

ORIGINAL RESEARCH

**CANOEING SLALOM: ORGANIZATION IN EUROPE AND OLYMPICS AREAS**

ANTOINE MARSAC

University of Burgundy, Dijon, France

**Address for correspondence:** Laboratoire Socio-psychologie et Management du sport- EA 4180, UFR STAPS, Campus Universitaire de Montmuzard, BP27877 – 21 078 Dijon Cedex, France  
Email: [antoine.marsac@u-bourgogne.fr](mailto:antoine.marsac@u-bourgogne.fr)

**Abstract**

The article describes how canoeing become an Olympic sport with development of competition's areas. It studies the relations between slalom canoeing and urbanization process. Wild water slalom has been an Olympic discipline since 1972. It is fundamental to a better understanding of the process of "sportivization" (Elias and Dunning, 1994) experienced by this discipline in its constitutive phase. Although the original activity was practised on rivers, this sport took place from torrents to artificial areas. Two serials of results are discussed. On a hand, this sport appears to be still closely associated with the main characteristics of outdoor recreation. On the other hand, the new presence of sport among big cities does not seem to reduce this activity in the rivers, since both types of activity co-exist without any process of transformation. The historic study of the Olympic Games shows that athletes prefer artificial sites to natural ones. Nowadays wild water Stadiums are situated in big cities. Canoeing remains an outdoor sport, even if it develops in urban areas. Canoeing is now practised by city-dwellers, whose socialization and learning occur in a developed environment. Artificial installation changes the constraints of the activity, and thus the sense of play habits

**Key-words :** Canoeing, history, Olympic Games, wild water stadiums, cities, torrents.

**Introduction**

Wild water slalom canoeing has been an Olympic discipline since 1972. For 30 000 persons were combined around the pond of race. Although previously, competitions were organized from the thirties, no event contained an urban device (terraces, control of the accesses, the paying entries) governing a demonstration of canoeing. After a disappearance of twenty years of the program of the Olympic Games, this discipline, reintroduced since 1992, remains threatened with eviction in every Olympiad. The reasons called by the organizers concern the cost of the installations, which is difficult to make profitable, miss its legibility of the regulation of the events by the spectators, questionable judgment and the chances of the wild water (difficulties to record the penalties of the competitors). While all the sports stabilized their "play area", the kayakers oscillate between tastes for the river (Isère) and the adaptation to the artificial sites of European towns (Pau, Prague...).

By studying specifically the canoeing, Michel Bouet showed that these sports based themselves on a "confrontation" with the nature" (Bouet, 1969). Now, when we examine the history of the slalom, we notice that attempts to reduce the uncertainty of the environment are present by the fact of mastering the debits and it for two reasons. On one hand, there is a concern to maintain an equivalent level of competition for every competitor (Elias, 1994). On the other hand, the kayakers tried to model their courses in their way.

With dams in urban zones, used from the beginning the fifties, they were able to regulate their space of practice (Eichberg and Al., 1998). These aspects are to be taken into account to measure the urbanization of the practices of open air because they offer a first level of explanation. Indeed, the slalom by taking place in spaces not assigned to the sporting event (river, dams) is different to the sports show as the major sports (football, tennis), established on an urban implanting.

The slalom constitutes a modality of practice of the canoeing which takes place on a rapid of the river. To make best use of the currents created by the wild water, a technicality is rigorous. Pickets are suspended over the surface of the water to stress the technical difficulties of the torrent. If for the most part of the kayakers, to navigate in wild water, it is to evolve in natural spaces, artificial sites were conceived on five continents. Now in the majority of the cases, the slalom takes place in a specific space in urban zones. These parties of rivers are

places where a river is diverted and fitted out for the practice in big cities. Wild water Stadiums build themselves, becoming artificial sites adapted to Olympics games.

### Problem

The aim of this article is to show how an activity taking place originally in a natural environment is going to change sense, as the space of practice evolves towards the city. By studying specifically the canoeing, Bouet shows how much this sport bases itself on a "solitary "wrestling" with the nature" (Bouet, 1969). But how an individual sport, practised originally in natural environment, does it become established in town? What is the influence of the inscription of this discipline to the Olympic program in the urbanization of the practices?

### Method

The investigation method used in order to collect the research data has consisted of archives analysis and interviews. We have questioned by competitors and the federal directors about construction of equipments (Wild water stadiums) and practices evolutions. How did word of this activity spread? It is advisable here to return on the landmarks which marked out the history of this sport. At first, the social sciences deal with the problem of the sportivization of this activity. This concept is developed by Elias and Dunning (1994). This theoretical viewpoint shows that there is a gap between physical activities and Olympic sports. The reference to historic facts justifies itself in the deployment of this process which does not stop pressing on the transformations of the sites of practices. To report specificities of the activity, it is necessary to return on the emergence of the first competitions in wild water. Secondly, the urban fact will be questioned in the alder of the sports practice. This consists more precisely in studying a cross approach of the rationalization of the sports movement and of the normalization of the urban fact. How do the kayakers adapt the practices of wild water from nature to the city? The structural and formal analyses presented in *La Rivière* (first magazine in France to focus in canoe) allow us to study history of slalom and canoeing.

### Canoeing slalom: outdoor recreation and Olympism

Before the Second World War, the slalom was a method of training intended to reproduce the informative complexity of the river. From the first competitions, regulated sections are similar to a permanent place of competition. The development of ponds of slalom in urban zones converted this exercise in discipline of competition. This initiative take its roots come in the construction of artificial rivers in town. It asks the question of the evolution of the show because the inscription of the slalom in the Olympic movement increased its urban visibility. In Europe, the interwar period was favourable to the development of slalom canoeing. So there is a "push of sportivization" (Elias and Dunning, 1994) when the slalom was created in 1934, in Switzerland because it is about the empowerment of a practice which is imperative outside the "descent of river ". From the thirties, the followers tell about "pond of slalom" and a break takes place with the tradition of touring of the kayakers in river. The concentration of the followers in an only place explains this will of the kayakers of slalom, for a long time stayed in the anonymity, to turn gradually to the city. Pierre de Coubertin reminds in sports Pedagogy that "*the water sport, it is the sport for the sport, the free effort the Olympic ideal*" (1938). Beyond this amateurism philosophy, how establishes the practice itself?

Paradoxically, the Second World War does not mark the ruling of the practice. On the contrary, this period is synonymous with progress of this activity. Indeed, the review *La Rivière*, stated participations in competitions during the years of activity. French victories are even mentioned there! In this period, the slalom is set in the speeches against the race in river: "*the slalom is useful for the technical perfection of every paddler while the criterion is a stupidity, the sportsman has the nose riveted on the point of his boat and so wastes the pleasure of a descent*" (*La Rivière*, 37, 1943).

By leaning on the concept of "modalities of practice ", developed in the field of the sociology of the sport by Pociello, we understand the influence of the urbanization on the activity of the kayakers. First of all, it is necessary to connect the practice with the "sports natural spaces". In France, the first sites appear near mills, near towns of average importance (Louviers, Créteil, Apremont-sur-Allier near Nevers and Trillbardou). All are installed in the approval of the restraints. The common evacuee of dams reproduces, partially, the movements of water of rivers. The wild water which builds up itself allows there to realize the technical figures which we meet on torrents. Secondly, let us mention the will to organize the competitions in a stable environment. Rivers are thus abandoned for the benefit of the dams which offer the possibility of regulating the debits. It allows to get closer to a space of competition dedicating the sportivization of the activity. The equity between competitors is a sine qua none condition to raise the practice to the rank of Olympic sport. The kayakers previously took place as of evolution these portions of wild water of the river, the currents in the approval of dams. In that case, they equipped with doors the rapids of the river which can be fitted out. The slalom takes place on developments, from the 1940s. During an interview led with Hervé Madoré, National technical director of the French Federation of Canoeing from 1988 to 1997, the composed questions concerned the geographical origin of the first slaloms: "*In fact, it is necessary to know that the practice in artificial environment goes back up in the*

years 1935-36 (in Switzerland and in Austria) where we find a track of the first slaloms which were organized ". Therefore, the paddlers evolve in an environment fitted out for the needs of the competition. This process of "sportivization" must be examined to understand the implication of the kayakers in the first developments.

Let us return on connections between the city and the influence of the first competitions on the practices in river. So, the canoeing can be envisaged as the ongoing construction of new practices, passing of a movement in the nature in search of a style. It is then necessary to move closer to this situation of the concerns of the kayakers themselves who get organized in groups of followers. These social aggregations define themselves by the membership in a bounded entity (clubs, groups of peers). Indeed, the paddlers differ between kayakers engaged on more ways of practice (descent of river, tourism). The renewal of the naming of the ways of practice raises the problem of the definition of the activities as the figure 1 shows it. A difference takes place between practices of the canoeing by the meanings that their attribute the followers. It shows itself when the slalom imposes passages obliged the paddlers. This demarcation of the "training ground" is not any more reduced to the descent of the river, but it is complicated by the installation of pickets over the water. There is thus a codification of the ways to navigate in wild water, through this arrangement of the space. The slalom remains the most prestigious competition because it requires a technical precision and it is necessary to wait for the Olympic Games of Munich to see the canoeing going out of the shade thanks to the mediatization of the competitions on Eiskanal, situated to Ausburg, in the South of Germany. It is about a bypass channel which was created from the XIXth century. The site is held for the organization of Olympics showing in the whole world that it is possible to navigate in canoe a totally artificial stretch of water.

1972 : The slalom becomes Olympic in the Games Olympic of Munich, an artificial river is built in Augsburg.  
1981: Inauguration of the first artificial river conceived by the national company of the Rhône.  
1992-1993: Conception and inauguration of the first wild water Stadium in the city center of Lannion.

**Figure 1 : Chronology of dates of the artificial equipments in wild water**

In spite of his success, the slalom was disappearing progressively from the same Olympic program between 1972 and 1992. But during these twenty years on returning to the confidentiality, the autonomy towards the descents of river comes true through the adaptation towards a spectacular practice.

**Areas and the competitions of slalom**

When we ask the question of the stake in entertainment of natural sports, the number of spectators attending the competitions appears, from then on, as an indicator to supply an answer. The slalom is introduced for the first time in Olympics in Munich, in 1972. Although demonstrations get organized from the thirties, the event contains a huge installation of terraces, paying access control indispensable to the Olympic events of canoeing. So that there is sports entertainment, the space of practice is not any more reduced to sites natural. The emergence of the slalom is marked by the will to stabilize the conditions of exercise which take root in the development in town of specific places, dedicated to the competitions assuring the equity between the competitors. The interest of this sport lives in the urban distribution of the practice: " *these slaloms would arouse besides an interest among the viewers and would be a powerful propaganda means.* " (La Rivière, 325, 1947)

But what does the notion of wild water cover? By defining it, we reveal the sense, so raising any ambiguity of direction. In the studied spaces of practices, the kayakers evolve on a natural element. It is a question here, of a physical element which is a portion of water put in movement under the influence of the gravity. The wild water is also a construction which indicates sites in which the current is convenient to navigation in kayak. In his work, Bill Mattos, defines the wild water as "any water, generally of river, which contains rapids with zones of lightning flow, where the shape of the bed of the river provokes waves and chaotic and unpredictable currents" (2004). The descent of river, the slalom between the movements of water of a torrent, the crossing of current downstream to a dam, the realization of figure in a wave, constitute manners to run in canoeing. All these practices are gathered around the terms "wild waters" (currents, rocks). The expression "wild water" used also on the singular indicates a social construction which gathers the followers of the river of the origin until today. With this development of the canoe, we can wonder about the origin of this expression. Naming "white water" in American, "Wild water" in English or "wild wasser" in German indicates respectively the wild water as white or wild waters. The expression is envisaged as a social construction of the urban representation of streams by the Anglo-Saxon culture which establishes a dichotomy between "the artificial" and the "savage". The expression "wild water" sends back to an opposition between "dead water" and "alive water" "standing out as" natural creation ". Indeed, it seems necessary to control the conditions of practice.

In the majority of the cases, the sportive events take place in a "semi-natural" space, tracing on the descents of torrent. Now, in slalom, this passage of the river, uncertain environment by definition, in the middle domesticated by the Stadium of wild water consolidates "an urban access to the entertainment" (Maguire, 1999). Indeed, this trend to the urbanization was confirmed by a survey with five hundred kayakers of slalom because 73 % them prefer "areas situated in a town" to the sections of river situated away from cities. A follower questioned at the wild water Stadium of Cergy confirms: "the opening in the general public has just got late our activity. In the middle of the 80s still, we asserted that most of the sites were in zones difficult to access: gorges,

*torrents enclosed in mountain* ". In 1985, Baudou raises the same report by wondering about the device of entertainment: "the developments necessary for the reception of the public are non-existent. Will the followers of wild waters remain the Spartans of the french sport? Real Stadiums are necessary for the practice of the slalom in canoeing" (1985).

The canoeing in wild water would embody the values of the Olympic movement for its social aspects. The spectators, the groups of supporters consisted of city members for majority: friends, family of the kayakers. After the international competitions, the speech of the double Olympic champion Tony Estanguet returns on the navigation in urban plannings. This sportsman of world fame admits that: "the kayaker of river henceforth has to adapt himself to the movements of water of the artificial sites". Through this sentence, the athlete participates to define what the kayakers qualify as Stadiums of wild water which become spaces of entertainment, thanks to the installations (doors, installation of terraces for the public). So Estanguet was crowned Olympic champion in Sydney and Athens on in wild water Stadiums. These equipments were of use as models to the conception of the other sites.

The athlete concerns an optimistic glance for the future of his discipline. By advancing the urbanization of sites, it embodies nevertheless a position shared between city and nature: "*these artificial ponds, it is a chance, a fabulous means to develop. We are going to be able to practise the kayak in town, everywhere. We shall need no more rivers. Because, in fact, it is a concept of swimming pools with waves, closed. But, it is true that we do not still manage to reproduce movements of water as in river. The navigation is different all the kayakers like the nature and take a lot of pleasure to cross rapids.*"

Nevertheless, another Olympic champion, Franck Adisson declared in an interview for the same magazine that: "*the problem in canoeing and mainly of the wild water, it is whom we are not absolutely Parisians. Now, the big seats of the French sport are in Paris*". Far from the will to reduce the practice to an exclusively urban sport, the trend to implant the competitions of slalom in town tends to lead. The presence of politicians, fellow countrymen, athletes in stands and on Olympic sites participate of this will to make visible the practices.

After 1972, the slalom disappeared from the program during twenty years. The cost of the installations (wild water Stadiums) is considered too heavy by the International Olympic Committee. Moreover, the chief editor in the last number of *The River*, in 1973 titles "that it is impossible for the poor countries to realize such equipments, but Canada in 1976 refuses, that takes the cake in the country of origin of the canoe!". After twenty years of eviction of the program of the J.O, this discipline is reintroduced since 1992. There are three reasons: cost of the installations, difficult to make profitable, miss it legibility of the regulation of the events by the spectators (questionable judgment and the hydrological chances of the wild water difficulties to record the penalties of the competitors). While sports stabilized their "play area", the kayakers oscillate between natural spaces and adaptation to the artificial sites of town. This passage of the river, "natural" and uncertain environment by definition, in the middle domesticated by the wild water Stadium would begin a "sports arrangement". Indeed, the trend to the urban activities of wild water is verified by a survey concerning the areas of practice. On 100 questioned kayakers, 80 athletes prefer areas situated in a town "to rivers situated away from cities". This contribution gives to see an Olympic sport and a facet of its stake in show by studying the social relationships of the city kayakers. The competition of slalom remains marked by the development of artificial areas. Actually, all these spatial aspects are to be taken into account to arrest the urbanization of this natural sport because they supply a first level of explanation. Indeed, the slalom, by taking place in spaces not assigned to the sporting event (river, currents of dams) would not enter totally in the dimension of the sports show of the Olympic sports (athletics, football, swimming), based on "urban standardized devices ". Because the kayakers, who were used to evolve in rivers, adapt themselves henceforth to the urban Stadiums.

### **Outdoor recreation implanted in urban areas**

According to what processes are the organizers of the Olympic Games going to fit out the sites of competition in urban zones? If we attempt to report one "artificialisation of the streams", we can answer it, through the construction of specific developments (Mac donald, 2006). Indeed, in this part, I shall expose how the appearance of artificial spaces participates to move the navigation into wild water, in particular by the fact that the kayakers shoot to spaces specialized for the slalom. We suppose that the canoeing limits itself henceforth in the middle urban. We pass then of a regenerative nature in the activity: in gorges, valleys, in a nature domesticated in town excited by the Olympic show.

### **Developments in wild water in the artificial sites**

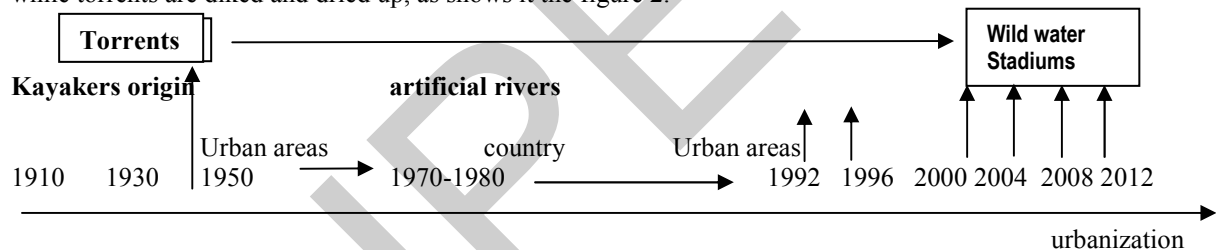
The developers of the slalom tried to codify the pond by imposing an arrangement of pickets of doors. In 1969, in Vichy, an artificial river is realized with obstacles and bottom in concrete. It is a diversion of waters of Allier from a bypassing of the dam, situated in city center. This construction demonstrates the emergence of the artificial rivers in France and in the world, because this realization inspires the development of the Eiskanal d'Ausburg which becomes the site of the Olympics of Munich in 1972. In 1970s appeared real equipments for

the practice of the canoeing in wild water. Indeed, the realized developments allow to obtain stable movements of water, the kayakers can elaborate themselves their configuration of "Stadium". Here, the slalom promotes the artificiality of the river.

Nevertheless, the big Olympic sports finished their program of equipment (swimming pools, gymnasiums flatware) perfect because the play area becomes little by little standardized. The effort of appropriation of the space by the sports standards is not any more enough to stabilize the space of practice. Universal rules basing on precise criteria are needed. It is only on this condition that the Olympic judges are to establish to decide between the competitors between them. In this respect, the beginning of 1960s begins the effort of the officials of canoeing to stabilize the practice conditions the slalom. It passes by an artificialisation of the middle of practice. It is in this relationship domesticated in the nature that sets up itself the artificialisation of the spaces of practice. The term "pond", assigned to the Stadiums of illustrious wild water the need to evolve in spaces with norms. The contribution of the artificial obstacles to the practices of wild water confronts in the relation of the followers in the institutionalization towards standardized Stadiums of wild water.

A significant factor enlightens this relation of the city-dwellers in a domesticated nature. The river remains an environment which did not stop being modelled by the man. This intervention on the environment generates a decrease of the rivers of wild water, as far as the kayakers concentrate on the urban artificial Stadiums to the detriment of rivers. An interview led with Hervé Madoré, the National technical director of the french canoe union (F.F.C.K) returns on the origin of the sites of competition in slalom. He replaces it in their environment: " *when we examine ten sites of the first ten world championships, we notice that most are urban artificial sites: Geneva, Tacen, Zwickau in the industrial area of Germany, Augsburg. There is already this concern to work with the urban and the domesticated because most of the followers result from cities.*" These elements show that the development of the Stadiums of wild water comes along, certainly of an development of rivers, ut also of a raid of the activity in the urban environment which spread canoeing.

From then on, the genesis of the Stadiums of wild water in 1991 is based on a circular movement passing of a city origin of the pioneers towards their practice in torrents to return in the urban spaces. It indicates the double movement of the urbanization of the natural sport and the naturalization of spaces in the city. Since ponds of wild water are set up from a stretch of water. In Vichy, the artificial river was inaugurated in 1970, while torrents are diked and dried up, as shows it the figure 2.



**Figure 2 : Relations between sites, périods and practices' areas**

In reading the Figure 2, we observe the evolution of the practices by leaving rivers until the realizations of artificial sites. These criteria of selection of the studied populations bring to light characteristic lines of periods from the factors that we identified previously (places of house, social origin of the followers). Indeed, on the idéal axis, we leave the disorientation in the nature until the urban relation to the river. The process of urbanization was crossing little along the XXth century, the tension between city and nature constitutes the vital lead of this evolution. The exceptional feature of the descents of river becomes blurred little by little during 1980s, to give birth to a craze for the slalom. The autonomy of this discipline towards the descent of river is a determining dimension of the passage of the kayakers of the nature in the city.

### The urban empowerment of outdoor recreation

The process of "sportivization" of the activity facilitated the grouping of kayakers between them. The "sports river" is then completed by the practices in the approval of dams. From then on, it is important to separate the "original" practice of the empowerment of the activity in urban zones. André Baudou reveals the lines of this outsourcing of a natural activity towards the artificial sites. By centring specifically his contribution on the ponds of slalom, he thinks that these sites recover from a process of taming of the space. Then, he concludes that from it the practice on dams, begun during 1940s, would be an "ersatz" of the navigation in river. The artificial sites would substitute themselves for the currents in natural environment. Baudou notices that no infrastructure is realized for the competition in France: " *the developments necessary for reception of the public are non-existent. Are the followers of wild water going to remain the Spartans of the French sport? Real stadiums are necessary for the practice of the slalom in canoeing.*" Urban sites are thus built to remedy it. However, oppositions are going to hatch, further to their programming by the federal persons in charge. The speech of a follower remains pessimistic, as for the development of the artificial rivers and for their impact on the natural environment: " *their creation cannot replace our beautiful rivers, no more than the rocks of climbing*

*claim to be able to make the Alps forget! It will never make us forget that rivers were deformed by the urbanization.* " tell us a follower (37 years, engineer).

With the genesis of the Stadiums of wild water, is born a spatial device to frame the followers. In fact, the influx of the kayakers comes along with an adjustment of the environment. Developments guide the followers. From then on, the F.F.C.K takes care to relieve the files of construction of wild water Stadiums used during the Olympics which aim towards a standardization of the play area. Indeed, we find the same characteristics in the artificial sites conceived by a subsidiary of Electricity of France (Cergy, Millau). The kayakers navigate then the same movements of water throughout the planet. In France, thirteen sites are conceived from the system of removable obstacles.

From then on, this late standardization of the play area (pond of slalom reproduces almost as before on two different Olympiads between 2000 and 2004) establishes a specific line of the artificial sites. With the exception of the site held for the Olympic games of Atlanta, situated away from cities, all the equipments which catered for the tests events of slalom are situated in urban zones. It ends in the establishment of a set gathering in the same place the irreconcilable: the freedom to navigate in wild water and the sports constraints connected to the show (presence of articulated cameras, maintenance of law and order). In 2004, the Olympic Center of Canoeing is a construction which can accommodate 80 000 spectators for the events of slalom (Henry, 2005). After all, the urbanization is also connected to the territorialisation which privileges sites in town. We find this urban dimension to Augsburg (Olympics of Munich), Seu de Urgell (Barcelona), Hellinikos (Athens). Because henceforth, these wild water Stadiums welcome competitions of slalom organized every four years. These sites become integrated into the urban fabric of these big metropolises. Bound to the process of "sportivization", the urbanization of the activity would increase stability of the conditions and of the disposition of practice, especially for slalom, which is a olympic discipline.

### Conclusion

In post-war years, rivers were closed to navigation, which led kayakers to search for new spaces to practice. In the seventies, sites of wild water have been identified and classified following two logics. The first logic is a natural one, which relies on an unstable and wild environment, and is associated with tourist and sports conceptions of nature (Poling, 2000). An artificially-built logic organizes itself around developments artificial rivers, from setting-up slalom poles on surface of water to the out of nothing creation of an artificial run.

By "pushes of sportivization" (Elias and Dunning, 1994) successive, the slalom stands out as an urban sport. At the beginning of 1960s, the artificiality of the river consisted in modelling its bed, so that he can answer the ponds of secure slalom, questioning the notion of open air. When we examine the history of the slalom, we notice that attempts to reduce the uncertainty of the environment are constantly present because the organizers wish to master the debits at least for two reasons. On one hand, there is a concern to maintain an equivalent level of competition for every competitor. On the other hand, the kayakers model the urban Stadiums in the style of ski runs. However, the slalom becomes an Olympic sport since it appears as a sport. There is a perpetual adjustment because the space disinfected by the wild water Stadium concentrates the qualities of a fair confrontation. The slalom as competitive sport remains connected to the city and to his city-dwellers. But the question of the future of sites after the competitions of Olympics remains composed because he goes away of the perpetuity of the discipline.

### Bibliography

1. Augustin, J-P. & Gillon, P. (2004). *L'Olympisme, bilan et enjeux géopolitiques*, Paris : Armand Colin.
2. Baudou, A. (1985). Les bassins de slalom en canoë-kayak, *Culture technique*, 11, 315-323.
3. Bouet, M. (1969). *Significations du sport*. Paris, Editions Universitaires,.
4. Coubertin, P. de (1938). *Pédagogie sportive*, Paris : Vrin.
5. Eichberg H., Bale J., Philo C. & Browell S. (1998). *Body Cultures: Essays on Sport, Space and Identity*. New York: Routledge.
6. Elias, N. & Dunning, E. (1986). *The Quest for excitement: Sport and leisure in the civilizing process*. Oxford, Basil Blackwell.
7. *La Rivière*, from 1943 to 1947, Paris.
8. Mac donald, K. (2006). *Global movements, action and culture*, London, Blackwell.
9. Maguire, J. (1999). *Global Sport: Identities, Societies, Civilizations*, Cambridge: Polity Press.
10. Mattos, B., (2004). - *Le canoë-kayak*, Paris : La Martinière.
11. Milza, P., Jequier, F. & Tétard, P., (2004). - *Le pouvoir des anneaux : les jeux olympiques à la lumière de la politique : 1896-2004*, Paris : Vuibert.
12. Poling, J. (2000). *The canoe. An illustrated history*, Toronto: Key Porter books.
13. Vigarello, G., « D'une nature... l'autre, les paradoxes du nouveau retour » in Pociello C. (1981). *Sports et société. Approche socio-culturelle des pratiques*. Paris : Vigot.
14. « Aménagements des stades d'eau vive en milieu urbain », *cahier technique FFCK*, 1998.