UNCONSCIOUS FORCES IN PROJECT MANAGEMENT TEAMS

David Hugill

A combination of economic forces and increasing fragmentation in the construction industry is creating a situation where inter-organisational and personal conflict is common. This leads to anxiety and stress amongst management teams. The manifestation of stress can be considered in relation to individuals and also groups. This paper examines the theories of unconscious forces in project management teams and in particular the nature of 'defence mechanisms' they exhibit. The issue of how such forces can be measured is examined from both a quantitative and qualitative perspective. Conclusions are drawn in support of a qualitative approach.

Keywords: anxiety, ethnomethodology, group dynamics, naturalism, positivism, stress, unconscious forces.

INTRODUCTION

The successful completion of construction projects is increasingly dependant on the cooperation of firms and individuals from a wide variety of backgrounds. The typical project management team can be considered not only in its obvious arrangements and relationships, but also in terms of its 'group dynamics'. These are sometimes explicit and observable, but can also be unconscious, which has lead to the conclusion that the group can be viewed as a social system in which its task activities are imbued with, and can even be displaced by, activity attributable to unconscious forces (Guzzo 1996: 3-21).

The notion of unconscious forces raises many questions: what are these forces? How do they manifest themselves? Are they for the good or bad? The work of Sigmund Freud and Melanie Klein formed the basis of Wilfred Bion's theories which specifically examined group reactions to stressful/anxiety provoking situations. Bion (1961) identified three specific group reactions which he called 'dependency', 'pairing' and 'fight-flight'.

Bion continued to work as a clinical psychologist until his early seventies. Since his death in 1981 a number of scientists have attempted to re-examine the phenomena he identified, with varying degrees of success.

This paper examines the construction project environment as a fertile ground for the generation of elements which cause stress (stressors), and presents a comparative analysis of Bion's defence mechanisms.

The study of unconscious forces involves a multi-disciplinary approach embracing sociology, psychology and physiology. The paper will discuss the predominantly quantitative approach which has been adopted thus far in attempts to identify and measure Bion's defence mechanisms. An outline of a more qualitative procedure will be presented using ethnographic research principles.

THE PROJECT ENVIRONMENT

The organisational environment of the construction project is increasingly being influenced by changes taking place in the wider economy. The construction industry is becoming ever more fragmented, as indicated by the changes in the number and size of firms which carry out its activities. There are 194,000 (1996) firms engaged in construction activity, an increase of 35% since 1982 (Housing & Construction Statistics 1997). Whilst the increase itself is significant, of at least equal importance is the nature of this rise in numbers: there were 100,000 firms employing 3 or fewer people in 1982, this has risen to 164,000 in 1996. One implication of these changes is that it is now necessary to bring together more distinct organisational entities to complete a construction project. Furthermore, it can be hypothesised that for many of the smaller firms, their approach to management may be based more on their own experiences as tradesmen, than any formal training.

These factors combine to create a situation where inter-organisation and personal conflict is common; it has been reported by Latham (1993, p5) that 'the culture of conflict seems to be embedded... disputes and conflicts have taken their toll on morale and team spirit'. Therefore there would appear to be a need to consider one of the effects of conflict in the industry, namely stress; as Atkin states 'Efficiency of the industry will depend more upon its success in solving organisational rather than technical problems.' (Atkin 1994, p61).

ANXIETY AND STRESS IN CONSTRUCTION

The increasing complexity of the project environment is a particularly fertile ground for the generation of anxiety and stress between individuals and organisations. Support for this argument can be found in both definitions of stress and some of the features associated with it.

Schuler (1980) reviews many definitions of stress including: 'a misfit between a person's skills and abilities and demands of the job, and a misfit in terms of a person's needs supplied by the job environment' (Hall and Mansfield); 'job stress as a condition wherein job related factors interact with the worker to change (disrupt or enhance) his/her psychological or physiological conditions such that the person (mind and/or body) is forced to deviate from normal functioning' (Beehr and Newman).

An important additional emphasis is introduced by McGrath (1976) who examines stress in the context of an interaction between a person and their environment: 'Stress involves an interaction... something happens which presents a person with a demand, or a constraint or an opportunity for behaviour.' The stress is created when the person is somehow prevented from responding to the 'demand/ constraint/ opportunity.' Schuler thus developed his own conceptualisation of stress based upon McGrath's outline, as follows:

'Stress is a dynamic condition in which an individual is:

- (a) confronted with an opportunity for being/ having/ doing what he/she desires; and/or
- (b) confronted with a constraint for being/ having/ doing what he/she desires; and/or
- (c) confronted with a demand for being/ having/ doing what he/she desires; and...

for which the resolution is perceived to have uncertainty but which will lead (upon resolution) to important outcomes.' (Schuler 1986, p189).

Schuler's model can therefore be applied to a typical construction project to examine the generation of factors which are likely to lead to anxiety and stress amongst members of the project team.

Firstly the dynamic nature of projects should be examined for the likely occurrence of opportunities, constraints and demands. Clearly the overriding demand facing the project team is to complete the project in accordance with the client's requirements expressed in terms of the design, budget and within a pre-determined timescale. In addition, it is suggested that this perspective, though obvious to those familiar with construction works, ignores other elements of the dynamic relationship amongst the firms who are brought together, including the need to achieve a margin of profit, almost irrespective of the success or otherwise, of the project itself. Thus the ability of a firm to respond to the demands of the project is constrained by the availability of resources available, their cost, and the manner in which they are managed to satisfy the requirements of the contract which has been entered into.

It can also be envisaged that each party to the construction process is acutely aware of the need to secure the survival of the firm in the long term, beyond the immediate scheme on which they are engaged. Thus each project, whilst being undertaken within certain constraints, will also offer an opportunity to demonstrate the firm's capabilities. This is as applicable to members of the design team as those organisations engaged to undertake the physical works on site. The Architect seeing a chance to make a 'statement'; the quantity surveyor using reporting and control mechanisms to secure completion of the works within the client's budget.

Thus, the interplay of opportunity, constraint and demand is easily illustrated with reference to the construction industry.

The second important element of Schuler's model is the perception of uncertainty in relation to the person individually, or firm collectively, to: seize an opportunity, operate within a constraint or respond to a demand. This aspect is clearly illustrated by the numerous array of firms engaged to undertake a single project. Thus the uncertainty is generated by the interdependence of the relationships amongst parties who are more than likely being brought together for the first time. The uncertainty is tangible, manifest and overwhelming.

The third and final part of the model concerns the importance of outcomes. For all the parties engaged the outcome must simply be a level of expenditure less than the income received, the importance of which is quite simply connected to the survival of the firm in the long term.

Schuler's model has therefore been used to examine the construction project as a basis for the creation of anxiety and stress. The creation of a model which conceptualises stress provides the basis for the identification of stressors. It is beyond the scope of this paper to present an exhaustive list of likely stressors in the project environment, although Djebarni (1996) provides a list for construction site managers. With the brief illustrations based on this model it is however possible to envisage the very large number of likely factors inherent in a typical construction project.

One final aspect of Schuler's conceptualisation which is worthy of particular attention is the 'additive' nature of stress: 'the more dynamic conditions of opportunity, constraint and/or demand an individual confronts, the more stress he/she will potentially have.' (Schuler p191). Given the myriad of array of interactions, the interconnection of the different elements of work programme and budget it is evident that the construction project is an extremely fertile environment for the generation of stressors.

REACTIONS TO ANXIETY AND STRESS - GROUP DEFENCE MECHANISMS

From the previous section it is clear that the construction project is host to a large number of stressors. How these manifest themselves can be viewed from different perspectives. A number of authors have examined stress as it affects site managers (Djebarni 1996, Davidson and Sutherland 1992), though there has generally been little work in this area. The benefits of adopting this perspective are clear in view of the pivotal role of the manager in terms of the successful completion of construction projects. Much less work has been undertaken to examine the extent to which there may be elements of reactions which are attributable to certain dynamics within groups.

Groups in construction can be viewed in terms of their directly apparent structures: the project team; design team; contractor's team; on site and in the offices of the different organisations involved. The objectives of these groups can also be considered in relation to the terms on which they were engaged: a design which satisfies the brief; a building within budget; a project which achieves the profit margin; a works package to programme and profit margin etc. All of these are apparent and obvious. However, it is also possible to view the group's concerned in relation to structures, motives and interactions which are not so obviously apparent; as Guzzo states: 'groups can be observed as small social systems in existence to perform some primary task but in which the rational, planned task-performance activity was imbued with, and often displaced by, activity attributable to unconscious forces' (Guzzo 1996).

One manifestation of these unconscious forces is in the form of reactions to stressors. Early work in this area was undertaken by Wilfred Bion (1897-1981).

In his major work in this field, Bion (1961) distinguished between two types of group activity. The first type he described as work-group mentality 'that is, mental functioning designed to further the task in hand' (p188). However, the work of the group can be effected (hindering or furthering the group) by... 'emotional drives of obscure origin'. Bion gave this behaviour the title of 'basic assumption mentality'. Stokes (1994) has summarised these opposing tendencies as: 'the wish to face and work with reality, and the wish to evade it when it is painful or causes psychological conflict within or between members' (p20).

In the context of a construction project we can say that a project team is exhibiting the work-group mentality when it is focused upon managing the design/ construction phase. In contrast, exhibition of basic assumption mentality can be seen where the team's behaviour is directed at attempting to meet the unconscious needs of members by reducing anxiety and internal conflicts. Stokes (1994 p22) describes a group in this state: 'group members lose their critical faculties... group seems to lose awareness of the passing of time... apparently willing to continue endlessly with trivial matters... the group closes itself off from the outside world and retreats into paranoia.'

THE THREE BASIC ASSUMPTIONS: DEPENDENCY, PAIRING, FIGHT-FLIGHT

Bion further developed his theories to identify three distinct types of basic assumption activity: 'dependency', 'pairing' or 'fight-flight'. For emphasis, therefore they should be seen as associated with the mental state (together with the abbreviations used by Bion):

- basic assumption dependency (BaD)
- basic assumption pairing (BaP)
- basic assumption fight-flight (BaF)

Unfortunately, it is difficult to extract clear definitions of these states from Bion's work. This is of crucial importance if we are to be able to obtain a better understanding and measurement of this activity. The following discussion summarises attempts by other authors to explain Bion's terms.

For dependency Morgan (1986) offered the explanation of a group in search of a leader to solve its predicament. The group often expresses helplessness in coping with a given situation, and becomes dependent on the emergence of a new leader, thus the problem is projected on to a particular individual. The projection need not however be on to another person, it can also be to an attractive symbol of the past; ie a celebration of the way things used to be. The explanation of dependency offered by Stokes (1994) bears little obvious connection to that offered by Morgan. Stokes asserts that this basic assumption illustrates the situation where the leader serves as a focus for a pathological form of dependency, inhibiting the growth and development of the group.

Lansley and Riddick (1991) are some of the few researchers in construction management who have cited Bion's work. In a paper which examines small group interactions, the authors offer brief and concise definitions. Thus dependency is simply stated: 'the group has met together to obtain security from one individual on whom they depend'. Lastly the work of Karterud is included, also addressed in the following section. Sigmund Karterud's background is in psychiatry and therefore the explanations offered are reflective of that background: 'The dependency group is a manifestation of collective (archaic) idealizing transference'. (1989)

The same process of comparative definition can be used to examine the second of Bion's basic assumptions, pairing. Morgan (1986) describes a group paralysed by inaction awaiting the arrival of a 'messiah' figure to solve its present problem. Stokes's explanation is similar and advances upon Morgan in that the messianic figure is expected to 'pair' with another person in the group. Here, the messianic figure can be an existing group member, or someone from outside - 'the group is not in fact working practically towards the current problem, only attempting to sustain a vague sense of hope as a way out of its current difficulties'.

Lansley and Riddick refer to BaP as the 'reproductive metaphor': 'the dependence by group members on two individuals who somehow can be expected to mate to sire a better tomorrow'. Karterud offers the complex view that 'the pairing group is a manifestation of mirroring (and alter ego) transference, belonging to the grandiose self'.

In many respects, the author's conversations with people since the general election has revealed some evidence of a pairing type reaction during the campaigning process - the hope for some leader to emerge to solve the group's (countries) problems!

Lastly we have to examine the basic assumption fight-flight. Morgan explains that here the group projects its fears on to an enemy of some kind. An explanation is offered in the initial reaction from the car manufacturing industry in North America to the challenge imposed by imports from Japan. Whilst the new source of competition was real in its effects, the initial preoccupation was with an 'enemy' and thus reactions were in terms of the need for protection through legislation and import quotas diverting attention from the 'real' need for action in terms of an examination of the nature of the domestic product to find out how it might be modified to compete in the new market conditions.

Stokes refers to the group's perception of an enemy to be attacked or fled from; quoting Bion: 'the group is prepared to do either indifferently'. An example is given by Stokes of a group discussing rumours of impending organisational change; the group becomes preoccupied with defending itself by attacking the rumours, rather than looking for new, more efficient, ways of operating. Lansley and Riddick offer the brief explanation that the group is only concerned with the recognition of an enemy.

For sake of consistency, Karterud's explanation is offered, without comment: 'the fight-flight group is a manifestation of a collective narcissistic rage activated by self-object (therapist) failure'.

It should be appreciated at this point that when Bion refers to these defence mechanisms, he is not considering brief parts of a conversation or discussion, but much longer exchanges amongst a group of people. According to Karterud (1989) 'they (BaD, BaP, BaF) are definitely not isolated verbal statements, but long sequences of total group phenomena' (p318). Furthermore, since we are concerned with group phenomena, there should be what Karterud describes as a certain 'echo' in the group, which makes the verbal evidence part of a group phenomena and not just a hostile attack of a singular person.

In summarising this section, it is apparent that there is some difficulty in comprehending certain aspects of the defence mechanisms hypothesised by Bion. Yet this difficulty may in part be attributable to the need to become familiar with certain psychological frames of reference. Certainly, much of Karterud's work is at best difficult to understand, yet it might be the case that herein lies the most critical evaluation of Bion's work. It will be necessary to conduct a more rigorous examination of the psychological perspective in order to unravel much of Karterud's explanation.

MEASUREMENT OF UNCONSCIOUS FORCES

Having considered the different explanations of the basic assumptions offered by Bion, it is now necessary to develop a greater understanding of the fundamental aspect of a group's reaction; in other words "how will I know a defence mechanism when I see/hear one?" This somewhat light-hearted view of the area disguises real difficulties in identifying the phenomenal units identified by Bion.

Before considering this matter in more detail it is worth giving some consideration to the fundamental approach to the measurement of unconscious forces. The approach to the investigation of issues in construction management has recently been the subject of debate (Seymour, Crook, Rooke, 1997). The argument centres on the need to adopt a new research paradigm in construction management. The debate calls for an approach that concentrates on 'the meaning rather than the causality, and produces an account that recognizes the respective viewpoints of practitioners in the process' (Seymour et al, 1997). It is not necessary to repeat the very persuasive argument of Seymour et al, indeed those interested in the debate are referred to Seymour and Rooke (1995) and also Rooke (1996) for a thoughtful philosophical discussion of the area. What can be done in this brief paper however, is set out a summary argument for the interpretative paradigm and examine Bion's and his critics arguments in the light of this methodology.

The general debate which has been taking place for many years concerning the fundamental approach to research in the social sciences concerns the distinction between, at its simplest level, a quantitative or qualitative approach. The former is linked with words and ideas like 'positivism' and 'rationalism', as Hammersley and Atkinson (1995, p4) have explained 'central to positivism is a certain conception of scientific method, modelled on the natural sciences, and in particular on physics.' Associated with the qualitative approach are words like 'naturalism', 'interpretation'; thus 'a first requirement of social research according to naturalism, is fidelity to the phenomena under study, not to any particular set of methodological principles' (Hammersley and Atkinson, p7).

Naturalism is based upon a set of philosophical and sociological ideas including symbolic interactionism, phenomenology and hermeneutics. It is in symbolic interactionism that clear arguments emerge for the rejection of the positivist approach. Whereas the scientist following rationalism utilises the stimulus-response model of human behaviour, this is seen to be fundamentally flawed because it fails to accommodate the way in which people interpret stimuli; thus the same physical stimuli can mean different things to different people. Hammersley and Atkinson provide a nice illustration of this point:

'A question from a language development test instructs the child to chose the 'animal that can fly' from a bird, elephant, dog. The answer (obviously) is the bird. Many first grade children though, chose the elephant along with the bird... in response to a question they replied: "That's Dumbo..."' (Hammersley and Atkinson, p7).

Early attempts to measure emotionality in groups was undertaken by Herbert Thelen at the University of Chicago. Much of the work was designed to measure Bion's categories of emotionality. Thelen and his team developed a battery of research instruments; Karterud and Foss (1989) report their attempts to develop some of these for their own use. It soon became apparent that the instruments used had some significant weaknesses, including the pragmatic aspect of the ability of the observer to accurately record interactions in accordance with a prescribed system as an exchange was occurring. A typical record would take the form: 'participant no. 8, 37min.: Fd 1, or: 2, or: fl 2'

Under this system each verbal statement is capable of being categorised according to 1 or more of 13 categories. Viewed in the light of this brief illustration, as Karterud and Foss report, it can be appreciated that Thelen and his co-workers found it to be so complicated and exhausting that they were only able to rate sequences for between 15 and 20 minutes in each session. Karterud and Foss go on to propose modifications to Thelen's model to make it more manageable.

It is clear that Karterud's approach is avowedly quantitative, which is as yet failing to provide clear evidence of the existence of the three Bionian defence mechanisms. Yet, there is in his own work an acceptance of their validity, they are: 'rather uncontroversial and accepted by most group psychotherapists and psychoanalytic-oriented theorists' (Karterud p316). Interestingly, Karterud's concern is therefore not with the validity of Bion's ideas but a need to clarify the phenomenology of the basic assumptions, to be 'done' by: 'direct group observations, combining reliable methods of a qualitative nature (hermeneutics) with quantitative ratings' (Karterud 1989). Karterud expresses concern and urges clarification of Bion's metapsychological explanations; does this mean that if they cannot be validated in relation to the psyche, they are not valid as phenomena?

CONCLUSIONS

The concept of unconscious forces provides the opportunity for a new and interesting insight into the management of construction projects. One aspect of these forces is the manner in which groups respond to the anxiety and stress associated with today's modern industry. Because of their nature, these forces are difficult to detect and measure. The majority of attempts to elucidate the work of Wilfred Bion have been based upon quantitative methods, following a rationalist paradigm. Thus far, this approach has not provided the clarity of evidence acceptable to a number of scientists, although Bion's work is probably the most cited one in group psychotherapy literature.

This paper has outlined the importance of understanding these forces in the context of an industry which is becoming increasingly more fragmented, and its managers more anxious, suffering from the deleterious consequences of stress. Further work will seek to examine the validity of 'basic assumption' mentality, and whether its manifestation can be categorised according to Bion's configuration: dependency, pairing, fightflight. The approach used will differ from that predominating historically, in that it will use the principles of naturalism, adopting an ethnomethodological system.

REFERENCES

Bion, W.R. (1961) Experiences in groups, Tavistock Publications.

- Davidson, M.J. and Sutherland, V.J. (1992) Stress and construction site managers. *Employee Relations*, **14**(2) 25-39.
- Djebarni, R. (1996) The impact of stress in site management effectiveness. *Construction Management & Economics.* 14, 281-293.
- Guzzo, R.A. (1996) Fundamental considerations about work groups: handbook of work group psychology, London: Wiley.
- Hammersley, M. and Atkinson, P. (1995) *Ethnography principles in practice*. 2nd ed. London: Routledge.
- Karterud, S. and Foss, T. (1989) The group emotionality rating system: a modification of thelen's method of assessing emotionality in groups. *Small Group Behaviour*, **20**(2) 131-150.
- Karterud, S (1989) A study of bion's basic assumption groups. *Human Relations* **42**(4), 315-335.
- Lansley, P. and Riddick, J. (1991) The implications of small group interactions for understanding aspects of organizational culture. *Construction Management & Economics*. 9, 221-229.

- McGrath, J.E. (1976) Stress and behaviour in organisations. In: *M. D. Dunette (Ed), Handbook of industrial and organisational psychology.* Chicago: Rand Mc Nally.
- Morgan, G. (1986) Images of organization. London: Sage.
- Rooke, J. (1996) Developing a more empirical approach to researching human resource management. *ARCOM Workshop*, 21 Nov, University of Glamorgan.
- Seymour, D. and Rooke, J. (1995) The culture of the industry and the culture of research. *Construction Management & Economics.* **13**, 511-523.
- Seymour, D., Crook, D. and Rooke, J. (1997) The role of theory in construction management: a call for debate. *Construction Management & Economics.* **15**, 117-119.
- Schuler, R.S. (1980) Definition and conceptualisation of stress in organisations. Organisational Behaviour and Human Performance, **25**, 184-215.
- Stokes, J. (1994) The unconscious at work in groups and teams. In: *The unconscious at work, individual and organizational stress in the human services*. London: Tavistock.