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Architectural and urban research network

Architecture and Facilities Management

Design implications of the growth of service activities

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PROBLEMATICS

Introduction

Established professions, stabilised by regulations or convention, and players with sufficiently clear and accepted roles have, for quite some time, contributed to the production of built space. They are structured around different types of standard works such as buildings, facilities, infrastructures and operations, and contributed through programmes, master plans, planning and development, etc. However, in all these fields, a large number of directly involved parties have been integrated into the project development process and, increasingly, these parties are the users. In addition, projects need to take into consideration the growing attention paid to the efficiency of the resulting works, the expected services and use conditions insofar as users are concerned.

Facilities Management (FM), being the strategic management of the means of organisation and the services needed to meet core requirements, is characteristic of this change. The prime criteria are quality (performance, reliability, etc.) and the cost of the provided service (*best value for money*).

Facilities management can assume a number of forms. It can be an activity taking place within a contractor's organisation, more or less related to its strategic directions, that makes use of subcontracting as often as needed. It can also be applied by consultants intervening either globally by assuming responsibility for an entire field or simply taking on one or another of its aspects, such as real estate management. Certain contractors outsource activities not essential to them and, occasionally, these activities gradually become autonomous and develop their own place on the market. There are also contractors, sometimes very large ones, which, from a particular area of expertise (such as energy supply, construction, etc.), enlarge their service offer, either directly or through subsidiaries.

By considering buildings as simply being one among many means and supports for providing services¹, FM considerably transforms the methods and processes used for their design or for the design of more substantial complexes (such as large facilities) as well as the modes of action of those concerned and the relations between them.

¹ However, this workshop does not concern itself with FM areas of expertise that are too distant from the professions and activities concerning us, such IT and logistics.

The objective of this international workshop is to clarify and compare the modes and the transformation effects resulting from the development of FM on the design, cooperation and the objects themselves (developments, buildings, etc.) when it becomes involved in architectural projects. We shall attempt to analyse the convergences and divergences in these changes and anticipate what the future might bring.

This examination will be organised around four themes:

- The position of FM with regards client organisations, between demand and offer.
- The forms of transaction, contracts and the issue of evaluation.
- The uses and effects on design as a result of FM involvement.
- The future of FM, between contract and profession?

1 – Between demand and offer

The activities and services assumed by FM had for many years been the direct responsibility of the contractors and organisations that have now become clients. Formerly and where necessary, they had called on a range of different providers of goods and services.

FM approaches modify the terms of the relationship between client and suppliers. A management model providing an ever-more detailed definition of the core profession and an increased level of *outsourcing* has developed; new trades have been created and become highly structured in certain countries; contractors have developed or concentrated in specialised fields; and new methods developed. In this situation, FM has increasingly become an autonomous activity and, whatever the form it takes, it would seem that this activity has created its own specific market.

Does this development result, to a degree, in inverting the supply and demand relationship? While, initially, it was the clients that placed themselves in a situation where they needed to call on FM structures, it was finally the latter that found themselves obliged to develop their offer, enlarge the range of services they wanted to provide as well as the types of clients that they wished to serve.

- What roles do the areas originally covered by FM structures play in their competitive positioning and the development of the offer? How does this interfere in their links with other players involved in the design of buildings, facilities or services?
- Does FM use differentiated arrangements for the activities carried out in various countries where the system has developed? Do these arrangements modify the nature of the FM offer and relations with contractors and client organisations?
- How do FM structures acquire information concerning the needs of clients and, more generally, those of the potential users of the facilities and services that these structures propose?
 - In an offer situation, do FM structures more or less directly become specifiers insofar as facilities and associated services are concerned? If so, to what point and in what form do these structures contribute to the design?

2 – Transaction, contract, evaluation

Externalising a certain number of activities and facilities results in contracting out a service that, until then, had been internal. A large set of studies and procedures preside over the drafting of contracts governing the relationships between FM and client organisations. While they introduce transaction costs that must be taken into account, these restrictive details also provide a more detailed analysis of facilities and services and their value for the instructing organisation. The preliminary definitions of the objects to be designed and their performance levels can thus become contractual elements, with all the effects that this will have on the design conditions and means.

This leads on to questioning the impact of this change on the organisation of the project.

What is contractually established during the definition of the projects assumes *ex ante* evaluations of the future works which, in turn, assumes *ex post* evaluations. Consequently, the growing use of FM has resulted in the development of a set of evaluation devices and methods. These have little in common with the value analyses normally practiced: *benchmarking* – theory or practice? – provides a good example, and the

consideration of the life cycle of facilities rather than simply the initial investment is also a particularly significant form.

- Does the externalisation of FM activities modify the decision-making and organisational process applicable from the initial expression of needs through to the design and management of the buildings?
- Do the controlled forms of relationships between client organisations and FM amend those bringing together these organisations and the designers? What are the resulting constraints or requirements applicable to the latter?
- How are the forms of evaluation developed by FM and subsequently used by the client organisations taken into account by the designers?
- Does the development of FM, its procedures and methods, such as, for example, the contractualisation of performance levels, result in organisations and designers, especially architects, modifying their point of view concerning their facilities and, if so, how?
- How is the value contributed by the architecture, be it in terms of the use offer, the image proposed both internally and externally, the enhancement factor, etc. taken into consideration by FM in the organisation of the project?
- Other points of view intervene in decisions and the real estate design. Are there specific FM criteria and modes of evaluation when compared with other intervening parties, such as investors?
- How is the incorporation of the life cycle of facilities concretely expressed in the decisions made by the players, contracts and evaluation approaches and methods?

3 – The attention paid to uses and users

FM concerns itself with uses to provide client organisations with the best possible service. The chosen uses are therefore those that best serve these organisations and where FM can, using a variety of methods, acknowledge and even measure the effects (for example, the mobility of persons on sites or in buildings, population density, etc.). Similarly, facilities can provide a service that is that much better adapted by directing an organisation towards the uses that it wishes to favour. As a result, the brief given to the designers finds itself channelled, occasionally very rigorously, by the analysis carried out by FM in function of its own criteria. There is obviously nothing revolutionary in incorporating the objectives sought by the instructing organisation during the design of the building or layout. FM, by replacing or adding to the normal programming methods nevertheless provides two additional aspects: on the one hand, it has developed a sizeable methodological system permitting a better appreciation of the means to be provided to optimise the link between the instructing organisation and FM by, in particular, integrating the concerns of the final users and, on the other hand, proposing a level of management in this field based on making use of references and previous experience that can anticipate and provide instruments to measure the economic aspects.

The dialogue between the designers and the organisation as mediated by FM can be considerably modified. New types of cooperation become established between FM and the other designers as soon as the life span of the facility and operating and maintenance costs are taken into account. All factors resulting from FM become preponderant elements in the demands made of the project.

- Is it possible, in the dialogue between client organisations, facilities managers and designers, to distinguish points of view, approach methods and the priorities of each party concerning users and uses? How does each of these parties assert its points of view? How are compromises reached? Are there any arbitration principles?
- In the design of buildings, what is the predominant hierarchy of criteria ascribed to potential uses, strategic choices made by the client organisations and the management of the life cycle?
- What is the sequencing for formulating the uses and needs expressed in the development of the programmes: how are the uses expected by the organisations and the users expressed during the various stages?
- How and to what degree is the knowledge held by FM concerning the uses and end-purposes of the client organisations and users integrated by the design professionals?

- When detailing the developments or buildings, what expectations are expressed concerning the architecture and its functional and symbolic enrichment capacity with regards uses? What role does the architecture have to play in this field?
- In what ways are the uses taken into consideration in the evaluation procedures? Are the direct users involved in this evaluation? What is their weight in all the criteria used?

4 – A profession or a market?

As we have noted, FM presents a great diversity, both in its structures and its activities. Mostly in Anglo-Saxon countries, well structured professional organisations (IFMA, BCFM, etc.) have been formed to develop specific tools and procedures, professional and university courses, certification, etc.

It is therefore necessary to examine this diversity, to see what unifies it and what divides or at least differentiates it. Is it a profession working alongside those that for so long have contributed to the design of facilities and developments, or a market where contractors with their inherent skills but no specific identity compete with one another?

- What kind of training is given to those involved in FM and how is knowledge transmitted? What other types of professions and practices are involved and, in particular, is FM used by those forming part of the design process?
- Is there equivalence between contractors and FM professionals? Should they be differentiated and, if so, using what criteria? Are their roles equivalent and what are their effects on projects and their organisation?
- Is FM tending towards enlarging its field of activity? To what new fields? In relation with what organisations? What are the roles of the players?

Does the development of public private partnerships open new prospects for FM or, on the contrary, do the structures developed within this framework replace it, including insofar as private organisations are concerned?

Bibliographie

ALEXANDER K. (coord.), FENKER M., GRANATH J.A., HAUGEN T., VISSANEN K. (2006), *Usability of workplaces - report on case studies*, Rotterdam, CIB publication n° 306.

ALEXANDER K., ATKIN B., BRÖCHNER J., HAUGEN T. (2004) (eds.), *Facilities management: innovation and performance*, London, Spon Press.

ALEXANDER K., FENKER M., GRANATH J.A., HAUGEN T., VISSANEN K. (2004), "Usable Workplaces — Investigating the Concept", CIB W70 symposium: *Human Elements in Facilities Management — Understanding the Needs of our Customers*, Hong Kong, 7-8 décembre 2004, actes du colloque (publication 297), pp. 217-224.

BARRETT P., BALDRY D. (2003), *Facilities management: towards best practice*, Oxford, Blackwell Publishing Company.

BEECH N. (1997), "Learning to build customers into facilities management: the case of Reuters", *International Journal of Facilities Management*, Vol 1 No 1, pp 51-58.

BORZEIX A. (2000), « Relation de service et sociologie du travail : l'usager, une figure qui nous dérange ? », *Cahiers du Genre*, n° 28.

BRÖCHNER, J. (1996) "Feedback from facilities management to design and construction — systems issues", in (D.A. Langford and A. Retik, eds) *The Organization and Management of Construction: Shaping Theory and Practice*, London: E & FN Spon, pp. 238-246.

CAMPAGNAC E. (2001), « La "commande" comme nouveau marché de services: crise ou renouveau du professionnalisme ? Les leçons de l'expérience britannique », *Espaces et Sociétés* n° 105-106.

CAMUS C. (2001), « L'architecte entre le service et l'œuvre », dans *Interprofessionnalités et action collective dans les métiers de la conception*, Cahiers Ramau n° 2, Paris, Ed. de La Villette.

CARASSUS J. (2002), *Construction : la mutation ; de l'ouvrage au service*, Paris, Presses de l'ENPC

- DAVIS G., VENTRE F.T., (1990), *Performance of buildings and serviceability of facilities*, Philadelphia (PA), ed. ASTM.
- FENKER M. (2004), "Organisational change, representations and facilities", in ALEXANDER K., ATKIN B., BRÖCHNER J., HAUGEN T. (eds.), *Facilities management: innovation and performance*, London, Spon Press, pp. 33-46.
- FISCHER G.-N., VISCHER J. (1997), *L'évaluation des environnements de travail. La méthode diagnostique*, Montréal, Presse de l'Université de Montréal.
- GADREY J., ZARIFIAN P. (2002), *L'émergence d'un modèle du service, enjeux et réalités*, Paris, Ed. Liaisons.
- JONES O. (2000), "Facilities management : future opportunities, scope and impact", *Facilities*, 18, pp. 133 – 137.
- JOUINI (S.) (2001) « Conception et interprofessionnalité dans et hors du projet », in *Interprofessionnalité et action collective dans les métiers de la conception*, Cahiers Ramau n° 2, Paris, Ed. de la Villette, pp. 37-63.
- LAUTIER F. (2005), « Les maîtrises d'ouvrage, des produits et des processus », in Bonnet M., dir., *La conduite des projets architecturaux et urbains : tendances d'évolution*, Paris, La documentation française.
- LAUTIER (F.) (1999), "Can workspaces be productive?", in *EuroFM Practice, Facilities Management*, Arko Publishers, Nieuwegein, pp. 45-48.
- LAUTIER (F.) (1999), "Espaces de travail : une ressource stratégique", in Collectif, *Les organisations*, Ed. Sciences Humaines, Auxerre, pp. 321-327.
- LEAMAN A. (2000), "Usability in buildings: the Cinderella subject", *Building Research and Information*, Vol 28 No 4, pp 296-300.
- NELSON M.-M. « The emergence of supply chain management as a strategic facilities management tool », in ALEXANDER K., ATKIN B., BRÖCHNER J., HAUGEN T. (eds.), *Facilities management: innovation and performance*, London, Spon Press, pp. 83-94.
- NUTT B., McLENNAN P. (2000), *Facilities management : risks and opportunities*, Oxford, Blackwell Publishing Company.
- NUTT B. (2000), "Four Trails to the Future", in *Facilities management : risks and opportunities*, pp. 1-18.
- PREISER, W.F.E., VISCHER J.C. (2005) (eds), *Assesing Building Performance*. Elsevier Butterworth-Heinemann, Oxford.
- SARDAS J.-C. (2002), « Relation de partenariat et recomposition des métiers », dans Hubault F., coord, *La relation de service, opportunité et questions nouvelles pour l'ergonomie*, Toulouse, Octarès Editions.
- TAPIE G., COURDURIER E. (2004), *Les professionnels de la maîtrise d'œuvre*, Paris, La documentation française.
- VAN WAGENBERG A.F. (1997), "Facilities management as a profession and an academic field", *International Journal of Facilities Management*, Vol 1 No 1, pp 3-10.