

The importance of ‘process’ in Rethinking Project Management: The story of a UK Government-funded research network

Mark Winter ^{a,*}, Charles Smith ^b, Terry Cooke-Davies ^c, Svetlana Cicmil ^d

^a Manchester Business School, University of Manchester, MBS East, Booth Street West, Manchester M15 6PB, UK

^b 11 Lowland Way, Knutsford, Cheshire WA16 9AG, UK

^c Human Systems Limited, 8 Hanover Street, Mayfair, London W1S 1YE, UK

^d Bristol Business School, University of the West of England, Frenchay Campus, Bristol BS16 1QY, UK

Abstract

This paper tells the story of a UK Government-funded research network called *Rethinking Project Management*, funded by the Engineering and Physical Sciences Research Council between 2004 and 2006. The story is significant because of the considerable attention given to the *process* of the Network, both the *inquiry process* of ‘rethinking’ project management, and the broader *social process* in which the rethinking activity was carried out. In telling this story, the lead organisers explain how the inquiry process was organised as a *learning system* to enable the Network to ‘learn’ its way to relevant directions for future research, and secondly, how the broader social process was organised and facilitated to create a context for effective interaction between the people involved. A significant challenge in managing the research programme was how to engage the participants in purposeful inquiry, which would serve not only the primary aims of the Network, but would also yield new and interesting insights for the people involved. This paper seeks to explain how the lead organisers addressed this challenge, through a detailed and reflective discussion of how the research programme was organised and facilitated to achieve the Network’s primary aims. In summary, the principal aim in telling this story is to highlight the importance of *process* in collaborative research activity involving academics and practitioners, in order that other researchers might draw on the experience of this Network.

© 2006 Elsevier Ltd and IPMA. All rights reserved.

Keywords: Network; Rethinking; Process; Learning system; Facilitation; Sensemaking; Engaged scholarship

1. Introduction

This paper tells the story of a UK Government-funded research network called *Rethinking Project Management*, funded by the Engineering and Physical Sciences Research Council (EPSRC), as part of a scheme of networks aimed at creating new interdisciplinary research communities and new research topics in developing fields. Shaped by the general aims of EPSRC networks, the stated aims of the *Rethinking Project Management* Network were:

1. To create a new interdisciplinary network of academics, researchers and practitioners interested in developing the field of project management and improving real-world practice.
2. To define an interdisciplinary research agenda aimed at enriching and extending the field beyond its current foundations.

To briefly summarise the Network, a comprehensive programme of meetings was organised between 2004 and 2006, involving many leading academics in project management, and a number of senior practitioners from industry – see [Table 1](#). Each meeting was carefully planned, and the main substantive meetings were closely aligned with the interests and perspectives of the participants, focusing on seven core areas of concern – *projectification, managing*

* Corresponding author.

E-mail address: m.winter@manchester.ac.uk (M. Winter).

Table 1

| Rethinking Project Management (EPSRC Network 2004-2006) Summary of the Network Research Programme | | | |
|--|--|------------------------------|---|
| Network Title | Rethinking Project Management: Developing a New Research Agenda | | |
| Funding Body | Engineering and Physical Sciences Research Council (EPSRC) | | |
| Grant Period | 24 months | Start Date March 2004 | End Date February 2006 |
| Network Objectives | <ol style="list-style-type: none"> To create a new inter-disciplinary network of academics, researchers and practitioners interested in developing the field of project management and improving real-world practice. To define an inter-disciplinary research agenda aimed at enriching and extending the field beyond its current foundations. | | |
| Academics & Disciplines | <ul style="list-style-type: none"> Academics from fifteen UK universities covering both business and engineering schools, and a number of overseas academics from Canada, Europe, Australia and the US. Disciplines: project management, operations management, management science, operational research, information systems, business strategy, new product development and innovation, organisational behaviour, critical management, social theory, and complexity theory. | | |
| Industry Participants <i>(including presenters)</i> | <ul style="list-style-type: none"> Senior practitioners from private, public and voluntary sector organisations including: Rolls-Royce Plc, Human Systems Ltd, the Big Food Group, Warburtons, Daresbury Laboratories, FAME National Project (ODPM), Newcastle-Gateshead Initiative, Office for Government Commerce (UK Government), GlaxoSmithKline, UK Ministry of Defence, Sharefirst/South East England Development Agency (SEEDA), Airbus, High-Point Rendell, Halcrow, Royal Liver Assurance, and the National School of Government (UK Civil Service). Representatives from the Association for Project Management (APM), the Project Management Institute (PMI), the Major Projects Association (MPA) and the International Project Management Association (IPMA). | | |
| PROGRAMME | | | |
| | Date | Location | Areas of Concern |
| Meeting 1 | 30 th -31 st March 2004 | Manchester | Shaping and Planning the Network |
| Meeting 2 | 15 th July 2004 | London | Emerging Themes and New Perspectives |
| Meeting 3 | 20 th -21 st October 2004 | Newcastle | Projects Across Sectors (Business Projects) |
| Meeting 4 | 27 th -28 th January 2005 | London | Projectification and Managing Multiple Projects |
| Meeting 5 | 26 th -27 th May 2005 | Strathclyde | Actuality of Projects and Uncertainty |
| Meeting 6 | 21 st -22 nd September 05 | Bath | Profession and Practitioner Development |
| Meeting 7 | 24 th -25 th January 2006 | Manchester | Directions, Messages and Network Review |
| Primary Research Output | A Special Issue of the <i>International Journal of Project Management</i> containing a set of papers on areas for future research in the management of projects. The first paper [1] presents the Network's main findings on the need for new research in the following areas: project complexity, social process, value creation, conceptualisation, and practitioner development. | | |
| Industry Outputs | A report on the more immediate implications of this work is planned for practitioners, together with a seminar programme for different industry groups. According to the EPSRC, the objective of these networks is not simply to define new research topics, but to also " <i>facilitate the transfer of knowledge to a broader community</i> " (www.epsrc.ac.uk). | | |
| Website | www.rethinkingpm.org.uk | | |

multiple projects, actuality of projects, dealing with uncertainty, managing business projects, the profession and practitioner development – see meetings 3–6 in Table 1. It was also decided that seven meetings would not be sufficient to develop the research agenda output of the Network, and that significant between-meeting activity would also

be needed. Consequently, a considerable amount of activity was carried out between the meetings, resulting in a series of working papers covering the perceived issues and themes arising from each meeting. And finally, as Table 1 shows, the primary research output to emerge from this Network has been the collection of papers presented in this

Special Issue, covering a number of areas for future research in the management of projects. Taking this then to be our starting point, we turn now to the purpose of this paper and its role within the Special Issue.

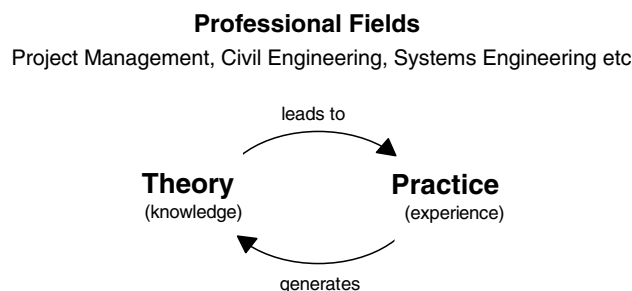
Written by the lead organisers, this paper has two purposes: firstly, to explain the whole methodological approach to the Network, for those interested in the methodology behind the research directions in the first paper of the Special Issue [1], and also the methodological background to the other papers; and secondly, to highlight the importance of ‘process’ as a key methodological theme in conducting interdisciplinary research. In essence, the purpose of this paper is to tell the story ‘behind’ Table 1, for the benefit of other researchers who might be interested in the experience of this particular Network. The story is significant because of how the organisers approached the Network over and above the minimum requirements set by the EPSRC. Not content with viewing the Network as a series of meetings to be administered over two years, the core concept was essentially that of an interdisciplinary *research programme*, which needed to be carefully organised and managed, in order to achieve the stated aims of the Network. For this reason, considerable attention was given to the *process* of the programme, including both the *intellectual process* of ‘rethinking’ project management, and the broader *social process* in which the rethinking activity was carried out. This paper is therefore the story of a complex interdisciplinary research programme, which provides not only a detailed account of the Network research approach, but also a reflective account of some of the *processual* issues associated with interdisciplinary research, emanating from this particular experience. With these two purposes, the paper is deliberately written in two parts: the first part describes the methodological approach, starting with a brief account of the underlying philosophy of the Network, and the guiding principles that informed the whole approach. Next, we discuss the inquiry process that was used to craft the future research directions in [1], and the methodology ‘behind’ this process. Following this, the second part provides a reflective discussion of some of the perceived processual issues – relating to aspects such as sensemaking, process facilitation, and com-

municative interaction amongst participating agents – and how the organisers dealt with these issues during the programme. Altogether, this paper is about the lived experience of conducting an interdisciplinary research programme, which provides not only the methodological background to the other papers in this Special Issue, but also a reflective account for other researchers to draw on. With the demand for interdisciplinary research increasing, and the need for more real-world examples in the literature, the paper is offered as a practical and reflective contribution to this developing field.

2. Network philosophy and principles of approach

To understand the research philosophy behind the Network, it is important to begin with a brief summary of *why* the Network was established and *what* the primary concern was in operating the research programme shown in Table 1. It was Keynes who suggested that people who described themselves as practical men, proud to be uncontaminated by any kind of theory, always turned out to be the intellectual prisoners of the theoreticians of yesteryear. Whether we agree or not with Keynes’ assertion, it does remind us that all practical activity in any professional field is theory-laden, in the sense that all practical action is based on some theory or knowledge, irrespective of whether the practitioner is aware of the theory guiding their action. As well as this, many practitioners also draw on published knowledge in professional fields – bodies of knowledge and methodologies etc. – which are rooted in the accumulated experience of those fields. Fig. 1 shows the process by which this accumulated knowledge is generated.

Turning now to *why* the Network was established, the main argument centred around the published knowledge in project management – mainstream project management concepts – and the growing critiques of these concepts in relation to the developing practice across different sectors and industries. (The first paper of this Special Issue [1] highlights the various critiques that were cited in the original proposal to EPSRC.) Against this background, the Network’s concept of ‘rethinking’ was to research how published knowledge in project management – mainstream



[This] is not as trivial a picture as it might appear. It emphasises the groundlessness underlying [all professional fields]. Theory leads to practice; but the practice is itself the source of the theory; neither is prime; the process generates itself. [2]

Fig. 1. Theory and practice in professional fields [adapted from Ref. [2]].

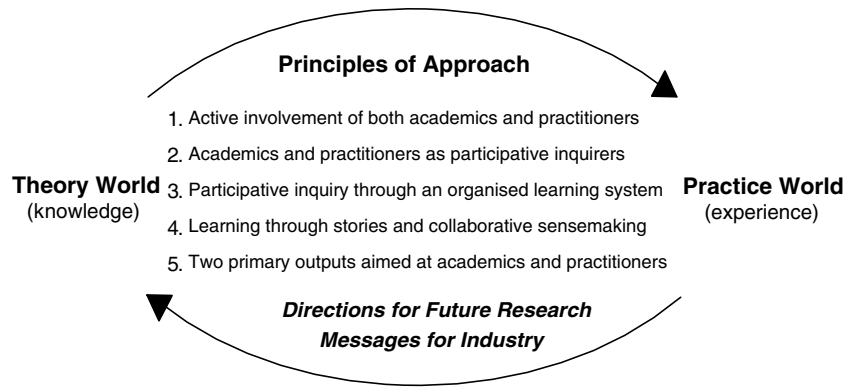


Fig. 2. Guiding principles of the Network.

theory in Fig. 1 – should be enriched and extended with new concepts and approaches to support practitioners working on 21st century projects. Ultimately then, the wider concern of the Network is about improving real-world practice, and it is *this* aspect which helps to explain the philosophy behind the whole Network programme. In essence, project management theory and practice cannot be separated *as if* they are the concern of two different groups of people, namely ‘academics’ and ‘practitioners’. To develop new thinking for practitioners requires organised *interaction* between theory and practice, between academics and practitioners, and it is *this* concept that has been the driving philosophy behind the *Rethinking Project Management* Network. To illustrate this in more detail, Fig. 2 shows the main guiding principles that were used to operationalise this concept through the course of the Network programme. The precise meaning of these principles, notably the concepts of participative inquiry, organised learning, and collaborative sensemaking, is explained in the next section. Collectively, the principles shown in Fig. 2 were aimed at creating a context in which effective interaction could take place between the different people involved, focusing not only on the *inquiry process* of the Network, but also the broader *social process* in which the rethinking activity would be carried out. In short, one of the central challenges throughout the programme was how to engage the participants in purposeful inquiry, which would serve not only the primary aims of the Network, but would also yield new and interesting insights for the people involved. How the Network organisers addressed this challenge is the subject of the next two sections, starting firstly with the design and operation of the Network inquiry process.

3. The Network inquiry process

Being essentially a ‘rethinking’ process, considerable attention was given to the *process of inquiry*, and how this should be organised to achieve the primary aims of the Network. In essence, given the complexity of the phenomena under investigation, and the different perspectives of

the people involved, the inquiry process was deliberately organised as a *learning system* to help the Network ‘learn’ its way to an agenda for future research, and the associated messages for industry. Methodologically, the idea of an organised learning system originates from the field of systems thinking and represents the fundamental principle of ‘soft’ systems thinking, which is summarised by Checkland [3] in the extract below:

in systems engineering (and also similar approaches based on the same fundamental ideas ...) the word ‘system’ is used simply as a label for something taken to exist in the world outside ourselves. The taken-as-given assumption is that the world can be taken to be a set of interacting systems, some of which do not work very well and can be engineered to work better. In the thinking embodied in [‘soft’ systems thinking] the taken-as-given assumptions are quite different. The world is taken to be very complex, problematical, mysterious. However, our coping with it, the *process of inquiry* into it, it is assumed, can itself be organised as a *learning system*. (italics added)

Fig. 3 shows the basic model of the Network inquiry process ‘learning’ its way to the two primary outputs, provisionally labelled as ‘insights and implications’, and later renamed directions for future research, and messages for industry. Also shown in Fig. 3 is the underlying inquiry process of soft systems methodology (SSM) [3,4], which was used to help craft the Network inquiry process and the original meeting programme of the Network. The practice of using SSM to help ‘craft’ a particular inquiry process is significant, as Checkland [5] points out:

anyone wishing to make effective use of SSM needs to be aware of its status as *methodology*. This is a much misunderstood word, especially by desk-bound academics, who are prone to use it when what they really mean is *method*. ... The point is that a methodology is, as the structure of the word indicates, a *logos* of method, a set of *principles* which have to be adapted in use to a particular situation ... Thus, a sophisticated user of SSM will create an approach appropriate to the

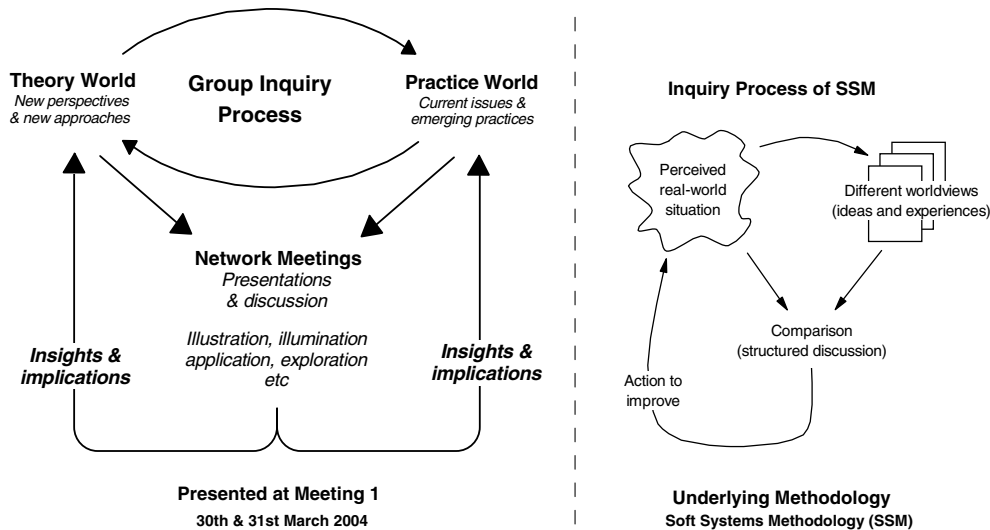


Fig. 3. The basic shape of the inquiry process.

particular situation studied which *draws on and embodies* the methodological principles which are SSM. (italics added)

In using SSM to help craft the rethinking process, the basic principles shown in Fig. 3 were translated as follows: the ‘perceived real-world situation’ represented the perceived state of the project management field at the time (the theory world and the practice world in 2004), the ‘different worldviews’ represented the ideas and experiences of the Network participants, the ‘comparison (structured discussion)’ would be the set of meetings to discuss the participants’ ideas and experiences, and the ‘action to improve’ would be the insights and implications that would (hopefully) emerge from the whole process.

In presenting the inquiry model shown in Fig. 3 at the first meeting in March 2004, the need for significant enhancements was recognised. In short, concerns were expressed about the design of the proposed meeting programme and the potential for divisive discussions to emerge between the academics and practitioners involved. As a result, additional features were incorporated into the meeting programme, including the idea of learning through ‘stories’ about real experience, and the idea of developing learning propositions for shaping possible future research. The original programme was also refined after the second meeting in July 2004, following a detailed analysis of the participants’ interests and perspectives, by the two lead organisers of the Network. This analysis identified seven areas of concern, deliberately crafted to link perceived issues and developments in the practice world with the knowledge and expertise of the Network participants. Based on this analysis, and a consensus view that the Network needed to capitalise on this expertise, a decision was taken to refine the meeting programme and focus four of the remaining five meetings on a comprehensive review of the seven areas of concern shown in Table 1.

Being a learning process essentially, it was also necessary to conceptualise *how* the Network inquiry process would ‘learn’ its way to the insights and implications shown in Fig. 3, particularly given the complexity of the phenomena under investigation, and the different worldviews of the people involved. It was also assumed from the start, that a programme of seven meetings would not be enough to develop these insights and implications, and that the learning process would need to include additional activity to analyse *each* of the seven meetings, followed by analysis of *all* the meetings to discern the main insights and implications for research and practice. To help achieve this, the approach adopted was essentially that of *organised sensemaking*, at multiple levels within the inquiry system of the Network. Fig. 4 shows the conceptual design of this system – consisting of four levels of activity – linked together in such a way as to show the system progressively learning its way to the research directions and the associated messages for industry. In reality of course, the actual inquiry process was much more iterative and dynamic, but the basic pattern of activity was essentially the model shown in Fig. 4, and it was *this* model that was used to guide the primary work of the Network, as the next few paragraphs show.

- *Level 1: Network meetings (making sense of the areas of concern)*. For each meeting, a programme of activity was carefully crafted to guide the meeting process, and each programme usually involved a selection of presentations by invited speakers from industry and academia, followed by structured discussion involving the meeting participants. For the practitioner presentations, the focus was on ‘practice stories’ about real experience, encompassing not only current developments in practice, but also issues that the practitioners perceived as being relevant to the primary focus of the meeting. This was particularly important for the meeting discussion, and many of the practitioner presentations were

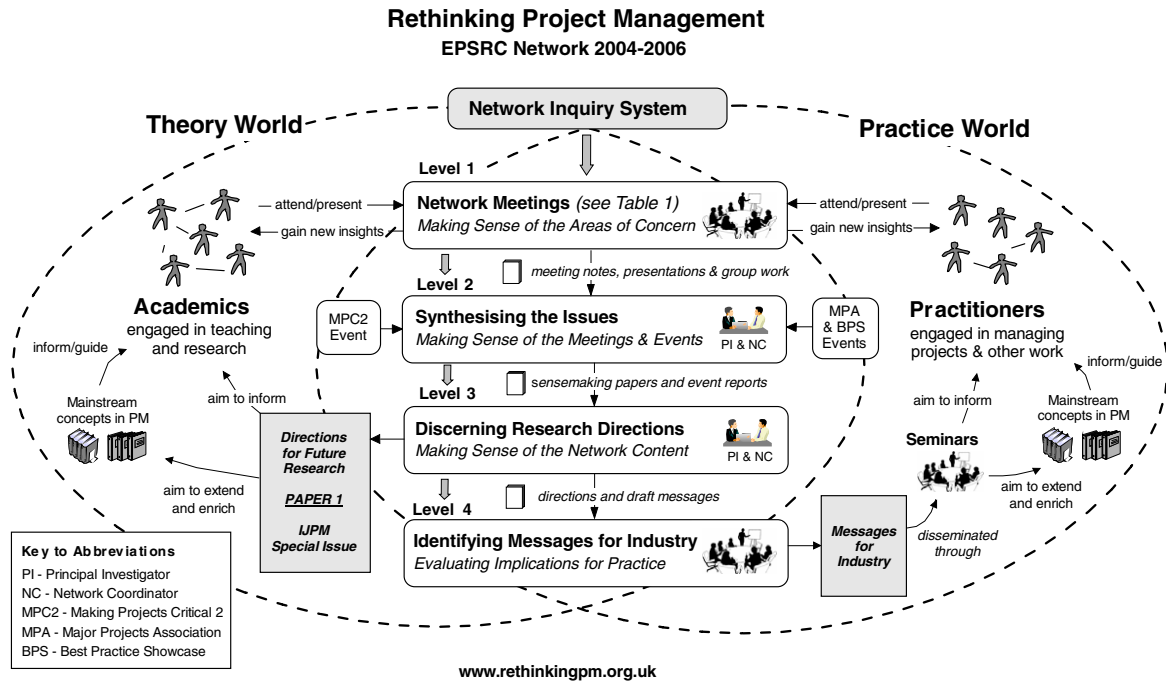


Fig. 4. Network inquiry system (expanded from the model in Fig. 3).

reviewed prior to the meetings to ensure they aligned with the learning objectives of the programme. With regard to the actual meetings, the organised sensemaking which followed these presentations was organised using a selection of concepts and approaches (e.g. [5–7]), including Weick’s cartography image of ‘sensemaking’ [8] which was operationalised through the learning cycle of soft systems methodology – see Fig. 5. In summary, all the meeting programmes were deliberately crafted to serve the twin purposes of generating relevant material for the research agenda, whilst also being events from which people would (hopefully) learn new insights relating to project management.

- *Level 2: Synthesising the issues (making sense of the meetings and events).* As Fig. 4 shows, after each meeting, a sensemaking paper was then produced by the Network coordinator (NC) and the principal investigator (PI), synthesising the perceived issues and themes arising from that meeting. The PI and NC also attended three further events between December 2004 and June 2005 in order to relate the thinking of the Network to relevant ‘conversations’ taking place elsewhere. Sensemaking reports for these events were also produced as further material with which to develop the research directions, and copies of all these papers and reports were placed on the Network website.

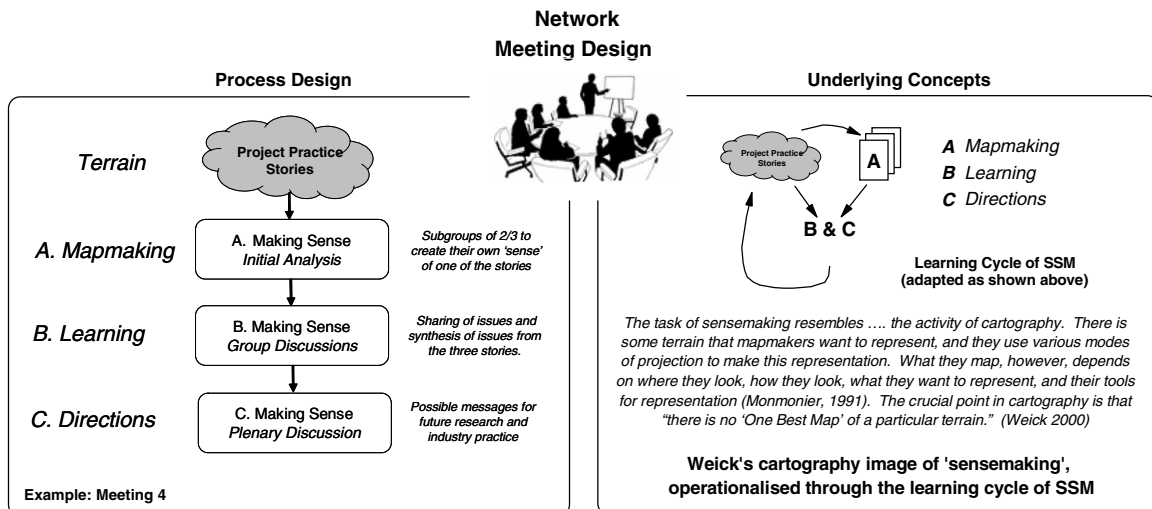


Fig. 5. Design of individual meetings.

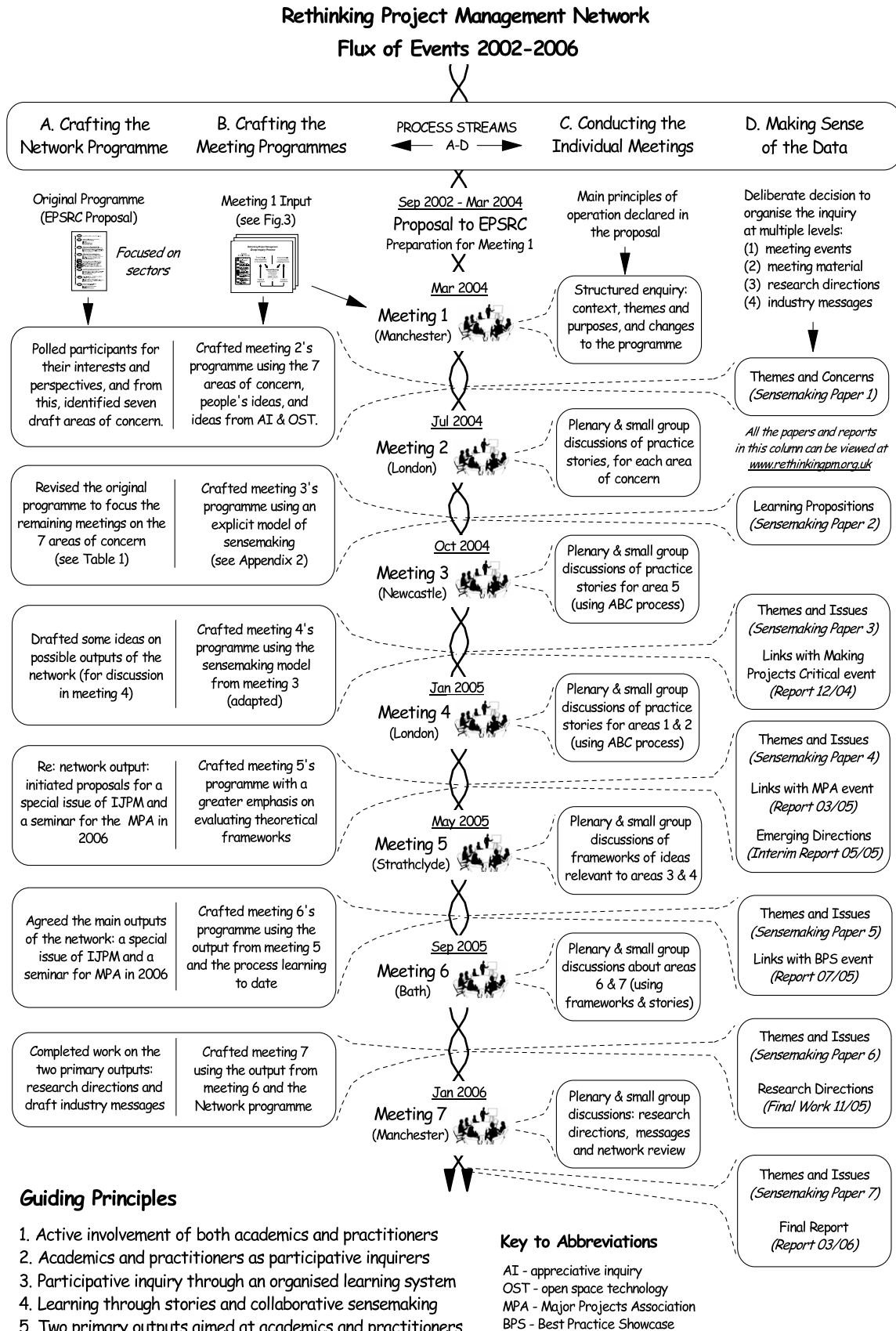


Fig. 6. The social process of the Network.

- *Level 3: Discerning research directions (making sense of the Network content)*. The inquiry process at this level was essentially about making sense *across* all the meetings (and other events) in order to discern the dominant patterns and themes arising from the Network as a whole. In May 2005, an interim report was written by the PI and NC identifying the emerging directions at that time, based on a comprehensive analysis of all the material produced so far (comprising sensemaking papers, meeting minutes, meeting notes, presentations and reports from other events). Subsequent meetings and events served to strengthen and enrich these directions, resulting in the framework of five directions presented in the first paper of this Special Issue [1].
- *Level 4: Identifying messages for industry (evaluating implications for practice)*. As well as discerning directions for future research, Fig. 4 shows the other primary output of the Network, namely the more immediate messages for practitioners in the practice world. Disseminating these messages has already begun, reflecting an additional aim of the Network organisers to make a more immediate contribution towards developing the field. As the following statement from EPSRC shows, the objective of EPSRC Networks is not simply to define new research topics, but to also “*facilitate the transfer of knowledge to a broader community*” [9].

In summary then, the Network inquiry process involved a considerable amount of activity beyond the seven meetings shown in Table 1, and to illustrate this in more detail, Fig. 6 shows a detailed picture of all the ‘between meeting’ activity that was carried out during the course of the programme. As a picture of the whole research programme, Fig. 6 also provides a ‘window’ into the *social process* of the Network and the complexity of this process as conveyed by the flux of events and all the activity that constituted the Network programme. Bringing together this Network created various social and political issues, and it is *these* aspects that are now the subject of discussion, by three of the Network organisers, starting with the Network coordinator.

4. Reflections on the social process

The Network process, as described in Section 3, was experienced differently by different social players. Turning now to the second half of this paper, we reflect this polyphony of voices through three reflective pieces on the subjective experience of the Network.

4.1. Network coordinator

I came to the Network, and the position of Network coordinator, from a background practising projects in organisations and providing consultancy on projects and change. My theoretical position is essentially constructivist, covering both personal and organisational psychology.

This flavoured my interests in the Network, my concerns, my conception of ‘rethinking’, and also my understanding of how ‘sense’ might emerge from the meeting content: the presentations, the discussions and the opinions and explanations put forward by the Network participants. From the outset the concept of sensemaking had been central to the plans for the Network. However, there were a number of issues on my mind, vague at first but clarifying as we proceeded, the most important of which I summarise, with some hindsight, in relation to the following three questions.

1. *What were the sensemaking processes: the route from the discussions at meetings to some form of documented output constituting the ‘sense’ emerging from the Network?*

The overall sensemaking process of the Network is shown in the central spine of Fig. 4. Discussions, at the meetings, of areas of concern were condensed into a ‘sensemaking paper’ for each meeting which summarised the issues and themes raised. These in turn were abstracted into the research directions and messages to practitioners which form the main output of the Network. A key concept in the sensemaking papers was that of the ‘learning proposition’ – a statement about a topic of interest. It was not necessary for the participants to agree with each proposition – only that it should somehow encapsulate an issue raised. The propositions were ‘learning’ in two senses: (a) that they introduced issues that were new to many participants, and (b) that they were carried forward as matters to be ‘tested’ by any new thinking that might emerge. The themes captured in the sensemaking papers were predominantly about concepts of projects and their construction, organisations and power, the nature of actuality and complexity, the use of language, and the nature and capabilities of practitioners – the topics covered in the meeting discussions. Thus the key to the sensemaking lay in the conduct of the meeting. It could only be productive because of the meeting exchanges – the interactive analysis of practice and theory – it encapsulated. At meeting 5 the meeting format was changed to give greater emphasis to theoretical frameworks, which were presented to the meeting by individual members and then discussed. There was a consequential shift in the themes reported in the sensemaking paper: reflecting the theoretical frameworks, and also examining the role of research in the development of new practice.

2. *Who was doing the rethinking? – individual members, the Network as a collective body, or some form of Network ‘executive’?*

For the Network to act as some form of collective body it was necessary to have a collective process for thinking together. This was mainly created through the format of the meetings, and particularly the extensive use of small group discussions from meeting 2 onwards. Learning propositions, stated directly or implied, were generated in profusion by the collective body of the meeting. However, the subsequent thinking, to synthesise issues and to prepare the sensemaking papers, had little input from the Network as a collective body. In the final session of meeting 2, for

example, small discussion groups reported to the plenary session, but they were disquieted, concerned that their reports were incomplete and needed further post-meeting development. The leaders of these groups took an action to lead this extra work, consulting with their group members. In practice, however, the leaders of the groups circulated the incomplete output with a request that comments should be sent direct to the Network coordinator – thereby bypassing the intended collective group discussion. There was very little response. Efforts to interpret the meeting content to form the sensemaking papers, research directions and messages to practitioners were thus primarily a central ‘executive’ function, performed by the two lead organisers. It might therefore be argued that the structure of themes in these papers was subjective: imposed by the organisers, reflecting their pre-existing interests. However, I would argue that these themes were also embedded in the practitioner stories, and in the intellectual frameworks used at the meetings, by both the practitioners and the academics, to explain their understanding of the project stories. This depiction of the Network’s sensemaking as primarily an ‘executive’ function applies especially to the production of the sense that emerged, and was formally reported during the timeframe of the Network meetings. However, more diffuse forms of sensemaking, not reported here, will also have continued in isolation from the meetings and outside their timeframe (for example in the preparation of the later papers in this Special Issue).

3. What form of ‘sense’ would we produce that would constitute rethinking?

The primary thrust of the Network’s rethinking was considered at meeting 1 to concern the generation of intellectual assets. However it was also noted at that stage that such assets might comprise both: (a) useful day-to-day models – enhancements and additions to the practitioners’ ‘took kit’, and also (b) macro-level perspectives – overviews of projects and their position in the context of organisation theory, understandings of the interacting worlds of theory, research and practice, and Grand Theory narratives of the growth and developments of projects as a way of life. I believe that assets in this latter form are essential if our output is to constitute ‘rethinking’. The directions we have defined for future research are, I believe, framed within such higher-level perspectives, being expressed in terms of general concepts of projects in organisations, such as social processes and the creation of value. It is also of interest that the directions forming the principal ‘rethinking’ output of the Network were already present, at the meetings, grounded in, and extracted from, the narratives and explanations provided by the practitioner speakers: how they made sense of the complexities, the interactions between diverse groups, the quest for ‘value’ and the delivery of corporate strategy, the diversity of project forms and concepts, and the exceptional practitioners who deal with these matters. Rethinking in the Network has therefore not been some external intellectual analytical exercise, but rather the interrogation, synthesis, condensation and reflection

of what was already there in practice – and hence the Network has been a process of making explicit and digestible the expert practice of projects. Further reflections on this process are now offered in relation to the facilitation and moderation of the group process.

4.2. Facilitation and moderation of group process

Reference has been made to the central challenge of engaging the participants in purposeful inquiry, and this was seen as being particularly acute in view of the diversity of their background, interests, motivation and expertise. Although the very act of participating in the Network implied a level of conscious assent to its stated goals, this diversity, coupled with participants’ emotional investment in their current academic or practical viewpoints, could be expected to lead to a range of pre-conscious drives and motivations that had the potential to run counter to the stated goals.

At the first meeting, when discussing the programme of meetings for the Network, two important decisions were taken: firstly to follow a flexible process that allowed participants sufficient space to grapple with issues and to let the outcomes emerge from it, and secondly to create a small group to plan the process to be followed at the second meeting. As it turned out, this group, with minor changes in its constitution, provided a continuity both to the development of the meeting programmes (Column B in Fig. 6) and to the conduct of individual meetings (Column C in Fig. 6). This small group, consisting of the principal investigator, the network coordinator, and one or two participants with a particular background in facilitation and group process, could be described as providing additional facilitation to the Network, and arranging for suitable moderation at each meeting. Facilitation is here taken to mean “*the role of empowering participants to learn in an experiential manner*” [10], while moderation is used to mean “*presiding over specific discussions so as to facilitate productive discourse*”. Getting together once or twice between each meeting, the small group reflected on progress up to the end of the preceding meeting in relation to both the stated Network goals and the perceived interests of participants, defined the desired outcomes to be achieved at the next meeting, and sought to devise a suitable agenda to achieve those outcomes.

The small group sought to strike a balance in the agenda between input from knowledgeable people with stories to tell and reflection by participants, between small group work and plenary discussions, between understanding practice and theory, and between providing a structured group process and allowing participants appropriate autonomy. Moderators of plenary sessions similarly sought to lead group process sensitively through recognition of the different ‘dimensions’ of group work, such as planning, meaning, confronting, feeling and valuing. This can all sound very abstract, but it is perhaps well illustrated by outlining a number of interventions developed by the

group that appeared to be significant in facilitating the Network's learning. Ones that particularly come to mind are the four listed below.

- Before the second meeting, the group decided to explore how participants responded to practitioner input by asking them to frame their responses as 'learning propositions' – i.e. propositions that 'capture possibilities for knowledge'. This formed part of a small group process that was itself designed to allow participants autonomy to do their own learning but in the framework of a structured small group process.
- Before the third meeting, a process that became known as the 'ABC process' was developed for individual, small group and plenary reflection on practitioner 'stories'. This proved to be such a powerful aid to reflective learning that it was used for both meetings 3 and 4 (see Fig. 5).
- Before the fourth meeting, the principal investigator invited five participants to accept responsibility for planning meeting 5 and then provided support to this 'organising group'. He also invited a different group (albeit with some overlap with the meeting 5 group) to plan meeting 6.
- Before the fifth meeting, the organisers and the small group, working together, replaced the ABC process with one that introduced a greater input from researchers, and encouraged a discourse on the differences between diverse research contributions and their impact on both practice and research. At the suggestion of the principal investigator, the organisers also structured the agenda for meeting 5 so that its outputs provided input to the sixth meeting.

The decision to make each of these interventions was driven more by the perceived needs of the Network, and the skills and experiences available to the small group, than it was by specific research into group dynamics or interpersonal process. Nevertheless, each decision was a conscious one, designed to facilitate the Network's effective operation. The overall impact can best be reviewed, perhaps, by reflecting on the behaviour of the Network as a complex learning system.

4.3. Reflections on the network as a complex learning system

The aim of this final contribution is to provide insight into the complexity of the Network as a learning system and into the structural and behavioural interventions that were put in place to deal with such complexity over time and minimize its potentially destructive consequences. Written by one of the lead organisers of the Network, this section takes the notion of a 'collaborative learning system' and its guiding principles represented in Fig. 2 and Fig. 6 as the point of departure. It is written as a reflective analytical piece drawing on a 'processual' view of complexity in project-based arrangements [11], focussing on communicative

interaction among participating agents, equivocality of agendas and success criteria, and continuous negotiation of unintended consequences over time [12–15], as discussed below.

The complexity of the Network process – the inquiry process and the social process – was unavoidable as much of it had been built into the very design of the Network at the early stages and implied by its aims (Section 1). This implied from the start an important aspect of complexity – micro-diversity and dynamic processes of communication, conversation, interaction and power relating among and between individuals and groups – involved in the Network process streams over time (see Fig. 6). Secondly, the desired outcome of the collaborative learning process was rather ambitious: to identify and agree on new trajectories for future research in the field of project management which would, in turn, more closely reflect the experiences of practitioners with projects and generate practically useful knowledge (see the first paper in this special issue [1]). This illuminates further aspects of complexity inherent within the Network from the start – *the knowledge creation process* – that the Network community engaged in with varying levels of participation, domination, agreement or consensus, and *political processes* that developed in deciding what counted as new thinking, in negotiating the outcomes of sense-making with powerful voices, and in legitimising what 'practically relevant' project management research and knowledge are. We will now look at some of these aspects of complexity more closely and discuss the facilitation process and structure that was put in place to sustain the Network's vision of collaborative learning and new knowledge creation, and to, at the same time, cope with potentially disruptive consequences of its dynamics.

- *Diversity: dealing with multiple perspectives, interests and voices* (Fig. 2: principles 1 and 2) The original programme of the Network and the very Network process imply two underpinning criteria that brought the participants together: (1) a *shared interest* in furthering the boundaries of project management as a subject area and a field of practice, and (2) a *readiness to engage* in a cooperative inquiry process. The participants included researchers from a range of scholarly traditions and practitioners from a variety of industrial and professional backgrounds. The task that they were to accomplish jointly (the aims and outputs of the Network) was a sophisticated one and required not only an intellectual ability but also a shared sense of 'togetherness'. Over time, multiple perspectives of participants, their varying agendas, views and interests emerged naturally throughout the process of 'rethinking', suggesting areas of concern, discussing practice stories in small groups, presenting frameworks of ideas, and contributing to sense-making papers, etc. At the same time it was necessary to acknowledge the inevitable emergence of multiple and conflicting interests guiding the arguments for particular knowledge areas to be included in the

resulting framework of new directions at the expense of others. For example: calls for practically relevant knowledge often conflicted with the need for deeper conceptualisation and wider theoretical approaches; similarly, the propositions to distinguish project management, management of projects, and programme management etc, frequently caused confusion and disagreement, before these issues were summarised in the corresponding sense-making paper.

- *Power, collaborative learning and knowledge creation*
Various sources and symbols played a role in the formation and shifting of power relations among and between different groups in the Network: academics according to their research standing and prominence of their work; practitioners in terms of the industry or organisation they represented and the managerial profile they associated themselves with; consultants and trainers with their pragmatic approach to serving organisations and management; and representatives of the professional bodies with their voices calling for practically relevant project management research and knowledge. A facilitation process (see Section 4.2 above) was put in place to support the work of such a complex intellectual community, and to ensure validity of the Network as a multidisciplinary learning system. Moderation was also necessary to reduce the possibility of unhelpful division into winners and losers, traditionalists vs ‘enlightened minds’, whilst simultaneously, not wanting to suppress debate and conflict. A democratic discourse was encouraged throughout to minimise the risk of powerful voices dominating the Network and turning it into a ‘closed shop’. Therefore, there was a need for continuous negotiation of positions, to minimise the feeling of a losers-winners divide, or the possibility of lobbying. This was moderated for example through the process of collaborative presentations on topics of common interest among groups of individuals. The issues of trust, confidence [16], critical dialogue and reflection [17–19] also emerged as key to the Network process, when it came to compiling joint presentations and positioning papers by people with varying intellectual or professional backgrounds, who had not previously worked together. When decisions had to be made with regard to the published output from the Network, including an edited book, a journal special issue, working papers and reports, different interests beyond the immediate aims of the Network influenced responses from different groups of participants. For some of the British academics, the relevance of the Network outputs for the forthcoming national Research Assessment Exercise (RAE)¹ became an overarching criterion.

During the course of the programme, a number of situations arose in which the principal investigator

needed to take action, firstly to help achieve the Network’s primary aims, and secondly to help maintain the interest and commitment of the Network participants. By meeting 4 for example, the Network had held several meetings driven by practitioner stories, and it was felt that meeting 5 should be more theoretical, focusing on a selection of different theoretical perspectives relevant to the actuality of projects. This was expressed by the fourth author of this paper in a conversation with the principal investigator, and in subsequent conversations between other participants in the Network. Equally, there were times when the changing composition of the Network and its various subgroups (principal investigators, invited guests, meeting organisers, etc.) required additional action to be taken. These were the moments when the principal investigator and his team used their skills, sensitivity and value-rationality, for example, to redirect the debate by introducing alternative themes which acted as ‘strange attractors’ [14], opening up opportunities for new perspectives and ways of thinking among the Network participants. An example of this was the introduction of a rather unconventional conceptual and theoretical discussion in meeting 5, which in an important way, shifted the focus of the debate and influenced the final formulation of the Network outcomes (re: the five directions, see [1]).

It was important to make sure that the anxiety emerging from the unpredictable outcomes of interaction among participants during the meetings was identified and coped with. The on-going, holistic and participative style of the principal investigator and network coordinator in making necessary decisions and interventions over time, were clearly focused on protecting and enhancing the quality of relationships (including power relating among the participants). The dynamics of conversations that went on inside and outside the scheduled meetings, the fluctuation of membership including the temporary appearance of invited members and industrial speakers contributed to the overall dynamics of the Network process. To ensure that this had creative results, it was important for the organising team of the Network to be attuned to the polyphony of voices, to be sensitive to different behaviours and responses of participating members in critical situations (including the presenters from both academia and practice), to be involved in the processes of cooperation between practitioners and academics, and skilful in dealing with frustrations as well as enthusiasm. These echo the skills identified by Stacey [14] and Introna [20] as key in leading and negotiating complex organisational arrangements. In other words, unmanaged complexity could have jeopardised the success of the Network, and two important issues emerged spontaneously as subtle aspects of collaborative learning over its entire duration, thereby becoming an important part of its facilitation. These are: reflection and critical dialogue.

¹ RAE is a series of periodic exercises conducted nationally to assess the quality of UK research and to inform the selective distribution of public funds for research by the four UK higher education funding bodies.

- *Reflection* is understood in this paper as a process of critically considering our own ontological position towards the subject area and allowing space for different views and perspectives [17,19,21]. Reflection encourages us to consider our own place in the network of power relations (that is the collaborative learning system) and to evaluate the process of learning and interaction that we go through by invoking not only rational, but ethical-moral criteria too.
- *Critical dialogue* is understood as a process of dialoguing with a polyphony of voices and agendas in order to create the possibility for continuation of collaborative learning [17,22]. The consequence of critical dialogue is continuous negotiation and renegotiation of the common ground, the objectives and the ways of accomplishing them jointly and cooperatively as a multidisciplinary Network, not as a set of dispersed, discrete loci of knowledge and authority. In summary, these two aspects emerged as central to the whole operation of the *Rethinking Project Management* Network.

This section has been included to illuminate some interesting aspects of dynamics and complexity of the Network and its processes of communication, collaborative learning and knowledge creation, as experienced by the fourth author – a participant in this significant project. Due to the constraints imposed by the scope of this paper and its overall goal, many arguments and claims raised within this section appear rather sketchy and in need of a further deeper investigation. The authors believe this is an area for further research and reflection, the development of which can add to the body of the literature addressing the complexity of interdisciplinary research initiatives.

5. Conclusion

Finally, to conclude this paper, it seems appropriate to return to the core philosophy behind the whole Network programme, that is, the philosophy of linking theory and practice through an organised process of interaction involving academics and practitioners. As stated, the Network's concept of 'rethinking' was to research how mainstream project management ideas should be enriched and extended with new concepts and approaches to support practitioners working on 21st century projects. And to do this, the approach was a consciously organised learning process to help the Network 'learn' its way to an agenda for future research, and the more immediate implications for practice. Interestingly, at the final meeting in January 2006, this process was commented on by several participants as having strong links to other processual concepts such as the co-production of knowledge, collective sensemaking, participative inquiry, and engaged scholarship. How these terms might be defined and understood is beyond the scope of this paper, but as a point to end on, what is interesting to note is the concept of 'engaged scholarship' shown in Fig. 7, and how it relates to the processual approach of the Network.

Engaged Scholarship

Association of American Law Schools
Annual Meeting
January 5-8, 2005
San Francisco

Theme: Engaged Scholarship

This year's Annual Meeting aims to further recent efforts to strengthen the Association's role as the learned society of the profession. The theme for the Annual Meeting is "engaged scholarship." What does it mean to do scholarship that bridges the "purely academic" and the "practical" ? How can scholarly projects that engage pressing questions of legal practice enhance the empirical breadth and theoretical sophistication of our work ? And how, finally, has (and how may) "engaged scholarship" transform aspects of legal practice and legal institutions more generally ?

Source: www.aals.org

Fig. 7. An example of engaged scholarship.

Interestingly, the event shown in Fig. 7 took place during the time of the Network, and what is particularly interesting is how the same questions can be applied to the practice of projects: firstly, how can future research projects that engage pressing questions relating to the management of projects, enhance the empirical breadth and theoretical sophistication of our work? And secondly, how may 'engaged scholarship' transform aspects of the management of projects in practice? Engaging in this kind of scholarship that bridges the 'purely academic' and the 'practical' is both challenging and complex – as this paper has shown – and the biggest challenge of all perhaps is the 'bridging process' itself.

Acknowledgements

The Network organisers would like to acknowledge the contributions of all the invited speakers and the Network participants, and the UK's Engineering and Physical Sciences Research Council for funding this work.

References

- [1] Winter M, Smith C, Morris P, Cicmil S. Directions for future research in project management: The main findings of a UK government-funded research network. *Int J Project Manage* 2006;24:638–49.
- [2] Checkland P. From optimising to learning: a development of systems thinking for the 1990s. *J Oper Res Soc* 1985;36(9):757–67.
- [3] Checkland P. *Soft systems methodology: a 30 year retrospective*. Wiley; 1999.
- [4] Checkland P, Scholes J. *Soft systems methodology in action*. Wiley; 1990.
- [5] Checkland P. *Soft systems methodology*. In: Rosenhead J, Mingers J, editors. *Rational analysis for a problematic world*. Wiley; 2001 [chapter 4].
- [6] Watkins J, Mohr B. *Appreciative inquiry*. Jossey-Bass; 2001.
- [7] Owen H. *Open space technology: a user's guide*, Berrett-Koehler, 1997.

- [8] Weick K. Making sense of the organization. Blackwell; 2001.
- [9] <http://www.epsrc.ac.uk/researchfunding/fundingopportunities/networks/networkguidetobestpractice.htm> [accessed December 2005].
- [10] Heron J. The complete facilitator's handbook, Kogan Page, 1999.
- [11] Cicmil S, Marshall D. Insights into collaboration at project level: complexity, social interaction and procurement mechanisms. *Build Res Inf* 2005;33(6):523–35.
- [12] Chia R. Essai: time, duration, and simultaneity: rethinking process and change in organizational analysis. *Organ Stud* 2002;23(6): 863–8.
- [13] Stacey R. Complex responsive processes in organisations: learning and knowledge creation. London: Routledge; 2001.
- [14] Stacey R. Strategic management and organizational design – the challenge of complexity. 3rd ed. Harlow: FT Prentice Hall; 2003.
- [15] Wood M. Mind the gap? A processual reconsideration of organisational knowledge. *Organization* 2002;9(1):151–71.
- [16] Das TK, Teng B-S. Between trust and control: developing confidence in partner cooperation in alliances. *Acad Manage Rev* 1998;23(3):491–512.
- [17] Raelin JA. Public reflection as the basis of learning. *Manage Learn* 2001;32(1):11–30.
- [18] Weick KE. Essai: real-time reflexivity: prods to reflection. *Organ Stud* 2002;23(6):893–8.
- [19] Chan A, Garrick J. The moral “technologies” of knowledge management. *Inf Commun Soc* 2003;6(3):291–306.
- [20] Introna LD. Management, information, and power. Macmillan Press; 1997.
- [21] Clegg S, Ross-Smith A. Revising the boundaries: management education and learning in postpositivist world. *Acad Manage Learn Educ* 2003;2(1):85–98.
- [22] Habermas J. Knowledge and human interest; theory and practice; communication and the evolution of society [Shapiro JJ, trans.]. London: Heinemann; 1972.