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Practical post-modernism: FM and socially constructed realities

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Practical postmodernism: FM and socially constructed realities

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Practical post-modernism: FM and socially constructed realities

ABSTRACT

The theme of the paper, with examples, is that strategic FM should engage not with elaborate structural functional models of building service supply but with the socially constructed realities of organisations and their results. Several, evidence based, examples of FM creating different conversations will be provided, viz:

- The creation of excellent patient environments in English Hospitals is not a function
 of structure (whether or not there is an integrated FM Directorate), sourcing (in
 house or outsourced) or a particular business process. It is a function of leadership
 exercised through context specific conversations.
- The creation of effective new 'knowledge' environments is not a function of a particular design or project structure. It is a reflection of FMs ability to create conversations for changes in business results.
- The failure of FM to capture strategic attention deriving from an obsession with considerations of unit costs and building condition rather than overall costs and business outcomes.
- The role of perceptions and assertions in creating or blocking effective business relationships between FM providers and clients

In the process the paper will challenge academic FM, whether research or education, to stop being in thrall to 'practice' to a degree that is arguably greater than is found in other areas of business and management, let alone other established disciplines. FM has too many models, too little theory and too little empirical evidence of specific business contributions. It is too concerned with supplying facilities rather than considering the purpose for which a given facility is managed.

INTRODUCTION: ORGANISATION AS ECOLOGY

This paper is offered as a contribution to the debate on the future FM research agenda. In brief its arguments are as follows.

- 1. What differentiates, or should differentiate, FM from say building service provision is a concern for organisational purpose.
- 2. Organisations are, as the branch of organisational theory broadly captured as postmodernism has evidenced, social constructs although we subscribe to an, ontologically real, ecological interpretation of the same phenomena.
- 3. It follows that the research agenda for FM should include engagement with organisational discourses or narratives: conversations in a particular sense of the word that we will explain. To cite the helpful summary of an anonymous reviewer "understanding the power of conversations to organizations and the changing physical reality in which those conversations occur should be important perspectives for the forthcoming research agenda".

The arguments are illustrated by reference to a case studies published elsewhere rather than by specific new research. We briefly discuss the methodological problems raised by the suggested approach.

The term post modernism derived from architecture (Jencks, 1977) and has become prevalent to describe a set of challenges to rational scientific management during which it has lost a precise meaning (Macauley et al., 2007) despite a general association with continental and especially French philosophical thinking (Gatherer 1997). It has gained in some circles a reputation as frankly unsound intellectual fraud (Sokal and Bricmont, 1998), mumbo-jumbo (Wheen 2005) or 'haute francophonyism' (Dawkins 2006). It has been little used in FM despite philosophical arguments, notably from George Cairns, drawing on a broadly post modern epistemology to criticise an over reliance on simple normative models applied to complex problems (e.g. Beech and Cairns, 2001;, Cairns, 2008) and there are calls for theories, in the critical sense of the word, of the built environment (Rabeneck 2008).

The present authors are not convinced of post modernism per se and sympathise with the critiques cited above. What the theory does however is alert us to, or remind us of, is the power of narratives or discourses in shaping organisations and their behaviour. Jaqueline Vischer (2008) has provided a handy summary (Figure 1)

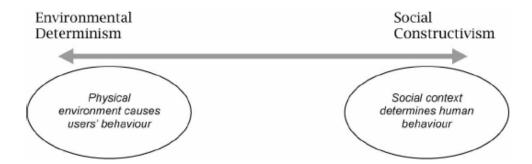


Figure 1 Vischer's (2008) summary of the spectrum of epistemology applicable to Built Environment research.

Conrad Waddington (1977) provided a modernist perspective on social context and organisations with his argument that they exist because of the replication of the conventional wisdom of dominant groups; COWDUNG in his graphic metaphor. From such a perspective organisations are systems in which conversations establish and reproduce the conventional wisdom. That sentence requires a word of warning. We use the term conversation not in the colloquial sense but rather in a sense closer to the post modern concept of 'discourse'. That sense is well explained by Ford, (1999)

conversations as a complex, information rich mix of auditory, visual, olfactory and tactile events and includes not only what is spoken but the full conversational apparatus of symbols, artifacts, theatrics etc that are used in conjunction with or as substitutes for what is spoken. The speaking and listening that goes on between and among people and their many forms of expression in talking singing, dancing etc may be understood as conversation. Similarly, listening is more than hearing and includes all the ways in which people become aware and conscious of, or present to the world. (p. 484)

and provides a stimulating alternative perspective on organisational change (Ford and Ford, 1995). Waddington's COWDUNG is a close approximation to the 'dominant discourse' of post modern organisational commentators or indeed the prevailing narrative. Waddington was however offering COWDUNG as a metaphor for social DNA, actually replicated and preserving itself in a process of selection. The term did not catch on and those who explore evolutionary theories (in the modernist sense of proposed scientific explanations) of organisational behaviour have tended to draw on memes¹ rather than COWDUNG as the dominant replicator (Hull, 1988; Csikszentmihalyi, 1988; Price 1995; Price and Shaw, 1998), a view explored in most detail by Weeks and Galunic (2003) who developed a theory of an organisation as "an intra-organisational ecology of memes". If the term memes is confusing consider the sentence as an intra-organisational ecology of narratives, or discourses, or conventional wisdoms.

There is, for those versed in the history of FM, an immediate parallel with Becker's (1981) and Steele's (1983) metaphor of an organisational ecology and their stance on the workplace or facility as the environment in which that ecology interacts and evolves. The

¹ A term sufficiently established to no longer merit an explanation as to its origin.

concept has been revisited (Price 2007, 2009) as potentially more than a metaphor. In an ecosystem different species interact in a series of symbiotic and parasitic relationships (Moore, 1993) ultimately coded in genes which act, without any teleological intent, as if they were competing for reproductive success: future copies of particular genes (Dawkins, 1976). While there is competition between species and individual organisms in the ecology it is also, if mature, a system that resists encroachment from outside, at least if the environment is stable (Price and Kennie 1997; Price and Shaw, 1998).

Consider FM from such a perspective. Kaya and Alexander (2005) have hypothesised a model (Figure 2) of the FM Organisation overlapping with but not perfectly aligned with 'the business'. Their diagram can be visualised as a map of the domains of several social or memetic species. The complex of memes, the narratives and discourse, in the FM organisation acts <u>as if</u> bent_on their own replication as too do the memes in the host organisation. Either domain may of course be an ecosystem in its own right. This view does not, as some critics have argued, (e.g. Midgely, 1992), deny human free will and intentionality. It does perhaps alert us to the danger of being trapped in a prevailing COWDUNG and to the need to create different conversations to achieve different results.

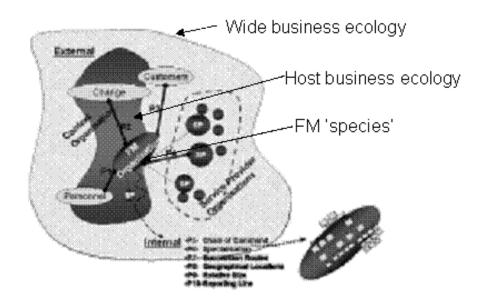


Figure 2. The ecology of FM (adapted from Kaya and Alexander 2005). The detail of this figure is not important in the context of the current paper. Our point is that it can be interpreted as a map pr snapshot of interactions in a system of ecologies at several scales.

Returning to architecture, the dominant narrative of FM remains modernist and normative, rooted (Vischer 2008) in environmental determinism. Buildings are there to deliver as a function rather than as form and symbol. Yet because they are built from that perspective they risk sending the wrong signals and ultimately do not deliver their intended function. Consider work-place changes that have not endured. See Price and Fortune, (2008 for an extended review, or Donald (1994) for a case study. Ultimately the difference between FM and 'supply-side' services such as building service engineering should lie in FM understanding the ecology of a particular business, speaking that businesses' language and contributing to what is delivered from a facility and not simply how the facility is constructed

and serviced. The dominant discourse of FM down the years has not achieved that end. FM, or allied fields, have tended to say "clarify your business needs and we will provide" rather than "how can we help you deliver your customers requirements". In the interests of both developing ideas for future research directions and developing the practice of FM this paper presents some evidence based examples of the power of FMs who create different conversations and of the role conversations play in FM in practice. Despite progress in the intervening decade, the challenges facing FMs in the future are still, as in other areas, those of finding new ways of leading, of cultivating environments for performing, and of finding new conversations with clients, customers and staff (Price and Akhlaghi 1999). The next section illustrates the power of such an approach.

EVIDENCE BASED EXAMPLES

Definitive methodologies for research into postulated organisational ecologies remain underdeveloped. In keeping with the theme of this paper we would suggest there is much to learn from methodologies developed from 'postmodern' or 'social constructionist' perspectives examining narratives in organisations. However whereas in those fields "repeated tests of theory, are rare, and harder to publish, since they may be criticized as being unimaginative" (cited by Morrell 2008) an ontologically realist ecological perspective probably requires the accumulation of evidence by repeated studies and observations. Any methodology will probably derive more from the observational sciences such as biology or geology than experimental sciences such as chemistry².

What we summarise here are cases informed by such a perspective with references to more detailed sources. The studies were observational in nature rather than fully inductivist in the sense of theory and test by experiment. They illustrate methodologies and open up questions about the scale and maturity of proposed ecologies. Ultimately however, our purpose is to illustrate the potential for studies of this kind in FM. We are concerned to demonstrate the potential value of an approach rather than to present a specific solution to a particular, formulated, problem. Indeed the meta-problem may be to find a way of researching and validating or falsifying the ecological perspective outlined above. Can a ecological perspective provide not only a powerful metaphor for FM research and practice but also a theoretical, scientific foundation.

Conversations for Patient Environments

Macdonald (2007) defended a doctoral thesis describing four years of research seeking to establish what, if anything, existed in common between a sample of English hospital trusts who had achieved consistent excellent ratings at all their sites in three rounds of Patient Environment Assessments (PEAT)³. For reasons of consistency the sample was restricted to

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² The first author is grateful to Jaap Hanekamp for thought provoking discussions of this point.

³ Trusts are the name given to the organisations who operate one or more hospitals in the UK's healthcare system. PEAT assessments were introduced by the then government in 2000 in an effort to allay public concern about poor hospital environments.

183 so called acute trusts in England⁴. Of that group fifteen were found to be consistently excellent over three separate assessments.

A search for possible geographic, socio-economic or demographic commonalities did not reveal any. The trusts in the sample varied in size and included both single site and multi site organisations. Some had new hospitals; others did not. Some had established FM directorates; others had not. Some outsourced FM others did not. There was no common adoption of a particular management technique such as a balanced scorecard or lean management. In short the researchers (Macdonald et al. 2009a) could not detect any common factor or explanation rooted in the environmental deterministic or normative approaches to FM and indeed management in general.

A research plan was therefore devised whereby the principal researcher would visit each trust that agreed to participate and ask for an open conversation with the responsible FM manager and such other participants as that individual wished to nominate. The particular arrangements were left to the FM host. The visits were conversations rather than interviews and the researcher, herself a former facilities director from an acute trust, was alert to the general state of the environment and the symbols used by the managers (Macdonald et al. 2009b). There were common behaviours. The group did not fit stereotypes of leader versus manager. They evidenced an eye for detail and leadership and many behaviours which can be found in the leadership literature such as modesty, pride in achievements, commitment to their organisation and community, commitment to people development, commitment to teams (in house or outsourced) and a sense of their trusts history. They worked at integration with clinical teams and — a behavioural aspect less explored in the leadership literature — they spoke about deliberately investing time in conversations to create networks; conversations laterally, upward and downward.

The sample consistently devoted deliberate and significant time and effort into this activity, recognising that they would be the ones who contributed the most. Relationship building takes time and is a slow process (Barrett, 2000) but the effort allowed the sample to ensure FM issues remained on, and indeed became part of, other people's agendas. In reflecting on the language and the behaviours of the FMs underlying this integration, we saw evidence of boundary management (Ancona, 1990; Rosenthal, 1997) and the building of social networks (Downes, 2005). The study shows that the FMs were concerned not with creating structures, but with the creation of social networks throughout the organisation. These networks had little or no formal recognition and had little accountability as a group. They were multilayered and predominately made up of collaborating peers (Lipnack and Stamps, 1990). Only a few of the members had direct responsibility for delivering the FM services.

The study does not prove conversations to be a necessary or sufficient determinant of an excellent facility. The research could not access trusts with poorer patient environment results to test for differences. One focus group of peers convened to discuss the findings

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⁴ Scotland and Wales have devolved political responsibility for health care. Specialised Trusts and teaching hospitals have different funding arrangements.

produced the conclusion "yes its obvious but it would be career suicide at my trust". Some of the research participants appeared aware that they were breaking the unwritten rules (Scott-Morgan, 1994) of the wider NHS. They asked that recorders be turned off before they would "tell it like it really is". The findings are therefore consistent with the proposition that different organisational results require different conversations.

Even doing the work proved problematic. Being national it required the approval of a meeting of the National NHS Ethics committee; a body dominated by clinicians more used to scrutinising research such as clinical trials. Their conventional wisdom was to dismiss any research that was not only non-clinical but also inductivist to boot. In such manner do existing memes "preserve their patch" by belittling alternatives. Ninety percent of 'yes but' interjections in everyday organisational discourse can be seen in the same light. The ethics committee were not happy that the proposed study was restricted to FMs in trusts with successful PEAT scores and felt that it should also investigate failing trusts in order to establish the difference. It took considerable persuasion to convince them that the research was not concerned with proving the 'right' way to lead, but merely to discover whether there was any common discourse among the successful FMs. The committee were also concerned that the information was of a sensitive nature and required a signed consent form at each trust before the research started. In the event, not all the trusts in the sample were prepared to give that consent. Some, by simply not responding, were able to avoid any scrutiny.

Wider knowledge ecologies

Macdonald's study demonstrates another point. The ecosystem of a trust, or of the NHS, contains many different cultural species. Clinicians are members of their profession, carriers of its memes, as much or more than they are members of an individual trust. Their career and status is derived in large part from membership of a particular group and with membership comes an obligation to obey the same unwritten rules (Scott-Morgan, 1994; Price and Shaw, 1998). Members of the Royal College of Nursing or various 'professions allied to medicine' demonstrate the same phenomenon, as indeed do FMs and the various professional groupings struggling for position within the general world of Health care FM. An individual trust or hospital is partly an ecology in the Weeks and Galunic (2003) sense but it is an artificial one analogous to a wild-life park into which different species, that only loosely cohabit in nature, have been thrown together or an amalgam of members of different tribes with their own language, identity and culture⁵

All organisations have this tendency but some are more tightly linked than others. Small family firms often, but not always (Gill, 2008), have a high sense of common purpose and many large corporations develop an identity which at least partially overcomes professional differences. Other large organisations such as universities are more akin to the wild-life park end of the spectrum with members of individual academic groups having more in common with particular subject specialisms than with the institution as a whole.

⁵ The first author is grateful to John Flowers (unpublished) for introducing a map of such an ecology and evidencing it in case studies.

Facilities both provide the platform for such an ecology (Becker, 2007) and indicate the dominant meme complexes within it. Some organisations have gone a long way towards creating expressive workplaces branded to reflect a company's desired or actual image. Some have created natural hubs or attractors, areas that draw members from different professional species into conversations. Natural and repeated interaction allows individuals to learn each others language in a way that formal meetings often do not. The results in business terms can sometimes be dramatic (Price 2007, 2009). A relocation or refurbishment project can be an opportunity to interrupt an existing memetic equilibrium and encourage the development of a new one. All too often however, the old patterns resurface. Rather as some forests have learnt to thrive and regenerate after fires so old organisational ecologies tend to resurface.

Major outsourcing events are another interruption of the prevailing equilibrium wherein peoples' attachment to, or infection by, one set of memes can be seen in their conversations after an event.

Sourcing conversations 1

The narratives of employees and managers involved in outsourcing provide a rich source of socially constructed realities (e.g. Ellison 2008) that often become commercially or contractually sensitive for the organisations concerned. Macdonald's sample included a hospital where Soft FM services were provided under a PFI contract. Unusually for the NHS the client side management had gone to great lengths to create an inclusive conversation embracing 'the contractors'. More common still is to find an assertion within the health service along the lines of "PFI depends on partnership which is impossible because you cannot trust the private sector" (a direct quotation to the first author in a study of an operation where relationship problems had become acute.)

Staff who were outsourced faced similar contradictions, and even reported being ostracised by former colleagues while at the same time not necessarily feeling trusted by their new employees. From an ecological perspective a new ecology was evolving from formerly separate populations. In such situations dominant discourses, or memes, present in different staff groups underpin behaviour that becomes self-fulfilling. The unwritten rules (Scott-Morgan, 1994, McGovern, 1995), aided and abetted by adversarial contracts couched in terms of penalties for failure, encourage emergent complexity. In another case (pers. comm. to the first author) a new facilities director discovered he was employing two staff to continually monitor failure for typical savings of ca £100 per month.

What is perpetuated by such strong assertions are entrenched second order realities (Ford et al., 2002). The risk of antagonistic meme proliferation, contrary to the prevailing organisational aims, is evident. In the first case a dominant meme was the PFI provider's adherence to contracted terms and processes. They too became embroiled in designs to show that failures were not of their making. The suggestion that they should also use a well developed helpdesk / service management centre to record unsolicited thanks was a revelation to the Finance Director concerned, and reduced antagonism in the management team by significant levels in six weeks. Transferred employees still asserted a discernible loss of enjoyment (c.f. Kakabadse and Kakabadse, 2000) but began to see that they were also

part of an enterprise that was delivering a better service. A more self-reliant, career-focussed psychological contract (Maguire, 2002) developed from commitment (Mowday, 1998) rather than 'survivor syndrome' (Appelbaum et al., 1997) prevailed.

Perhaps most importantly, such studies demonstrate that in an outsourcing situation, prevalent discourses and organisational behaviour create both intended and unintended consequences. FM outsourcing still has the scope to pay more attention to the consequences of narrative mismatches.

DISCUSSION

Sourcing conversations 2

Interruptions to equilibrium are one of the more general principles held and offered by those who see organisational change as changing conversations and who develop facilitation techniques to achieve such an end (*op cit.* by Ford, Price and Shaw). Sometimes enquiries framed in a slightly unusual manner can induce a moment of reflection. Asking where a particular conversation is sourced from is one such method. Many conversations for confirmation are actually implicit re-enforcements of prevailing common wisdom. Watch for example a group of FMs nod and otherwise signal agreement when one of their number complains about the behaviours of academics, or consultants, or whichever cultural group appears stuck in prevailing common wisdom. Such conversations tend to become self fulfilling. The dynamic labelled 'accidental adversaries' (Senge et al, 1994) results:

- I assert and perceive you to be acting in a certain way
- I act to you consistent with that perception
- You therefore perceive me to act in a certain way
- You therefore act consistent with your perception
- My perception is accordingly reinforced

Another meme which has gained a wide hold in FM discourse is the term 'none core' to delineate the role of FM:

- I assert that I am none core
- I act to you and the staff that I manage in a way which is consistent with that perception
- You and they therefore perceive me as none core with nothing to contribute
- You and they communicate accordingly
- My perception is reinforced

The FM Leaders in the first example discussed above did not source their conversation from the none core perspective. They spoke and acted as individuals with a contribution to make, thereby earning the organisational trust, space and freedom to make that contribution.

Their conversations were not however monologic, Jabri et al's (2008) term for conversations sourced from the single logic of persuading the recipients of a communication to accept and adopt it; to buy in. Monologic conversations are not restricted to FM but those trained in building professions are perhaps particularly susceptible to approaching facilities projects from such a perspective rather than a dialogic conversation with users about the possibilities afforded by the new work space. Hörgen et al's (1998) call for 'process architecture' is in effect a plea for architects to engage in different conversations with end users. They start with "what is the building for" rather than "how are we going to build it?" (Rabeneck 2008) but they spend more time in a conversation sourced from the former position rather than one devoted to establishing the outcomes as quickly as possible only to find later they were insufficiently articulated.

Many other work place conversations are sourced from replication of the 'cost per unit area' meme leading, arguably, to the accumulation of too much, low quality space (Price, 2007)

THE RESEARCH AGENDA: A CONVERSATION FOR POSSIBILITY

From the theoretical stance developed here new terms (memes) compete to gain credence and usage in more general organisational conversation. FM is no exception. Around the turn of the millennium several other terms such as CREM or Infrastructure Management were being advocated as conveying something more strategic, less none core, than "merely managing the facility". At the time of writing (late 2008) that trend seems to have diminished: an observation also made to the first author by the current CEO of the BIFM. It has not gone away and UK policy guidance still gives priority to Asset Management as being where the big bucks are.

FM has managed to embrace all Nutt's (2000) four trails, but is still vulnerable to Grimshaw's (2003) operational paradox. There may be three alternative trails or conversations for FM research. Firstly it could retreat to post modern theory — critical intellectual commentary without engaging with moving practice forward. Secondly it could continue to scrabble for crumbs from the table of practice. Models, theories and standards can result which may move say building services engineering or maintenance practice forward, but FM as a whole will remain in a conversation for confirmation of non core status. A third trail, whether we label it evidence based or business critical will seek to engage with the cutting edge of practice and take the majority forward. Understanding the role and power of conversations to organisations and changing the physical reality in which those conversations occur should be part of such an agenda. It is a route to real, sector specific differences in what Facilities Management can deliver. What, in other words, is possible?

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REFERENCES CITED

Ancona, D.G., (1990). Outward bound: strategies for team survival in an organisation. *Academy of Management Journal*, 33(2) 234-365

Appelbaum, S., Delage, C., Labib, N. & Gault, G. (1997) 'The survivor syndrome: aftermath of downsizing', *Career Development International*, 2(6), pp. 278-286.

Barrett, P., (2000) Achieving strategic facilities management through strong relationships. *Facilities*, 18(10/11/12) 421-426

Becker, F.D., (1981) Workspace: creating environments in organizations, New York, Praeger

Becker, F.D. (2007) The ecology of knowledge networks. *California Management Review*, 49 (2) 42-61

Beech, N. and Cairns, G. (2001) Coping with change: the contribution of post dichotomous ontologies, *Human Relations*, 54(10), 1303–1324.

Cairns, G. (2008) Advocating an ambivalent approach to theorizing the built environment, *Building Research & Information* 36(3), 280–289

Csikszentmihalyi, M. (1988) Society, culture, and person: a systems view of creativity, in R. J. Sternberg, (Ed) *The nature of creativity: Contemporary psychological perspectives* New York: Cambridge University Press, 325-339

Dawkins, R., (1976) The selfish gene, Oxford, Oxford University Press,

Dawkins R. (2006) The God Delusion, London Bantam Press

Donald I., (1994), Management and change in office environments. *Journal of environmental psychology*, 14 (1), 21-30.

Downes, S., (2005) Semantic networks and social networks. *The Learning Organisation*, 12(5), 411-417

Ellison, I. (2008) *Do perceptions play a role in FM outsourcing? An ethnographic study,* Sheffield Hallam University MBA Dissertation.

Ford, J., Ford, L. & McNamara, R. (2002) 'Resistance and the background conversations of change', *Journal of Organizational Change Management*, 15(2), pp. 105-121.

Ford, J. D. (1999), Oorganizational change as shifting conversations, *Journal of Organisational Change Management*. 12(6), 480-500

Ford, J. D., and Ford, L. W., (1995), The role of conversations in producing intentional change in organizations, *Academy of Management Review*; 20 (3), 541-570

Hörgen, T.H., Joroff, M.L., Porter, W.L. and Schön (1988) *Excellence by design: Transforming Workplace and Work Practice*, New York John Wiley & Sons Inc.

Hull, D.,(1988) Science as a process, Chicago, University of Chicago Press

Gatherer, D., (1997), Macromemetics: Towards a Framework for the Re-unification of Philosophy, *Journal of Memetics - Evolutionary Models of Information Transmission*, 1 http://cfpm.org/jom-emit/1997/vol1/gatherer_dg.html

Gill, J., (2008) A discussion of and methodology for the use of participant observation as an approach to researching cultural complexity in an SME, Sheffield Hallam University MA Dissertation

Grimshaw, R.W. (2003), FM: the professional interface, Facilities, 21 (3) pp. 50-57

Jabri, M. Adrian, A. D. and Boje D., (2008) Reconsidering the role of conversations in change communication A contribution based on Bakhtin, *Journal of Organizational Change Management* 21(6) 667-685

Jencks, C. (1977) The Language of Post-Modern Architecture, London, Academy Editions

Kakabadse, N. & Kakabadse, A. (2000) 'Critical review – Outsourcing: a paradigm shift', Journal of Management Development, 19(8), pp. 670-728.

Kaya, S. and Aklexander, K., 2005 Classifying FM organisations using pattern recognition *Facilities* 23 (13/14), 570-584

Lipnack, J., and Stamps, J., (1990) [online]. *The Architecture of complexity. The Seybold.* Available at:

www.virtualteams.com/library/articles/publications/seybold/seybold_2-90.html [Accessed on: 2 February 2007]

Macauley J., Duberley, J. and Johnson, P. (2007) *Organization Theory: Challenges and Perspectives*, Harlow, Pearson Education

Macdonald, R., (2007). Excellent Patient Environments within acute NHS Trusts: The Leaders who enable them, Sheffield Hallam University UK, Unpublished DBA Thesis

Macdonald, R., Price, I and Askham P., (2009a), Excellent patient environments within acute NHS trusts: external influences and Trust characteristics, *Journal of Facilities Management*, In press

Macdonald, R., Price, I and Askham P., (2009b), Leadership conversations: the impact on patient environments, *Leadership in health services*, in press

McGovern, P. (1995) 'Learning from the Gurus: Managers' Responses to The Unwritten Rules of the Game', *Business Strategy Review*, 6(3), pp. 13-25.

Maguire, H. (2002) 'Psychological contracts: are they still relevant?', *Career Development International*, 7(3), pp. 167-180.

Midgley, M. (1992) Science as Salvation: A Modern Myth and its Meaning, New York, Routledge

(Moore, J.F., 1993), Predators and Prey: A new Ecology of Competition, *Harvard Business review*. 71(3). 75-86

Morrell, K, (2008)The Narrative of 'Evidence Based' Management: A Polemic, *Journal of Management Studies* 45 (3)613-635

Mowday, R. (1998) Reflections on the study and relevance of organizational commitment, *Human Resource Management Review*, 8(4), pp. 387-481.

Nutt, B. (2000), Four competing futures for facility management, *Facilities*, 18 (3/4). 124-132.

Price, i. (1995) Organizational memetics?: organizational learning as a selection process *Management Learning*, 26(3) 299-318

Price, I., (2002), Can FM Evolve? If not what future? *Journal of Facilities Management*, 1(1) 56-70.

Price, I., (2004); "Business Critical FM" Facilities, 22(13/14) 353–358.

Price, I., (2007) The lean asset: new language for new workplaces, *California Management Review*, 49 (2) 102-118

Price, I., (2009) Space to adapt: workplaces, creativity behaviour and organizational memetics In Rickards, T., Runco, M.A., and Moger, S., *The Routledge Companion to Creativity*, Oxford, UK and New York, USA Routledge, 46-57

Price, I., Kennie, T. (1997), Punctuated strategic equilibrium and some leadership challenges for University 2000, paper presented at *the 2nd International Conference on the Dynamics of Strategy*, SEMS, Guildford, pp.335-349.

Price, I, and Akhlaghi, F., (1999). New patterns in facilities management: industry best practice and new organisational theory. *Facilities*, 17 (5/6) 159-166

Price, I, and Shaw, R. (1998) Shifting the Patterns. Chalfont Glos. Management Books 2000

Price, I. and Fortune, J. (2008) Open plan and academe: pre- and post-hoc conversations In Finch, E Ed *Proceedings of the CiOB W70 Conference*, Edingburgh Heriot Watt University

Rabeneck, A., (2008) A sketch-plan for construction of built environment theory *Building Research & Information* (2008) 36(3), 269–279

Rosenthal, E., 1997. Social networks and team performance. *Team Performance Management*, 3(4), 288-294

Scott-Morgan, P., (1994) The Unwritten Rules of the Game, New York, McGraw Hill

Senge, P. Roberts, C. Ross R. Smith, B &. Kleiner, A (1994): *The Fifth Discipline Fieldbook: Strategies and Tools for Building a Learning Organization*, New York, Doubleday/Currency.

Smeltzer, L. (1991) "An Analysis of Strategies for Announcing Organization-Wide Change', *Group & Organization Studies*, 16(1), pp. 5-24.

Sokal, A. & Bricmont, J. (1998) Intellectual Impostors. London: Profile Books

Steele F., (1983), The Ecology of Executive Teams: A New View of the Top, *Organizational Dynamics*, Spring 65-78

Vischer, J. C., (2008), Towards a user-centred theory of the built environment *Building Research & Information* (2008) 36(3), 231–240

Waddington, C. H. (1977) *Tools for thought: how to understand and apply the latest scientific techniques of problem solving*, New York: Basic Books, 1977

Weeks, J. and Galunic, C, 92003), A theory of the cultural evolution of the firm: the intraorganisational ecology of memes, *Organization Studies*, 24(8) 1309-1352

Wheen, F., (2005), How Mumbo-jumbo Conquered the World: A Short History of Modern Delusions London, Harper Perennial