Illusion and Reality: A Systemic Approach to Management Development Workshops

M A Barrett
Dept of Business Information Management
University of Central Lancashire
Preston
PR1 2HE, UK
Tel: +44 772 201201
Fax: +44 772 892905

B Crellin
Crellin Consultancy
80 Riverside Drive
Hambleton
FY6 9EB, UK
Tel: +44 253 701215
Fax: +44 253 700511

Abstract

We describe the development of a meta-level framework to be used as a structuring and controlling mechanism during management development workshops.

The framework is constructed around the use of systems metaphors and methodologies within a microworld workshop environment.

Relevant elements from systems methodologies are employed as transitional objects within these microworld environments, in order to provide a creative stimulus and reduce participant anxiety.

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Introduction

This paper concerns the use of gaming and microworld simulations to initiate individual and organisational change within creative management development programmes.

A review of articles concerning the subject revealed that practitioners often centre their approach around providing dynamic computer based simulations as the focus of the microworld. (Richardson and Pugh 1981; Dangerfield 1992; Diehl 1992; Eberlien and Peterson 1992). These simulations frequently use specialist software programs to provide models with an interactive focus based upon the perceived relationships within a specific situation under study. This is an area of concern, since such specialist resources may not be generally available to some researchers and practitioners who would like to experiment with gaming approaches within microworld environments. Our aim is to encourage participation by practitioners who seek to implement a more modest use of microworld concepts, and for whom specialist resources may be limited.

Consequently, we offer an exploratory meta-level framework as a link between the notion of creative play and the existing metaphors of systems thinking. This framework does not seek to deny the established microworld initiatives their proper level of importance; rather, our concern is to extend the way of thinking about the range of creative possibilities available. The paper also addresses concerns which have evolved from our learning experiences in using Strategic Assumption Surfacing and Testing (SAST), (Mason 1969; Mason and Mitroff 1981), during management development programmes conducted with dispirit client groups. We conclude by describing the use of our exploratory framework in practice.

Our approach must acknowledge its roots in the concept of Total Systems Intervention (TSI), and is consequently underpinned by the three central philosophical tenets of critical systems thinking; namely, complementarism, sociological awareness and the promotion of human well-being and emancipation (Flood and Jackson 1991).

The Challenge of Change

Much of our work has been with individuals for whom a specific change process proposes a daunting personal challenge. This challenge may be evident through complex patterns of resistance to change and the expression of considerable anxiety. Our task has been to find a means to enable individuals and groups to find emancipation from these anxieties, which may otherwise act to imprison their imagination.

In common with many practitioners we centred our initial workshops around the traditional case study approach. Participants found case studies useful in organising their thinking and providing frameworks for discussion. Disappointingly, some individuals found that the case studies seemed too far removed from their perceptions of reality and did not provide sufficient opportunity for their ideas to be fully evaluated. Graham, Morecroft, Senge and Sterman (1992) suggest that the latter point is one of the main limitations of the case study method. Two important concepts guided our further progress.

Firstly, Churchman's notion of challenging elements from the participants existing culture offered a mechanism for increasing participant involvement in a systemic process of change (Churchman 1968).

Secondly, consideration of Seymour Papert's original concept of *incubation* in a microworld environment offered the possibility of intensifying the exploratory experience within workshops by using transitional objects (Papert 1980).

Hopefully such an environment would provide a useful framework for encouraging participants to entertain a number of positive illusions concerning future realities. These illusions could then be modelled in some pragmatic way as archetypes. Guided by these concepts we proceeded to develop a number of practical workshops.

Exponents of gaming within microworlds have claimed the advantage of reduced fear for participants, due to the facility to re-think or re-model scenarios without the risks of facing the consequences of their actions (deGeus 1992). However, during several workshops we observed that an atmosphere of pessimism or uncertainty, transferred from the participants existing culture, could produce extreme alienation. Some individuals were clearly unwilling to tolerate the anxiety levels produced when evolving scenarios which provided realistic negative illusions concerning their personal futures. We use the term *negative illusions* to define those cognitive states which individuals may find intolerable even when they are only entertained within an illusory modelling format. Recent research by others confirms that confronting complex management problems can create embarrassment and threat, which consequently triggers self-sealing behaviour and diminishes both learning and the likelihood for change (Argyris 1990; Argyris, Putnam and Smith 1985; Argyris and Schon 1978).

Learning from Experience

Our practical learning experiences encouraged us to re-examine both the creation of the microworld environments and our relationship to the participants attending them. Analysis of participant feedback focused our concerns upon two key areas:

- The use of an overly didactic approach in creating the modelling frameworks used to seed the structure of the gaming process.

- The unwillingness of the participant organisation to allow sufficient preparation time and organisational access to enable joint scenario building.

Further reflection suggested that we might continue to improve the formulation of the workshop process by adherence to the following guidelines:

- Building model frameworks interactively with participants.

- Inhibiting participants from developing objective models at too early a stage within workshops.

- Incorporating respect for existing organisational boundaries and roles.

These realisations are paralleled by those of other practitioners (Wolstenholme 1993).

We also extended the timescale of our workshops to allow more time for participants to express and analyse their individual concerns.

Subsequent workshops indicated some improvement had been achieved. However, we decided to reappraise our entire approach in the search for a more rigorous conceptual framework. We sought an overall approach which would convey a positive connotation to the structure of, and the processes within, our workshops. By implication we needed a meta-level framework as a context for thinking about further development.

Evolving a Creative Process Framework

As systems thinkers we recognised the importance of the notion of emergent properties (Checkland 1981) and a period of reflection led us to identify *creativity* as the most desirable emergent property from the workshop process. Clearly, it is the translation of *creative outcomes* from microworld experiences into pragmatic change within social reality which provides the prospect of realising the real learning from a transitional environment.

Creation is a non linear process which embraces aspects of both conscious and unconscious thought. It also involves divergent and convergent trains of thinking. Many commentators have attempted to extend our understanding of the creative process, and to classify the relevant stages in a linear model. (Poincare 1924; Kneller 1965; Osborn 1972; Getzels 1980). With the exception of the Gestalt psychologists, for whom creativity is an unsegmented process, most researchers generally agree that creativity involves identifiable stages (Edwards 1988).

An explanation of this multi-stage process is illustrated in fig.1 below.

### Fig.1 A linear model of the Creative Process
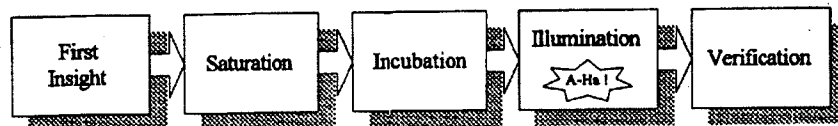
This diagram is a convenient form of linear expression which attempts to illustrate the broad sequence of events concerning creativity. In practice the process of creativity is complex and intensely iterative. It may be more accurate to read this diagram as a progression through increasingly well informed *cognitive states*. In reality cognitive progress occupies a highly variable time domain and is essentially non linear. For example, a *First Insight* might be gained from a slowly developing awareness of concern or from immediate inspiration. Research and the thinking processes involved in *Saturation* may occupy any amount of time available. *Incubation* can be a painfully slow process, but might be encouraged by intensifying relevant experience. In contrast *Illumination* is generally taken to be instantaneous. *Verification* is the conscious testing and development of the outline idea over any timescale.

Consideration of these time domain aspects of the creative process led us to speculate about the phenomena of negative illusion we had observed. Could it be that anxious workshop participants were circumnavigating the structuring stages of the creative process, whilst indulging in internal verification of their worst anxieties? If this were the case then further incubation within a microworld

environment would be problematic. Consequently, we decided to investigate the use of systems thinking metaphors to monitor and control the complex process of creativity within workshops in a structured way.

In fig.2 below, we show an exploratory model developed from the original linear form of fig.1. This evolutionary model illustrates some possible relationships between the creative cognitive states and the broad range of systemic methodologies which may be used to inform and induce them.

Fig. 2 An Exploratory Microworld Framework
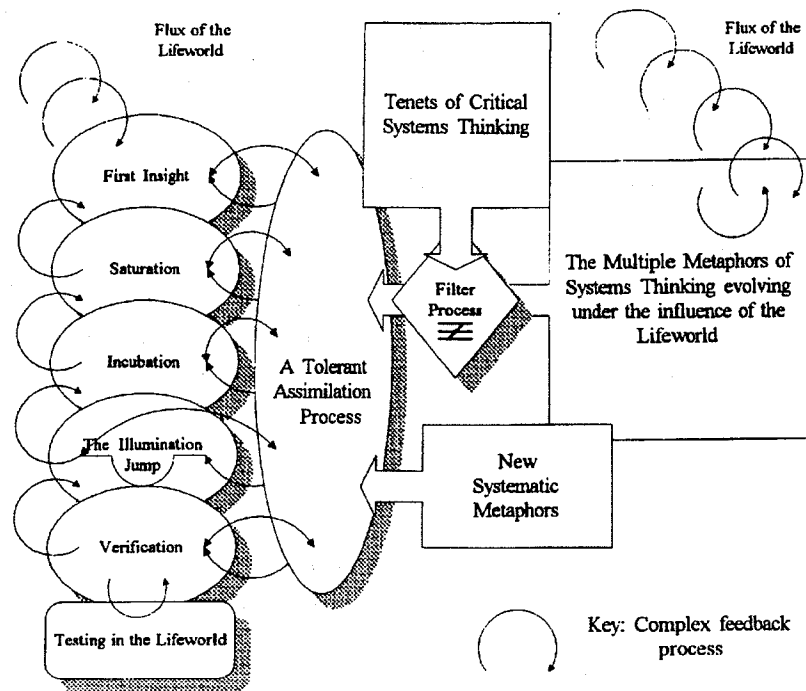
This second model is merely a useful metaphor, which suggests how we might visualise and refine the fluid flow between the evolutionary cognitive states of creativity. This metaphor offers an opportunity to extend Papert's original concept of 'learning through play' by using transitional objects (Papert 1980). It simply enlarges the scope of the transitional objects to include relevant systems methodologies. The claim of relevance is supported by the effectiveness of a particular methodology in achieving transition between the required cognitive states. The only external constraint we apply to relevance is the ability to meet the filtering ethos of critical systems thinking.

Essential to the model framework is the concept of a tolerant assimilation process, which orchestrates the timing and use of relevant metaphors in relation to observable stages of the creative cognitive process. This is a stage where the events of the lifeworld which are significant to those participants entering the workshop process, are assimilated using the characteristics of systems thinking metaphors. These metaphors are also evolving under lifeworld influences. The notion of tolerance suggests that the process of a creative development workshop is one which requires participants and facilitators to endure complex cognitive cycles and the entertainment of multiple perceptions during the assimilation process. The role of a facilitator within development workshops is always contentious. From our model we can identify several interesting aspects of this role.

They are:

- To observe the creative cognitive shifts and adjust proceedings accordingly.

- To encourage experimentation with systems metaphors as transitional objects.

- To provide a wide range of relevant resources.

- To support participants in assimilating their individual and group cognitive shifts.

- To encourage individuals to tolerate non concensual world views.

Workshops which are structured around such a flexible framework may not achieve progress through all stages of the creative process. Indeed it may be that *Illumination* will never occur, or will occur for some participants after the end of the workshop! In this sense the price of a creative approach to systems driven microworlds is that of uncertainty concerning objective outcomes.

We must observe an important caution here. Whilst participants may be unaware that they are being subjected to the use of a particular methodology, this should not excuse facilitators from rigour in application.

The specialist software developments in system dynamics modelling which we referred to in our introduction can of course provide an innovational mechanism for use within creative workshops. They are extremely useful within the constraint that they limit as well as enable. From the perspective provided by our framework their use is complementary rather than mandatory.

Experiencing Creative Practice

One early project to be structured around the exploratory framework was conducted for a company which employs technical "trouble-shooters" to provide a specialist service for the oil industry. The individuals concerned travel to emergency situations around the world. They must display a high degree of independence and initiative in dealing with complex management problems.

The senior managers sponsoring the project were prepared to commission an extended workshop and to allow prior access to company personnel. The general aim of the workshop was to broaden the participants view of their management role within the company.

After initial in-company research we arranged a residential workshop scheduled to last for up to five days. Our role would be to chair this workshop as a participatory, systems driven microworld. The exploratory framework would be used as a monitoring and control system governing the overall workshop process. We decided to adopt a flexible timescale and to use relevant systems metaphors to guide our choice of methodologies. The systems thinking methodologies would then act as our transitional objects.

The initial phase of the workshop was focused around the Cultural Metaphor. The related methodological frameworks acting as transitional objects can be identified as complementary segments of both SAST and Soft Systems Methodology (SSM).

In order to acquire a *first insight* into the nature of concerns to be addressed during the workshop, participants took part in an initial debate. They sought to qualify what they took to be the key elements of 'managing' (in terms of Roles, Values and Norms) within their particular organisational environment. The outcome of this debate was a pluralist view of 'managing' as a concept. For several participants this view presented a disconfirming perspective.

The *saturation* stage in our overall creative framework suggested that we might use a methodology which could enrich the breadth of experience concerning 'management' available to the participants. Accordingly participants were asked to prepare a questionnaire which would be used to seek real world opinions of 'managing' from managers external to the participants own culture.

The participants carried out field research involving a wide sector of the management population found within the immediate geographical area.
They compared analysis of their original debate with an analysis of their findings from field research. The SSM stages of richening, modelling and comparing were frequently used out of sequence. Checkland refers to this as a flexible use of SSM (Checkland and Scholes 1990).

Our next action as facilitators was to terminate the saturation process. We simply instructed the participants to take an afternoon break and to relax from their formal endeavours. In the evening of the same day we reconvened an informal discussion and reviewed progress. It was clear that for some individuals a considerable broadening of outlook had taken place. What we needed was a method of verifying the relevance of new learning. This was achieved by means of a dramatisation sequence. Small teams of participants scripted scenarios which included activities considered relevant to their own management roles and experiences. They then enacted dramatised versions of the scenarios with their colleagues. Each dramatisation adopted external norms and values which had been identified as having interesting possibilities for adoption within the parent organisation. Opposition norms were not excluded from these dramatisations. On occasion participants considered the oppositional dramatisations demonstrated a valuable addition to normative practice.

From this lengthy procedure the participants decided what new areas of activity were applicable to their individual role as a manager within the parent organisation. The final session of the workshop involved the preparation of an individual action plan recording the intended changes and suggesting how they were to be implemented within the parent organisation.

In practice the workshop evolved under the three broad phases of TSI, namely creativity, choice and action. The assimilation of new knowledge being achieved within a creative framework which itself was made coherent and tolerable by a systems driven assimilation process.

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