to be a shortening of the Middle English "defens" (defense), from Latin *defensa*. It means that earlier and late medieval manuals of fencing include also other tecniques rather than only foil, épée and sable as in olympic fencing, and that the word found to describe it was "martial art" in Pallas Armata manual.

In modern times, we could say that Japan was the first country in Asia and world to institutionalize in great manner the combat sports as a whole in a special organization. The name given was *Dai Nippon Butoku Kai* (大日本武德会): the Great (dai) Japan (nihon) Martial (bu) Virtue (toku) Association (kai). Founded in 1895 after *Meiji* revolution (1868-1912), the association builds the *Butokuden* (Martial Virtue Hall), completed in 1899, witch organized branches

<sup>&</sup>lt;sup>2</sup> "Martial arts" appear in English 1933 dictionaries as translating Japanese *bujutsu*. The French dictionary defines "martial art" as "traditional combat sports from East Asia": "arts martiaux" – "les sports de combat traditionnels d'Extrême Orient" – Le dictionnaire Petit Robert, Paris, Le Robert, 1989, p. 1159

throughout the country (including Okinawa) and held a Martial Virtue Festival (*Butokusen*) every year in May. *Butokukai* open the training institute for martial art's teachers in 1905, which became the Special Training College of Bujutsu (*Bujutsu Senmon Gakko*) in 1912. In 1919, after the official change of the word *bujutsu* to *budō*, the *Budō Senmon Gakkō* (武道専門学校) was established, becoming known as *Busen*, an abbreviation. From the 1920s to the 1930s budō showed remarkable development [Draeger 1974, p. 35; Inoue 1998, pp. 89-90; McCarthy 1999, pp. 25-28; 71-84; Mol 2001, pp. 80, 221].

The modern name used since 1919 to that whole group of activities was Budō (武 道) and the sense was very linked with education philosophy from past to modernity. We can translate as "martial way" but there is a certain complexity around it that indicates a togetherness movement in main countries of Asia.

There are also two other terms used by Japanese to denote aspects of these activities: Bugei (武 芸) or "martial arts", a general term more erudite in use, and Bujutsu (武 術) or "martial techniques", a concrete term more popular for premeiji arts and techniques, also very used today, and from wich become modern Budō. This is an example of the Japanese culture in *inventing traditions* very well treated by Japanese sociology teacher Inoue Shun [1998]. The institutionalization, indeed, happens inventing a tradition: Budō.

But this is not an only Japanese institutionalization movement. Probably because the Koreanization of Budō [Bennet 2004, p. 2; 2005, p. 327] after the finish of Japanese occupation in Korea, that influenced Korean education under Japanese rule (1910-1945), we have the same use of original Chinese characters (武 術) for Mou Sul (same as Bujutsu) [Min-Ho 1999, pp. 11-12]. In that movement, Japanese dōjo is *dojang*, Judō is *Yudo*, Aikidō is *Hapkido* and Kendō is *Kumdo*. In Karate, toudidō is *tangsoodo*, shotokan is *songmookwan* and Karatedō is *kongsoodo*, but the alternative denomination developed was Taekwondo.

Today we are near to see in 2008 open ceremony the world visible side of Wu Shu (武 術 – Chinese characters read Bujutsu in Japanese or Mousul in Korean) after the "Wushu Tournament Beijin 2008", from 21st to 24th August: "According to the Host City Contract, no international or national sports competition is allowed to be held in the Olympic host city during the Games and one week before or after. But this wushu tournament has been approved by the International Olympic Committee (IOC) specifically," said Wang Xiaolin³, director of China's Wushu Administrative Center.

So, the name Wushu (武 術), usually translated as "martial arts", with the new Chinese entrance in Olympic movement after the pause for isolation, became an institutionalized sport recognized by International Olympic

<sup>&</sup>lt;sup>3</sup>See: [http://en.beijing2008.cn/news/sports/headlines/others/n214192558.shtml]

Committee, after an invented tradition with Japanese that from Bujutsu (武術) passed to Budō (武道) in 1919. Budō as a modern whole group of different *kaiha* (schools), viewed as sports after (Judō, Kendō, Kyudō, Karatedō, etc.) some of them Koreanizated and even Olympic recognized for program as Taekwondo, become again a group but in a sport: Wushu.

We consider the ideogram "bu", "wu" or "mou" (武) as the central idea of these new activities that where responsible for the concept of Asian Martial Arts on world.



Fig. 1 - "Bu", "Wu" or "Mou"

This ideogram (武) as radical includes "stop" (止) and "weapons" (文). The conjunction means cease the fight or battle. Translating these Asian concepts as "martial arts" can simplify the real complexity around it, and its correct deconstruction, make us starting to understand its proper complexity, even without explaining the western concept of "martial" and "art". We do not intend more than indicate, by this example, the need of interpreting hermeneutically the translation of Budō, Wushu or Mou Sul as Martial Art. Indeed Europe and Asia constructed and still are constructing in social complexity the concepts.

Because its complexity, today, we can found people referring to "Budō Sports" in Japan.

# **Combat Sports Contexts**

The word "sport", since earlier (c. 1400) is linked with taking pleasure and to amuse oneself from Anglo-French "disport" that, since 1303, from "disporter", means "divert, amuse" and from old French "desporter", literally "carry away" ("des"="away" + "porter"="to carry") as carry away the mind

from serious matters, and from latin "portare" (to carry), and this is visible in actual languages maintaining Latin similarities, as "deporte" (Spanish) or "desporto" (Portuguese).

The actual concept of sport can be found in European Sports Charter:

"All forms of physical activity which, through casual or organised participation, aim at expressing or improving physical fitness and mental well-being, forming social relationships or obtaining results in competition at all levels".

The *physical fitness* is linked with *bio* dimension of human being, the *mental well-being* is more linked with *psycho* dimension and the *social relationships* evidence the *socio* dimension.

A Person is a bio-psycho-social unity in a certain context, and should be said that this represents a logical integrity of identified limits, because the limits we cannot identify, they cannot be represented. The context is the sport, and the multidimensional concept link us to the idea that sport is not a neutral activity; its impact factor in human development depends of the project dimension as central connection between *kinetics* (movement grade), *ludics* (pleasure grade), *agonistics* (emulation/competition grade) and *institution* (norms, values and symbols establishment grade).

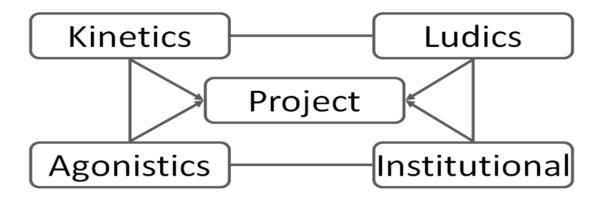


Fig. 2 – Pentadimensional Sport concept (adapted from Pires)

Focusing in an institutional analysis of sport, as a social context where human motricity [Sergio 1987] happens, we can observe the intentionality of the sport communities, in relation with other social practices, in an epistemic way.

Sport is the institutionalization of certain practices, and the degrees of institutionalization conducts to the interpretation of social happenings. These movements are epistemic relations with other social activities.

The sport as we see it today is different from the sport of the emergence of Olympic Games with Coubertin's stimulation. That sport was founded between modern industrialization and postmodernity. But Sport emerges in modernity before the beginning of Olympic Games, institutionalizing the

traditional games. Sport begins to be the institutionalization of a human motricity play.

The rupture with the world of tradition during the born of modernity at its beginning, was thinking throw two essential values: "the liberty and equality, and throw an inedit figure, the autonomous individual in rupture with the world of tradition" [Charles 2004, p. 22].

In that whole complex world of modernity the organized sport becomes visible, and International Olympic Committee is the world top institution emerged between the linkage between tradition and modernity. Tradition is there, in modernity, integrated but surmounted.

We can considerer this moment as the effort to construct "organized sport" (OS), and we have developed during XX century International Sport Federations where we found many combat sports and martial arts federations from west and east. The effort of Dai Nippon Butokukai emergence, as we presented earlier, belongs to this model.

But this modern institutionalization, more and more visible, conducts to the emergence of the visibility of what we can call the "casual sport", the human motricity actions that happen in a low institutionalized context and many times, against the major institutions. "The postmodernity represents the precise historical moment where every institutional constraints that contradict individual emancipation give place to singular desires" [Charles 2004. pp. 22-23].

On the same over institution time, with Gilles Lipovetsky and Sébastian Charles [2004] the idea of hypermodernity follows, between other ideas, the freedom sensation of human being. The same idea we found in Marc Augé with the analysis of the place, evidencing "the intrusion of territory into space. Land = society = nation = culture = religion: the equation of anthropological place, fleetingly inscribed in space". Returning to the "non-place of space, escaping from the totalitarian constraints of place" [1995, p. 116], the freedom resembling freedom return to the individual, with similar constraints (land – culture).

The idea of a seem contradiction in terms need for soon as "ethnology of solitude" found explanation on Augé's conclusion that "the community of human destinies is experienced in the anonymity of non-place, and in solitude" and because of that we agree that "it is no longer possible for social analysis to dispense with individuals, nor for an analysis of individuals to ignore the spaces through which they are in transit" [Augé 1995, p. 120].

Many groups of people in martial arts and combat sports present their activities as not sportive, because their nature of practice are presented as different from the sport federations trying to gain credentials in world sport institutions. Usually they comment as "traditional" or "classical" martial arts, usually as "not competitive" and more linked with the reality of the fighting actions.

These make many practitioners argue to differentiate their practice from sport, linking hardly sport to competition and lack of credibility in human values and fighting skills. These lack of a complete analysis in both complex ways, usually simplifies one part of the complex duality presented.

But this vertical moment of individuality on the horizontality of the group make individuals emancipate from institutional constraints and look deep in their self esteem.

From *negatrice* of tradition we can go deeply to the *integratice* linked with multi-vision, and in this way, there are place for organized sport, for casual sport and for non-sport, just as we can go from "organized combat", "casual combat" and "non-combat".

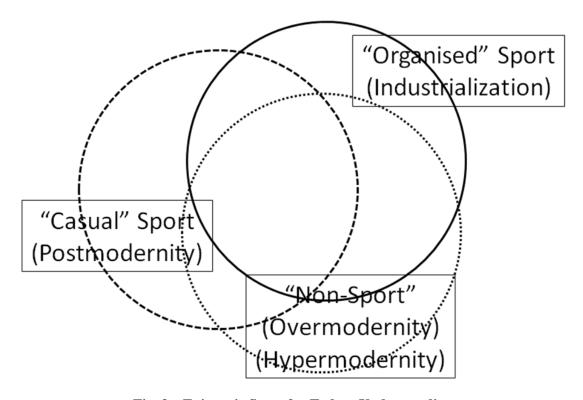


Fig. 3 – Epistemic Sport for Todays Understanding

### **Human Motricity Actions**

The translation of "Motricidade Humana" [Sergio 1987] as "Human Kinetics" is not correct. "Human motion", "human movement" ("movimento" in Portuguese) and even "human kinetics" (kinetic in Portuguese is "cinética") do not emerge with the enough significance.

It is common to see authors to translate the French term "motricité" of Merleau-Ponty, for "motricity" and not for "motivity". On the other hand,

scientists as the neurophysiologist Rodolfo Llinás call "motricity" in a relatively new mat.

He calls the movements fixed—action patterns (FAPs), and he argues that they are where thinking and consciousness began. Active movement—what Llinás calls motricity—is the very source and main stem of mental life. "That which we call thinking is the evolutionary internalization of movement." <sup>4</sup>

The coherence with the intense "I move, so I am" from Sergio [1987], is very interesting. But it is not the movement as observed that is the main target.

We use of the term "human motricity" ("motricité humaine"; "motricidad humana") in the denomination of our macro-object of study, in the scope of the scientific community. Terms as motricity sciences ("sciences de la motricité" in French by Marc Duran – motricity sciences) appear as better possibilities rather than ones centered in the contexts as objects of study (physical education, sport, etc.). For a paradigm where object of study is simultaneously the person and the circumstance, focus on context is not enough.

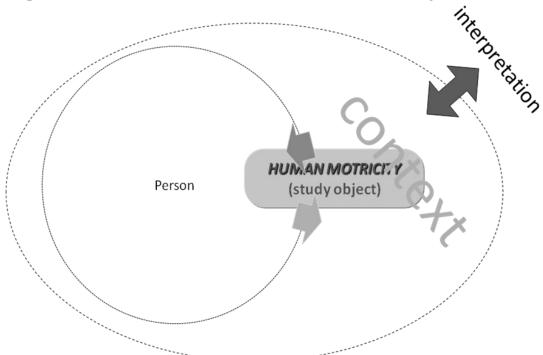


Fig. 4 – Basics of Human Motricity Interpretation

The invisible side of the human movement is in the operative intentionality, for what the concept of Human Motricity (HM) emerges with Manuel Sergio [1987] in the mat of Merleau-Ponty [1945] among others. The HM is studied and stimulated in its personal transdimension (biopsychosocial) and context.

<sup>&</sup>lt;sup>4</sup> [http://www.americanscientist.org/template/BookReviewTypeDetail/assetid/14370;jsessionid=baa9].

Affirming HM (Human Motricity) as macro-object of study, explainable and understandable through the light of various sciences in function of some contexts, the hermeneutic method is affirmed as the methodological main field to have in account for interpretation.

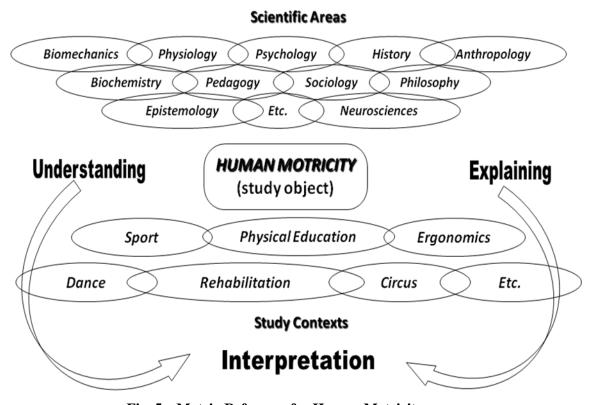


Fig. 5 – Matrix Reference for Human Motricity

Sport (sport motricity), Physical Education (educative motricity), Dance and Circus, between others (artistic motricity), Rehabilitation (rehabilitative motricity), etc., emerge as contexts with various degrees of institutionalization in social web. They become study contexts when HM is interpreted under science studies.

In a micro intervention during exercising practice throw intentional process (training), and in a interfactorial, multifactorial or transfactorial analysis, we can link human dimensions with training factors [Bompa 1990; 1999] and task realization conditionings [Famose 1990], usually the biomotricity dimension focused in three main factors: physical (biophysiological conditionings), technical (biomechanical conditionings) and tactical (bioinformational conditionings); the psychomotricity dimension focused in psychological factor (affective and emotional conditionings); and sociomotricity on theoretical factor (socio-cultural conditionings). This is the basis of the microscopic intervention and tools.

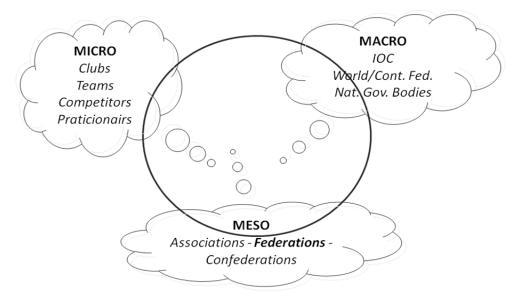


Fig. 6 – Sport Metadimension Analysis

The macroscopic view, help us to look and interpret organizations as International Olympic Committee, World or Continental Federations, or even National Governing Bodies, is fundamental to situate the institutional analysis. Human Motricity is macroscopic also.

The individuals are organized in groups with different levels, and thinking. The mesoscopic analysis in sport motricity situates the HM of the person on its sport context, linked him from micro to macro. To this we have the mesoscopic model of analysis [Figueiredo 2006].

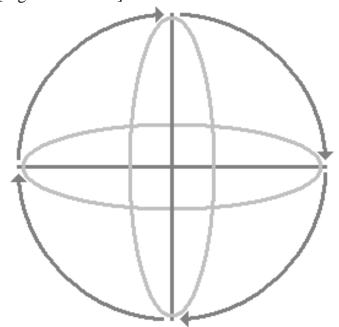


Fig. 7 – Mesoscopic

The concept of Motrice Action (MA) emerges in the mat of Paul Ricoeur [1977] and Eugénia Trigo [1999] and is assumed as micro-object of study already fruit of the Human Motricity Hermeneutics. Motrice is for motricity as motor is for mobility.

### Conclusion

The Martial Arts and Combat Sports are contexts of bonanza biopsychosocio-axiological wealth of where it urges to have a double epistemological vigilance. Human Motricity hermeneutics, becoming visible in the explanation and understanding of the Motrice Actions, must be made by specialists who understand the context of the motricity in martial arts and combat sports.

Rather than concentrate on negatrice movements, trying to differentiate some aspects of this or that, the integratice attitude became essential to the complex whole of these activities. The object of study and practice in martial arts and combat sports is the motrice action in institutionalized combat.

Motrice because we go deeply in a multi complex micro individual and macro collective interpretation of human action. The institutionalization of intentional communities in different martial arts and combat sport contexts is so important such individual bio-psycho-social aspects.

The institucionalized practices of combat assumes norms, values and symbols that must be integrated on the complexity of the motrice action.

The epistemic rhythm of motrice actions in ritualized fighting appeals to the fact that not only the visibility of the opponent body as target and objective becomes essential. In some aspects, the non-combat appeals to an overcombat perspective, like in kyudō. The target is not the objective, and even the liberation from the arrow and the bow becomes an overfight. The same interpretation can be done in a Karatedō Kata motrice action. The interpretation of a kata is not focusing in a real fighter as opponent.

Deeply, the interpretation of Kata action, following Ricoeur's theory of interpretation, like a text, "is a meaningful entity which must be constructed as a whole; and a conflict of interpretations can be resolved only by a process of argumentation and debate, in which the intentions of the agent may be relevant but are not decisive" [John Thompson, in: Ricoeur, 1981, pp. 15-16]. The same must be applied to referees or judging grades and, why not, to other motrice action in Sport Motricity, or Educative Motricity, or even in Artistic Motricity where expression assumes major relevance.

Following an interpretative exercise, where explanation and comprehension evolutes in hermeneutic sense, we have looked into the "motrice action in ritualized combat" that, from a proto-sportive evidence (as in Gilgamesh),

approaches the contemporaneous sport rhythm as the study subject of Martial Arts and Combat Sports in a postmodern paradigm, complemented with a "surmodernité" [Augé 1992] (supermodernity/overmodernity), or "hypermodernité" [Lipovetsky 2004] attitude.

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