Chris Mowles The practice of complexity: Review, change and service improvement in an NHS department

Introduction

In this article we will reflect upon a piece of work aimed at bringing about service improvement in an NHS setting. In doing so we will draw upon analogies from the complexity sciences, to develop a theory of working with staff caught up in processes of change. We will locate and contrast our theory of change within the spectrum of ideas and concepts that are taken up by other scholars and researchers interested in the change process as a contribution to the discussion about how best to support service improvement in a healthcare setting. Based on the experience of working with therapy staff in an NHS setting over a two year period, we make the case for the importance of focusing on the relationships between colleagues in their local settings, encouraging managers and practitioners alike to consider themselves to be active researchers of and engaged practitioners in their day to day working environment. Deriving from methods that privilege reflection, reflexivity and research, this approach marks a radical departure from the more orthodox way of understanding both organisational change and consultancy intervention. It encourages attending to relationships of power and the constantly emerging and changing patterns of interaction that arise between socially interdependent people. We will argue that more conventional theories of organisational change and consultancy are predominantly based in systems thinking and encourage the idea that change can be wholesale, linear and predictable. They suggest that the problems faced by staff in their day to day interactions with each other are capable of solutions and conceive of these solutions as technical and rational responses to the problems encountered. At the same time we will compare and contrast our approach towards organisational change with other scholars who have also started to argue for less conventional, non-linear understandings of organisational change.

The setting

The therapy department in which we worked was a department made up of 150 whole time equivalent therapists and support workers. The department covers a large urban/rural region of Scotland, with a population of 500,000 spread over 3,000 square miles. It provides services to children and adults with a range of communication disabilities in individual and group therapy settings. The service was delivered in hospitals, schools, health clinics, homes, resources centres and other community settings. Like many departments in the NHS, this therapy department has undergone significant reorganisations and, management initiatives. The most recent reorganisation found the department divided into 8 divisions, 5 of them geographically based, and relating to regional Community Health Partnerships (CHPs) with no formal management links between them. Following this reorganisation, the managers of the eight divisions were invited to work together as peers in the same department whilst being managed geographically in local CHPs. This invitation was intended to address a number of organisational issues which had arisen across the region. These comprised difficulties recruiting and retaining staff, coupled with a higher than average number of complaints about the service lodged with Members of the Scottish Parliament (MSPs) and the local press over lack of service provision and long waiting times particularly for childrens' services.

The consultants were invited to put forward a proposal for working with the department to address some of the issues. Several review options were discussed, including short, medium and long term review processes. The Steering Group responsible for the process approved a review process spanning 18 months. One short term review had been commissioned previously but had had limited effect; simply identifying departmental problems and listing

recommendations for development and action had not been enough previously to move the department in the way that made a substantial difference to working practices. The consultants were intent on attempting something different.

To undertake consultancy in this setting necessitated having a theory of intervention, implicit or explicit, if we were to support managers and staff in the department to bring about change. If we were to offer a critique of the ways of working that we found we would be obliged to answer the pragmatic philosopher Richard J Bernstein's question – 'critique in the name of what?', (Bernstein, 1991). What would we implicitly or explicitly bring to the conversations currently ongoing in the department about the way change happens in organisations and our contribution to it and how would they be different from the theories of change prevalent in the NHS?

Prevalent theories of change in the NHS

Change programmes in the NHS are endemic. In a report commissioned by the NHS on theories of change which sought inspiration from the literature on social movements, the authors concluded the following:

> Research has identified that, even in NHS organisations with a strong track record of improvement, there is typically little reflection, hypothesising or consideration of alternative actions before embarking on change processes. Rather, teams decide on a specific course of action and jump straight in to making changes. (Bate et al, 2005: 45)

From our experience of working in the NHS and elsewhere in the public sector we would argue that although staff and organisational consultants do often jump into making changes without reflection they do so, implicitly or explicitly, informed by management theories underpinned by systems thinking, since they are so prevalent in management literature and in managerial discourse within the NHS (Clarke and Newman, 1997). What we mean by this is that consultancy interventions, and work undertaken by staff themselves in the reviewing of organisational functioning, will often draw explicitly and uncritically from ways of understanding the process of organising based in systems theory which are taken for granted in much of the public sector and beyond. This is partly because they have been popularised in management literature in particular by Peter Senge (1990) in *The Fifth Discipline*, and Argyris (1990) and Argyris and Schön (1978, 1995) in their ideas on organisational learning. It has become difficult to intervene in organisations without using language, concepts and methods developed and disseminated extensively within a systemic understanding of the management of organisations.

There can be no surprise that systems theory should be so well received in a medical domain, where it has made such a contribution to the advancement of knowledge. Representations of organisations as if they were systems with a boundary often offer helpful heuristics for managers and staff grappling with complex organisations. But how helpful is it in informing thinking about change and what is its limitations, and why would we bring something that was different?

Systems theory

The domain of change theories is still contested in health research as elsewhere, and it is possible to encounter the whole spectrum of views about what counts most for effective change to happen. Theories in the health literature which cover GP practice, nursing and work in hospitals range from the empirical and quasi-scientific (Olsson et al, 2007), which attempt to identify change methods which are generalisable and predictive of success; theories which borrow directly from

private sector business techniques such as business process re-engineering, Probert et al, 1999); theories which draw on concepts of organisational learning and development (Davies and Nutley, 2000; Garside, 1999); theories which enquire into the unconscious and affective aspects of organising (Obholzer and Roberts, 1994; Beale et al, 2005) and theories which tend towards process understandings of change, including those which draw on analogies from the complexity sciences, (Dopson, 2005; Plsek, 2003; Kernick, 2002). It is the last of these which we will explore in more depth below.

However, we would concur with those who have argued that the majority draw extensively from systems theories, even where scholars have taken a turn towards a less linear understanding of process of organising. For example, Iles and Sutherland (2001) were commissioned by the NHS to produce a review of theories of change to aid NHS managers choose amongst them. They are explicit about the prevalence of systems thinking in NHS management: 'Within the NHS the term whole systems thinking is now routinely used by managers and clinicians.' (2001:17). Rhydderch et al (2007), argue that systems theory exerts the most influence over concepts of change in the NHS and set out the case that other theories, organisational development, social worlds theory, and complexity theory each have a contribution to make. However, in presenting these as alternatives, they do not draw attention to the fact that organisational development and theories of complexity, presented here as complex adaptive systems theory, are also variations of a systemic understanding of change.

What does it mean to take a systemic perspective on change? Orthodoxy and alternatives.

Systems thinking is a dynamic and developing area of thought, (Jackson, 2000; Midgely, 2000), so there is not one systems theory but many variations of it. However, systems theories share common characteristics in that they conceive of an organisation as an idealised whole with a boundary, and imagine that 'whole' organisational change is possible. They do so by positing a direct causal relationship between 'parts' of the organisation and the 'whole': manipulating or redesigning the whole can affect the parts, and vice versa. Any information, especially mistakes (Senge, op. cit.) and the unexpected (Weick and Sutcliffe, 2001) are opportunities to improve the systemic model. Usually spatial metaphors are used to determine different 'levels' of organisational activity, so senior managers are deemed to be at a higher 'level' than more junior staff, and can design principles and rules which will act upon those people at a lower level. Despite an acknowledgement of different perspectives and world views, an acceptance of a socially constructed reality, more sophisticated systems theories aim at resolving conflict, harmonising differences and controlling the organisation towards agreed idealised ends (alignment).

When organisational consultants undertake work reviewing organisational functioning they often conceive of themselves as being objective observers standing outside the organisation. Their job is to identify 'malfunction' and to make suggestions for whole organisational transformation towards an idealised model often by means of redesign. Many of the ideas of more mainstream proponents of organisational consultancy (Schein, 1987; Block, 2000) derive from such systemic understandings of the possibility of wholesale and predictable change, and offer 'solutions' to organisational 'problems'. They conceive of such solutions broadly in terms of technical and rational answers to problems which are capable of disaggregation into their constituent parts.

Even where scholars argue for a more complex understanding of how change comes about, often drawing on the complexity sciences, (Issel and Narashima, 2007; Holden, 2005; Rowe and Hogarth, 2005) they are apt, in drawing on

complex adaptive systems theory, to argue, after Wheatley (1999) and Pascale et al (2000), that the central insight from the complexity sciences is that staff in organisations should operate by 'simple rules'. Whilst appreciative of the unexpected, and more tolerant of ambiguity and paradox, these researchers can suggest that managers and consultants are capable of 'unleashing' the power of complexity, and somehow applying it to ensure better results and more creativity. This understanding seems to be derived from the idea that organisations are like natural living systems, which, according to Wheatley and Pascale, emerge and grow in their environment according to simple rules of nature – if one could identify and use these simple rules then the process of organisational development would be easier. Griffin (2002) has offered an extensive critique of this position and the way in which complex and paradoxical phenomena are drawn into a systemic understanding of organising which in the end reduces the complexity of the concept under discussion. Complexity becomes another form of instrumentalism, a tool to bring about change.

In a helpful article which describes the broad range of ways in which complexity theory is taken up in theories of organising, Kernick, (2006) argues that the more radical manifestations of complexity theory problematise the idea of an organisation as a system with a boundary, as well as the notion of disassembling 'parts and whole' as a way of coming to terms with organisational problems. They privilege instead communicative interaction and power relating and the spontaneous and improvisational nature of collective human action. They do so drawing on one of the central insights from complex adaptive systems theory (Gell-Mann, 1994; Holland, 1998), which is that global patterns emerge only as a consequence of the interactions of local agents. These global patterns both constrain what it is possible for local agents to do, and enable them at the same time, and in this sense they are a paradoxical phenomenon; local agents form, and are formed by the global pattern both at the same time. However, it is important to understand that no one is in overall control of what is happening, and although patterns of relating tend in a particular direction, the exact global pattern that emerges is unpredictable. Everything that local agents do, then, including nothing, will have an effect on the patterning that emerges over time.

We will take up one such radical manifestation of complexity theory, complex responsive processes (Stacey, 2007; Stacey, Griffin and Shaw, 2000), as a way of making sense of our work, and to make a claim for a different approach to participating in change in the NHS and beyond, both from the point of view of consultants and those employees caught up daily in processes of change, both intended and unintended. We will do so in the belief that it offers an understanding and methods more appropriate for coming to terms with the complexity of situations that face managers and staff in the day to day practice of their work. We will explore why we adopted these methods and how they affected the consultancy after explaining some of the ideas on which the theory draws.

Some of the ideas central to complex responsive processes of relating

Stacey et al developed their theory drawing on sociologists and philosophers who have themselves written extensively about the paradoxical nature of interdependent people trying to achieve things together. By focusing on power relating, taking up the social theories of Norbert Elias (1939/2000, 1939/1991), the theory of language and mind drawing on G. H Mead (1934) it encourages a recursive reflexivity of method (Bourdieu, 1992; Giddens, 1993) which takes into view both subject and object of study, and understands them to be in paradoxical relation. The methods associated with complex responsive processes of relating tend less towards problem solution and more towards a shared restatement of organisational problems as staff members co-create their organisational futures together. In this way they more closely approximate to some of the central

insights of self-organisation and emergence without instrumentalising them, or being impelled to simplify them.

We will take up the authors central to the concepts of complex responsive processes of relating, Elias, Mead and Bourdieu as a way of drawing attention to their relevance in explaining the complexity of daily human interactions. All three were interested in explaining how continuity and change occur in society, which appears both ordered and disordered at the same time, beyond assuming that it is the narrow intentionality and will of individuals or some kind of collective and ordered goal setting. And all three were concerned with the relationship between the patterning of micro-interactions and the relationship between local and global social phenomena.

Mead argued (1934) that human beings are capable of highly sophisticated co-operative and competitive communication with others using symbols. They are engaged in constant iterations of gesture and response with others, where the meaning of a gesture can only be understood in the context of the response. To understand the meaning just as gesture is to cut out half of the interaction, and therefore half the meaning, of the social event. The iterations of gesture and response form an ever-emerging and changing social pattern of interaction. Even when we are not directly gesturing to others we are capable of responding to what Mead called a 'generalised other' where, because of the evolution of our central nervous system, we are able to treat ourselves as an object to ourselves and respond to the way we what we would consider to be a generalised tendency of others to act in a particular way. We are capable of understanding ourselves as others see us through our capacity for reflexivity. For Mead, we are inherently social; we cannot but respond to others.

This understanding of the circularity of gesture and response is also something that interested Pierre Bourdieu (1977, 1990), who, drawing on Mead amongst others, developed a theory of practice that overcame the dualisms of subjective/objective and rule-based linear intentionality. Both Bourdieu and Mead would suggest that we cannot be aware of how we will respond until after we have responded, which in turn informs the next response in an endless chain of interactions, the genesis of which cannot be identified in terms of which gesture led to which response. To respond to others is to make evaluative judgements which we are not conscious of in the moment, although they will be informed by past judgements and the *habitus,* which is our tendency to act in a particular way, acculturated as we are by socio-historical conditions). Although absolutely any response is impossible, what the actual response will be is unpredictable, even to ourselves. But the making of such judgements, is what makes us human since it is part of the formation of mind and self-consciousness.

This retrospective sense-making represents a very different way of understanding what happens between people than that presented in some of the literature quoted at the beginning of this paper, where there is an implication that through reflection or analysis it is possible to design organisational 'solutions' in advance of taking action. They imply that first there is reflection or intention, then there is action. After an intensive period of analysis, consultants should be able to design a solution to organisational problems. With a more social understanding of daily practice and the reflexivity it requires, we are suggesting here as an alternative that the outcome of interactions can only be understood together with others in consideration of how our interweaving intentionalities have patterned themselves. The cause-effect linearity of intention to action has been broken. Causality becomes a matter of inter-subjective interpretation which emerges over time. The more we act and reflect on our action, the better we understand the emergent pattern in which we participate.

We would also like to draw attention to Elias' sociological theories in which power and conflict contributes to social change. In the *Civilising Process* (1939/1990), Elias sets out his own understanding of *habitus*, how societies keep their characteristics of continuity, and yet change, at the same time:

> …plans and actions, the emotional and rational impulses of individual peoples, constantly interweave in a friendly or hostile way. This basic tissue resulting from many single plans and actions of people can give rise to changes and patterns that no individual person has planned or created. From this interdependence of people arises an order sui generis, an order more compelling and stronger than the will and reason of the individual people composing it. It is this order of interweaving human impulses and strivings, this social order, which determines the course of historical change; it underlies the civilising process. (1990: 366)

In this passage Elias is much more explicit about the role of power and conflict in the intermeshing of people's actions and intentions, and comes very close to what we might understand as a theory of social emergence. Even our learned psychological processes of restraint and detachment can contribute to social phenomena over which we have no control:

> The web of actions grows so complex and extensive, the effort to behave 'correctly' becomes so great, that beside the individual's conscious self-control an automatic, blindly functioning apparatus of self-control is firmly established. This seeks to prevent offences to socially acceptable behaviour by a wall of deep-rooted fears, but, just because it operates blindly and by habit, it frequently indirectly produces such collisions with social reality. (Ibid: 367/8)

This is something that Dopson points to in her article on the introduction of new procedures on glue ear in the health service, drawing on Elias' sociological concepts (Dopson, 2005). She describes the variable implementation of policy derived from evidence based medicine in different health settings because of the complexity of the game being played between the different players of varying power. She too enjoins the taking seriously of day to day interactions between colleagues in health settings as a way of coming to terms with, and making better collective sense of the constant flux of organising together.

In sum, Mead, Bourdieu and Elias are concerned with the paradoxical interaction between the self and other, and the emergent properties of daily communications which we can only start to make sense of through reflection and reflexivity. Our sense of self arises in these social interactions, which are iterative and recursive, rather than being straightforwardly linear, and in order to understand them we have to develop a more cyclical understanding of time than a simple 'if…then' causality. According to Elias, our daily relations with others are conditioned by power relationships; when we act, we do so into a web of other people's intentions, and we cannot predict what the outcome will be. Only by noticing and trying to make meaning of the gesture and response between actors in a field of activity could we begin to make sense of what is happening. This will also mean taking seriously our own emotions which will arise continuously in the social process of identity creation.

How did we engage with the therapists and why an approach based on theories of complexity?

In setting out the methods that we would use to the managers , we were explicit that we would use reflective learning groups with both managers and therapists.

Indeed they encouraged us to do so. We were not invited to explore with them the theories that lay behind our choice and we may or may not have been successful in convincing contracting managers if we had been. We intended using reflection as a way of helping the staff we were working with better to understand the patterning of power relations which they were forming, and being formed by at the same time. However we were conscious, after Bourdieu (1991) that as consultants we were operating in a 'field of specialised production' where certain methods, and the theories that lie behind them, are expected and taken for granted. Our judgement, in applying for the work, was that we would need to frame what we were doing in a broadly orthodox way, since the dominant ways of understanding consultancy interventions lie very much within the systemic paradigm that we have outlined above. However, the managers in question took a risk in allowing us to adopt, what might have been for them, unorthodox methods. But they neither sought, nor were they offered, the conceptual underpinnings of what we were doing: what we offered was both explicit and tacit at the same time. We would venture that they themselves must have recognised the limitations of conventional ways of undertaking the work and were very open to doing things differently. We were always conscious that together we were co-participants engaging in the patterning of power relations around the nature and shape of the consultancy, and together we were negotiating what was possible in this context.

We believe we were invited to apply for this consultancy on the basis of our previous work elsewhere, which had also involved paying attention to the importance of reflection and reflexivity. We have a history of working with groups in a health and other not for profit settings. We have a number of publications arising out of our previous work. So, for both sides in this negotiation, the reputational stakes were high.

For the consultants, the utility of reflection and reflexivity are their potential for greater explanation. Participants in reflective learning groups are invited to consider with others and in more depth the factors which were contributing to the complexity of their working situation, and their own role in them. The analogy one might make with non-linear equations used in some branches of complexity theory is that they have no solutions: as the equations are run time and again they offer explanations of how complex patterning occurs. There is no end point, and there is no solution. They offer what Peter Hedström (2005) calls 'covering law explanations' which typically refer to causal factors, rather than causal processes. We understand this to be a much closer approximation of the way in which complex patterns of relationships arise in the daily process of organising together than are provided by the more static and reified grids and matrices that dominate more managerialist ways of understanding consultancy intervention.

As consultants we were also aware of the fact that, as in all health departments, there are elements of the work which are amenable to more linear methods and problem identification, such as the measuring of throughput of patients for example. We intended using more orthodox approaches to counting and measuring, which could in turn be objects of reflection and discussion.

Working methods

We used a variety of methods during the two year intervention, including, external training, assessments of existing work processes, surveys and system reviews. The external training involved a high proportion of staff and focused on developing specific skills around decision making with service users and more robust and consistent clinical decision making processes. Both these initiatives were undertaken by respected and experienced trainers well known to the staff who were very much attuned to the approach used in the learning sets and the

consultancy – that is, supportive of reflective thinking and local improvisation. The clinical audits and surveys involved looking in systematic ways at how the service was operating, what the inconsistencies were, and what patients and their families thought of the service. At the core of the intervention was the idea of establishing time for reflection on the day to day interaction with others and the process of intervention itself, and thus to encourage reflexivity, or the coming back to self, of the participants. We did this by setting up four learning sets of eight people which met on a quarterly basis for the duration of a year, and encouraged participants to submit written reflections to each other on aspects of their day to day practice. There was also a separate learning set for the group of peer senior managers. The facilitator invited staff to take their daily experience as practitioners seriously with others by framing an enquiry about an area of work that they found problematic, difficult, frustrating, damaging to their well-being and/or professionalism or that caught them in some way, perhaps because it made them feel proud or even joyful. This required a focus on an aspect of day-to-day work, recording and reflecting systematically on it over a course of a year, with a view to making note of the situations in which the area of interest arises and to note their own responses and to discuss these reflections with others in the group as a form of peer review. Participants were invited over time to reflect upon the relationships of power that they were caught up in, as well as the relationships that they co-created with others, explicitly drawing on ways of thinking about these as interdependent power relationships.

This became an enquiry where the primary data was the practitioner's own experience, but where the aim was to make subjective experience more objective through reflection and discussion with others. The process aimed to reveal the interpretive assumptions that are often implicit in our work with others in the company of what the early pragmatic philosopher Charles Sanders Peirce (1902) originally termed 'a community of inquirers.' In doing so the practitioner could open themselves up to different ways of working and perhaps move themselves on from stuck and less productive ways of working with peers.

Not only were they invited to take their daily practice seriously, but were further encouraged to consider themselves to be active researchers more broadly in the life of the organisation in which they were working. So other interventions, such as a review of waiting lists and criteria for placing patients on the list, became jointly conceived and executed projects where managers were invited to make sense of the data and propose ways forward. The whole review was itself discussed in workshops at the beginning and at the end of the intervention as a way of opening up the process to further iterations of reflection and scrutiny. In doing so we were privileging attending to the emerging patterns of interaction which constituted the daily practice of managers and staff . Methodologically we were encouraging reflection which involved constantly exposing the method to critical scrutiny (Bourdieu and Wacquant, 1992).

Learning sets, sometimes referred to as action learning sets, have a long history and have evolved many manifestations since their founder Reg Revans (1983) first coined the phrase and developed the concept. Many organisations, across the private, public and voluntary sections have taken an interest in them and see them as an integral part of organisational development. The Scottish Executive has also drawn attention to the potential of communities of enquiry for the transformation of practice (Sharp, 2005). The learning sets offered to therapy staff were aimed at creating an opportunity for collective meaning-making, further research and evaluation. Where they differed from Revans' concept is that they did not tend towards the more positivist assumptions in Revans' work, which are based on trial and error hypothesizing about an organisational 'problem'. The learning sets encouraged staff to become more conscious of the theories and

assumptions that underpinned their practice, either as practitioners or as managers, but were not intended principally to conclude in a solution to a short-term work problem. Rather they were intended to help staff reflect in an intensive way on the day to day hurly burly of their working lives and by doing so, develop a more detached and reflexive practice. They were encouraged to become aware of themselves as engaged, feeling actors in their social setting: 'the body is in the social world, but the social world is in the body', (Bourdieu, 1982:38)

They were set up to focus on ways of working, including the functioning of the learning set, to make these more explicit and to assist practitioners to be more conscious of, and therefore more skilful in their practice. They were aimed at making reflection on the patterning of practices routine and enduring. In this process of intensifying the conversation around themes and practices that arise in the service, staff members are expected to gain new insights into the way they were currently working, which then can open up fresh possibilities for working differently. The very process of reflection on practice surfaces all kinds of assumptions and theories about day-to-day practice which have remained tacit. In the process of their coming to light between staff members, interactions began to shift, and transformation became possible from within the process of reflection itself.

What happened as a consequence of the intervention

Since we have already made the case above that one aspect of drawing on analogies from the complexity sciences presumes the breaking of the link between cause and effect, it would be difficult for us then to go on to claim direct responsibility for service improvements that happened during the course of our intervention. Moreover, if we were to take a process view of our consultancy, it would only be possible for us to respond to the situation we found ourselves in together, where, no doubt managers and staff were already taking steps to make sense of, and resolve, some of the difficulties they found themselves facing. In addition, staff reported that the influence of the external trainers also had a significant impact on their practice, particularly in the context where they had further opportunity to reflect on how they might make better use of what they experienced. Prior to the consultancy, there was undoubtedly much that was good about practice in the service, even if there was a diminished appreciation of that value amongst a number of service users who felt compelled to complain, managers and staff in the department, and the colleagues they worked with.

However, it would be fair to say that there were identifiable changes in service provision, as well as changes in ways of working that emerged during the course of the intervention. We make no claims for these being a direct result of the work we were undertaking with colleagues in Grampian. We would, however, claim that colleagues were able to engage with these problems in a more sustained and confident way as a result of the environment of reflection, research and investigation that we co-created together. Literature rooted in more systemic ways of understanding organisations (Argyris and Schön, 1995; Flood and Romm, 1996) would understand these as process outcomes, an example of 'triple loop learning', where the third loop of learning is the development of tools or ways of working which help tackle the difficulties identified in loops one and two. Our own understanding of what happened rejects this formulation as being a helpful but nonetheless overly simplistic explanation of the paradoxical and non-linear social processes in which participants were engaged. Among the things that changed in the department during the course of the consultancy were:

A significant decrease in the level of complaints about the service, with CHP managers reporting no complaints at all in the last quarter of the review.

A decrease in vacant posts from 22 WTE posts in June 2005 to 7 in June 2007.

A significant reduction of waiting times across the child and adult services. For example, in March 2005 average service waiting times for children in the community was 18 months. By December 2006, 80% of all new referrals to childrens' services across the region had been seen within 6 months, and 41% within 8 weeks.

There were also developments in the management and leadership of the service, which have had a significant impact on ways of working and meeting together within the department. For example, the managers' group commented on their enhanced ability to discuss, share and decide upon both shorter and longer term organisational problems, some of which were intractable. At the end of the review, staff and managers observed a new emphasis on reflective practice, a more confident and less defensive attitude on the part of staff and a clearer understanding of how the service needed to develop. These less tangible but equally important underpinnings of a quality service are likely to sustain the gains made over the longer term.

Our explanation for this increased confidence, in terms of the methods that we were using, was that, in changing their ways of relating with each other in the learning sets and paying closer attention to the ways in which they co-create patterns of working with others, learning set participants were able to engage others outside the learning set with greater skill. Participants in the learning sets were better able to invite colleagues to reflect on their own practice, and so the effects of the learning sets spread out beyond the groups themselves.

Some of the participants in the learning sets commented on the process as follows:

"Taking part in the Learning Set is what spurred the process of reflection and self-awareness. It took some time to get used to delving so deeply into past experiences and thought processes but the results have been evident in my practice. It has been interesting and helpful hearing the reflections of others as I can relate and learn from some of their thoughts."

"The theme of the relationship with patients/carers/other professionals was a recurrent one; what are the features of an effective relationship?, why do some relationships/situations work and others don't?, how can I improve relationships? In providing answers to these questions it seemed that we were touching on two issues that are current in healthcare management: 'user involvement' and 'self-management'…. It seems to me that there is a lot we do well here. Before we feel the need as a service to jump through more management hoops, we should look to our own current practice and argue are own case more effectively".

"The whole process of reflective practice is an integral part of what we should do as speech and language therapists and further opportunities within the teams to keep this going would be really good."

"The learning set process has helped me to keep focused on one area for a significant length of time. That wouldn't have happened without being part of the learning set experience and using the journal. It has been a real freedom to get away from looking for solutions and how to "fix" issues – although some solutions have emerged along the way."

"Cynicism about overindulgent navel-gazing aside, it was interesting, and fruitful, to see what happens when you do have enough space and time to think about your own practice; what's 'bugging you'. It was the case for several of us that the initial question posed turned out not to be the actual question we really needed to ask ourselves".

One of the consistent themes arising out of the participants' comments is the importance of paying attention to the relationships of power between themselves and patients, and between themselves and colleagues. Most participants developed a much greater acuity in attending to, and understanding how they were co-creating these relationships in their daily interactions with others: they were co-creators of the situations they found themselves in, although this in no way implied that they were necessarily equally responsible. Recognising the fact that they were themselves caught up in powerful organisational processes that are prevalent in the NHS, target setting for example, or the drive for continuous improvement which is understood very much in systemic terms, was helpful and reassuring to many. Most participants came to a more realistic understanding of what they could and could not affect, and for some this enabled them better to contextualise their own guilt and anxiety about the way they were undertaking their jobs.

The power relationship between the facilitator and the participants also became an object of discussion between us as we struggled over and negotiated how we might work together. About half way through the year a number of participants challenged the facilitator of the learning set for not giving them any answers, or what they regarded as sufficient help in furthering their area of enquiry. They came to the work with an expectation that the consultant would provide answers or models, or perhaps tell them what they should be doing. Their challenge did indeed affect the way that the facilitator worked and he began more actively to provide more examples, analogies and summaries from other groups or working situations as parallels to participants' own situations. Whilst taking account of what he was being asked, he was also not prepared to provide answers for other people's questions. Together we struggled over how best to work, and this process of struggle itself began to influence how participants negotiated with each other, and the outcome was both more and less satisfactory for those with whom we were working.

There were occasions during the consultancy when managers had not carried out the tasks that they had agreed to that we felt impelled to draw attention to it, or when difficulties which pre-existed between colleagues surfaced in the groups, which then became an object of discussion. Sometimes, with the prospect of having to engage with colleagues about such difficult matters, group participants would opt out of the groups on the grounds of pre-existing or newly discovered commitments. Deciding how to reengage colleagues in groups that they had left also became something to discuss in the group.

All in all, 32 staff members out of a department complement of 150 were drawn into the learning set process. They were invited to evaluate their engagement with it. The majority of comments were positive, and in general participants described how they felt the learning sets had developed their self knowledge and self awareness and engendered a deeper understanding of reflective and reflexive practice. Participants were able to describe their working circumstances with a new-found detachment. Many experienced the learning sets as affirmative, helping to build individual and collective confidence, as well as having a positive impact on working relationships within the groups and outside them. Although some did claim that solutions had arisen as a result of reflecting on work

circumstances in the groups, the greatest benefit seems to have been in their being able to come to terms with more intractable and enduring problems, which need a more patient approach. Simply having the time to reflect on current working practices allowed for other possibilities to surface. On the negative side, a minority expressed concerns about the time factor, and one participant felt that, in the longer term, the process could not be sustained without an outside facilitator.

Moreover, there was also a significant drop out from the learning sets since this is a way of working that is more suited to people who are more tolerant of ambiguity, and more patient with the exploration of meaning with others. For those who were expecting a more traditional training course, or a more conventional action learning set to solve a departmental problem, there was some degree of disappointment and frustration. All, in all though, the learning sets became a core process into which other aspects of the organisational review, questionnaires to stakeholders and staff, a review of IT and waiting lists, could be brought as additional phenomena to be reflected upon for action to be taken.

Some 18 months after the consultancy ended, managers have issued another invitation to the consultancy team to work with them some more and renew their skills in reflecting in groups.

Conclusions

In this account of a consultancy in a therapy department we are offering a radical departure from the dominant understanding of the conceptual underpinnings of consultancy based in systems thinking. Rather than assuming that consultants are detached, objective observers of a 'system' which they can, at the same time, stand outside of and analyse, and then go on to make recommendations for redesign and 'realignment', we consider ourselves to be co-participants in the patterning processes of human interaction. By encouraging systematic reflection on action and reflexivity as a way of noticing habitual and paradoxical patterns of relating within and beyond the department, we tried to support managers and staff gain greater detachment from, and possibly greater control over, their day to day practice with others. We did so based on some analogies from the complexity sciences, particularly derived from a more radical manifestation in the theory of complex responsive processes which privilege explanation above problem identification and resolution.

This arose out of our conviction that many change initiatives in NHS settings are inadequate precisely because they understand change to be a technical, rational process, and in so doing attempt to cover over the day to day figurations of power, struggle and conflict that are essential to offering an explanation of the many processes of change that we are caught up in when we try to organise together. Using methods which draw attention to the constant fluctuating pattern of identity and valuation, the values that we draw on when we choose this course of action over that, we tried to help staff locate themselves in figurations of power which have no beginning, middle and end, but continue as long as people come together to try and achieve things. In doing so staff called into question our methods, and our own power relations with them were made more explicit in the process. This inevitably embroiled us in negotiations with the contracting managers, and with managers and staff in the department as the work enfolded. As active participants in the process we were forming, and being formed by the work that we were all engaged in. There was no standing above the day to day politics as some commentators on consultancy contend (Rowley and Rubin, 2006), and presenting ourselves as objective outside experts.

In writing such an account and in drawing attention to the messy, conflictual nature of work in organisations, we have tried to include what is often left out of articles of consultancy work in academic journals and consultancy reports. These usually emphasise the causal, how X intervention led to Y outcome, and the predicted, rather than the unforeseen and the unwanted. We have also attempted to describe how the theory of complex responsive processes differs from the way that other scholars have taken up complexity theory, often as another kind of instrumentalism, which leads to diluting some of the radical implications of complexity and emergence. We do not understand complexity science to be a 'tool' to be 'used' in organisational settings. Rather it offers a series of analogies for helping staff to understand the constant patterning of power relations between themselves and others, not as problems waiting for solutions, but as phenomena requiring collective interpretation and further investigation. One of the analogies that we have found most helpful, drawn from complex adaptive systems theory as outlined above, is the way that the global patterns of interaction arise only out of the daily local actions of participating agents. Local agents both form, and are formed by the global patterns of power and identity formation in which they participate. Our intention of focusing with colleagues on local interactions was an attempt at encouraging them to participate more skilfully in the local and global pattern formation that arises out of their intentions and actions. This is a very different way of understanding their agency than as 'designers' of some imagined whole.

How would we respond to the critique that this article offers nothing of scientific value to the research community since it puts forward no generalisable theory which is potentially replicable? How would we justify a way of working which is not predicated on predictability and control? Is it just an anecdote?

Our response would take up two arguments. Firstly, we would agree with Giddens (1993: 65) that we should resist the hegemonic claims of both positivism and hermeneutics, where the former contends that the logical form of the natural sciences applies equally to the social sciences, and the latter argues that all experience can only be 'understood'. Secondly we take up Baert's contention (2005: 148), that when commentators argue for scientific method, they erroneously generalise from one or two scientific sub-disciplines, usually Newtonian physics. Non-linear complexity sciences, and quantum physics experiments, where the presence of the experimenter affects the outcome of the experiment, are also scientific disciplines. We make no foundational claims in this article: there is nothing to be verified, proven or predicted. Rather, after Elias (1991) we believe that our presentation of the complex interweaving of intentions that we have very partially explored in this article is more reality-convergent than methods which privilege abstraction, simplification and reduction. These latter methods, in the guise of systems theories of organisational change, are taken up everywhere with much less critical enquiry than that which is often brought to other methods. They attempt to depoliticise the process of consultancy and organising, and depopulate it in favour of grids and matrices and expected outcomes. In our case, and in the spirit of scientific enquiry, we offer up our claims for the importance of the rehabilitation of the day to day practice and reflection on the same to critical appraisal by others, and invite challenges to our assumptions and theories as a way of moving them on.

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