

# A COGNITIVE APPROACH OF THE GLOBAL VALUE : THE CASE OF THE VALORIZATION OF SPORTS FACILITIES

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## INTRODUCTION

For a long time sports practices have been divided in specific spaces. Today these activities are overstepping these equipped places and gain new territories. New practices are developing at the same time in the heart of cities as well as in middle of open country. This “sportivisation” of the society is taking advantage of the combined effects of the increase spare time, the advent of hygienic and playful considerations and the growing interest of mass media for sports activities. Facing this evolution, public administrators are led to view these sport equipments as a place which produces a successful sporty service adapted to practicing’s’ expectations. Therefore the user becomes the ultimate instance of valorization of production (Pociello et Baslé, 1993) of the organization. Value, being at the interface between supply and demand, necessitates the development of tools as well as management practices. This is why this present study is endeavouring to base evaluation of public sports facilities performance and their management upon this notion of value. Such valuing of public sports facilities is founded on the interaction between the functions of the object and the needs of the user.

The first purpose of this communication is to conduct a study on the formation of the comprehensive value of public sports equipment. Following this objective, the model developed by Aurier, Evrad and N’Goala (2000) who integrated both transactional and relational marketing approaches of value, will be used as a theoretical lighting of the elements of the global value. From this model, it will become possible to deduce the nature and constituents of the sports equipment’s value.

Secondly, we will show to what extent a cognitive approach can be consider as a relevant methodology that would allow to explore the mental representations of the main sporty actors about sports equipment’s global value (official in charge of sports policy and director on sports services).

## METHODS

Our consideration is based on research works in marketing and consumer behavior related to value, and more specifically on both conceptualizations, from a punctual purchase perspective or from a long term relation approach.

We will particularly found our study on the Aurier, Evrard and N’Goala’s works (2000) who propose a typology of the constituents of the value consumption based on 4 crossed criteria as shown in the chart below.

The integration of these two approaches in such a model brings a new lighting on the nature and the constituents of the value.

	<b>Extrinsic</b>	<b>Intrinsic</b>
<b>Directed to one</b>	Instrumental value (utilitarian value and value of knowledge)	Hedonist value
<b>Directed to the others</b>	Social value (social link and expression of one)	Spiritual value

So, in the continuation of the works of Aurier, Evrard and N' Goala ( 2000 ) the value of a sports equipment contains multiple constituents among which we will set the sources of costs and profit apart. These constituents of the value of a sports equipment have been expressed within 16 variables.

The distribution of these variables between the various constituents of the value is detailed in chart below.

CONSTITUENTS OF THE GLOBAL VALUE OF A SPORTS EQUIPMENT						
Granted sacrifice	Utilitarian value	Value of knowledge	Hedonist Value	Social link	Self Expression	Symbolic value
(n <sub>1</sub> ) Price	(n <sub>3</sub> ) Correspondence to the standards	(n <sub>8</sub> ) Educational potential of the equipment	(n <sub>10</sub> ) Playful and entertaining character	(n <sub>13</sub> ) Conviviality of the place	(n <sub>15</sub> ) Staged, spectacularisation of the practice	(n <sub>16</sub> ) Symbol of the municipality, the recognition factor
(n <sub>2</sub> ) Ease or constraint of access (spatial and temporal)	(n <sub>4</sub> ) Feature	(n <sub>9</sub> ) Reception of the competitive sports practice	(n <sub>11</sub> ) Shaping, well being of the population	(n <sub>14</sub> ) Opening to most large number		
	(n <sub>5</sub> ) Accommodation facilities		(n <sub>12</sub> ) Relaxation space			
	(n <sub>6</sub> ) Comfort					
	(n <sub>7</sub> ) Cleanliness					

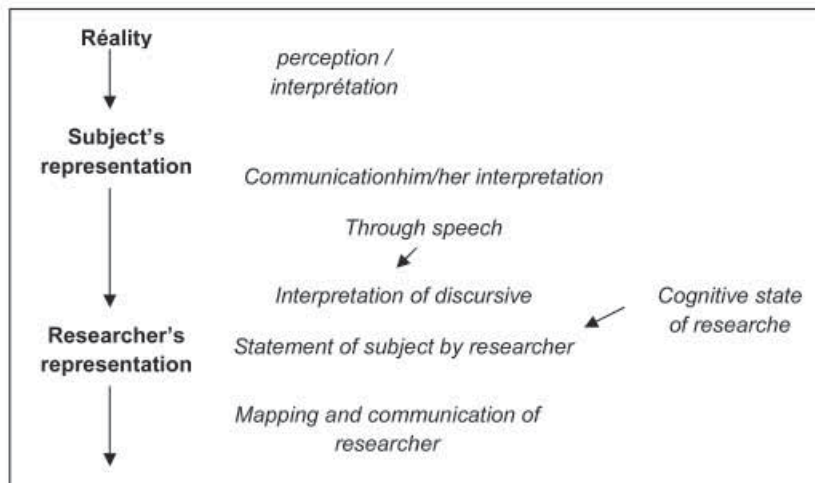
VARIABLES

The selection of these variables was made from a review of the literature concerning the subject of the management and the modernization of the public sports equipments. The retained variables represent the main items quoted in the literature and what we identified as being potentially a consequent source for the public sports equipments. These variables were then the object of a reclassifying within the various constituents of the global value. That is why we can notice certain heterogeneousness in the distribution of variables between the constituents of the global value of sports equipment.

Concerning methodology, cognitive cartography is used for this study in order to analyze the representations of the tested users, that is the structures formed from beliefs and opinions concerning sports facilities by establishing causal maps of individual cognitive mapping ; The aim of this research in terms of methodology is the validation of the relevance of such tools in the organizational framework notably by elaboration of individual mappings that can be easily compared.

The expression cognitive mapping is to be attributed to Tolman ; a researcher who essentially worked on animal psychology. Since then, such tool was used in many fields of research, notably since the works of Axelrod (1976) and his team in the field of international politics.

We shall retain the definition of cognitive mapping proposed by Cossette and Audet (1994), "A cognitive map is a graphic representation of the mental representation that the researcher has of a whole set of discursive representations voiced by a subject from his own cognitive representations about a specific object". These authors then consider cognitive cartography as the concrete result of a series of operations calling on representations of the actors concerned ; that is the researcher and the answering subject. It is the result of a process represented by Verstraete (1996) by the following diagram :



## RESULTS

The analysis of the results brings us to apprehend the points of convergence and difference in the representations of the global value of the sports equipments. The development of individual and collective cognitive maps facilitates the observation of actors' logic in front of public sports policies.

Some results

*Matrix of association of official in charge of sports policy in city A*  
*Graphic representation of the matrix of association of official in charge of sports policy in city A*

	$n_1$	$n_6$	$n_9$	$n_{11}$	$n_{13}$	$n_{14}$	$n_{17}$	Out-degree
$n_1$	■	0	+3	-2	0	-3	-3	11
$n_6$	0	■	0	+3	+1	0	+2	6
$n_9$	0	+1	■	+2	+3	-2	+3	11
$n_{11}$	0	0	0	■	+1	0	+2	3
$n_{13}$	0	0	0	0	■	0	+3	3
$n_{14}$	0	0	0	+3	+3	■	+3	9
$n_{17}$	0	0	0	0	0	0	■	0
In-degree	0	1	3	10	8	5	16	43

*Matrix of association of director on sports services in city A*  
*Graphic representation of the matrix of association of director on sports services in city A*

	n <sub>1</sub>	n <sub>3</sub>	n <sub>4</sub>	n <sub>8</sub>	n <sub>9</sub>	n <sub>11</sub>	n <sub>14</sub>	n <sub>17</sub>	Out-degree
n <sub>1</sub>		0	0	-1	0	0	-3	-3	7
n <sub>3</sub>	0		+3	+1	+3	+2	0	+3	12
n <sub>4</sub>	0	0		0	+2	+2	+2	+3	9
n <sub>8</sub>	0	0	0		+1	0	0	+3	4
n <sub>9</sub>	0	0	0	0		-2	0	+2	4
n <sub>11</sub>	0	0	0	0	0		0	+2	2
n <sub>14</sub>	0	0	0	0	0	+3		+3	6
n <sub>17</sub>	0	0	0	0	0	0	0		0
In-degree	0	0	3	2	6	9	5	19	44

## DISCUSSION

Comparative analysis of the structure of cognitive mapping of the official in charge of Sports, and of the Director of administrative services implementing the city sports policy highlights some convergence and divergence between the mental representations of both actors. Thus if they seem to agree on the aims of the city sports policy, they differ as to the means envisaged to implement such policy. Divergences translate clearly a difference between representations of the constituents of the value a some public sports facility. Moreover, it appears that such representations are strongly influenced by the actors' logics.

## REFERENCES

- Allard Poesi F. (1996), Cartes cognitives : pour ne pas jeter le bébé avec l'eau du bain, Communication à la conférence de l'Association Internationale de Management Stratégique de Lille, 1996.
- Aurier P., Evrard Y., N'Goala G. (2000), Valeur de consommation et valeur globale : une application au cas de la consommation cinématographique, Congrès de l'Association Française du Marketing, Montréal, 18-20 mai 2000.
- Axelrod R. (1976), Structure of decision: the cognitive maps of political elites, Princeton, NJ, Princeton University Press, 1976.
- Axelrod R. (1976), The cognitive maps of political elites, Princeton University Press, Princeton, 1976.
- Bartoli A. (1997), Le management dans les organisations publiques, Dunod, Paris, 1997.
- Bessy O., D.hilaret D. et al. (2002), Les espaces sportifs innovants – Tome 1 : L'innovation dans les équipements, p.31, PUS, 2002.
- Bourguignon A. (1998), Management accounting and value creation : beyond strategic relevance, some social functions, working paper, ESSEC, Novembre 1998.
- Bower J.L. (1977), Effective public management, Harvard business review, mars-avril, 1977.

- Callede J.P. (1984), Dynamique spatiale et politiques d'équipement : le cas des équipements culturels et sportifs, XI<sup>e</sup> Congrès national, Grenoble, AFSP, 1984.
- Charrier D. (1997), Financement du sport par les collectivités locales : données 1993 et 1994 : rapport, Ministère de la jeunesse et des sports, France, 1997, 49 pages.
- Cossette P. (1994), La carte cognitive idiosyncrasique. Etude exploratoire des schèmes personnels de propriétaires-dirigeants de PME, extrait de Cartes cognitives et organisations, chap.6, p.122, Les presses de l'Université de Laval, éditions Eska, 1994.
- Cossette P. et Audet M. (1994), Cartes cognitives et organisations, Les presses de l'Université de Laval, éditions Eska, 1994.
- Desbordes M., Ohl F. et Tribou G. (2005), Marketing du sport, Economica collection Gestion.
- Dutau-Berges B. (1995), Le concept de valeur ajoutée et le problème de sa transférabilité dans le secteur public – Réflexions à l'échelle de la commune, Mémoire de DEA en Sciences de Gestion, ESUG, Université Toulouse I, 1995.
- Eden C. (1988), Cognitive mapping : a review, European Journal of Operational Research, n°36, p.11, 1988.
- Eden C., Ackerman F. et Trait A. (1993), Comparing cognitive maps – methodological issues, Communication présentée à l'International Workshop on Managerial and Organizational Cognition, Bruxelles, 13 et 14 mai 1993.
- Gardial S.F., Clemons D.S., Woodruff R.B., Scuman D.W., Burns M.J. (1994), Comparing consumers recall of prepurchase and postpurchase evaluation experiences, Journal of consumer research, n°20, p.548-560, 1994.
- Holbrook M.B., Hirschman E.C. (1982), The experiential aspects of consumption : consumer fantasies, feelings and fun, Journal of consumer research, p.132-140, n°9, 1982.
- Holbrook M.B., Corfman K.P. (1985), Quality and value in the consumption experience : Phaedrus rides again, in Perceived quality : How consumers view stores and merchandise, Jacoby J., Olson J.C, Lexington, p.31-57, 1985.
- Jenkins M. (1994), Creating and comparing strategic causal maps: issues in mapping across multiple organizations, Communication présentée à l'International Workshop on Managerial and Organizational Cognition, Bruxelles, 26 et 27 mai 1994.
- Jokung-Nguena O., Arreglej.L., Ronge Y. De, Ulaga W. (2001), Introduction au management de la valeur, Dunod, 2001.
- Katz M. et Shapiro C. (1985), Networks externalities, competition and compatibility, American Economic Review, p.424-440, 1985.
- Langfield-Smith K. et Wirth A. (1992), Measuring differences between cognitive maps, Journal of operational research society, volume 43, n°12, p.1135-1150, 1992.
- Larpin F. et Bonnenfant R. (1993), L'évaluation des coûts et de l'efficacité des politiques d'équipements sportifs locaux, chapitre 25 de Sport et Management de l'éthique à la pratique, sous la direction d'A.LORET, revue EPS, Dunod, 1993.
- Laukkanen M. (1994), Comparative cause mapping of organizational cognitions, Organization Science, vol.5, n°3, p.322 – 343, 1994.
- Lai A.W. (1995), Consumer values, product benefits and customer value: a consumption behavior approach, Advances in consumer research, Eds Franck R.Kardes and Mita Sujjan, Ut: Association for consumer research, p.381-388, 1995.

- Markoczy L.A. et Goldberg J. (1993), A method for eliciting and comparing causal maps, Communication présentée à l'International Workshop on Managerial and Organizational Cognition, Bruxelles, Belgique, 1993.
- Markoczy L.A. (1994), Barriers to shared belief : the role of strategic interest, managerial characteristics and organisational factors, Thèse présentée à l'Université de Cambridge, St Johns College, Décembre 1994.
- Perry J.L. (1996), Motivation to innovate in public organizations, dans Public management - the state of the art, B.Bozeman, Jossey Bass Publishers, San Francisco, 1996.
- Pociello C. et Basle G. (1993), Espaces et équipements sportifs: innovation, prospective et management, in Sport et Management – de l'éthique à la pratique, sous la direction d'A.LORET, éditions Revue EPS, Dunod, Paris, 1993.
- Saias M. et Leonardi J.P (1977), Service public et service du public, Revue française de gestion n°10, juillet-août 1977.
- Sarre V. (2002), Comment adapter les installations aux nouvelles pratiques, Enjeu – mensuel de l'Ufolep-Usep, dossier les lieux du sport, p.10, n°357, mars 2002
- Sheth J., Newman B., Gross B. (1991), Consumption values and market choice: theory and applications, Cincinnati, Southwestern Publishing, 1991
- Stoffaes C. (1994), Entre monopole et concurrence : la régulation de l'énergie en perspective historique, éditions P.A.U, Paris, 1994.
- Verstraete T.(1996), La cartographie cognitive : outil pour une démarche d'essence heuristique d'identification des Facteurs Clés de Succès, Communication à la 5<sup>ème</sup> Conférence Internationale de Management Stratégique, Lille, mai 1996.
- Vigneau F. (1998), Les espaces du sport, PUF, Que sais-je?, 1998
- Weick K.E. et Bougon M.G (1986), Organisations as cognitive maps : charting ways to success and failure, extrait de The thinking organization : dynamics of organisational social cognition, sous direction de H.P Sims, Jr et D.A.Gioia, San Francisco : Jossey-Bass, p.106.
- Zeitham L., Valarie A., Parasuraman A., Berry Leonard L., Delivering quality service, balancing customer perceptions and expectations, The Free Press, New York, 1990.