GRADUATE SCHOOL OF BUSINESS

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THE PAST IN PLAY

TRADITION AND COLLABORATION

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CHAPTER 6: DETAILED CASE FINDINGS

INTRODUCTION

This chapter introduces the data from the three research cases. The presentation in the chapter seeks to be 'close to data', or at least focussed on the level of 'primary interpretation' (Alvesson and Skoldberg, 2000). For that reason, although the descriptions of the cases are necessarily theoretically informed, formal theoretical development and comparative discussion which connects back to the literature is deferred to chapter 7. This approach is also important methodologically, in demonstrating that the use of the 'conceptual hooks' for engaging with the data, described in the conclusion of the preceding chapter, allows theory to function as a *lens* rather than a *filter*. That is, the data are presented in a way that allows alternative interpretations of the situations to be constructed, rather than excluding material which does not narrowly relate to the theoretical focus; the reader should thereby have some sense of the complexities of each of the research situations, and a degree of confidence in the integrity of the findings.

There were some other benefits of approaching the presentation of the findings in this way, as discussed in chapter 4. In particular engaging with each case from the perspective of tradition, in such a way that the research would be open to the development of emergent themes from the data, supports the possibility of providing enriching as well as critical commentary on this theory. For this reason the discussion of each case which follows below is concluded with a summary of areas for theoretical discussion and development that are related to tradition, but also engage with the related themes presented earlier in chapter 5. These summaries are engaged with collectively, across all of the cases, in chapter 7.

Each of the cases is presented in turn below, beginning with the findings from a regional business network collaboration. This is followed in turn by the discussion of a collaboration to support the development of national science groups and the chapter concludes with the last of the cases examined, a collaboration concerned with the development of a European science network.

CASE 1: REGIONAL BUSINESS NETWORK

Preliminaries: The case context

Firstly, this case is an extension and re-analysis of the 'conference' case discussed in the exploratory findings (the remaining two cases, presented later, were completed after these initial explorations). It extends this initial work since it incorporates data collected over an additional period (including some follow-up on the fate of some involved firms, two years after the period of researcher involvement was completed – this is explained more fully later). Before engaging with the data, it is necessary to set out some background details to help make the subsequent discussion simple to engage with. These are set out below:

Duration of involvement	1 year (peak activity over 4 month period)
Nature of the collaboration	A regional business network set up with the support of government, academia and business to help nascent technology firms grow

Members of the collaboration	 'Staff' – employees of the network (latterly, employees of a not-for-profit company which was responsible for administration of the network) 'Sponsors' – businesses providing funding and voluntary support to the network Latterly, 'seekers' – entrepreneurial, technology-led companies and spin-outs seeking venture capital
Researcher's role	Representative of a sponsor firm
Primary activities of collaboration ¹	Recruiting <i>seekers</i> to join the network, and provide scrutiny and coaching to make them 'investor ready'
Sequence and description of key events ²	 Kick-off meeting (sponsors and staff) Meeting to arrange reviews of seekers (sponsors and staff) Review visits to seekers (pairs of sponsors) Meeting to discuss reviews (sponsors and staff) Investment conference (sponsors, staff, seekers, venture capitalists, distinguished guests)
Data sources	Observations at formal and informal meetings, conversations in the margins of events, phone calls, email and written documents.

1) During the focal period of the research – the collaboration also supported networking and general learning events for technology entrepreneurs, and those with the potential and/or interest to become such people, at other times.

2) In this and the other two cases (discussed later in the chapter), these represent both key elements in the collaborative process, and central opportunities for observational data gathering.

Introduction to the data

The partners in this case were engaged in what might be considered to be a logical and rational process, to identify potential 'winners' amongst small businesses that would be worthy of significant investment – and cooperate to help them achieve their potential. However, the data suggests that processes actually operated – at least partially – in line with the theoretical discussion of tradition set out earlier in the thesis. Three particular threads in the data which suggest theoretical links to tradition are therefore explored in this case, and are shown in the diagram below. The detail is

not intended to be readable in this picture, which (although it is an actual picture of the final data 'map' for the case) is provided to give a sense of the complexity of the pattern and the overlap of the three main threads; the detail is explained more helpfully in the discussion which follows the diagram, and a larger-scale data map is provided in appendix 2.



Figure 15: Main themes in the regional business network case

The first of the three main threads relates to the ways in which certain identities seemed to be accepted as making a partner 'worthwhile' whilst others were problematic, although there were reasons for all the variety of identities in play to be legitimate in this collaboration. Secondly and related to the first point, the ways in which one particular group seemed to be in a dominantly influential position –

exercising casual authority – is discussed. Finally, the ways in which one of the *staff* seemed to be making use of tradition (perhaps deliberately), through appeals to precedent and the use of traditional settings, is set out. In this way the data clearly connects with, and potentially enriches, elements of theory related to tradition which were elaborated in the preceding chapter. There are also some overlaps with other connected themes which were discussed in the preceding chapter (structures, identity and knowledge) which also merit discussion as related elements of an understanding of the role of tradition in the situation. All of these elements are briefly discussed at the close of this case review, which provides some linking points with the theoretical development undertaken in chapter 7.

Positioning: Presenting the identity of a suitable partner

A significant cluster in the data was labelled as 'methods for validating position'. This collection of data items reflected a number of points, relating to the ways in which the *seekers* in the network seemed to use certain types of evidence and allusion to support their identities as worthy investment candidates. It also reflects the talk amongst sponsors and staff, as they discussed (often in the informal margins of events – of which more later) the *seekers* that they thought were good propositions for investment. Effectively, this cluster was about: the kinds of signal to potential equity partners that were presented; the varying influence that the various kinds of signal seemed to have; and the connected concepts that seemed to be making these signals influential – or not.

This last point connects the cluster to others in the data, but before delving into these connections, there is a need to review the kinds of signal and their apparent impact. There seemed to be five major kinds of signal employed. Firstly, the use of financial data - about current performance and future projections - were used in written submissions and conference presentations by all but one of the seekers. These had a certain formality, often dealing with the same time frame (three years) and showing the same kind of profile, displaying losses in the first projected year and a swing to impressive profits in the third projected year. Often they were introduced in the context of phrases to support the value of the figures, such as "sound market research" and "conservative estimates", but there were reasons to challenge the rationality behind these figures. In particular, since the firms were all based around the development of new technology, in many cases the actual product conformations were not finalised, meaning that there was nothing to robustly estimate the sales of. Also, in one case, I had some direct knowledge that the assertions made by one firm, that it was "now profitable", were false (the company has since been liquidated). The important point here seems to be that it was necessary to have financial figures, because that was something that was expected, but they did not seem to get the most attention or scrutiny when it came to considering whether the company was worth getting involved with.

The second kind of signal seemed to be a similar formal hurdle – the assurance of some innovative technology upon which the *seeker*'s business was based. It is difficult to be precise, but around half of the firms had technology that was essentially proprietary software and often not of a 'breakthrough' kind. For example,

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one of the 'buzz' *seeker* companies generating a lot of interest was a computer games development firm – but there was nothing unique about its technology. (The firm has since been liquidated). People in the *sponsor*, *funder* and *staff* member categories of the network seemed to like new ideas that they could grasp easily, and did not want to engage (perhaps understandably) with new and complex science. Many firms did have innovative research outputs or technology in development, but only three of them dealt with it in any detail during the presentations – and did not generate much excitement by doing so.

The third apparent category of signal was 'name dropping' - mentioning customers that the firms had already attracted (in the cases where significant trading had been established). It is difficult to gauge the impact of these signals. On the face of it, comments like "We have attracted major clients like Tesco" ought to have been important, especially backed up with a reference to a named client contact. On the other hand, as in the example just cited, it was obvious from the scope of the work undertaken and the limited sales figures at the time, that the work must have been pro bono, just to get the use of the client name as a reference. At the final conference, the opportunity to gently question the MD of the firm (now liquidated) making the particular reference to Tesco presented itself - and he confirmed that it was work done for free for that purpose. It seems reasonable to assume that many of the other people in the network must also have been able to work this out, which seems to suggest that this signal might have been intended to work at another level - perhaps to show that the firm was "well connected", and could get into some important informal networks.

This leads to the final two kinds of signal, which are connected. These are comments about the experience and capability of the management team (one seeker firm commented that they had a "battle-scarred management team") and the previous funding interest that the firms had attracted; the connection in these cases was often in relation to particular names on the management teams, which were well known in the funder circles or actually placed by them in the firms in which they had invested. It was interesting to note that where the seeker firms did not have a particular strength in management, they were at particular pains to point out their "intention to strengthen the management team, including some non-executive appointments", for example, or at least that to state that they "were actively seeking an experienced chairman". The important point seemed to be to get the firm to replace, as quickly as possible, the academic / scientifically trained management (that had developed its technology) with some establishment business figure(s). The background and capability of the *technical* person or team that made the firm possible was not used to support the business case for any of the seeker firms - indeed only one of twentythree used academic titles at all in introducing the firm, although many more could have used them legitimately if they had so chosen.

This leads to the consideration of the first of the connected clusters to the positioning cluster – the academic history of some members, and the ways in which this was seen to be a negative aspect of participant identity – that should, perhaps, be suppressed or overcome. This was an interesting point not only in relation to some *seeker* firms but also in relation to *staff* members of the network. For example, the chair of the

network led a chorus of sniggering about a potential *seeker* firm that had committed to academics in its top management team. At that time, the formal structure of the network hub was successfully being transferred to a not-for-profit company (from a loose, collectively led collaboration) under the chair – himself formerly a distinguished academic. The potential seeker firm was excluded from the process at an early stage, in comparison with other academically-led firms which did gain entry and presented at the final event – where they were at pains to point out (as discussed earlier) that they had every intention of replacing their academic management team.

This apparent rejection of academia seems to be the flip-side of the kinds of identities that were respected in this arena. These can be understood in the context of the notion of reputation. At the broadest level, this was apparent in assertions made by staff about the final event: "the [...] investment conference has an outstanding reputation"; and "it is attracting as much interest as ever". Naturally the direct appeal to the past is interesting in these statements, but the question that arises is: an "outstanding reputation" with whom? The answer seems to be particular investors that continued to support the event - two nationally known figures in particular were frequently mentioned, although they only seemed to be interested in / involved with one seeker firm. Other names were mentioned less frequently, but amongst the investing sponsors - especially the 'business angels' - 'names' seemed to be the touchstone of credibility. This seemed to relate to the constitution of an experienced 'establishment' group, involving: individual 'business angels', investing the yield from their own past businesses and ventures; and representatives of large, long established international firms (sponsor members with 'Director' or 'Partner' titles).

This establishment group often seemed to bypass formal criteria for supporting seeker firms to be involved with the network, and rely on connections amongst themselves instead. For example, one of the *seeker* firms that was reviewed for entry, both by me and by a *sponsor* firm representative, seemed to have a very poor business case and shaky figures (in my own professional opinion – at that time I was a consultant familiar with due diligence work). The *sponsor* firm representative (from a 'big five' consultancy) argued that the *seeker* firm should definitely be included, since he had "heard good things about them from a mutual contact". The firm in question was admitted, and has since collapsed; other similar instances of firms cited as "no-brainers" for entry – then proceeding quickly to failure – could also be mentioned.

The point that needs to be emphasised in this particular thread is that the establishment group, many of whom must have been of the highest educational standards to be admitted to the firms which they represented, weren't leading the field in making smart decisions. In fact, they were praising firms that subsequently failed. Such failures might be considered to be related to the tough business climate; after all, many new high risk ventures fail. However, the three applicant firms that were *not* admitted to the network were *all* thriving at the time this was written, years after the decision to reject them was made. The establishment group seemed to prefer informal nods from the right sort of people, with whom they had a history of contact, and to be selective about who else might be listened to and what mattered in making judgements.

There seems to be a strong argument for seeing this as 'old answers adapted to new questions' – as relying on sources embedded in a shared past and seeing connections to familiar organizations and actors as a measure of acceptability for new organizations. This seems to be linked to a notional identity which has been described in the narrative above as the 'establishment', as well as the rejection of those people or messages associated with non-favoured identities (academic or scientific, for example).

The old boy network: Informality and irrationality in collaborative outcomes

More needs to be said about this notion of the 'establishment' identity. As allusions in the previous discussion have suggested, informality seemed to be a significant aspect of the established practices⁹ for members of this group, both in their modus operandi and in relation to their own presented identities. As the earlier discussion has suggested, this informal approach seemed to be much more important than 'evidence-based' judgements, and was manifested in a number of ways. For example, when I partnered one particular *sponsor* firm representative (from a 'big five' consultancy) in the assessment of a potential *seeker* firm it was evident that the representative had not even reviewed the firm's entry submission. Yet this *sponsor* representative suggested to the firm's MD that he was "just the sort of person to enter our entrepreneur of the year competition", which left him in no doubt about where he stood – he would be getting access to the conference as a 'good bet' (...the firm has

⁹ Or perhaps, their established culture or traditions. I think the latter characterisation is suggested by the argument which follows this.

since been liquidated). In fact established / establishment reviewers did not seem greatly concerned with the process of company reviews at all, but were rather more concerned about other business arenas. In the process of another company review visit, the *sponsor* firm representative in this case was a younger partner from a smaller, but regionally well-known and respected firm. Whilst this representative was quite relaxed about the review process for the firm (which could have serious implications for the *seeker* firm's access to capital for development), in general conversation he mentioned that he was "very nervous about the corporate golf day tomorrow".

Whilst this pattern of informality was often inclusive – first name terms were usual in all meetings, events and passing conversations – it also had its limits, which made it clear who was a part of the 'establishment' group and who was not. That is, explicit attitudes implying different recognition and rules for the 'establishment' group were apparent. As an example, in the review discussions leading to the selection of 'seeker' firms, one such firm that had previously been involved in the network was excluded because of "the MD's antics at the dinner last year". Yet at the conference dinner at the close of the intensive period of research for this case, there was a good deal of exuberant drunkenness amongst the establishment figures – one *sponsor* representative (from a large venture capital organization) asked the (replete) researcher to "take the wine when it comes round anyway and give it to me". After the formal part of the dinner concluded at 11:30 pm, as I was leaving to be ready for the second day of the conference it seemed as if the revelry was set to continue – the bar was in a state of siege at that point.

More subtle manifestations of this discriminating attitude were also apparent. For example, at the final investment conference I generally found that conversations were easy to start with many people in the marginal 'milling about' times for coffee and so on, but often a glance at my conference badge (at that time, I was clearly identifiable as an employee of a very small consultancy firm) seemed to lead to a termination of the conversation. Interpreting this precisely is difficult, but since it is unlikely that the badge readers would have heard of me as an individual or even the firm mentioned on the badge, it seems reasonable to suggest that this 'unknown' status was the problem (rather than some explicit rejection). Similarly, when a member of a seeker firm had engaged with me in conversation, he still kept looking around for other people passing. This kind of selectivity was also apparent in review meetings in the run-up to the conference; staff would greet certain influential individuals with warmth and enthusiasm as they arrived, whereas other attendees might as well have been invisible. This might have been related to personal friendships; however, it could be argued to be bad business practice to ignore any representatives, as all of the sponsor firms were contributing several thousand pounds each for the operation of the network. Other status games were also apparent; for example, a consultant from a small firm (as it emerged later) presented herself at the kick-off meeting as a member of her (large, influential) client company, that she was temporarily representing.

This leads to some important elements of this distinction, connecting the notions that 'size matters' with apparent differences in attitudes between big (old, established) companies and small (often newer) company attitudes. These differences were

manifested in three particular ways. Firstly, in the patterns of attendance and involvement; large, influential firms were often represented by senior staff at relatively high status events (the kick-off meeting and final conference) and often by junior staff at the actual 'working' meetings and review processes. For example, when reviews of seeker companies to decide on admission were conducted, the senior representatives from the larger firm usually did not get involved in these visits. It should be noted that some influential establishment figures did undertake review visits, but these were 'business angels' that might have a personal interest in investing in some of the firms (also - obviously - they did not have any junior staff to delegate these tasks to). These influential figures in the network underlined the notion that 'size matters' in *financial* terms; one of the 'business angels' suggested that a firm should not be admitted to the network because "my money wasn't good enough for them". However, even when senior figures from large corporations did. occasionally, get involved in the 'legwork', they certainly did not get 'assigned' visits to distant parts of the region to visit more isolated firms - which was a common requirement for representatives from smaller sponsor firms.

A second, related point is that the senior representatives of the larger firms *did* get particularly involved in the higher status events. For example, the conversation at the kick-off meeting was dominated by (in addition to the chair) three people from a group of 26 (24 *sponsor* and two *staff* members). Large firm representatives also dominated the high status 'session chair' roles at the final investment conference; they were also in the main significant, specific financial sponsors of this final event, although this did not formally account for their chair 'slots' (according to the terms

specified in the sponsorship prospectus). These representatives were also quite forthright in highlighting their own activities, even when these were actually competing to an extent with the role of the sponsored network at the heart of this case. For example, some of them promoted their own corporate investment events which might pull investors away from the regional business network's own programme of events and investment conference programme.

It is interesting to note that there was some complicity in accepting the domination of the establishment firms amongst certain *seeker* firms. For example, in the case of one review visit, I noted that I was comprehensively ignored by the applicant MD in comparison with the ('big five' consultancy firm) establishment *sponsor* partner in the review.

This leads to the final point, which is that the differences in attitude seemed to be related to the *kind* of organizations with which people were involved. I had worked most extensively with two individual *sponsor* representatives from very different organizations; both people were, however, of the same age, from the same UK region and both graduates of Edinburgh University. These individuals seemed to have quite different perspectives; for example, their attitudes to 'family firms' were quite different. Whereas the representative of the smaller *sponsor* firm did not seem to make particular distinctions in this regard, the larger firm's representative did. This person (from a 'big five' consultancy), referring to a particular firm (still growing at the time this study was written, some years after the initial research, and employing

12 people at the time of the study) commented that "investors don't like husband and wife companies".

The final point above, about the rejection of 'husband and wife' companies, leads to a discussion of some other aspects of the discriminating stance of the 'establishment' group – perhaps the 'wife' was the problem here? That is, there seemed to be a whiff of old-fashioned, generic discrimination (not *necessarily* conscious) about the way in the way in which roles in the meetings and events panned out. For example, none of the 23 presentations made by *seeker* firms, at the final conference, were made by women (even in the case – only one – where the firm had a female MD, and MDs were usually involved in the presentation). However, women did predominate in conference roles such as handing out bags and registration. In addition, only one person of colour made a presentation at the final conference. The evidence for deliberate or conscious discrimination is not, however, emphatic in this case; this must be treated as a potential suspicion about the character of the business establishment – and nothing more concrete.

Coming back to collaboration however, it can be argued – quite forcefully – that the possibilities for *seeker* participation in the network were heavily influenced by the establishment group's dominant role in shaping events, and connections to *their* network. In addition, this group also impacted on the workload of smaller collaborating *sponsors*, that picked up the lion's share of the 'legwork'. The fact that this group of powerful individuals were able to exert this authority (despite their arguable capacity for stupid decisions, bad behaviour and posturing in relation to

specific notions of what makes a firm 'acceptable') points to a degree of acceptance, amongst 'the rest of us', of traditional truths about business. There seemed to be considerable evidence for notions like 'money talks', 'big is beautiful' and so on being *implicit* in the flow of the collaboration, when these notions were connected to something (or someone) that has been around for a long time. This may be quite strong evidence for the role of tradition. General issues of power and identity also seem to be suggested, as do issues about the traditional construction of what knowledge is to be regarded as acceptable and the central importance of informal networks as opposed to more formal collaborative structures. The discussion will return to these points later. For the present the discussion moves to the consideration of the ways in which one particular individual seemed to be 'working around' this dominant group, up to a point...

Deliberate use of tradition? Underpinning authority in the collaboration

The chair of the collaboration – a member of the network staff – seemed to be asserting a dominant position, particularly within meetings of the whole group leading up to the conference. This self-positioning also seemed to be supported by (or draw upon?) the repetition of established processes and the use of some physical settings or arrangements.

The discussion of this self-positioning begins with some direct observations about the chair and his actions in meetings. There are four main points to consider: his aggressive questioning stance; his deflecting stance; the control of arrangements; and the invoking of past processes to support a number of *fait accompli*. Firstly, then, there is the matter of his aggressive questioning style. This was aimed in three directions: at his own *staff* colleagues; at *sponsors* from smaller firms; and at junior representatives of larger sponsor firms. This kind of pointed questioning was usually about some technical point in the review of a firm, or related to challenging the recommendations for acceptance supplied in some reviews of potential *seeker* firms. As the earlier discussions in this case have indicated, there might be good reasons for questioning some of these recommendations, but the decision making and questioning seemed to be rather aggressive. To be more explicit, that is, although *acceptance* decisions were questioned, *rejections* were not – and these often had the feeling of summary executions. For example, one reviewer verbally reported that a potential *seeker* firm MD had said "you need us" during the review meeting – the chair immediately excluded this applicant from the process.

Secondly, in contrast to the point above, the chair seemed to adopt a 'deflecting' rather than a confrontational stance at the meetings involving senior figures, most particularly the kick-off meeting. Questions from three individuals in particular were raised during the meeting, and the chair often provided 'yes, I hear you' kind of responses rather than 'yes, I agree' or direct confrontation. For example, there was a suggestion (gaining general nodding agreement around the table) that applicant *seeker* firms supplying inadequate written applications should be asked to refine them before a review visit would be scheduled. This recommendation was not minuted and the proposed revision process was never actually instituted as the process unfolded. These 'yes, I hear you' moves seemed to effectively contain discussion, although there was a degree of cross-looking body language (and even

some scowling) from people who were not getting the kind of engagement in dialogue that they were perhaps looking for. This kind of quiet discomfort was particularly evident when, at the close of the kick-off meeting, the chair re-arranged the date of the follow up meeting to suit himself and his staff colleagues – without any discussion of the convenience for others.

It is interesting to speculate whether these displays and manoeuvres by the chair were deliberately designed to compete with or stand against the authority of the establishment group, or to provide him with an equivalently authoritative identity. The substitution of more junior members of the establishment firms in the 'legwork' activities (discussed earlier) suggests that his scope for feeling successful – if either motive was a driving force – might be rather limited. However, the remaining two points in this four-part thread relate to some more complex notions which may have been related to these motives, and which certainly bear some relation to notions of identity and control.

The next point thus relates to the use of physical settings to suggest the status of: particular events; the people in attendance at certain events; or a particular organization. It touches on meetings under the control of the chair, as well as some other instances that suggest that the use of settings might be an approach used to suggest status (or more homely messages). For example, the kick-off meeting was held at an heritage hotel in the region's prime city, in a room that was very elegant, but not altogether practical – it very much called to mind the pictures of cabinet meetings, with the network chair in the place one might imagine the prime minister would sit. The other of the events at which most of the high status individuals were present – the final conference – was also held in a prestige hotel (a facility of such magnificence that many of the delegates had to stay somewhere cheaper and travel to the venue each day). Catering was silver-service throughout and formalities extended not just to after-dinner, but after-luncheon speakers. The final conference was certainly intended to be a high status event that would attract international interest; one of the *seeker* firm MDs commented that "it's much bigger than I expected it to be" during the conference – and looked somewhat overwhelmed.

The use of hotels seemed to be quite common in this network and I would often meet with review partners in an hotel for tea, before going on to conduct a company visit. In comparison, the 'working' meetings – often, the senior members of large firms did not attend these, but sent junior representatives – were held in functional rooms at one of the region's major business schools. Business at these meetings was conducted over packets of (perfectly adequate) supermarket sandwiches, rather than being accompanied by elaborate catering arrangements.

There was no *practical* reason why the kick-off meeting – and perhaps even the final conference – could not also have been held at the business school, and saved the hard-pressed network some valuable funds. As has already been alluded to in the preceding discussion, these choices therefore *had to be* about something else – perhaps about making the 'right' impression? This certainly connected with the purpose of the *seeker* selection review visits, and subsequent coaching of the successful *seekers*. The network chair stated that this coaching (including trial

presentations) was to ensure that "people don't drop themselves in it". The idea of impression management can also be connected with comparisons between the premises occupied by a firm that was highly rated (high-status, large and commodious offices in a new business park) by many *sponsors* and one that attracted little interest (rather worn, but functional and cheap offices 'ambulance chased' from a collapsing firm); there seemed to be a preference for superficial gloss and physical statements of confidence. Of the two firms in the preceding comparison, the former has been liquidated whilst the latter is still in operation – naturally there are more factors involved in such consequences than the premises, but the evident satisfaction with such superficialities amongst some reviewers does not seem to reflect a particularly thoughtful level of judgement.

It is argued that the preceding points suggest that there were sufficient instances of the use and judgement of physical settings to indicate that there were games and interpretations associated with them. It is not clear, however, whether the chair of the network in particular was *using* these settings quite deliberately, and/or *fitting in* with establishment conventions about what was appropriate. That is, he may have called upon tradition either deliberately or intuitively in the use of physical settings.

In comparison, however, the final point relates to an area that did fall under the control of the network chair – the processes used in the collaboration. The first thing to note about the processes for the collaboration was that each was, in the main, introduced to the network participants as a *fait accompli*. Examples of these predetermined processes included: the process for reviewing *seeker* companies; the

timing and terms of the required confidentiality agreements; the pairings for company review visits; the submission templates to be used by applicant *seeker* firms; and the definition of reviews to be provided by *sponsor* reviewers. (Interestingly, the last two items did bear a passing resemblance to the format of tasks that might be set to MBA students – perhaps the chair's suppressed, erstwhile academic identity couldn't *quite* be contained...). These processes were justified (where this occurred) through claims to be "following the pattern of previous years"; comments from the limited number of speakers (in addition to the chair) at the kick off meeting also often related to past events. It seemed that there was a definite call upon tradition as a justification in this case – even if it was a tradition only a few years old. This possible indication of a nascent tradition seems to be an interesting point, connecting with the earlier theoretical discussion, which identified one aspect of tradition as the repeated application of old answers; the temporal differences amongst traditions will be considered further in chapter 7.

To wrap up this thread, then, it can be suggested that some interesting arguments are beginning to be shaped about the way in which an individual (the chair, in this case) seems to either *draw on* or *comply* with traditions to support their own authority in the collaborative setting. The degree to which these manoeuvres were successful, or might be accounted for with other related explanations will be discussed further later.

Case summary: points for theoretical development and discussion

In this part of the discussion the elements for theoretical development and discussion

(to follow in chapter 7, in parallel with the findings from the remaining two cases)

are collated. The key elements arising in this case are summarised in figure 16.

Key element of findings			S
The use of connections to, and signals which seem to be drawn from, old, established identities (or identity groups) to present oneself as a suitable collaborative partner, and the apparent need to suppress 'unfavourable' identity presentations.		-	
The ways in which representatives from a dominant group of large, well established organizations seemed to be able to exert an influence on the possibilities and operation of other partners in the collaboration, through informal processes and networks.			 Image: A state of the state of
The establishment group's ability to make (pretty poor, in many cases) decisions on traditional grounds ('names' from the past, for example) and in the context of apparent discrimination, which limited equitable participation in the collaboration.			
The chair's direct appeal to the past for justification of processes, the use of traditional settings to influence (or fit in with) perceptions about the venture capital arena, and the ways in which these might be argued to be applied as identity and authority resources.		-	

Table Key (principle, not sole, thematic connections to) -K: tradition and knowledgeI: tradition and identityS: tradition and structure

Figure 16: Table of key findings, regional business network case

As suggested earlier in the preceding discussion, these points are not simply suggestive of tradition, but connect to the related areas discussed in chapter 5 - knowledge, identity, structures (particularly networks, in this case) – as well as other possible interpretations. The connections between the data and these areas of theory are explored in chapter 7, especially in relation to structures, identity and knowledge.

Before reaching that discussion, however, the present chapter continues with the remaining two cases.

CASE 2: NATIONAL SCIENCE GROUPS

Preliminaries: The case context

As with the preceding case, the background details of the situation are presented first,

to simplify engagement with the subsequent discussion:

Duration of involvement	2 years and 2 months
Nature of the collaboration	 A series of inter-related, sector-based¹, collaborative group developments to support a particular, niche scientific interest. Four groups were developed, one for each of: The environmental sector (mostly SMEs and larger firms) The food industry (PLCs and large public sector institutions) The (largely public) clinical-medical sector A general industrial catch-all sector (largely 'heavy' industry) An extant cross-sectoral group was also related to the general mission of the programme, and had been in existence for several years. All five of the groups included the 'lead institution' and some government agencies.
Members of the collaboration	 'Lead Institution' (LI) – a fully privatised former government agency. Participants were both senior scientists and managers of the organization. 'Sponsors' – the government department funding the programme 'Members' – representatives of private and public sector organizations that chose to become involved (from a larger number of consulted organizations); typically senior scientists or technical directors.
Researcher's role	Consultant helping to design, implement and support the programme.

Primary activities of collaboration²

To understand the support needs in each of the focussed groups, so that direct government support and mutual aid activities could be suitably shaped.

Sequence and description of key events

- 1. Programme development discussions and plans (*Researcher*, *LI*)
- 2. Multi-sectoral initial scoping workshop (LI, Sponsors, Members, Researcher)
- 3. Consultations with organizations in a specific sector³ (*Researcher*, *Members*)
- 4. An inaugural sectoral meeting (LI, Sponsors, Members, Researcher)
- 5. Preparation of sectoral action plan and meeting to discuss it (*LI*, *Researcher*)
- 6. Meeting to plan the next sectoral group (LI, Researcher)
- 7. Back to step 3.

I was also involved in the extant cross-sectoral group (as a member, since my involvement in science – through supporting a number of collaborations – was significant at that time).

Data sources Observations at formal and informal meetings, conversations in the margins of events, phone calls, email and written documents.

1) 'Sector' in this particular case discussion does not mean 'public' or 'private' – it relates to a distinctly different 'user' area for science, such as the food industry – and may include private and public organizations. The word is retained from its natural use in the data.

2) This included technical standards work, access to specialist facilities, training and information provision, representation at higher levels (national / international) and collaborative development research and development projects.

3) The order of development of the groups was: environmental, food, clinical, industrial.

Introduction to the case

The various parties involved in the multiple, overlapping collaborative groups considered in this case came from a wide range of organizations varying in size, influence and aims. More will be said about the constitution of particular sectors in the discussion which follows in this section, particularly where it connects with key aspects of the findings, but the disparate bases of identity are one of the main themes observed in this data set, along with the importance of the past and the particular role of the central *LI*. The data are therefore explored in three main strands, which are indicated in the figure 17 (a larger-scale data map is provided in appendix 2).



Figure 17: Main themes in the national science groups case

At this point, a brief overview of the strands may be helpful, beginning with the 'unusual position of leadership'. This relates to a pattern of observations about the LI; although this was not the largest of the organizations involved in the collaboration (or necessarily superior in technical or collaborative capabilities), it seemed to hold an unchallenged leadership position in relation to the shaping and direction of the programme. It seemed that the LI was effectively able to dominate the groups

involved in a publicly-funded initiative without question. In this case discussion, the exploration for this unchallenged domination is undertaken, leading to three principle elements of discussion which relate to the discussion of tradition elaborated earlier (chapter 5). Firstly, this leadership position seems to relate to the operation of informal authority in the collaboration and the ways in which this was related to the self-positioning – the identity – of the *LI*. Secondly, the discussion then moves on to consider the way that informal authority was connected to broader communities with their own traditions and identity resources – the multiple strands of identity in the diagram. Finally, the remaining strand explores the ways in which the particular position of the *LI*, supporting leadership and authority in relation to the other involved partners, was built on the past; this involved the history of the organisation itself, as well as historical structures, historically informed understandings and appeals to precedent.

In this way the case connects with the core elements of the theories of tradition elaborated earlier and provides scope for theoretical development; in particular there are some connections to overlapping concepts explored earlier (knowledge, structure, and identity). These points are highlighted at the close of the discussion of this case, to provide connections to the theoretical development undertaken in chapter 7.

An unusual position of leadership

The first of the major themes that is explored in detail is the leadership position of the *LI*. One place to begin considering this might be to ask the question: might there be reasons why some of the other involved organizations might have wished to have taken a leadership position? As has already been suggested earlier, the involved organizations had varying motivations for, and interests in, collaborating. *Members* of all of the sectoral groups were interested in sharing and accessing information and all except the clinical group *members* were inclined to share resources and potentially become engaged in collaborative R&D projects. Overall the group *members* seemed to have a strong motivation and need to collaborate (and therefore, arguably, potential benefits to be gained from leading it towards their particular preferences), but seemed to accept the leadership position of the *LI* within these collaborations without question.

The LI enacted this leadership position in a number of ways. Firstly, in defining the terms of the collaboration; the LI had suggested the sectoral structure of the groups and defined their internal structure (a core group which was to meet at regular intervals and a wider membership which was involved by electronic means). They also strongly influenced the construction of the collaborative agenda. This allowed them to include some of their own favoured programme objectives that were being 'squeezed' (in terms of government funding) – such as sectoral training programmes – within the remit of the new sectoral groups. In effect, the LI was able to manipulate the achievement of its preferred, overlapping but not *necessarily* linked objectives within what might have been protected as a separate programme. The LI also took the lead in shaping the agenda of meetings of each group, despite this being a role that was technically subcontracted to the researcher as a hired consultant. For example, the LI sought out and involved 'Quango' representatives to give lengthy presentations at each of the inaugural group meetings. Such presentations effectively limited the

time for the development of a group agenda from 'the bottom up' – a possibility that was further constrained by additional presentations from the LI. Perhaps most deliberately, the direction of the groups was constrained by the definition of relatively tight agendas for discussion (for example, by setting out a predefined list of development topics from which participating *members* could nominate priorities).

In effect the terms under which the collaboration might develop were defined by the LI; although not officially in a hierarchical position over the groups (their function was to deliver the programme that 'made the groups happen') they nonetheless were able to operate as if this was the case, without dissent from members or intervention from sponsors. Most markedly, the LI took all of the 'chair' and 'secretary' roles in each of the groups, and no other collaborators received¹⁰ any role other than member. Although it is not suggested that the LI was acting in a contrary manner to the members' and sponsors' interests (the sponsors were clear that this was a bottom-up, self-help and consultative group - the activities that were developed would have appeared to be consistent with this, in the main), they had a strong say in how those interests were to be defined and achieved. This possibility seems to be connected to two particular aspects of the LI. Firstly, its positioning in relation to history; that is, its own and other / shared histories and the appeal to precedent. Secondly - and connected to the first point - a kind of double grounding of the informal authority of the LI in scientific and establishment notions which seemed to inform both identity and action. Each of these two points is considered further below.

¹⁰ There was no opportunity for them to *take* roles – the *LI* took all of the formal positions without any debate or comment, right from the first meeting of each group.

Built on the past

The self-positioning of the LI seemed to connect particularly with its own heritage as a former governmental organization. For example, despite privatization a number of years before the present research, the LI had retained elements of its historic branding, such as the short form (three-letter abbreviation) of the company name and its typical colours and font style. Interestingly, the three-letter mnemonic had actually become the full company name - rather than being known as (let us say for illustration purposes), 'The Government Science Organization', by the time of the research it was officially known as 'GSO plc' and the full name was effectively abolished. This change in status did not seem to be fully acknowledged by all of the members of the collaborative groups - one or two from time to time used the (abolished) long name, but in general most used the short form name; however, they referred to the organization as 'The GSO', which implied the original long form of the name. In addition the LI was still the major contractor for several government programmes, despite the fact that these were officially offered for open tender although, as one LI manager commented, "Competitors either get put on a steering committee or given a sub-contract". The LI also maintained another connection to officialdom through housing some small regulatory agency scientific facilities, which were too small to efficiently maintain their own technical infrastructure, on its own site. It also maintained a strategic partnership (cross-board membership) with the leading learned professional society in the field.

There were also specific technical achievements of the past which affected the standing of the *LI*. In particular, it was and remains a leader in *certain aspects* of the

scientific field in which it operates. However the explosion of developments in new science (such as biotechnology) had resulted in the LI having a much less preeminent position than before; large commercial operations had taken a clear lead in some areas. In addition, the growing trend towards European and broader international cooperation in science had meant that it was likely that the LI's technical leadership position would be further undermined. However, it seemed that the LI's pre-eminent past had made it the natural point of call for information within the UK. This heritage also meant that the LI had key representative and rapporteur roles on international standards and cooperative committees; this in turn gave it a functional position as the access route to international information (and, as the discussion will suggest later, perhaps allowed it to mitigate the competitive aspects of the international context whilst maximising potential cooperative benefits).

These heritage factors may be helpful in beginning to provide an understanding of the ways in which it seemed that the *LI* was able to connect the *member* needs (or perhaps steer them towards) the historical areas of provision which *they* were most able to provide access to. This was evidenced in two particular ways; firstly, in the re-application of old answers to new problems and secondly, in the connection with individual histories and historical structures. These two points will be addressed in turn below.

The re-application of old answers to new problems involved a number of elements that related to expectations that past modes of operation could continue without modification, despite variations in the concerns of groups (as the programme progressed from sector to sector) and changes in membership in established structures. Part of the rationale for this seemed to be the background of the most senior representative of the *LI* involved in the programme (the person that normally took the role of chair in the sectoral groups); for the purposes of this discussion the individual will be referred to as 'Bob'. Bob had been employed within the *LI* for over 30 years, but had also spent some time on secondment within the government *sponsor* department, and felt that he "[knew] the people and how they worked". Although, roles, responsibilities and elements of organizational structure within the *sponsor* department had changed, his historical understanding still seemed to be sufficiently effective in maintaining good relationships with the department (it is tempting to speculate that perhaps Bob had become acquainted with the department's own historically informed and traditionally structured practices, although the data do not support a detailed examination of the sponsor's internal operation).

A second point of continuity with past modes of operation was the use of jargon within the long-established *cross-sectoral group*. For example, the long-serving *members* of this group (which was the majority – one of their number being over 80 years old, and still an active company director at the time of this research) were used to discussing international activities and groups in terms of many lengthy acronyms, which were proving difficult for a newer member of the group. When explanations were requested, Bob just replied that "if we had to explain everything we'd be here all day" – although *members* using *business* terms in written submissions were told that "the consultant-speak needs to be replaced". Since those raising the jargon problem included, for example, a senior member of a learned society this issue was a

not a matter of technical competence. The language used was highly specific to the ways that this group had been working for many years, and was beginning to date (perhaps representing a tradition becoming rather redundant¹¹). Nevertheless, it still served to define a group and made their approaches to issues difficult to argue against.

In addition to the examples cited in the case of the cross-sectoral group, a telling example of the re-application of old answers was suggested in the way in which the sectoral groups were all developed sequentially on the same pattern, despite different historical issues and concerns in each sector. These differences were discussed at the initial scoping workshop had concluded that there needed to be some "trade-offs' between general and sector-specific activities – and that having sector-focussed groups might help to manage this balance. Before the initial workshop, the assumption had been that a rather more generic solution might be appropriate (for example, a single group or regional collaborations). However, some specific foci of interest identified in the scoping workshop suggested the need for different styles and membership amongst the groups – differences in the former, in particular, were not allowed for in practice and the membership patterns were not as different as sectoral variations would suggest was appropriate.

Examples of these key differences in interest were: the industrial group's interest in substantial collaborative projects to meet certain technical challenges; the food group's interest in influencing regulators; and the clinical group's concern with

¹¹ What I am thinking of here is one of Shils' (1981) notions about tradition – that it is *that which is effectively handed down*; in this case, whilst this specialist language had been consistent with this

quality and reliability. What actually happened in practice was that the same methods of compiling potential member lists and undertaking initial consultations were conducted in each of the four successive group developments. Groups were then constituted with similar cross-sections of membership (in as much as the nature of the sector allowed this; some were quite different in terms of the kind of organizations that operated within them) and – as discussed earlier – action agendas were steered towards a similar pattern.

Whilst it can be reasonably suggested that there were some central actors (in particular the LI) with an interest in shaping the way the groups developed – and their aims might be presumed to be constant – the re-application of the same development pattern did reflect a deliberate re-use of a process that was perceived to be a success in the first of the group developments. I was actually and necessarily involved in this re-use; in my role as a consultant, my superiors encouraged the 'recycling' of any effective approach that had been demonstrated – there was a determination within the firm not to 're-invent the wheel'. Clearly, then, the 're-application of old answers to new problems' was quite deliberate in aspects of this case. It is to be emphasised though, that the decisions on process and progress were all made by the LI, and that particular sectoral-specific lines of debate were not admitted, or were fitted within a broad centrally-defined context.

notion, it was beginning to lose saliency for 'succeeding generations'. Shils would consider this to be a dying tradition.
This use of the stock of old answers and practices was then, on a broader level, part of the process of gently shaping members' needs to fit with the historical patterns of provision. Another aspect of this process was the way in which individual actor histories, and earlier collaborative initiatives, were used as resources to influence the shape of the developing collaborative groups. This was most noted in relation to the LI. Many of the individuals working for this organization had a long history of involvement in particular sectors, sometimes through previous employment, sometimes through a long period of liaison - and sometimes through both. These people were keen to preserve long-established links, and offered, for each group, the contact details of "people that have all been supportive of our initiatives in the past" and suggesting that "signing up existing collaborators would be good". In addition, the LI drew on old network contacts in their areas of experience to suggest new participants and identify speakers for the inaugural meetings - especially from Quangos and government agencies. The LI's most senior representative, 'Bob' was particularly focussed on the use of networks and had a keen interest in the backgrounds of the people involved in the groups and the processes to develop them - much of the initial discussions between Bob and I at the start of the work were about a common background in a specialist area of science, and about one particular common contact (notwithstanding the fact that I had not seen this contact for seven years). It seemed to be these aspects of a common history and shared network that made me something of an 'insider' - having previously been a successful competitor of the LI for certain aspects of government programmes.

Overall, by re-introducing 'established' contacts and filtering-in people with common backgrounds, the *LI* might be seen to be establishing the possibility of maintaining their historical position as the dominant 'official' partner, after the formal rights to this role had passed away. It would be interesting to speculate whether newer members of these communities might be socialized to take up the same practices, and relationship to the *LI*, as the members of long acquaintance, although the data do not provide any firm insights in this direction.

Involving multiple strands of identity

The informal authority of the LI, which has been touched upon above, seemed to be connected to some complex and long-standing identities (and related notions) which helped the LI to support its position. Two important areas for discussion are considered. Firstly, the 'scientific' identities in play and their influence on the nature of the collaborations. This seemed to be apparent in relation to the maintenance of a collaborative 'tone' (the suppression of some of the more competitive or suspicious approaches which might be thought more typical in a business context). Secondly, there was a suggestion of an 'establishment' feel to the proceedings (and the identities of the central actors) and also the broader context of the programme – that is, the halo of notions of the 'official' stemming from connections to government programmes. This conservative, establishment aspect of the identities in play seemed to perhaps also partially explain some potential rigidity and resistance to potential change (especially in relation to the role of the LI) that was noted in the observations.

A community of scientists

Addressing the first of the two points touched on above, the term 'scientific identities' seemed to convey some particularities about the ways that the members of the groups (including the LI) conducted their discussions, established legitimacy and developed common ground with other participants. For example, the discussions at all of the sector-specific groups were rich in technical language, statistical data and espousal of notions such as the "traditional emphasis on the quality of the method" and "the need to know the pedigree of the data". This technical emphasis was echoed in documents. For example, official minutes from one of the groups in particular contained more technical data than action plan discussions, although the actual focus and purpose of the meeting was specifically upon the latter. A subtler indication of scientific identity also noted in the use of language was the LI's description of the supplied at the meeting (including consultancy presentations, documents management-style reports and so on) as "papers". In addition, the group discussions indicated reverence for the structures and principles of science in other ways through, for example: the citation of high-profile international initiatives; a concern for and recognition of formal accreditation; and an emphasis on "peer comparisons" and "consensus values" for numerical terms. A notion of the scientific community can be suggested in the latter points, an analysis reinforced in the ways in which members were relatively open about potentially commercially sensitive details - in the environmental group, costing and pricing details were discussed quite freely. It is suggested that this kind of openness might not have obtained if the participants had not been senior scientists / technical directors of their organizations but more general managers.

There seems, therefore, to be a lot of evidence for the operation of 'scientific identities' in the collaboration. The discussion now moves on to consider the importance of this for the particular case – the notion of science as a driver for collaboration. As the previous discussion has indicated, it was in the nature of the particular science niche that the groups were addressing to rely, traditionally, on the development of consensus analytical measurements of certain materials and material characteristics. (An alternative approach, to have a lead institute apply an ultimate definitive method / definitive analysis, is possible – this is the approach to this class of scientific problem used in the United States' equivalent structures, but nowhere else in the world).

As noted above this habit of consensus seemed to be stretching into areas where it was not so formally necessary (such as financial matters), and overall the groups were fairly positive about collaborating – a typical comment (from a member of the food group) being that they were "happy to contribute – if it is not every week". Processes within the groups were formally democratic (voting took place to decide action priorities, for example – although as noted earlier, a lot of manoeuvring of agenda items had been carried out by the LI) and links to other networks were also a formal item on the agenda of every group. The groups considered that collaboration would have benefits that went beyond their own interests – as a member of the industrial group commented "the benefits will include publicity for the [government's science] programme, but will ultimately translate to economic benefits". In fact, many drivers for collaboration were perceived by the group members, including "networking", "knowledge transfer" and "the efficient pooling of

resources". There were some differences amongst the sector-specific groups though; for example, the *members* of the food-focussed group were not so interested in networking and the industrial group saw the pooling of resources as being more problematic, perhaps because of the much more diverse scientific interests in this group. For example, one *member* of the industrial group commented that "there is wide variation – it is difficult to generalize here".

It seems, therefore, that the operation of scientific identities seemed to set up some positive attitudes to collaboration, overcoming to a degree some long-term differences of interest and present individual concerns. To explore this in more detail, some of the differences amongst the historical backgrounds of the group members merit discussion. The clinical group, for example, involved a wide range of organizations from across the UK but was dominated by public NHS laboratories, historically seriously under-funded, rather than large influential companies or major research institutions. This may help to explain why of all the groups, the clinical members found it most difficult to suggest priorities for action; faced with a list of over a hundred potential projects, they would typically respond by saying - uniformly - "we need all of them", when the programme's resources would probably support no more than five. In comparison the food group included many 'wealthy' companies, but had faced a number of controversies and scares in the years before the formation of the group – such as BSE, genetic modification of foodstuffs and foot-and-mouth. Perhaps unsurprisingly, this group was strongly interested in working with regulators and found it relatively easy to agree priorities.

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There were also differences in the centrality of science to the participant organizations from group to group. That is, whilst it was central to the operation of the organizations participating in the environmental and clinical groups (complex, analytical scientific problems were at the heart of their operations) it was an important but minor function of the food and industrial participant's organizations. This brief review of differences perhaps helps to underline that the similarities in operation of the different sector-specific groups relied more on the participants being members of a scientific community than representatives of their respective organizations.

The apparent consistency of successful collaboration despite sectoral differences does, however, take us back to the starting point for this thread, the informal authority of the LI within these groups. Although the preceding discussion suggests that they were perhaps able to draw upon their own standing as respected members of the scientific community – within which the other organizational representatives were also embedded – that does not seem to be a sufficient explanation in itself. It does not explain, for example, how the LI was able to develop a *national* group for each of the sectors, when the industrial group favoured *regional* arrangements reflecting industrial 'clusters'. It is suggested that the LI was tapping into its 'establishment' heritage, which also helped to support its position. This is explored further below.

Rooted in the establishment

As earlier allusions have suggested, the 'establishment' was an important feature in the data. Accordingly, in this part of the discussion the features of the data that suggested its role are explored, with particular reference to four connected features in the data: suggested links between history, track record and credibility; the relative formality of certain processes within the groups; the orchestration of a stable centre to the community; and the notion of 'international anchors' of the national arrangements. Before discussing these connected features – each of which undoubtedly requires explanation, to which the discussion will soon turn – some of the more general points about the establishment are discussed below.

At the broadest level, there were suggestions of 'the establishment' in the arrangements for meetings of the groups. Bob had commented that "we must have a pleasant venue for the meetings" – and the room selected was a (magnificent) Georgian drawing room within the premises of a royal scientific institution in central London, which could accommodate about twenty-four people. If an analogy might be allowed here, the atmosphere was reminiscent of a gentlemen's club – plenty of wood, leather and refinement in evidence in the fitting up of the room, and Bob always took the 'chairman's seat' at the enormous mahogany table around which we gathered. High-quality external catering was also sourced and wine was served with lunch. The LI had traditionally used this facility for such meetings, although their own premises had perfectly functional facilities able to accommodate similar numbers. Beyond the facility itself, there were also some 'gentlemanly' establishment comments (or snobbery?) around the organization and collection of members; for

example, a learned society that was an historic partner of the *LI* had suggested that "we don't *advertise*, but we could *provide information* to our members" [about the formation of the groups – my emphasis added].

Continuity was also important, particularly to the participants involved in the longestablished cross-sectoral group; one of the founder *members* of that body was still active at the time of the research, despite being in his eighties and his company having faded from prominence in the field. Amongst this central group, there was some disdain for newer participants in some (related) international collaborative groupings – there were comments about "slackness" and suggestions that "some people just shouldn't have been there" – although no material comments about the nature of the inadequacy of these people were put forward.

Interestingly, the cross-sectoral group gender composition also seemed to suggest a rather traditional pattern¹²; whilst the most equal of the sector-specific groups had a split of female:male participants of 1:2, the (smaller) cross-sectoral group usually had 13 male representatives and 2 female (although one of the female representatives was actually an appointed note-taker from the *LI*, and did not have an equal voice in discussions).

From the discussion above the existence of a traditional, establishment group can be suggested, but this rather broad notion requires some further elaboration. It is possible to characterize the establishment group by exploring four points mentioned

¹² That is, historical gender relations which disadvantaged women might be seen to persist in the these patterns. The patterns are traditional in that they suggest the continuity of historical understandings and

earlier. The first of these is the importance of history and track-record to the credibility of both the programme in general and the LI. In meetings of the sectorspecific groups, the LI emphasised that the government programme had been running for many years. In fact, it had formerly been under the direct control of the LI (in the 1980s) when it was a government agency, but had been taken into departmental control when the organization was privatized; it had become part of a rolling series of three year programmes supporting particular aspects of UK science led by the department. This connection with the past was echoed by the representatives of quasi-governmental and independent agencies invited to attend and speak at the inaugural meetings of the environmental, food and clinical groups. All of the representatives had been through changes in the status of their agencies, but were keen to connect with the history of their organization and the essential continuity of its mission. In addition, an invited speaker from a food regulatory agency spent a significant amount of his presentation time setting out his own background and experience.

It seemed to be the case that there was an expectation that things would continue to operate in essentially the same way as in the past, despite any formal changes that took place. This was exemplified in the way that certain training activities which the *LI* had provided in the past were incorporated into the framework of the collaborative development programme. It seems clear that the idea of continuity (so important to

practices. The connection to common-sense notions of tradition as 'old-fashioned' (and bad) could also be made here, but is not central to the argument.

the notion of tradition) was supported, in part through an interpretation of a more formal past into a new, informal, networked mode of operation.

This brings us to the second of the themes connected to the establishment, which is the notion of formality. That is, continuity of 'establishment ways' seemed to be supported not just through an adaptation to informality, but also through the maintenance of some formal practices. This was most noticeable in the cross-sectoral group where some of the terminology used was very formal. For example, minutes were formally "adopted" and there was a formal discussion of "matters arising", each matter being linked to "papers" which were cited by their reference numbers. In this group those with 'official' roles were referred to as such - for example the 'chair' and 'secretary' in written communications (such as the detailed, numerically indexed minutes of meetings). This formal addressing of roles also took place in verbal communications in meetings, although an interesting exception was one instance when a member was letting the chair know about a personal contact to help circumvent some rather inert management in an organization. In that instance (and only in that instance) the chair was addressed as 'Bob' rather than 'chair'. An interesting subtlety of form and politeness was also noted in the fact that I had visited the LI many times before becoming engaged as a sub-contractor on the programme through the LI; on each of these previous visits I found that my name was posted on the "LI welcomes..." board in their foyer. Once I was engaged in the programme as a hired consultant this practice ceased (although reception was still pre-advised about visits for security reasons). This selective use of formality also extended to scenes and processes outside the meetings. For example, I had received formal invitations to

meetings that I had arranged, and copies of documents that I had prepared for the groups, via the *LI*. Such actions served no purpose but to underline the traditional centrality of the *LI* in the programme.

This brings us to the third of the themes connected to the notion of the establishment. The idea that there was a stable centre to the programme and the network of scientists engaged in it, and that this centre seemed to be orchestrated, seemed to be important in this case. Some of the ways in which this orchestration seemed to be effected have already been touched on, for example the deliberate connection to established government and Quango agencies and the favouring of partners that had a long history of cooperation with the LI – in fact Bob went so far as to prohibit the invitation of a prominent figure in one of the sectors who "has an independent streak". The members of the cross-sectoral group in particular were all long-serving and a certain degree of the talk in this forum related to past contributions, people who had moved on and previous patterns of engagement. Given the changes in the patterns of government support for science and the wide range of agencies involved many also subject to considerable changes - the cross-sectoral group might well have been the most stable grouping in that particular niche scientific arena, commanding a relatively stable pattern of support over a long period, whilst other organizations of both commercial and non-commercial bent were radically altered.

The final theme connected to the establishment perhaps also provides some degree of explanation for this apparent stability at the centre. That is, in addition to internal orchestration, there were also some 'external anchors' which helped to provide additional bases for continuity and stability. In particular, the UK groups were connected – mostly through the LI – to international networks of cooperation in scientific standards, many of which had international legal or quasi-legal recognition. The LI was always keen to show that its activities were connected to this international framework (which was the case to a greater or lesser degree across the parts of the programme), and had suggested "bringing in overseas collaborators on high-level projects". The LI was keen to ensure that UK activities (and therefore their organization?) would continue to be credible from an international perspective, suggesting that it was "important to have world-wide recognition" for new schemes.

The LI was in fact very well known on the international stage [I was involved in European Commission projects in this area, one of which is discussed in the third and final case in this chapter, which provided some access to the views of other major institutions of similar purpose in Europe]. It could be argued that it would have been quite difficult for another organization to quickly take its place in the Byzantine and slow-moving network of international committees. The complexity was a serious knowledge challenge; one of the cross-sectoral group members commented that "there are so many international groups that some [participants in the UK] won't know what is going on". Echoing the preservation of process between the recently established UK groups, the processes and practices of the international cooperations also seemed to have been unchanged for some time. This continuity seemed to be robust despite significant movements in the international political landscape (particularly the growing body of EU regulations in science) and changes in status of its major participant organizations, such as the *LI*.

Pulling these threads relating to the 'establishment' together then, it can be seen that the LI was tied into a long established network of partnerships and cooperation at home and abroad. Going further, arguably practices and approaches within this complex network operated as traditions that were compatible with, and reinforcing of, the scientific identity elements which also underpinned the LI's informal authority in the present case.

Case summary: points for theoretical development and discussion

In this part of the discussion the elements for theoretical development and elaboration

(to follow in chapter 7) are collated. These key elements are summarised in the table

provide as figure 18.

Key element of findings		Ι	S
The ways in which a dominant central organization seemed to be able to		\checkmark	
exert an influence on the scope of the collaboration, through connecting			
with its historically central position and authoritative past, in terms of			
references and practices.			
The ways in which personal and organizational histories of association			\checkmark
with specific sectors of interest, sponsors and other government			
agencies were influential in the maintenance of traditions in relation to			
the operation of groups.			
The potential roots of emerging traditions in the deliberate recycling of	\checkmark		
practices and procedures in the development of collaborations.			
The maintenance of traditions through continuity of membership, based			\checkmark
upon personal networks and organizational partnerships.			
The importance of <i>identity</i> in the maintenance of an authoritative		\checkmark	\checkmark
position in collaborations, particularly in relation to the notion of			
possession of a respected position within a professional community.			
The connections between elements of professional identities (in relation	\checkmark	\checkmark	
to science, in this case) such as language and procedures and the regard			
for certain quality and professional standards and the traditions of			
collaboration in within the professional community.			

Key element of findings		Ι	S
The complex notion of the <i>establishment</i> , involving certain traditional facilities and formalities, complex national and international networks and possible suggestions of network closure, which may help to explain the enduring, traditional aspects of the central positions occupied by some collaborators, and reinforce identity positions.			×
The importance of the maintenance of a body of historical knowledge – both formal and informal – in the continuance of collaborative traditions and underpinning roles within the collaborations.	1		

Table Key (principle, not sole, thematic connections to) -K: tradition and knowledgeI: tradition and identityS: tradition and structure

Figure 18: Table of key findings, national science groups case

As suggested in the first of the case discussions, the points developed from this second case are also supportive of the role of tradition. They also help to enrich an understanding of its connections with the overlapping themes discussed in chapter 5. As with the earlier case, there seem to be connections with all of the overlapping themes, and these will be explored directly and in detail in chapter 7. Before reaching that discussion, however, the present chapter concludes with the remaining case.

CASE 3: EUROPEAN SCIENCE NETWORK

Preliminaries: The case context

As with the preceding cases, to make the subsequent discussion of the case simple to engage with, some background details are set out here:

Duration of involvement	3 years (including pre-establishment proposal development and bidding activities)
Nature of the collaboration	 A collaboration to develop a European 'virtual' network of scientists in a particular niche area of science, which was intended to involve: Governmental scientific bodies Other public organizations Private companies Academia The developmental project – the early stage virtual network – was funded by the European Commission, and was one of a number of virtual organizations to be developed in the community's sixth framework programme.
Members of the collaboration	 'Management team'- involving three people: a director of a small (SME) consultancy (the firm is identified with the pseudonym 'Tartan'); an independent specialist consultant (identified as 'Johannes' here); and a senior academic ('Giovanni', from a university identified here as 'Andante'). 'Steering group' - the above, plus representatives of the three major scientific institutions in the relevant area within Europe (one pan-European, one UK-based institution, and one German organization) 'Sponsor' a European Commission official, responsible for monitoring the standards, probity and contract compliance of the collaboration. 'Core group' - all of the above, plus a representative from each of the remaining EU and New Accession States, typically from large public science institutes. Other members were being recruited (at the time of writing, there were over 600 in total) as my own engagement with the network was completed
Researcher 's role	Consultant helping to scope, design, implement and support the project, with responsibilities including the coordination of the network's prospective business plan.
Primary activities of collaboration	To develop a knowledge network amongst the scientists interested in the particular area, and facilitate the development of some collaborative projects amongst smaller groupings of the membership

Sequence and description of key events

- 1. Preliminary discussions on behalf of the UK government, with UK stakeholders and a selection of European institutes.
- 2. Formation of the *management team* consortium, which submitted an expression of interest to the European Commission.
- 3. Formation of the *core group* consortium, to back the formal proposal then submitted by the *management team* to the European Commission.
- 4. Acceptance of the project by the European Commission and the provision of funding.
- 5. Meetings of the management team to establish the processes and detailed plans.
- 6. Meetings of the steering and core groups to execute the plan and monitor the sub-contracted activities (such as website development).
- 7. Formal launch of the network and the recruitment of members beyond the original, invited group.

Data sources Observations at formal and informal meetings, conversations in the margins of events, phone calls, email and written documents.

Introduction to the case

This collaboration was particularly complex in relation to the number of levels of membership, the geographical scope and the mix of organizations. Some of the particular features of this case do cohere thematically, however, allowing this complexity to be grappled with. Firstly, as might be expected issues of identity in play at organizational and network levels reflected the diversity described; but addressing this thematically allows some integrative inferences to be developed. Secondly, whilst in this case there was no single dominant organization, there was evidence for influential sub-groups within the collaboration that had longer traditions of cooperation to draw upon in their positioning, which also helps to suggest some structure in the data.

There was also a suggestion of 'larger-scale' traditions in this case, as the European Union project came into view from time to time and implied some further levels of understanding. The importance of this particular tradition of cooperation was reinforced by the observation of how the cognoscenti were able to manoeuvre within the complex European system, whilst those that had not been historically engaged seemed to take a more submissive position – but more of this later.

A final thought in this preliminary identification of thematic elements relates to inference that the operation of some of the most active members of the collaboration was reliant upon the re-execution of earlier patterns of working, and was also becoming embedded in the formal establishment of a tradition – in the notion of 'founder members', as later discussion will elaborate.

The main features of the data alluded to above informed the development of the conceptualization shown in figure 19. The discussion following the diagram explains the ways in which the more general thematic areas discussed earlier inform the particular strands shown in the figure (a larger-scale data map is also provided in appendix 2).



Figure 19: Main themes in the European science network case

In this remainder of this case discussion, the exploration focuses upon the four particular strands in the data shown in the diagram, which – as the introductory part of this discussion has suggested – overlap with the theoretical terrain of tradition elaborated earlier in chapter 5. These strands are addressed sequentially. Firstly (and perhaps most obviously informed by tradition), the 'guided by the past' strand addresses the appeal to – and establishment of – precedent in the operation and status of the *core group* members. Secondly, the discussion then moves on to consider the ways in which authority was connected to large-scale, community traditions and the familiarity of agents in working with (or through) these traditions. Thirdly, the

multiple types of identities in play, and how these resulted in connections and conflicts in the patterns of collaboration, are considered. Finally, the ways in which the complex of elements alluded to above in the first three strands seemed to develop into a 'battle for formality' amidst the clash of traditions is discussed. As with the cases discussed in preceding sections, this case therefore connects with the central topic of tradition and the related themes discussed in chapter 5, as the following discussion will indicate. This elaboration is followed, at the close of this case discussion, by a summary of the main points for connection with the theoretical development and literature-informed discussion in chapter 7.

Guided by the past

The first of the parts of the data examined in detail is the 'guided by the past' strand. This particularly relates to the *steering group* at the heart of the collaboration. The members of this group had worked together over several generations of the EU's framework programmes for science and technology, in a number of different conformations involving some of the members of this group, sometimes with a few other partners also being involved. To the other members of the *core group* (the wider body of initial members) the steering group was perceived to be something of a clique. For example, it was accused of "pre-cooking decisions" by a member of the *core group*, although there does not seem to be any particular evidence of this being a *deliberate* strategy of the *steering group*. It did seem to be the case, however, that the fact that the *steering group* contained people that had worked together on a number of complex EU funded projects in the past allowed them to operate rather intuitively in progressing the project. It could be argued that this group, initially, did not adapt

well to a more extensive and formal project environment where the broader core group membership had to be involved (within the terms of the European Commission funding). This perhaps begins to help to explain how they seemed to present expectations - that were unmet, as the collaboration progressed - that they could continue to work in the same way as they had in the past. More deliberate actions (rather than intuitive ones) to support the group's own past methods were also in evidence. For example, formal contract arrangements were 'fudged' to give some of the steering group their 'usual' roles - particularly Johannes. His normal management role in previous collaborative projects amongst the group was arranged despite the formal rules for the contract requiring a significantly sized organization, rather than an individual, to take the leading/coordination role. Although this reflected arrangements that the steering group had used in the past, it did cause some confusion and problems in relation to formalities, such as the management of the project finances (officially the responsibility of the consultancy firm Tartan) and the formal communications with the wider membership. More particularly – as will be discussed later - the kind of 'old-fashioned' semi-formal way of working which the group had applied successfully to a number of collaborative projects in the past was connected to a problematic relationship with the EU project officer (with contractual oversight responsibilities for the collaboration's funding). This project officer had not been involved in either earlier generations of the EU's science framework programmes, or contractual relations with any of the steering group members before. It could be suggested that this officer was therefore necessarily reliant on the 'rule book', although she was not new to contract administration (in general) within the European Commission.

Despite circumstances suggesting the need for some formality, the steering group seemed to be happy working together in their old informal way. Examples of this include: arranging meetings without formal agendas in some cases; dealing with sub-contractors directly rather than through the financial coordinator (*Tartan*), as the regulations required; and 'establishing' an independent consultancy within *Andante* to handle a sub-contract within the overall project framework (the consultancy's address and contact details were exactly the same as *Andante*'s). On the other hand, they seemed to be quite direct in imposing formality on the broader membership, in relation to *their* responsibilities. For example instructions to the membership stated that "each National Contact Point [the *core group* member in each nation] will be asked to disseminate towards specific sectors". As later discussion will show, some of the larger institutes had their own traditions of cooperation and/or authority to draw upon, which gave them a different perspective on the matter.

However, the situation did not seem to indicate some simplistic 'power grab' – the steering group seemed to be keen to both draw upon *and* establish historical precedent, to embed the emerging science network within a web of its own and others' traditions. For example, the constitution of the independent entity which would facilitate the continuation of the network after the period of EU funding (it was a condition of the project that this self-funding, independent organization should be established) included the notion of *founder members*. This constitutional manoeuvre would guarantee those involved in the establishment of the network some future involvement through, arguably, a direct appeal to precedent. The constitution also gave the initial project members the right to determine who else might become

'voting members' in due course; in terms of usual practice amongst scientific networks, this might be thought of as rather old-fashioned and unnecessarily undemocratic (although, perhaps, resembling the co-option style of some traditional learned societies). Perhaps because of this, the constitution did allow for ordinary, voting members to become founder members by co-option – a nice example of an organizational tradition being established and re-interpreted into metaphorical rather than literal usage, before the organization was even formally established!

The general process of developing the science network also seemed to draw on past precedent in a number of other ways. For example, a number of other networks, similar in project size but different in scope, membership and focus had been established before the science network considered here. The management groups of these earlier foundations were consulted as the science network steering group negotiated some of the more complex issues they had to face - such as the determination of the appropriate legal structure and country of establishment for an independent network involving 24 nations. There was a tendency to attempt to reapply the solutions worked out by these other networks where this was possible. Often the differences meant that this might not have been ideally suited to the current project. That is, the earlier foundations had different sets of organizations participating in them, presumably with different requirements and constraints; these differences were never explored. Eventually, an informal 'network of networks' was formed to share 'solutions' and facilitate their re-use. 'Established facts' were sometimes seized on as the steering and core groups tried to work out, through a formal process, what might be suitable for its own membership - this emphasis on established external information was sometimes disruptive. For example, after a broad programme of market consultation has established membership fees, *Giovanni* commented "I heard from other networks that fees are much higher", re-opening the debate without, as alluded to earlier, investigating the differences in context between the European science network and the earlier foundations.

Some of the application of past solutions that arose in the European science network was also mandated; as already mentioned, such networks were discussed and developed across several generations of the EU's framework programmes, and were originally seen as "a platform for research broking and industry collaboration". However, practical experience and an early success in virtual networking had led the European Commission advisors for the programme to conclude that "electronic networking is essential" for European science cooperation. Similarly, the UK government department responsible for policy in this area saw the function of the science network simply as "coordination", without any clear notion about what substantive outcomes for the community might be aided by this. With such considerations in mind, it is perhaps not surprising that the final legal structure adopted for the network was one with which people were familiar and could be adopted simply - there was no suggestion that this solution was the most fitted to the purpose of the emerging network. In fact it seemed that all of the networks, including both the earlier foundations and the science network which is the focus of the current discussion, were perhaps ultimately founded on more general notions. That is, the traditions of well-established ERA^{13} precedents, which were perhaps more about *Europe* than about *Science*. To illustrate this point, some years before the establishment of the network, the Commission had concluded that [science networks] had an "essential role in the strengthening of the construction of Europe". The discussion therefore moves on from the adaptation of existing traditions on a relatively small scale, to consider the grand tradition of European integration.

A grand tradition: the European project

As alluded to above, the science network project seemed to be connected to (if not rooted in) the tradition of European integration. At a Commission-hosted workshop before the formal start of the science network project, the official position was stated as being "...in general that the wider the EU coverage the better". This wide participation extended beyond the formal bounds of the Union; it was built on the patterns of integration in the past, and the expectation that this would continue. This was evident in the ways that the 'grand political progress' of Europe was anticipated in the contractual terms of the project, which required that potential new accession states to the Union should be represented in the network, some time before their formal incorporation. The roots of the Union were evident in the way that these kinds of scientific collaboration were seen, in commission guidance, as part of establishing a "...common market in research and technology services" which "must establish an open approach"- a perspective the collaborating scientific institutions might not necessarily agree with. There was also some contradiction evident within the commission guidance, which suggested that this networking process should lead to

¹³ European Research Area -- a term for the EU's sphere of interest in science and technology

both a new, more open environment for research *and* not destroy existing patterns of scientific research. That is, the preservation of historical cooperations in this area were considered to be important, with the official terms of the project suggesting that it should be a "...collaboration of existing structures".

In the case of the science network, however, the 'existing structures', were tied into broader collaborations that went beyond the boundaries of the Union (both current and prospective). The opinions about the network from some 'customer' sectors (particularly pharmaceutical) suggested that this broad perspective was appropriate, that it should be "...worldwide, not just European". However there was also a counter-current of opinion defining this network as a bulwark of European capabilities against the dominance of others. The commission position was exemplified by early workshop discussions which suggested that the network should be "...the beginning of an organization that can stand up to [the US institute]". This perceived need to compete with the US was echoed by a representative of the pan-European institution representative on the steering group, who commented that "much work needs to be done to overcome the US attitude of superiority". Clearly, then, there were confused identity perspectives at play in the establishment of the science network. These perspectives seemed to be embedded in traditions concerned with the development of an open, inclusive Europe - for 'insiders' - and hubris about. the relative standing and respect in which European Science was (and might be) held, in relation to 'outsiders'.

This (perhaps competitive) positioning connects with notions of authority in relation to standards-setting in science (that is, which nations and collectives had most influence over these) and the principles and procedures through which such standards might be achieved; these were focal matters of concern for the national scientific institutes involved in the collaboration. That is to say, in the international context of the science network, identity issues were connected to notions of power and domination of the particular scientific field. Similarly, reflecting upon an earlier point suggests more confusing power issues were at play in the way in which the science network seemed to be mandated to be new and radical – provided that no existing structures were changed. Overall, this could be argued to leave participants mired in a political game which operated at multiple levels, which required some experience and skill to play.

The importance of (or demonstrated interest in) being familiar with and negotiating the 'politics' was particularly apparent in two ways. Firstly, not every participant seemed to have the same opinion about the viability of the network, or commitment to its success. This was apparent in way that some of the major partners were progressing their own, overlapping (and more market-oriented) plans for collaboration in parallel to the science network; the German partner openly expressed an intent to make some activities successful even if the network failed. Some partners may have been more covertly 'against' the success of the network – early in the project's life, the *sponsor* was copied in on some electronic communications which they had no need to see; these communications were embarrassing to some partners. Secondly, for all the expected (and demanded) openness and involvement, there was a good deal of suspicion apparent about the way partners and potential partners might behave - for example, Johannes was concerned whether "... Universities will hide behind labs which have an interest [and so pay smaller fees]". This suspicion was also evident amongst the (public sector, institutional) representatives of established community nations in relation to the provision of information. Many of these representatives were reticent to provide any market estimate information (one refusing outright to comply with a contractual commitment to do so), or provided bleakly pessimistic estimates that were exceeded before the network was even fully established. This resistance to providing estimates was not apparent amongst representatives of new accession states - responses were rapid and detailed from these participants - or from the management team and steering group members, although their responses perhaps tended to be overly optimistic (two members of the steering group each provided estimates which, for their nation alone, exceeded the number of registered members across all nations at the time of writing).

However, there is also an alternative interpretation that may be ascribed to some of the apparently political manoeuvring described in the above. This relates to concern for the notion of *precision*, so important to the tradition of the physical sciences to which the network was connected. The concern for precision was suggested by the ways in which those supplying national market information made it clear that their estimates were *not* precise. For example, the Danish network participant commented of his set of figures that "it is not based on any deeper investigation [...] just on my wild imagination" and the Dutch partner suggested that their figures represented "...a

very rough estimate..."; terms like "guess" and "bet" were also applied to the estimates by other participants. This kind of language can be argued to indicate the participants signalling that they were not working in their normal scientific manner; most tellingly, one commented that "...the numbers are only rough estimates [...] would be interested to compare with other countries". International comparative studies were (and continue to be) the way that scientists in this particular field approach the generation and validation of data that can only be produced with a high degree of uncertainty by individual groups.

It is suggested that all of the preceding points about precision perhaps indicate that the actions discussed in this small sub-section on the grand European project may not just be related to the juggernaut tradition of integration, or to the political manoeuvring to preserve existing structures within this. It can be argued that they might also be related – at the same time – to the way in which the participants constructed their own, professional, identities. This particular notion is addressed in more detail below.

Different identities, different traditions... differences of opinion

Picking up from the last point above, the notion of precision seemed to indicate some possibility that notions of identity might be involved in this case, and more specifically, the evident importance of *science/scientific* identities. Several related notions which seemed to support this were evident during the period of the establishment of the network. Concerns for notions such as standardization, the scientific quality of output and harmonization were evident, as previous allusions have suggested. At a broader level, as perhaps might be expected, there was a great deal of scientific jargon evident in all of the communication instruments of the network (newsletters, web materials, email, documents and so on). Whilst the use of jargon can be argued to illustrate some identity characteristics, it might also be argued simply to represent necessary and functional communication. However, in some cases scientific language seemed to drift into everyday terminology and be applied beyond the functional domain – one correspondent in an email referring to his "coordinates" rather than his *address*, for example.

The inferences about the importance of identity were not just rooted in particular instances of 'the talk of the moment', however. The project and business development plans for the network made it clear that the leading institutional partners had long scientific histories that were relevant to the purpose of the network (this might *plausibly* be seen as a call on tradition as a justification for current actions and roles) and the particular narrow scientific specializations of named sectoral participants were also given prominence in arguments about the credibility of the collaboration.

The importance attached to collaborating itself was perhaps also connected to the scientific identities in play. That is, there were long traditions of cooperative studies existing between many of the most significant institutional partners – collaboration was to some extent usual in this field, with some formal international cooperative arrangements having existed since the 19th Century. This tradition of collaboration (as opposed to competition) perhaps also connected to another potential influence

upon identity and action in this case; the domination of the agenda by a traditional public-sector rationale. This was most evident in some of the unusual legal constraints that the network faced, because of the regulations governing some of the partner institutes from certain domains. For example, because of their constitutional regulations on participation in collective ventures, the German and European institution partners could only formally join one specific type of legal entity - this was an 'ASBL'¹⁴, similar to a company limited by guarantee / not for profit company in the UK. This was not necessarily the most convenient legal form for other partners or the simplest method of establishing it, particularly since the financial control of the project was formally vested in the consultancy firm Tartan, based in the UK. Importantly, there was no suggestion that the constraining 'rules' (or interpretation of them) faced by the two partners could be challenged; the rest of the partners were either to respect their historical constitution or they would not participate. However, there were no conceivable negative consequences for the organizations concerned from participating in a number of other not-for-profit forms – the ASBL represented the only form that they had considered and joined in the past, after discussions with governmental or inter-governmental superiors. In contrast, a number of other national representatives did not even check their 'rules' and were happy to act on the merit of the individual proposal.

Similar issues with rules became apparent in attempting to deliver a portion of the project budget to the European institution – since this was already directly funded by the commission, it was judged to have already been paid for its activities on behalf of

¹⁴ Association Sans But Lucratif

the network, despite having to undertake additional work to do this. Despite the unexplained or unchallenged constraints of certain public sector rules (or perhaps one could say 'European bureaucracy'?), there was perhaps less discomfort with the public sector than there was with the private sector. For example, one network participant suggested that the "Pharma field is a different set of people... secretive... a closed shop". Going further, another suggested that "there is big potential in the private sector... but they are not ready to participate".

From some perspectives, it might be suggested that the private sector was only unable to participate fully because all of the rules about how the network should be structured, financed and operated were coming from public sector traditions; there did not seem to be much space for compromise in this regard. In fact, a lot of the detail about how the network was to be organised was specified in advance of the development of a detailed understanding of the purpose of the initiative - and before any detailed investigation of the 'market' for the proposed network and its 'knowledge services'. Indeed, the definition of the collaborative form as a 'knowledge network' reflected European Commission thinking that "good networks inherently add value" (although this oracular source did not outline what would make a network good or how this added value arises). This seemed to be organization around traditional truths, rather than around the enterprise or mission. Another example of this sort of thinking was that the pan-European institute (a steering group member) making the suggestion that "...the business plan should only be developed after the [network's programme of] activities are finalised" - which in practice would have meant organising startup activities to spend the European Community support funding, without any regard to what might form the (core of) a sustainable, independently funded programme of activities.

Other early decisions (before the *core group* of the network had even met) were taken, by the steering group, about the 'virtual identity' of the network – its web presence, branding, logo and so on. Overall, the impression was that the network was being organised around a public sector, intervention identity (reflecting its roots in the traditions of the European Research Area) rather than as a potentially independent organization.

Despite this formation of identity around public-sector traditions of operation, the network also had some other identity issues to contend with, as some founding members and many prospective participants were rather more embedded (at least in part) in the private sector. For example, the founding membership of the network included some consultants for whom the network establishment budget was a considerable proportion of their income – and the prospect of a continuing income stream, after the community support ended, was naturally a matter of real interest to them. Other commercial matters which were placed on the agenda included *Andante's* suggested focus on "high value sectors, like biotech", which raised some concerns for the (strictly public sector oriented) German institute partner that an *overly* commercial focus was being proposed. The German institute was also suspicious of handing over an international science database (which detailed organizations with an interest in this particular field, and the nature of their activities) to the network – although this had been envisaged in the project proposal that they

had been a signatory to. The German institute still retained the control of this database at the time this work was written. This may cause the network some problems in the future, as access to the database was envisaged as a major reason for potential participants to become interested in joining. For that reason, the maintenance and development of this database was seen as a core *network* activity in the original proposal, rather than remaining with a particular member.

The traditional approaches of the private sector were, however, influential to some degree in the early development of the network – business jargon ("SWOT", "commercial environment", "strategic direction" and so on) was liberally incorporated within the business plan, and the consultancy firm *Tartan* proposed ideas for "extending the brand" into extra-contract activities. The relevance of the private sector was also indicated when some potential participants in the network had suggested that their requirements in this field were already fully satisfied – by long established, commercial suppliers that they had dealt with for many years. As might be expected, therefore, the business aspects of partner histories were also incorporated within the network business plan; thereby making a direct appeal to historical precedent to assert the credibility of the organization's constituent members to potential new members.

The business development proposals for the network also addressed issues of market failure, channel strategies and other commercial concerns but again ran into problems with European Commission rules when it came to actually planning to *do something* about marketing. In fact, the commission rules would not allow funds to be spent on

anything *described as* marketing, despite the establishment of the network as an independent, self sustaining organization being an explicit goal – which meant that potential fee-paying participants and service customers had to *somehow* find out about the network and what it was offering! This was a problem that was addressed in terms of presentation: the business plan could not include a marketing strategy, but it could have a "dissemination plan"; the plan could not propose publicity materials but it could propose "dissemination products"; the network could not have "agents" but it could have "contact points". The elements of the business development plan were accordingly couched in these convoluted terms – a strategy informed by the experience of members of the *management team*, in particular *Johannes* and *Giovanni*.

It can be argued that these considerations really rooted the network in the traditions of Commission interventions in science in Europe, and in particular concerns about whether such interventions breached free trade agreements about the operation of the market. That is, the envisaged mission and sustainability of the network was constrained by a set of traditions linked to trade concerns that were not really relevant to the case in question – formal rules in this regard had not 'moved with the times' or with the changing vision of European science policy.

Inevitably, these kinds of mismatches began to suggest the possibility of a clash between the private and public sector concepts interacting in the play of identities in the network. This became most apparent when it was realised that if the network was successful in attracting any commercial income before the European funding period was completed, the central funding would be consequently reduced. The assumption of the network partners had been that (and the contract rules were rather unclear on this point) the network might be allowed to develop some surplus to ease the transition to independence. The potential for conflict seemed to escalate as further inconsistencies and problems were identified. In each case, the normal sponsor response seemed to be to hold to the 'letter of the law' (however illogical) or even to impose new and more constraining regulation, that fitted with the traditional understandings of the European situation (touched upon earlier in this discussion). This resulted in a number of specific problems, in relation to financial rules being modified just as the project was initiated and formal and confusing reminders from the Commission's representative to the steering group about it's "contractual obligations". This progressive and simultaneous formalisation and confusion eventually resulted in the consultant firm Tartan needing to formally monitor other members of the core group to make sure that the minutiae of the financial rules were observed (such as retaining boarding passes for flight expenses - the Commission would not accept receipts without these).

Further formalisation also seemed to be imposed in the way that the commission insisted on reviewing and editing all 'dissemination' materials before they were released – holding the network tightly to initial definitions in the contract (even though these were simply the best that could be done at the time) and not allowing new understandings to affect the implementation of the plans. The Commission seemed to have become ultra-traditional... in fact it could have been described as

fundamentalist. Unfortunately, this seemed to provide opportunities for some rather painful conflict to develop, as the following discussion suggests.

A clash of traditions

Earlier in the discussion of this case some centrally important aspects of the story (from a perspective of understanding tradition and its effects on collaboration) have been related:

- The patterns of informal working based on past practices amongst *management team* members.
- The influence of the 'grand tradition' of European integration.
- Aspects of identities and differences between them from scientific communities, and the public and private sectors.

All of these elements seemed to have an influence, to a degree, on aspects of the case captured in this last strand. Most particularly, they link to an apparent 'battle for formality' at the heart of the science network project. For example, a representative of the consultancy firm *Tartan* commented after a meeting with the *sponsor* that "...points discussed reflected a very strict definition of rules and regulations", which did not fit well with the informal operations of the *management team* (as discussed earlier), which was blurring the boundaries of involvement. As the Tartan representative again commented, another of the management team, *Johannes*, "sticks his fingers into all of the work packages". As has been discussed earlier, there was perhaps a hint of over-zealousness, as the *sponsor* presented lists of documents which she would need to formally approve, made detailed advance rulings on travel costs for split purpose meetings and defined the Commission role in some detail.
In fact the notion of a 'management team' per se was problematic for the *sponsor*, who commented that "...the steering group should be steering the project" – a reflection of traditional practice in collaborative European projects, but perhaps quite different from the way that an independent (although not for profit) enterprise would usually be run. Given that the development of such an enterprise was the purpose of the project, it seemed to be accepted by the *steering group* that there must be day to day management, but some members were also concerned that things should proceed with rather more formality – *Giovanni* often organised facilities at the last minute (or not at all – one steering group meeting took place for two days in a hotel lobby because of this), delivered documents late and arranged some matters behind the scenes with *Johannes*.

This pattern of informality, which these central partners had fallen into, also included relations with a Spanish representative, who also seemed to obtain a rather more blurred and broader role than envisaged in the contract – A *Tartan* representative commented that "work package leaders should stick to the contract". Commenting more generally on the spread of roles and activities, a *Tartan* representative commented that "the project is for all – it's not just a *Johannes* and *Giovanni* show", and also that they wanted "all of the steering group to be on good terms and gel". Others also wanted the project to proceed in a consistent and logical manner, even to a level of some precision in the formal documents – the European institute representative commented that there was a need for "logical order of words and linguistic corrections in the minutes [of the kick-off meeting]".

This conflict did move, for a while, to a personal level – *Johannes* developed the impression that the *sponsor* "...is personally against me" and had "...mis-addressed emails so that they did not reach me". He eventually tried to bypass the *sponsor* through a letter direct to her superior, but this only resulted in a firmer position on the formal rules – which did not suit *Johannes*' normal way of working very much. Looking over the data, there does not seem to be much to suggest that this was a personal conflict from the *sponsor*'s point of view – until the letter to the superior was sent – rather just a difference in *modus operandi*.

The important point about all of the formality-informality conflict issues – although they could also be argued to be connected with issues of power – is that they are also related to the informal traditions amongst partner groups, the 'grand European project' and identity issues (the European institute's precise scientific approach to minutes, for example). That is, there is a sense of – possibly – where these issues are *coming from*, that they are connected to different times, places and groups which 'reach in' to the focal situation through the explicit or implicit evocation of tradition. It is also particularly important to note that the situation and circumstances were different from previous projects in which *steering group* members had participated and really required some adaptation. The participants were all people with 'rational' scientific qualifications and backgrounds, and/or practical commercial experience – and yet old patterns persisted.

Case summary: points for theoretical development and discussion

The principal elements for theoretical development and discussion in chapter 7 -

with the key points from the other cases – are collated below:

Key element of findings	K	Ι	S
The ways in which the patterns of action in the central group seemed to	\checkmark		
be (at least partially) based upon the re-application of old answers, re-			
interpreted (perhaps insufficiently) in the context of the case.			
The potential roots of emerging traditions, in this recycling of practices	\checkmark		\checkmark
and procedures in serial collaborations amongst the same partners.			
The ways in which inter-personal and organizational traditions persisted	✓		
whilst the initial requirements of the collaboration, and unfolding			
circumstances as it was developing, identified the need for adaptation.			
The <i>deliberate establishment</i> of precedent as a basis for continuing roles	 ✓ 	\checkmark	\checkmark
in the future (the notion of founding members, discussed earlier,			
conceived by the steering group).			
Central notions about the purpose of the collaborative project were	✓		\checkmark
historically grounded (perhaps even outdated in part) in similar projects			
within large-scale programmes that were in their sixth generation (in			
Shils' (1981) sense of the term) at the time of the collaboration.			
Similarly to the point above, the link to even larger scale 'grand		\checkmark	\checkmark
traditions' - that is, historical and international traditions of cooperation			
and involvement across the whole of Europe over decades – which have			
an effect upon the shape and action of the local collaboration.			
Identity positions and related traditions of judging, speaking and acting		~	
having an impact beyond what might be regarded as their 'proper			
sphere' (for example, scientist identities and the role of notions of			
precision in the collaborative events and discourse).		<u> </u>	
Sectoral identity differences and ways of going about things, which		\checkmark	\checkmark
become especially visible in comparison and seem to resist the apparent			
rational need for adaptation.			
The ways in which all of the elements above play in local situations of	\checkmark		
action, and the extent to which the different players might be thought to			
be aware of what is in play.			

Table Key (principle, not sole, thematic connections to) -K: tradition and knowledgeI: tradition and identityS: tradition and structure

Figure 20: Table of key findings, European science network case

As with the preceding two cases, this case provides potential enrichment of theoretical conceptualizations about tradition. It also helps to support the development of understandings about the relationships between tradition and the related themes explored in chapter 5. The discussion now, therefore, proceeds to the integration and development of the theoretical insights from this and the preceding cases – and reconnects with the literature – in the following chapter.

CHAPTER 7: THEORETICAL DEVELOPMENT AND DISCUSSION

INTRODUCTION

This chapter integrates and develops the empirically grounded case findings set out in the preceding chapter and connects with the literature explorations presented earlier in the thesis. In doing so, there are three particular aims which this chapter seeks to accomplish.

Firstly, the discussion connects directly with notions of tradition, through a focus on the foregrounding of traditions in the researched situations of collaboration. Some possible consequences of this are elaborated, which help to explain how the foregrounding of traditions might be expected to apply to all collaborations. In doing so, this part of the discussion seeks to establish tradition as a potential source of suboptimality, perhaps a contributory factor in the development of collaborative inertia (Huxham and Vangen, 2005).

The first part of the discussion functions as a prelude to the main substance of this chapter; to consider the reasons for, and processes of, the play of tradition(s) in collaboration. In addressing this, sections focussing on tradition in relation to structures, identity and knowledge are presented. Whilst this discussion develops inferences that *may* be more generally related to the process and content of tradition, the focus here is particularly upon interorganizational situations.

The third aim of this chapter is accomplished in a final section that reconnects with culture, in order to develop some inferences which perhaps challenge the integrative conceptualization presented in chapter 5. Some thoughts about the consequences for

collaboration and the *possibility* of the generalization of this material to other organizational contexts are also touched on in the concluding part of the chapter.

COLLABORATION AND TRADITION(S): COMBINATION AND CONFLICT

It seems clear that tradition is likely to be highly relevant to interorganizational collaboration. The situations of collaboration have the potential to foreground the operation of tradition as process, and to highlight the traditions that are in play in organizational life. In fact, it seems that collaborative settings allow us to observe the long-term phenomena and processes of traditions in (relatively) short timescales. This is essentially related to the argument that the presentation of interpretations in acts of practice allows us to discuss tradition even at the level of the event (Gadamer, 1998). This is particularly the case for the involved researcher, having to understand and connect with the different parties – Ricoeur (1981) has argued that a balance of distance and closeness defines a reflective relationship to tradition, a balance that researchers must necessarily maintain.

Collaborative settings present a rich set of acts and events. The consequent ability to contrast different positions (distant in relation to some participants, close in relation to others – and frequently changing) therefore makes differences clearer, and supports critical engagement, if it is sought. The cases examined in this research, set out in the preceding chapter, seem to demonstrate this. However there is a need to explicate more fully the reasons for this foregrounding of traditions in collaborative practices and forms, which I have suggested above. I suggest two particular reasons for this.

Firstly, such forms and processes will inevitably involve significantly different organizations. If a collaborative, interorganizational form is thought to be required it suggests that the problem or opportunity that is presented is beyond the scope of a single organization to address (Gray, 1989; Everett and Jamal, 2004). The multiplicity of involved parties must therefore *necessarily* involve differences in one or more of these dimensions of scope:

- Geography collaborations may be formed with the intent to cooperate across, or collectively address, wider geographical areas than the participants could address in isolation (the formation of joint ventures may often be motivated at least in part for this reason, as suggested in: Child and Yan, 2003; Choi and Beamish, 2004). The European science network examined in this research is a good example of a collaboration where such a concern for geographical scope is important. In this kind of collaboration, it might be particularly expected that differences in traditions of a societal nature might be likely to be present (although other levels of difference are not necessarily excluded).
- Community there may be a desire to connect with different communities (perhaps, although not necessarily, within a relatively modest geographical area) that have different needs, understandings or information which the collaboration seeks to engage with (this is well described in public sector cases, for example: Milewa, Dowswell and Harrison, 2002; Osborne, Williamson and Beattie, 2002). The national science groups case, in which the framework supported sub-groups addressing different technical micro-specializations within the same geographical area, is a good example of a situation in which the community factor was

important. In such cases, differences in professional traditions (amongst others) might be expected to be observed.

Capability – collaborations are often formed with the desire to combine, or access, complementary capabilities (see, for example: Hitt, Dacin, Levitas, Arregle and Borza, 2000; Mothe and Quélin, 2000). The Regional business network case is a good example of this situation in two ways. Firstly, it sought to develop business skills in technology-led companies through information events. Secondly, it helped to connect experienced managers from the venture capital establishment to the technological specialists with ideas for development. As with the previous example, in such cases differences in professional traditions (amongst others) might be expected to be observed.

The reasons for collaboration suggested above may of course apply in combination, and might not necessarily be seen in the same way by each participant (Huxham and Vangen, 2005). There may also be a number of other reasons for collaboration, including such pragmatic matters as meeting the rules for public funding. For the present argument, however, the important point is that each of the dimensions of difference outlined above brings with it the possibility of some difference in established traditions – whether of societal, professional, organizational or other local origin and maintenance. In the situations of collaboration these different traditions are brought into play. As alluded to earlier, they may then become more discernible in ensuing confusion or conflict, or through comparison. This comparative foregrounding of traditions in collaboration seemed to be apparent in all of the cases examined in this research. The second reason which suggests that tradition is important in the context of collaboration – evidenced in the cases investigated in this research – is related to the importance of difference discussed above. More particularly, the differences in tradition are connected to traditional answers to problems, that the disparate participants have been used to applying and therefore seek to apply again. In this way, the nature of these answers and the underlying interpretations *as* traditions becomes apparent, in that there is a deficiency in the adjustment to different circumstances. In many cases this can be expected to lead to conflict, which is resolved in one of the manners described by Shils (1981) – there is an absorption of one tradition within another, some kind of integrative synthesis, or the extension of a dominant tradition which over-rides others. In the cases studied here, there are examples of each of these processes:

- In the European science network, the situation seemed not to be fully resolved, but the conflicting traditions of informal collaboration amongst the central actors seemed likely to be absorbed within the more formal structures of European cooperation; formal rules would be observed and attended to in a way that provided the central group with the ability – as much as possible – to continue their established working practices. The eventual formalization of this was in the establishment of 'founder member roles' within a European not-for-profit corporate vehicle for the ongoing collaborative network.
- In the national science groups, there was an obvious synthesis between the professional and academic traditions of science and the historical tradition of the government programmes in the field and the lead institution's role within in it. Perhaps also, at a deeper level, the traditions of public service and the private

sector transactional tradition were synthesised in the collaborative, relatively unchallenged delivery of the government programmes.

• In the regional business network, we can see that the dominant tradition of the establishment, based on the influence of 'named' individuals, powerful organizations and official opinions, overwhelmed the scientific-rational traditions of the technology-led small firms ostensibly at the focus of the collaborative endeavour.

It is important to note, therefore, that the outcome of the conflict of traditions (or comparison, in more gentle modes of interaction) in collaboration is not necessarily the development of a rationally designed solution which is an unarguably 'better answer'. As each of the examples above suggests, the important factor is that there is some preservation of tradition, either of the dominant through power relations or some more balanced integration or absorption. Even when this is a relatively benign process, this seems to be more about the preservation of the past than addressing the challenge of current and future problems. This suggests that the supposed rational benefits of collaboration may not obtain, in part, because of the practice of working with and preserving traditions. This limits the acceptable forms of working and the range of interpretations that the collaboration - whatever its original diversity - will support in the long term. This, of course, raises some further questions about the detail of why this should be so, how it comes about, and whether participants are fully aware of the traditional bases for action in play in these situations. To address this, the discussion now addresses three particular thematic relationships, which help to illuminate the process of tradition in more detail. These thematic relationships are between: tradition and structures; tradition and identity; and tradition and knowledge.

TRADITION AND STRUCTURES

In connecting the data presented earlier with discussions of structures and tradition, some elements of a possible framework begin to be suggested. More particularly when theoretical and empirical elements are considered together, the data suggest two continua that represent key characteristics of the relationship between structures and tradition. This framework is developed below by returning to some of the key elements of the findings set out in the preceding chapter and establishing connections back to the literature which both help to enhance understanding of the data, and enrich theories of tradition.

Breadth of structures

Structures of differing extent can be observed in each of the cases reported in this thesis. That is, three different scales of collaborative community can be identified – relatively small *groups of individuals*, more extensive *networks*, and finally broad *societal* groupings or patterns. The review of these different scales or types of structure begins by considering the simplest – instances of small groups of interacting individuals within a collaboration.

Relatively small groups of collaborating individuals were important in all of the cases researched in this study. Two particularly pertinent examples, however, were the *management team* and *steering group* in the case of the European science network.

Although these groupings could be seen as a formal level of organization, in practice much of the business and issues of the broader collaboration were handled by a relatively informal group of 'old friends', working together in their own familiar ways - the formal organizational terms were developed by this group, that sought to work together. Similarly in the national science groups, the operation of the lead institution, its government sponsor and the hired consultant to assist in the design of the project was more collaborative than contractual in practice. In a further example within the regional business network, there were a number of temporary groupings of sponsor and seeker firms (for the purposes of seeker evaluation) which had the potential to continue and develop. However in the latter case, interestingly, the small groups were not 'naturally occurring' (groupings were assigned by the coordinating organization) and perhaps helped to highlight some differences operating at a broader network level, rather than helping to establish a collaborative tradition amongst the participants. These 'naturally occurring' and deliberately constructed small groups both help to establish a connection with the notion of ties discussed in the earlier literature chapter. In particular, Granovetter's (1982) conception of strong and weak ties seems to be important here, in two ways.

Firstly, as discussed at length already, much of the progress and decision-making in the collaborations occurred within a small group(s) of relatively intenselyrelated/relating participants. This is consistent with the facilitation of action by a relatively narrow group of central actors described by Reagans and McEvily (2003); that is, there is a reliance on *strong ties* to help the collaborative agenda progress – even if the actual collaboration is much wider than these central groups (Elliot and Homan, 1999). It has been suggested that *project-focussed* collaborations – that is, where there is a *clear* collaborative agenda and an understanding of the desired outcomes – are likely to be best supported by a relatively small and self contained group (Hennestad, 1998).

Secondly, however, the collaborations at the heart of this research also had aims that were related to capacity building and/or supporting participant development and innovation. In agreement with the literature, these collaborations – in common with others with similar aims – also incorporated *weak ties*, bridging communities and integrating capabilities (Lazerson and Lorenzoni, 1999; Assimakopoulos and Macdonald, 2003). In doing so – as the later discussion will seek to elaborate – these collaborations necessarily encountered societal levels of diversity and culture (Lunnan and Kvålshaugen, 1999). For the present, however, the discussion will remain focussed on the immediate issues of weak ties and the conformations of these observed in the cases in this study.

This discussion of weak ties leads to the consideration of the *network* level of structures. A particularly potent example of an informal, social network was evident in the regional business network case. This was apparent in the way in which some (especially larger and conventionally more powerful) organizations seemed to be cognisant of, and be connected to, names and organizations beyond the scope of the collaboration. They also seemed to draw on their connections to, and understanding of, these more distant players in forming their judgements; this was described in the case narratives presented earlier, and is developed further later in this chapter.

Informal networks were also evident in the national science groups – particularly the personal networks of central actors in the lead institution, and the semi-formal professional networks of the participating scientists. They were also observed in the European science network where the professional communities, and links amongst senior managers and scientists in the leading European institutions, seemed to be especially important. Of course, in all of these cases the central collaboration was (at least in part) officially constituted *as* a network; however, it is interesting to note that the unfolding of events and decisions seemed to be equally – if not more, in some circumstances – related to the informal networks of the participants.

The importance of networks is not surprising in the present study, since the collaboration literature also emphasises their importance. Examples of the network forms discussed in the literature include: communities of practice and best practice networks, as described by Rosenkopf, Metiu and George (2001), Hartley and Allison (2002) and Breu and Hemingway (2002); regionally focussed industry networks (Sydow and Staber, 2002; Sydow and Windeler, 2003); and international research consortia (Mothe and Quélin, 2000). To a degree, the cases considered in the present study demonstrate overlap with all of these examples, as the discussion above has suggested. However, as has also been discussed earlier, these formally constituted or recognised network forms of collaboration were also observed in conjunction with informal or personal social networks.

Indeed, it seems reasonable to argue that a strong feature of all of the cases was the challenge to the notional boundaries of the collaboration. This challenge was posed

by the different kinds of informal, practice-related structures that were involved in the processes of the collaboration, as well as the overlapping, formally constituted networks. As we have already seen, the boundaries could at some times be seen as artificially wide, since the progress and decision making of the collaboration took place, in some situations, within smaller groups than the formal decision-making membership collective – as discussed earlier. At other times the boundaries seemed to be too narrow, as the events and decisions within the collaboration seemed to be influenced by participants' connections to networks (in the cases studied here, either or both personal and professional) which extended beyond the confines of the formal collaboration, as has been discussed above.

Indeed, there seems to be evidence of even wider groupings having some influence upon, or role within, the collaboration. These groupings seemed to extend beyond what might be recognised as participants' networks (either espoused or observed). The kind of structure that was apparent here was the *societal* grouping (or pattern). This suggests that the findings of the research seem to align with Granovetter's (1985) perspective, that action is embedded within a network of social relations, in an ongoing recursive process shaping *both* individuals and institutions. That is, the data collated for this study connected with the reflexive participation in social networks suggested by Chaserant (2003) and Sydow and Windeler (2003) and the consequent upscale (macro level) and downscale (micro level) effects that result from this participation. On the micro scale, the recursive shaping of the interpretive frames of individual collaborators was suggested by the ways in which perspectives of members of professional communities were enacted in particular interactions within the development of the collaborations. A good example of this is the concern for 'precision' in the European science network case. On the macro scale, the maintenance of larger scale structures was suggested in the role of the 'establishment' in the regional business network and the concept of a 'European Research Area' which was at the heart of the European science network. Other powerful examples include the appearance of the even larger scale concept of the 'grand European project' in the European science network, and the structure of science as a profession in the two science-focussed collaborations. In all of these examples there seem to be links to (inter) national levels of community which are grounded in broad cultural notions - of an organizational/professional or wider societal nature - which were most readily apparent in the use of their particular languages and practices.

The use of specialist languages and community-specific practices can be connected with differences in community interpretations (of events, aims and so on). On the face of it, this complexity would seem to limit the possibilities for mutual understanding and shared values in collaborations which incorporate such differences (Garcia-Canal, Valdes-Llaneza and Arino, 2003). Griffith (2002) has suggested that this complexity might begin to move towards some consensual integration as (inter) organizational cultures are formed from the compounding of the values, norms and beliefs of involved parties; however, the cases investigated in this study seemed to demonstrate the endurance of differences in communities of interpretation. This seems to be observable even at the individual/group level (the 'old familiar partners' patterns of working in the European case, for example), but especially at the network and broader levels. Perhaps the potential for integration suggested by Griffith (2002) might therefore be limited to the development of traditions of cooperation (Olberding, 2002), rather than agreement on substantive areas of difference. The broader, cultural differences that influence the possibilities for successful collaboration (Gray, 1989; Huxham, 1996; Himmelman, 1996) seem to be more refractory.

Interestingly, however, national cultural differences did not seem to be an issue in the European case studied here, despite the fact that such differences have been emphasised as problematic by many authors (for example: Steensma, Marino, and Weaver, 2000; Barkema and Vermeulen, 1998; Chen, Chen, and Meindl, 1998). Connected to all of these cultural discussions is the suggestion that large-scale structures or conformations introduce problems of shared meaning and interpretation (Salk and Shenkar; 2001; Gould, Ebers and McVicker-Clinchy, 1999). This seeming interpretation of culture and structures (especially at widest of the structural levels discussed here) seems to suggest that each of the structural levels might be usefully regarded as types of *interpreting communities*; particularly since culture has been defined by some authors as systems of shared symbols and meanings (see, for example: Hatch, 1993; Martin, 2003; de Certeau, 1997). However Alvesson (2002) has insisted that culture should be distinguished – analytically – from social structure. Some discrimination between the two concepts *can* be gained through exploring the

related dimension of tradition – perhaps seeing a culture as the combination of an interpreting community and its traditions of interpretation, which together produce and reproduce it.

Depth of traditions

Having discussed the structural levels that seemed to be important in the cases investigated in this study, and suggested a characterization of them as interpreting communities, the focus now moves more directly to the consideration of tradition. This change of focus moves us from notions of structural breadth to notions of conceptual depth. That is, there is clearly a temporal aspect of tradition, which helps to make our understanding of the interpreting communities elaborated earlier rather more two-dimensional. From the findings discussed in the preceding chapter, three 'depths' of tradition within the communities can be observed. These I characterize as:

- Available the basis of the authority of a tradition (or elements of a tradition) is apparent in actual events (or original inventions) which participants in the tradition have been involved with.
- Accessible the 'original meaning' of the tradition is to some extent recoverable
 some of the participants in the tradition were involved in its foundation, or can speak for the veracity of an authoritative text.
- Ancient the 'original meaning' of the tradition is lost in time, or only reachable through authorities which cannot be regarded as definitive (for example, a text reproduced and reinterpreted over generations).

To explain these categories further, each is elaborated in turn in the discussion that follows below.

The notion of a temporally available tradition is exemplified in the case of the national science groups, in which a 'model' for a sectoral science group was developed through group participation. As the collaboration progressed, this model was employed in the development of four successive groups, each based on the original concept but with some small variations in each. These variations were minor in nature, for example the ways in which related organizations in each sector were recruited (unsurprisingly, directory resources and access routes differed) and the kind of exploratory questions that the groups initially addressed (related to specific technical content). Essentially, in the development of each of the subsequent groups the same answers were repeated because they had been satisfactory before. Although each group could have been organized differently, the location of each of these subnetworks within a longer programme, and in particular the references to the initial scoping and design session seemed to be a sufficient justification of the approach for each group. It is this initial scoping session that particularly represents the accessible foundations of the tradition in this case - participants in the collaboration were directly involved in this event.

Another example of an *available* tradition was the development of the notion of 'founding members' in the construction of a legal form for the European science network. This notion seems to be an almost 'pure' appeal to the past as the basis for future roles and practices within the collaboration. As with the previous example, participants were directly involved in the events that established this element of tradition. If the network endures, the outcome of these events would support special,

authoritative roles for participants from certain organizations long after their involvement in the founding events was forgotten; but at the time of the research these events were actually taking place, and the knowledge of them was therefore directly available to participants.

The final example of an *available* tradition that will be discussed here relates to the regional business network. In particular, the 'same as last year' approach to the processes defined at the inception of the second annual programme. As in the case of the 'sectoral group model' discussed above in relation to the national science groups, the reason for continuity in this case was simply that it was an established process that had been acceptable in the past. As with the earlier example, some minor adaptations were incorporated but the process was largely unchanged from the preceding year. This example differs from the national science groups case, however, in that there was some dissent about the acceptability of the process, but the (traditionally constituted?) chairman of the collaboration did not allow any of these critiques to hold.

It is possible to speculate about the difference in the establishment of this prototradition and the relationship of its foundational circumstances to its probable fate. Firstly it seemed not to have been developed from a *group* process and therefore never had the quality of an 'agreement', which might perhaps help to limit dissent in the future. Secondly, since its continuance seemed to be rooted in the personal (charismatic?) authority of the chair, rather than the authority of the process as an established answer, it might not survive in the face of a change of chair – as had occurred at the time this present discussion was written. In this case perhaps we are observing tradition as process rather than an enduring feature, although all of the case examples exhibit aspects of both. Perhaps there is a continual ferment of possible answers to problems and whatever is seen to work (however poorly the reasons for this are understood) has some potential as the foundation of a tradition, where it becomes (or is constructed to be) concordant with the interpretation of a particular community.

The immediately preceding part of the discussion suggests some agreement with the theoretical survey presented earlier in this paper, which suggested that the 'truth' of tradition is invoked in the interpretation of the past into the future (West Turner, 1997; Giddens, 1984, 2002), and is anchored in particular events (Boyer, 1990). However, the discussion of the 'same as last year' approach in the regional business network case also highlights the scope for invention: many of the participants had not been present the previous year; the chair did not seem to refer to any historical documents in establishing the precedent; and the legal status of the central organization in the network was being changed at the time of the study. The conditions for interpretation were rather vague and moveable. Assuming precise continuity would place considerable reliance on the assertions of a central actor, who (it could be argued) had some performative as well as communicative motivations for the appeal to precedent. This seems to support the possibility that the anchoring of traditions may be open to a degree of 'retrospective invention' in relation to the events concerned (Hobsbawm and Ranger, 1983; Thompson, 1990; Giddens, 2002)

as any original interpretations of events may be reinterpreted (Friedrich, 1972; Dobel, 2001) and answers adapted to the new circumstances at hand.

As the preceding discussion has indicated, all of the nascent traditions – with temporally 'available' foundations – may well have been likely to change in character over time, perhaps also in combination with a movement to broader interpreting communities. That is, the traditions may well move from the group level at which they must arguably arise, although the boundary between a group and a network is by no means concrete or easily definable. Wherever the line is drawn, I would argue that the broadest level, a societal community, could not have *unmediated* access to the formative event of a tradition – but more of this later.

As the tradition is spread amongst a broader network and the time from its foundation fades through memory to history, it changes in character from an *available* to a temporally *accessible* tradition. For example, the patterns of cooperation in the national science groups had an underlying consistency and character, for which the reasons would not have been immediately apparent to many participants in the collaboration. However, some of the central actors in this collaboration could connect with memories of the time when the central institution was a government agency and the *deeper* roots of this class of collaborative programme were established; that is, the original meaning was in some sense recoverable through those who could connect directly with the formative times. It seemed likely that this tradition would continue, since it had become accepted by a much wider group and the essential elements of it were reproduced in iterations of

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programme documentation. Similarly, the patterns of cooperation between some of the most important national scientific organizations in the European science network reflected some international connections and structures which were established by some of the participants (although some were much more *ancient* in character). Despite the potentially recoverable origins of these traditions, they had still been handed down and transformed through a number of 'generations' (largely, iterations of programmes in these cases), and were thus more accessible than available in character.

As established earlier in this thesis, and reinforced in the present chapter, traditions can be regarded as methods for dealing with problems, adapted by communities in response to changing circumstances over time (Dobel, 2001). The transmission of a tradition to a new 'generation' obtains because the new 'generation' finds that the old answer provided by tradition serves their needs, perhaps with *some* re-interpretation reflecting new community understandings or circumstances (Shils, 1981). The findings in this study seem to support the suggestion that as long as the answer supplied by tradition can be adapted to the current circumstances (defined and interpreted by the community) it will serve (Schochet, 2004; Shils, 1981). The beginnings of a more deeply embedded authority (Friedrich, 1972) of tradition can therefore be seen as multiple iterations of traditional answers are accepted as true, and those truths are accepted by communities (Phillips, 2004).

Even as traditions become embedded in communities, it can be seen that the normative character of them is not complete since practitioners can both support self-

evident traditions, but necessarily draw on other understandings as they re-interpret them into their own changing circumstances (Shils, 1981; Warnke, 2004; Clifford, 2004). When the 'roots' of the tradition (whether real or imagined) are still accessible, it may be the case that this open-ness to interpretation inherent in tradition permits rejection – and where the founding precepts are certain, perhaps it is most likely to be possible to 'get behind' and radically critique them? In reflecting on this, the question that arises is what the limits of interpretation and critique might be for traditions which have become 'detached' from their roots, being interpreted over wider tracts of time and space as they develop an *ancient* character.

The findings indicate many examples of traditions which seem to be *ancient* in character. The complex notion of the *establishment*, involving certain traditional facilities and formalities in complex national and international networks, was observed in both the national science groups and European science network cases is a good example of this. The notion of the establishment itself is recognisable from literature which is centuries old (for example, the mechanisms of 'interest' and 'preferment' in Austen's novels, which link personal connections to social groupings with possibilities for personal success). Arguably in common with many ancient traditions, it is not necessarily the case that members of the establishment would even question the basis of their network influence – or perhaps even be aware of it. It seems certain that the 'founding events' of such traditions are unlikely to be recovered. Although speculation might lead back to, for example, ancient notions of nobility (an undoubtedly invented tradition), the roots in this case are expected to be multiple, contorted and difficult to unpack.

Similarly, some of the *professional communities* engaged in the collaborations studied in this research were not necessarily connected with their original founding rationales, and were arguably concerned with the traditions and dignity of the notion of a profession *per se*, rather than the particular demands of *their* profession. For example, one of the professional bodies (a society of which I am a member) relevant to both the national science groups and European science network case declares itself to be about 'the advancement of the chemical sciences'. That is probably true; but it also has a royal charter and issues honorary fellowships to its members (and others) who have achieved seniority and power in the public sector or industry, rather as an ancient university might.¹⁵

In another more general example, there were deeply embedded sectoral differences in practices and approaches to the collaboration in the European case, which become especially visible in comparison. These seemed to be resistant to the apparent need for adaptation and could not necessarily be connected with any founding events which might have helped to define the rationale behind each sector's treasured traditions and stock of adapted answers. If a transitional point is to be suggested, perhaps it could be argued that the central notions about the purpose of the European collaborative project were historically grounded to the point that they were *beginning* to take on ancient characteristics – the overarching European programme was in its sixth five-year long generation (in Shils' (1981) sense of generations) at the time of

¹⁵ It is important to note at this point that I am not criticizing either this particular learned society – or others – just highlighting the traditional aspect of their constitution.

the collaboration. At that temporal distance one could suggest that any personal connection with the 'founding events' becomes indistinct – and perhaps that the adaptations and re-interpretations in the intervening years begin to give the meaning of the tradition some sort of autonomy?

In this way, well-developed ancient traditions can be seen as *authoritative* modes of complex theorising that also seem to be *consensual* in nature at the level of the community. At the extreme limit, however, Heidegger (1962) suggests that we are not even aware how the authoritative operation of tradition wrests its autonomy from its original sources.

"Tradition takes what has come down to us and delivers it over to selfevidence; it blocks our access to those primordial 'sources' from which the categories and concepts handed down to us have been quite genuinely drawn."

Heidegger (1962: p43)

Breadth and depth – the interpreting-community spaces of tradition

The preceding discussion has emphasised the dimension of time in the construction and operation of tradition; Shils (1981) in particular emphasised the connection between these temporal and structural conceptualizations in the social sciences. The suggested interconnection is perhaps most clearly established as the link between the *conversation* as a short phenomenon of intersubjective relations and *tradition* as a long one (Moran and Mooney, 2002; Ricoeur, 1981). This theoretical observation helps to connect interactions within small group settings – the location of the conversation – with the eventual development of traditions and their adaptation into new forms. As traditions mature – if they survive, in the manner discussed earlier in this chapter – they tend towards some kind of autonomy, becoming less dependent on meaning in relation to the founding 'reasons' and more dependent on patterns of repetition and agreement within the structures of community interpretation (Gross, 1992; Giddens, 1990). It might therefore be expected that traditions can be observed in range of combinations of temporal depth and structural breadth, as the findings of this study seem to indicate. This range of possible interconnections is summarised in figure 21:

and the second second	Group	Networks	Societal
Locatable in recent events / inventions / interpretations	the case is the		acting company (an acting the
Recoverable 'core' of possible 'original' meaning or events	ke slankers ong tra onli skoepsi	e ace at profishing i	
Events / inventions / interpretations are lost in time		lay, even if that use	

Figure 21: Tradition and structures

It must be emphasised that although the preceding discussion has highlighted separate levels in the diagram for analytical purposes, it is to be expected that multiple depths of tradition may be at play even in a single event. In addition, connections to broader community levels are necessary to make the interpretation meaningful. Most particularly this latter point relates to the role of language as the widest, and most ancient in character, system of traditional meaning; a system that it is impossible to intelligibly 'get behind' (Gadamer, 1998). This is not to say that change and adaptation is impossible; operating with a range of connected traditions in each event or process provides a basis for reinterpreting, rejecting or changing aspects of any of them. But this freedom surely becomes lessened as the basis of a particular tradition becomes inaccessible and uncertain – with what are we contending, even if we *are* aware of tradition *as* tradition?

It is also important to note that the inter-related depth of traditions and breadth of community of interpretation might be perceived differently by different participants. This might be especially the case as the membership of interpreting communities changes. To a newcomer, the tradition might seem ancient (or perhaps initially meaningless), whereas older members might see an available level of foundational reasoning within it, if such is still accessible. At the micro-limit of the interpreting community- an individual – it can be argued that there can be no 'ancient' tradition; such deep levels require a broader community, even if that involves the dead rather than other living participants in the tradition¹⁶. What is argued here is that the development of deeper levels of tradition – achieving an 'ancient' character – requires some disconnection from the founding circumstances. This disconnection

¹⁶ An imagined example of this limit case might be a mother-to-daughter heirloom that is passed on with an accompanying, secret story – the interpreting community will at times consist of only one person, but there is always a chain to which this person connects.

from the birth of meaning cannot occur until the tradition spreads beyond its originating group, which means that it is most likely to relate to a broader grouping.

So much for the micro and short-term temporal limits in the development, interplay and spread of traditions. Approaching the possible interconnection of levels from the opposite direction, it can be argued that any *societal* level of interpreting community is unlikely to have been 'all there' when the founding events of a tradition occurred (or were invented). Traditions at the broad societal level are therefore necessarily approached through (or involve) distanciated means, if they are to support very wide communities of interpretation. At best such distanciation will provide *some* degree of accessibility to the foundation (perhaps an identifiable link to some original participants who are still available), but in most cases these foundations themselves may be matters of interpretation.

Taking all of these points together, this suggests that each tradition may be both one and many at the same time – available or accessible in character to some, ancient to others, whilst its 'meaning content' *in practice* might seem to be shared. It suggests that there are certain interconnections where it is going to be more possible to 'get behind' and critique traditions (the available and accessible combinations at the group and network level). However, it also suggests that certain interconnections of tradition seem to emphasize and underline the autonomy of the societal interpretation of tradition, rather than support agent-centred 'aware' interpretations and critique. In summary, it can be argued that there are levels within tradition and its use which

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seem more open to agency, and levels which are more about the 'facts' of society, as suggested in figure 22:



Figure 22: Tradition, agency, society - some possible connections

This is a significant enrichment of theories of tradition, but it is consistent with the definition of agency offered by Emirbayer and Mische (1998: p966) –

"the interpretive processes whereby choices are imagined, evaluated and contingently reconstructed by actors in an ongoing dialogue with unfolding situations"

- And the work on tradition and interpretation of Gadamer (1998) and Ricoeur (1981).

This is a significant and helpful framework for understanding aspects of interorganizational collaboration. Since these arguably operate at the network level, with complex interrelationships that often span multiple groups and societal structures (Huxham and Vangen, 2005), conceptually they are 'caught' right in the centre of figure 22. As the collaboration seeks to develop its own sense of purpose and interpretations – perhaps with some success – it necessarily encounters relatively autonomous societal traditions which support wider community interpretations. These relatively autonomous traditions are difficult for participants to change or adapt in isolation; changes in such traditions usually require larger-scale interactions (Shils, 1981). Enduring consensus that is acceptable to the collaboration participants and to the 'home' organizations might therefore be expected to be difficult or painful to achieve.

It could therefore be argued that collaborations operate at the painful limit of agency, where meaningful action can involve compromises about our relationship to our 'home' organizations or societal groupings; compromises which can begin to challenge notions of who we are, if change and progress is to be effected. This leads to questions of identity, which are addressed in the following section.

TRADITION AND IDENTITY

The preceding section of the discussion has described how the 'depth' of tradition can be considered at three levels, and how this is inter-related to the notions of social structure that are also pertinent to the field of collaboration. Thinking about the notion of identity – the relation of things to themselves – it can be argued that a similar characterization of the dimensions can be applied. The problematic notion in this case is perhaps that of the *organization*.

Many studies of organizational identity are based on social identity theory and therefore relate to individual perceptions of identity (e.g.: Dukerich, Golden and Shortell, 2002). Self-identity in organizations has been characterised as tenuous and established in a combination of deliberate control processes and interactive interpretation (Alvesson and Wilmott, 2002; Hatch and Schultz, 2002); the possibility of a stable organizational identity therefore seems to be somewhat undermined. It can be suggested that if the organization is small enough, it may have a relatively coherent identity as a group but for larger organizations this notion of identity becomes a looser and looser metaphor (Dias, Gonzalez-Vera, Hibbert and Ridge, 2005; Vaara, Tienari and Santti, 2003). The notions of the network and societal group, however, still seem to retain conceptual coherence and were also recognised by the participants in the collaborations investigated in this study - for example, in self-references describing professional communities or nationalities. For that reason, I argue that it is useful to retain the levels of group, network and societal pattern, established in the preceding section, for the present discussion.

At the group level, the establishment of a set of 'founding members' within the constitution of the European science network can be seen as an identity action that draws upon the support of tradition – in this case, interestingly, prospectively rather than retrospectively. The suggestion is that the founding members established a significant event (foundation) as a marker; this would give some support for the

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identity of this group. It is to be expected that this identity that would perhaps be reinterpreted over time as the enactment of it (through access to privileged positions in the network) became more significant than the originating event – although the *concept* of 'foundation' might perhaps always be important to it.

In a similar way, the development of the central collaborative group in the regional business network into a not-for profit company ensured the continuation of influential roles for central actors, within a (small-group) corporate identity. However, this was also based on traditions in subtlety different ways from the first example. In this case there was some connected movement - articulation - between the original founding of the collaborative group as a network, and the operation of the central actors over time within their roles. Essentially, their roles could be articulated with the patterns of action already established and the development of the corporate identity could be seen as a 'natural progression'. This sense of a natural progression was perhaps aided by articulation with the field of operation of the network - technology based entrepreneurship. The traditional development pattern in this field was that connected academic groups would work within the network context, as they gained maturity, and then subsequently launch as independent spinout companies. The central group was in some ways, therefore, participating in its own traditional mission. This suggests that the development of the not-for-profit organisation from the looser collective could also be described as anchored to traditional notions of what an organization operating in the private sector should be namely, a company.

Considering the network level, there were identity actions in the development of the establishment of sectoral groups in the national-level case, but again these were articulated in relation to networks with more established traditions (such as an existing cross-sectoral national group). They were also anchored in deeper traditions, through the involvement of learned societies and alignment with long-established international patterns of scientific cooperation. Similarly, the development of the international network in the European case was connected to older, more established traditions of cooperation, supporting identity notions such as the 'European Research Area'.

Within the context of networks, the use of connections to, and signals drawn from, traditional identities¹⁷ to present oneself as a suitable collaborative partner, and the apparent need to suppress 'unfavourable' identities in the regional business network (academic and scientific identities in particular) adds another layer of complexity. That is, the identity trajectories of individuals within a network. Similarly, the case of the lead institution participants in the national science groups indicates the importance of certain identities in the maintenance of an authoritative position in collaborations. In the case of the *lead institution*, this identity was clearly articulated in relation to a professional community, its traditions of cooperation and government-sponsored interaction. Furthermore, these patterns had been established and maintained over generations of government-supported programmes.

¹⁷ Or identity groups – most particularly I am thinking here of the difficult and complex notion of the *establishment*.

Thinking about the articulation of individual or small group identity notions in relation to professional communities also connects with another, deeper level. That is, the anchoring of such professional identities in relation to the broader and deeper traditions of science¹⁸. Most particularly, in the cases examined in this research three aspects of this anchoring seem to be important: the connections with the specialized language and procedures of science; the regard for certain quality and professional standards; and the traditions of collaboration within the scientific community. It seems that this anchoring in the traditions of science provides some support for identity positions.

These positions become apparent *as* identities in the way that the related traditions of judging, speaking and acting seemed to inform action beyond what might be regarded as their 'proper' sphere. A particular example is they way in which the scientist's concern for precision affected the discussions of the European science network, even in areas that were concerned with organizational and business planning – rather than scientific matters – where such concerns were not necessarily relevant. There is some correlation here with Lehrer and Asakawa's (2003) work on European R&D centres operated by Japanese and US multinationals; R&D specialists were perceived to be embedded within their communities of practice, drawing their identity from a number of intersecting groups which constituted their social environment. Lehrer and Asakawa found that the traditions of interaction amongst such research communities were important factors in successful constitution of these R&D centres.

¹⁸ The examples related to the science community are particularly relevant to the cases presented in this thesis, but similar arguments might tentatively be considered for other professional communities, and their particular traditions.
The overlap with Lehrer and Asakawa's (2003) work leads to the discussion of the broad, societal level connections between tradition and identity in the collaborative cases investigated in this study. A good example of this is suggested in the ways in which the dominant central organization in the national science groups case seemed to be able to exert an influence on the scope of the collaboration. It seemed to be able to do this through connecting with its authoritative past; this was articulated, in relation to formal and informal networks, to anchorage in notions of governmental identity that were long since consigned (officially) to its history. A further example of (perhaps weaker) societal identity connections could be suggested in the regional business network case. In this case the central group's use of traditional and high-status settings and symbols could be seen as an attempt to fit in with perceptions about the status of the venture capital arena. This implied congruence of identity was arguably intended to underpin an authoritative position (at least for some individuals) within the entrepreneurship community.

The preceding examples have provided indications of the anchoring of identity at more superficial levels in broader and deeper societal traditions, but perhaps the best example of this relates to the European science network. This network was most formally and pointedly connected to societal level traditions – in particular the 'grand tradition' of historical cooperation between nations across the whole of Europe over many decades. Connection to this tradition was explicit in the cooperative rules of engagement specified in European community guidance and implicit in the multiple sites of operation and dissemination chosen by the collaborative participants. The identity of the science network was thus explicitly and implicitly informed by

connections to this grand European tradition. This has overlaps with Salk and Shenkar's (2001) work, which connected social identity formation in joint ventures with *national* social identities, which they described as dominant influences in the 'sense making' processes adopted by those involved; commentaries suggesting that the European community is developing the characteristics of a sovereign state are not unknown.

These broad levels of connection between identity and tradition relate to Shils' (1981) suggestion that the individual sees herself as a consistent identity over time, rooted in particular past experiences and traditional definitions such as 'nation' and 'profession'. The role of these traditional definitions has been alluded to extensively above, but a particular aspect of this anchorage requires a little more discussion, since this suggests roots which extend beyond the bounds of individual memory.

Looking at this another way, it can be suggested that identity-defining memories can be rooted in a sense of the past that extends beyond the individual and is more properly connected to conceptions which are about, and 'belong to' communities (Clifford, 2004; Phillips, 2004). In this vein, Schochet (2004) suggests that such identity conceptions may operate at multiple shared levels and be open to challenge and adaptation. In this discussion I have sought to emphasize this, by highlighting the interplay of levels of identity actions (identity assertion, or the identity-legitimated acts) and the articulation of these actions with other identity notions, ultimately finding anchorage within broad networks or societal patterns. This connects the dimension of tradition with the notions about identity that people enact, and also with Fiol and O'Connor's (2002) observation that collective identity is built upon the interaction of individual and structural components. Taking all of that on board leads to the suggestion of figure 23.



Figure 23: The articulation of identity and tradition - I^{19}

In summary, it is suggested that multiple levels of calls upon tradition are involved in the development of identity positions or claims (*assertion* on figure 23) that endure. That is, if such claims are accepted *as* traditions at societal or network levels they are (or become) resources for legitimate action (*authority* on figure 23). The loop on the diagram therefore relates to a range of possible timescales. At the lower limit, the timescale could be an immediate connection with established authority – for example in calling upon well established societal notions such as nationality, professions and so on. At the upper limit, claim may be more a matter of the development over time of authority in a new or adapted tradition – that is, the gradual development of different notions of identity that gradually obtain acceptance over wider communities and the course of time. However, it is possible that identity assertions may *not* reach the 'bedrock' of a long-established, widespread and authoritative tradition.



Figure 24: The articulation of identity and tradition - II

In such cases a more appropriate conceptualisation might be that shown in figure 24. The smaller loop in this diagram (compared to the previous graphic) is intended to suggest that, whatever the timescale, it is not necessarily the case that the call on authority *will* obtain, in any enduringly meaningful way. That is, there are those identity claims and sources of authority which do not become so deeply embedded (or fail to be articulated in relation to existing depths). Such claims will therefore have a briefer, shallower and more parasitic existence. The rather loose use of high

¹⁹ The trajectories of assertion and authority on this diagram are intended to signify complex

status symbols and settings in the regional business network, discussed at length earlier, may be such a case.

This is an important matter for collaborations, where issues about identity are often connected with ideas about the legitimacy of membership. There can be a great deal of uncertainty about what is represented by whom (Huxham and Vangen, 2005), which makes notions of inclusivity problematic (Gray, 1989). The complex flows of articulation, relating action and anchorage indicated in the diagram and elaborated in the earlier discussion help to inform our understanding of this problem. They suggest that having a firm notion about the identity *of* a collaboration (except in the case of relatively clearly delineated professional communities) might itself be problematic, unless this notion is a coarse aggregate or a rather loose metaphor.

In addition to supporting an understanding of how incoherent collaborative identities might arise, the anchorage of tradition is also important in perhaps providing some understanding of how a collaborative community might endure. The notion of anchorage provides for the repetition of practices (Shils, 1981; Boyer, 1990), and connects with the link between role definitions with recurrent practices suggested by Perrone, Zaheer and McEvily (2003). Indeed it has been argued that such practices, in their repetition, help to define communities (Lave and Wenger, 1991).

This multi-level 'anchored but articulated' play of identity supported by tradition seems, therefore, to be relevant to informing our understanding of collaborative

movement, potentially through many levels - they should not be regarded as specific routes.

processes. It also provides for some understanding of collaborative structures; this argument is consistent with the conceptualization of such structures as negotiated, postmodern forms of organization (Poncelet, 2001; Williams, 2002). However, as alluded to earlier, this does not make the process of understanding their identity any easier.

In addition, the actions of external authorities (especially large societal groups with well-established traditions) may constrain this play and negotiation of identity and structure (Assimakopoulos and Macdonald, 2003; Alvesson and Wilmott, 2002; Lawrence, 2004). This potential for conceptual incoherence might therefore have the potential to spill over into functional incoherence, as the participants in the collaboration may not know what it is that they are collaborating *in* or as – and therefore have difficulty in defining their own role identity within it. This perhaps leads us to questions of knowledge, to which the discussion now turns.

TRADITION AND KNOWLEDGE

The consideration of tradition as the basis for interpretation set out by Gadamer (1998) would suggest that many inter-relationships between tradition and knowledge could be explored. Since collaborations may be expected to involve the play of multiple traditions, as earlier discussions in this chapter have suggested, the inter-relationships between tradition and knowledge might be expected to be rich and revealing in such circumstances. The particular focus here is therefore suggested by the research findings and concentrates upon the ways in which the carriage of

tradition *as* knowledge can be understood. Three particular modes of carriage were suggested by the findings:

- Deliberate the active and purposive invocation of tradition as knowledge, for example in the justification or rationale for a course of action, or perhaps to accomplish some feat of persuasion.
- Intuitive where a call on tradition as knowledge can be observed and is *consistent with the purpose* of those calling upon it, but does not seem to be an *obvious* and *purposive* invocation of tradition (or the past) as such.
- Passive where traditional knowledge is being transmitted in discourse, but it is seems that it is not being deliberately or intuitively applied to forwarding purposive action.

Although the discussion here will largely focus on the acts of individuals, it is recognised that for knowledge to have a communicative or performative role, there must be an interpreting community that recognises and legitimises it (Lave and Wenger, 1991; Brown and Duguid, 2001). Bearing this in mind, it is suggested that the levels of group, network and societal pattern described in the preceding sections have been sufficiently argued and developed as a suitable framework for understanding the types and nature of such communities. For this reason the relationships between the three modes of carriage presented above and the different levels of structure (already established in an earlier section), will be attended to later in this section. Before reaching that integrative discussion, each of the three modes of carriage are discussed in turn.

Firstly, the deliberate carriage of tradition in knowledge is considered. In this study, this is particularly well exemplified by the actions of the chair in the regional business network. That is, he made a direct appeal to the past in the justification of processes, and also seemed to use traditional settings to influence (or fit in with) perceptions about the venture capital arena. These actions present the elements of the past, of tradition, as sufficiently true in themselves but were also being applied deliberately to gain mastery of the agenda and support of influential players. The fuller discussion of this situation in the preceding chapter has already suggested that the authoritative truth of tradition was being asserted in this case. A similar deliberate connection with the truth claims of tradition can be suggested in the establishment of precedent as a basis for continuing roles in the future, in the notion of 'founding members', developed by the central actors in the European science network – which would establish significant roles for them in perpetuity (or as long as the network endured).

In the cited instances there is a suggestion of deliberate interpretation, of choosing not simply to belong to a tradition but to use it symbolically (Ricoeur, 1981). However, there must be a question about the degree to which the tradition has been 'opened up' in such moves, allowing its construction to become exposed – especially in the case of the nascent or potential tradition alluded to in the second of the instances above. The question here is whether, in the deliberate call on tradition *as* tradition, the tacit character of traditional knowledge is exposed and to a degree, explicated. Whilst there is a tacit dimension to all knowledge, the risk that opening up this tacit element can result in the destruction of its meaning (Polanyi 1966) is surely most significant in relation to tradition, where the founding concepts might then be seen to have little authority in themselves; the truth claims come to be based on successful repetition rather than content. Alternatively it can be argued that the explication of the *truly* tacit component of tradition is not feasible (McKeon, 2004; Schochet, 2004). This argument is perhaps strongest in the case of language, which Gadamer (1998) sees as bound to traditions of interpretation.

Taking these two lines of argument into account, we might expect that the *deliberate* use of tradition might more usually apply to 'younger' traditions and smaller scales of structure – for the more developed and fundamentally central a tradition becomes to a wider community of interpretation, the less likely it is that they will be able to get behind it and recognize it *as* tradition (Giddens, 2002; Ruthven 2004).

This leads to the consideration of the carriage of tradition in a rather more *intuitive* mode. It can be suggested that just such a process may have been observed in the emerging traditions of the national science groups discussed in the preceding chapter. In particular, the deliberate recycling of practices and procedures in the development of the individual sectoral collaborations was, to a degree, based on commonsense notions of 'not reinventing the wheel'; but it was also connected to the development of the founding model, and the successful reapplication over time of this model. As discussed earlier, there were small modifications as each iteration of the process of group formation took place, but the same pattern was essentially preserved. However, there might have been reasonable arguments for more radical differences in to be considered in the development of each group. Although each was essentially the

same in structure and initial agenda, there were major differences from group to group in relation to: the public/private sector mix; the role of regulation in the particular industry sector; and the typical organization size and munificence.

More generally within the context of the national science groups, the importance of the maintenance of a body of historical knowledge – both formal and informal – seemed to be important. That is, it perhaps helped to support the continuance of collaborative traditions and underpinned roles within the inter-related groups and networks. Further reflection perhaps also suggests the carriage of deeper layers of knowledge; the roots of processes and structures in the industry-sector collaborations could be connected to long-established cross-sectoral networks, and the former knowledge carried within the lead institution from its former governmental role.

From the conclusion of the preceding discussion, it might be suggested that the boundary between the intuitive use of tradition and the passive carriage of it can be rather blurred. An example of – what seems more clearly to be about – passive carriage seems to present itself in the case of the regional business network. The 'establishment' group's ability to make what seemed to be rather poor decisions about company prospects seemed to be based upon traditional grounds, such as 'names' from the past, for example. There was also a suggestion of some instances of apparent discrimination, which limited equitable participation in the processes of the collaboration (or the interests of the individual participants) and did not seem to involve *deliberate*

invocation of tradition as a justification; they seemed, therefore, neither deliberate nor intuitive but rather more representative of passive modes of carriage.

A perhaps deeper but less pernicious example of passive carriage was suggested by the unquestioning application of professional standards and quality procedures in the national science groups. Participants in these groups might quietly agree that the certain quality standards are empty paperwork, yet their application is not something that is publicly discussed as being open to alternatives - terms like 'ISO' perhaps had something of the character of an ancient authority. Interestingly, during the time of this research the pre-eminent American institution in this field decided that there was no-one superior to itself that could accredit it. It therefore declared itself to operate to a certain ISO standards, which somewhat undermined the rational, independent evaluation principle that the standard was nominally supposed to represent. An element of passive carriage of tradition could also be suggested in persistence of small-group traditions in the European science network. This particularly related to the management team's practices, as the initial requirements of the collaboration and unfolding circumstances identified the need for adaptation. Similarly, but connected to traditions operating on a larger scale, notions about the purpose of the collaboration were historically grounded in similar projects, all within large scale programmes which were in their sixth generation (in Shils' (1981) sense). This is important since the scale and scope of the programmes seemed to carry their own momentum, together with an accretion of arcane rules which had the status of authoritative knowledge.

Overall, the cases presented here suggest, in line with the argument presented in an earlier chapter; that tradition can be an important influence upon interpretations and is therefore carried in knowledge. But the very process of identifying and engaging with these traditions – as explored here – also shows that tradition is itself subject to interpretation. In this way it can be argued that the authority of traditional knowledge, which is most potently expressed in the passive carriage of prejudgements and habits of understanding that are difficult to explicate (McCarthy, 1994; Gadamer, 1998), is not unlimited. Most particularly the preceding argument has shown that the possibility of redescription or challenge at some level can be possible, although the deepest layers of traditional knowledge – such as language – will be most resistant to this (Friedrich, 1972; Gadamer, 1998). Building on earlier inferences about language, it can be argued that it is perhaps *the* irreducible tacit component of all knowledge (Polanyi, 1966; Nooteboom, 1999).

Languages are normally relatively large-scale features (especially if they become enduring traditions) defining significant communities, for example national or technical collectivities (Chikudate, 1999). This helps us to consider the ways in which the carriage of tradition in knowledge involves explicable and deeply tacit elements; integrating this with earlier discussion suggests figure 25.



Figure 25: Tradition and knowledge - carriage and character

This also raises some questions, however. In particular, given the irreducibility of tacitness in deeply traditional knowledge, there is a need to understand how traditions can change or be adapted over time. The role of (and space for) interpretation from iteration to iteration has already been discussed, but the study of collaborations also helps to shed some light – supporting Shils (1981) point that the adaptation of traditions can occur through the interaction with others. Such interactions have been studied at a range of levels, from small groups to entire societies (Molotch, Freudenburg and Paulsen, 2000; Shils, 1981; Schochet, 2004). These studies have suggested that commonality or conflict at the superficial, explicit level might give some understanding of possible differences at a tacit level. Although the linkage cannot be simply assumed (Chikudate, 1999), the connection between the uniqueness of certain networks and institutions, traditions and tacit knowledge has been explored by Sydow and Staber (2002).

This suggests that overcoming the issues of conflict in collaboration may require connection with deeper tacit levels of traditionally-constituted knowledge. For example, in this study both the relative absence of conflict in the national science groups, and the eventual progress despite conflict in the European science network, might be suggested to be related to the tradition of professional respect amongst scientists (Staropoli, 1998). Alternatively, the progress of cooperation in the European arena might be seen as passive carriage of a well-established tradition; Phillips, Lawrence and Hardy (2000) refer to the role of unquestioned traditions (with other factors) in supporting institutional power in interorganizational collaborations. Clearly time and space for social interaction will be necessary for participants in collaborations to penetrate the tacit levels of knowing and understand (or negotiate around) the traditions of others (Geppert and Clark, 2003).

TRADITION AND COLLABORATION(S): RECONNECTING WITH CULTURE

In order to complete this discussion, there is a need to connect with the final parts of the integrative conceptualization presented at the close of the earlier literature chapter. The preceding sections of the discussion have engaged with tradition – the focus of this study – and the connected concepts of identity, structure and knowledge. Although the findings from this study are not necessarily argued to support any definitive arguments about culture in the context of collaboration, they do allow some brief inferences to be discussed. This helps to suggest some thoughts about the relevance and utility of the earlier integrative conceptualization.

A return to culture

The focus of this work has been upon *tradition* and *collaboration*, but as the literature discussion earlier in the thesis suggested, tradition is perceived to be interwoven – in association with notions of structure identity and knowledge – with culture. Indeed, as pointed out earlier, Alvesson (2002) has explicitly stated that culture is anchored in tradition. This seems to be the appropriate point, therefore, to briefly explore the connections between the discussion in the preceding sections of this chapter and theme of culture, with a particular consideration for collaboration.

The first and most important point is that preceding discussions have suggested the ways in which tradition may *deliver meaning* into the cultural domain, through the agency of individuals acting within an interpreting community. The kinds of meaning that seem to be important are forms of knowledge (our interpretive relationship to concepts, things and other persons) and notions of identity (the interpretive self-relation of persons and groups). Meaning is central to symbolic conceptualizations of culture (Alvesson, 2002; Hatch, 1993; Martin, 2003) and tradition seems to provide some purchase on the basis of interpretation, in communities (Lave and Wenger, 1991; Mohrman, Tenkasi and Mohrman, 2003), that makes meaning possible; it is, therefore, perhaps useful in enriching Hatch's (1993) focus on *interpretation* in the construction of culture. A related point that is also important is that a plurality of interpretation that may be involved in each event; the findings of this study have connected identity moves, network ties and knowledge claims with the same tradition, and these may have relevance at more than one structural level.

The final point above connects with the earlier discussion of the dimensions of structural breadth and temporal depth across which the play of traditions may be observed. Although Alvesson (2002) has argued that culture should be studied as something distinct from structural conceptualizations, I suggest that the link between interpreting communities, traditions and the delivery of cultural meaning justifies some consideration of structure. However, I would agree with a rather flexible and loose conceptualization of this; the findings of this study suggest that concepts like the group, network and (broad and flexible notions of) societal patterns are useful, whereas a more conventionally reified conception – the organization – did not seem to be analytically useful in the same way²⁰.

The findings of this research also seem to provide some support for Alvesson's argument that micro and macro scale forces can be seen at work in the construction of culture, although this work adds a temporal dimension to his conceptualization – by seeing the small-group interaction level as also involving elements of tradition, which might be generated and maintained at a smaller scale and perhaps for a more limited time.

By paying particular attention to collaboration, we are reminded of another layer of plurality in the interpretation and authority of tradition in the expression of culture; participants may often come from diverse professional, national or other societal

 $^{^{20}}$ The 'lead institution' in the national science groups case might be thought to be an exception – its traditionally rooted identity seemed to be important to the unfolding of that collaboration. However, it is important to underline the fact that the government-sponsored collaborative programme was a small part of its modern, diverse business – many other members of the organization in different business

groupings which can have different traditions or interpretations of an *assumed* common tradition. Huxham and Vangen (2005) have shown how this diversity of interpretation can be observed even at the most deeply embedded levels of tradition – language – when even 'ordinary' terms can be the focus of confusion.

It seems unsurprising, then, that cultural differences are often regarded as a source of collaborative difficulties (Huxham, 1996; Gray, 1989; Himmelman, 1996). Although this has most often been investigated in relation to national cultures (Steensma, Marino, and Weaver, 2000; Barkema and Vermeulen, 1998; Chen, Chen, and Meindl, 1998) the findings of this research suggest that the multiple and polysemic play of traditions at different levels could lead to cultural confusion associated with a *range* of structural scales. It seems, in fact, that at least for the situations of collaboration, there is considerably more overlap between notions of structure and culture than the previous conceptualisation (presented at the close of chapter 5) suggested. When the findings of this thesis in relation to tradition are also considered – in which the cultural/structural notion of the interpreting community seemed to be important – the link between culture and structure is reinforced. Perhaps the following re-conceptualization of the overlap between tradition and culture might be appropriate:

sectors would not connect with the communities in the case in the same way, or perhaps recognise them – the central actors seemed to be the important factor in the case.



Figure 26: The inter-relationship of tradition and culture – re-conceptualized

Whilst I suggest that this revised figure is concordant with many of the problematic aspects of collaboration that have been discussed earlier (where blurred boundaries are common and structures and cultures are equally matters of debate) it is offered only tentatively. Whether such a conceptualization can be robustly concretized and have wider applicability beyond the field of collaboration, is a question beyond the scope and aims of the present thesis.

The final points on culture and structure, discussed above, bring this chapter to a conclusion; the integrative conceptualization presented earlier in this thesis has now been explored, elaborated and tentatively challenged in the context of the findings from this research. It should be emphasised that the contribution of this work rests on the connections between tradition (with the related themes of structure, identity and knowledge) and collaboration. This concluding section has merely provided a

tentative framing perspective for this, to help close the argument. These final discussion points have perhaps also helped to indicate some potential areas for further research, which are addressed explicitly in the following chapter.

CHAPTER 8: CONCLUSIONS

INTRODUCTION

This chapter provides some concluding thoughts on the contribution provided by the work presented in the preceding chapters. Following the presentation of those thoughts, the contribution is contextualised by considering some potential limitations and areas for further research, which completes the presentation of this thesis.

THOUGHTS ON THE CONTRIBUTION

It seems appropriate to briefly summarise the contribution that this thesis makes. This is addressed in three areas below, outlining the contribution in relation to: the theoretical understanding of interorganizational collaboration; implications for collaborative practice; and the development of theories of tradition.

The theoretical understanding of interorganizational collaboration

The findings from this research help to develop the body of theoretical knowledge on collaboration in three ways. Firstly, the findings on structures and tradition help to demonstrate that, in patterns of interpretation, different scales of community may be having an influence within the same set of events. That is, interpretations by an individual participant of a particular communication or event might be dependent upon their traditions within a small group (perhaps this might often be a group contained within the collaboration), or upon their traditions within their professional network, or even upon traditions related to a broader, societal grouping. These effects are important because collaboration participants remain connected to all of these interpreting communities; their lives within them mean that the authority of community interpretations is continually reinforced in the repetition and transmission

of tradition, in which they participate. In this way, as figure 22 presented earlier has suggested, collaborations may be operating at the boundary between the possibilities for agency and the pressures of society.

Secondly, the research has shown that besides having an interpretive role in the processes of collaboration, tradition can also be observed in a performative role. That is, traditionally constituted knowledge may be used as a brute justification ('because that's what we've always done') or persuasive lever for supporting a course of action, and this might be effected either deliberately or intuitively. The research also suggests that traditional knowledge might also be carried passively in certain situations, allowing tradition to have some role in the shaping of events 'using' participants as a medium. It is important to emphasise, however, that in each particular event there might be multiple interpretations and the divisions between the categories of deliberate, intuitive and passive carriage of traditional knowledge may be somewhat blurred.

Finally, the findings suggest that there may be multi-level flows in the construction of identities and identity positions in collaborations. Such flows assert claims and receive authority from tradition not just across different structural scales, but also across different temporal depths. Within collaborations these interpretive, identitysupporting flows are complex, and asserted identity claims may not always reach the authority that comes from anchorage in deeply embedded traditions.

Implications for collaborative practice

From the preceding discussion it can be argued that there are some significant implications for collaborative practice. The frameworks presented in figures 21-25 (preceding chapter), used with appropriate support, may provide participants in collaboration with some scope for reflecting on the various traditions at play within their own interorganizational relationships, to help them make consider:

- What the potential for collaboration is are there appropriate cooperative traditions which may be drawn on, or is the collaboration's mixture of traditions neutral or unfavourable?
- Whether new traditions can be developed amongst the collaborative group, which can function alongside or (temporarily) instead of the participants traditions, to establish some authority for practices within the collaboration?
- What the degree of mutability of traditions brought to the collaboration is can new, useful traditions be developed from them, or are they relatively shallow and amenable to re-interpretation, or are they more ancient and authoritative?
- How established traditions might provide some means of persuasion, through appealing to authoritative community interpretations anchored in long-established traditions.

These points are in the main concerned with whether those seeking to influence collaborations hope to shape meaning and practice; or whether they must 'bend' with the prevailing winds of tradition. These considerations would not, of course be an adequate consideration of all of the complexities of collaboration, but would need to be part of a broader pattern of reflection involving many other concerns and issues.

The development of theories of tradition

The third and final area of contribution provided by this study is in relation to theories of tradition, on two levels. Firstly, as presented earlier in this thesis, there is a small but significant body of existing theory on tradition; however this has not been investigated and empirically grounded in data in organisational studies. This work provides that empirical grounding, in cases which stretch over a range of related but different settings. It is to be emphasised that this is different from studies which look at historical analysis (and therefore do not connect with the processes of tradition 'in vivo') or those which naively use the word 'traditional' in a manner almost synonymously with 'old' (and therefore have a naïve idea about the content of tradition as something which is purely in the past).

A proper understanding of tradition includes the inter-related and sensitive consideration of both process and content, and this leads to the second level of contribution. This study has explored and characterised tradition in temporal and structural dimensions, and developed a richer conceptualisation of the processes supporting identity and knowledge/interpretation within those dimensions. It helps to enrich and extend the existing theory and potentially set the stage for further interesting studies.

LIMITATIONS

The process of defining a research project inevitably requires that some choices have to be made about certain aspects of the study. In this section, therefore, three key choices and their consequences are discussed. These relate to:

- The number and type of cases investigated.
- The concomitant geographical and cultural characteristics of the cases.
- The use of an observational versus an interrogative approach.

Each of these is discussed in turn below.

Choice of and number of cases

The choice of cases in this study represents a number of pragmatic and methodological choices. Firstly, grounding of the research in multiple cases required some compromises between maximising the number of cases that could be incorporated and being able to deal with the data collection and analysis effectively. The three cases chosen for this research reflect this need to compromise; on the positive side, they also have sufficient differences in scale and scope to provide some potential consideration of the impact of differences in a number of situational characteristics. Nevertheless, it is recognised that alternative approaches which looked at a larger number of cases in a more limited manner, or perhaps a single case in greater depth, might represent viable alternatives which have a different mix of strengths and weaknesses. The former would perhaps give a greater degree of confidence about the generalizability of the findings, whilst the latter might provide an additional degree of richer insight about the play of tradition in a particular case.

In terms of the types of cases investigated, there was a degree of pragmatism in selecting sites which provided degrees of both connection and difference, but which were also within the scope of consultancy interventions that were available. Fortunately there were a number of alternatives that presented themselves which were attractive and appropriate research sites, but it is recognised that a freer selection might also have provided some different options. However the intimate access available by operating in a participant-observer role in the three collaborations was invaluable to the collection of data and the generation of understandings of the situation – as the earlier chapters have suggested.

Characteristics of cases

All of the cases selected for this study had a degree of overlap, in that they were all (at least in part) concerned with developments in science and technology. However, all of the cases had characteristics that also made them broader than this apparent issue focus might suggest. For example, all of the collaborations included both private and public sector participants and organizations which ranged from SMEs to large corporations, public bodies or government departments. It might be argued that some degree of focus on a particular type of collaboration might have provided more focussed results, although such wide variations in organizational and sectoral characteristics are not unusual in interorganizational settings. Similar thoughts might apply to the variations in geographic scale, since the cases researched in this study included regional, national and European collaborations.

The compromise here lies between arguing that the findings are of sole or particular relevance to collaborations concerned with science and technology (within Europe), or suggesting that they might be amenable to broader generalization. I suggest that the broader characteristics of the cases (and their importance in the construction of the findings presented earlier), suggests that the latter point of view is reasonable.

Nevertheless I would agree that further studies looking at radically different types of collaboration, and perhaps different regional, national or international conformations, might add further to the perceptions of generalizability, or add subtle qualifications or developments to the findings. Arguably, of course, we might never be fully confident until every possible case had been examined.

The observational approach

Both of the preceding points for discussion are connected to the style of research adopted in this study, and inform the compromises associated with it. The general issues surrounding participant-observation have been thoroughly discussed in an earlier chapter, and will therefore not be revisited here. Some specific points, however, do merit some additional discussion. Most particularly, the potential insights from the participant-observation approach may be argued to depend, to a degree, on the level of understanding of the situation that the researcher already has before engaging in the research. In these cases, my background in the natural sciences was useful in understanding the language and practices of many of the participants (especially in the national science groups and the European science network) and MBA-level training and industry experience was useful in connecting with some others.

The potential down-side of this ability to connect might be some risk of reinforcing existing assumptions; however, it is argued that the methodology and theoretical frameworks applied here help to reduce this risk, as does the development and testing of material for conference, journal and book chapter publication. Nevertheless it

would be interesting to consider how this process might have proceeded in a setting with which I was more unfamiliar – might this support a greater level of criticality, or just confound the process and lead to rather superficial, mundane findings?

The researcher's voice in interpretive research

In addition to the point discussed above which explores the relevance of a common background and level of understanding in conducting this type of research, there is also a need to consider the researcher's particular voice in the presentation of the work. In some ways this has been addressed by explicitly identifying processes where the researcher's intervention is influencing the data that are observed (as a participant with a process role this will inevitably occur), and explicitly describing the researcher's formal role in the particular research situations.

Another angle that needs to be addressed, however, is the emotional tone or value dimensions that are suggested in particular elements of data descriptions. Such components of the description serve two purposes. Firstly, they can be used in a construction to underline a particular piece of comparative argument – for example, the role and influence of 'big firms' in the regional business network case was compared to my own 'very small' firm at the time of the research. Whenever presenting this kind of reinforcing rhetoric, it is helpful to offer alternative possibilities that show the researcher's own reflection *around* the point, for example notion of being (possibly!) disregarded as a member of a very small firm in this text was followed with the following discussion:

"Interpreting this precisely is difficult, but since it is unlikely that the badge readers would have heard of me as an individual or even the firm mentioned on the badge, it seems reasonable to suggest that this 'unknown' status was the problem (rather than some explicit rejection)" p174

The second point about the role of value dimensions in data is that it has a rhetorical value in two particular aspects; it makes the data more engaging and interesting to read, and provides more of a sense of the lived reality of the situation (Golden-Biddle and Locke, 1993).

Such elements of description provide have a useful function, then, but there is perhaps an argument for reflecting on the kinds of values that are informing my voice in these accounts, and where they come from. This could potentially lead to an endless cycle of self reflection, but I engage here with this process of reflection in relation to some very summary aspects of my personal life and history, and comment on the relation that this might have to sensitivity to certain aspects of the data. The points for reflection that I would like to offer are:

- I was raised in a poor family, and this may lead to a particular sensitivity to extravagant displays of wealth and/or power.
- As a gay man, issues related to (especially stereotypical or power-related) gender roles may be something that I am particularly sensitized to.
- I would probably describe my overall moral framework as being largely consistent with my upbringing as an Anglican.

I could go further in developing such examples, but the general point is clear: particular sensitivities to certain types of data may be informed by my personal background. None of this is surprising in relation to theories of tradition and interpretation (see especially Gadamer, 1998).

The important questions that one has to ask about this are: were unavoidable (for anyone) personal, immediate reactions to situations *all* that was involved in the gathering and analysis of data; and do the narratised data accounts make it clear where the data have a certain value-related tone? In relation to the first point, the answer is clearly no – the data collection and analysis had several dimensions which helped to provide a degree of robustness:

- Multiple types of data were employed including documentary sources, where the researcher does not have to depend on the keenness of the observation of the moment.
- Reflective note-taking, occasionally within analytical diagrams but also in separate diary files, was employed to help me think about my own particular role and reasons for interpreting data in certain ways (an example is provided in chapter 3).
- The approach used theory, albeit initially in very open ways, to form framework for engaging with the data – the analysis was not led by my own particular agenda.
- Data and work in progress were discussed with colleagues (supervisory and peers) in the preparation of publications and at conferences and seminars.

In relation to the second point, I suggest that the answer is yes. Discussions with examiners and colleagues seem to suggest that people are very aware of value dimensions of data and the use of rhetorical tropes in the narratised accounts; that is, such approaches are used quite openly in a way that allows others to make their own judgements and suggest other interpretations.

A final point to consider in relation to the researcher's own voice is the degree to which the process of research has been a process that has impacted on my own life and developing understanding. For me, the research has provided some genuine surprises that have changed my mind about some major issues:

- Having come from a poor background and benefited from education I had a strong belief in the notion of ability being linked to reward and opportunity. I do not now think that this obtains in some situations and that there are significant ethical issues, associated with the influence that tradition allows people to exert in some networks to the disadvantage of many others.
- I believe that I started the research as a very pro-European individual; however the way in which the 'European project' seemed to be progressing with its own momentum in a manner that conflicted with rational notions for progress has left me tending towards the 'anti' camp.
- Perhaps most importantly and fundamentally for me, the engagement with the theme of tradition has not led me to believe that it is a purely negative, old fashioned or bad construct. I would suggest that it has an almost universal role, but that it becomes a problem when people are *completely* unreflective about it or think that there is some form of 'pure' rationality that can overcome it. For

me, this has suggested that it is worthwhile to seriously engage with traditions which are explicit in their traditional construction – which has led me to an ongoing re-engagement with my own religious tradition.

These final thoughts on the personal impact of the work are intended to underline the point that the research conducted in this study has been a process which I have taken seriously in relation to my own opinions. It has not changed my attitude to conducting this kind of work, which I consider to be a useful and effective approach. I recognize the role of my own subjectivity in informing and enabling such an approach, but I do not believe that it fatally undermines the utility of it given the reflections and limitations set out in this chapter; I do also, however, recognize the value of the reception and challenge of the work by other academics. Eventually, if it finds a reception, the contribution of this work may translate from the short term of current conversation to finding a place in a developing tradition (Ricouer, 1981).

Final thoughts on limitations

Conducting the research presented in this thesis inevitably involved subjective engagement and a number of compromises, but it is suggested that in negotiating these a suitable balance has been struck, which has permitted the development of a useful contribution. That this contribution might be open to further development, adjustment or extension is beyond doubt; I would strongly agree with the Polanyi's (1966) view that all knowledge is provisional, and alternative views may always be constructed.

AREAS FOR FURTHER RESEARCH

There are a number of possible avenues for further research that would potentially help to reinforce, contextualize or extend this study. Some of these have already been alluded to in the discussion above. In particular, it may be useful to extend this research into different settings. For example, collaborations which cover alternative geographical and sectoral conformations, especially where the collaborative focus did not include science or technology; in such cases, are areas where professional languages and practices may be less important, shaped by and shaping traditions in the same way? Single-organization settings might also be interesting, in order to ascertain whether the apparent lack of importance of the organizational level in the play of traditions observed in this study also applies in their 'isolated' circumstances. Extending the research in some or all of these directions might therefore provide some additional purchase on the inter-relation of tradition, structures and identity.

A further angle for potential extension would be to consider some more explicit engagement with research participants on the theme of tradition, perhaps in parallel with observational research. This might add to the discussion of tradition and knowledge, and the modes of application of traditionally-constituted knowledge. If this was to be undertaken, however, great care would be needed in evaluating the significance of espoused opinions about tradition. It can be imagined, for example, what the natural scientists participating in the three collaborations explored here might have thought about a traditional basis of their knowledge. That is, there is a conceptual problem with commonsense notions about tradition – often it seems to be equated simply with something that is 'old-fashioned' and 'bad'.

A final area for potential development could be focussed research upon the interrelation of culture and power with tradition. Such a study might require an historical angle, to establish in more detail the repetition, adaptation and re-interpretation of cultural forms and their anchoring in the processes and interpreting communities of tradition – work that has already been begun in the current study. However, it might most usefully consider the synchronic interaction of culture(s) in context, to further understand how everyday practice results in the expression and subsequent adaptation of tradition.

These potential areas for further research could provide additional findings of relevance (in part) to the study of interorganizational collaboration, but would also be of more general utility for organizational studies.

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APPENDIX 1 – LIST OF OTHER WRITTEN WORKS

The list of outputs below is related to the body of work presented in this thesis and connects with the broader programme of collaboration research directed by Chris Huxham at Strathclyde – as well as other collaborative projects with which I have been involved. Except where indicated, I was the sole or lead author of the listed work.

Works about the exploratory research and methodological investigations

Hibbert, P. (2003): Collaboration research: a question of distance. In Scott, C. and Thurston, W.E. (eds) Collaboration in Context. Calgary: University of Calgary.

Works about tradition and collaboration

- Hibbert, P. and McQuade, A. (2004): A silent authority: the role of tradition in interorganizational collaboration. Presented to the Australia and New Zealand Academy of Management, Dunedin, New Zealand.
- Hibbert, P. and McQuade, A. (2005): To which we belong: understanding the role of tradition in interorganizational relations. M@n@gement special edition on collaboration forthcoming.

Works about related themes - including identity, power and knowledge

- Dias, D., Gonzales-Vera, M., Hibbert, P. and Ridge, D. (2005): Collaboration and the struggle for identity: observation and engagement. *Presented to the British Academy of Management, Oxford, UK.*
- Hibbert, P. and Huxham, C. (2004): At the interface between collaboration and learning: exploring what research reveals. *Presented to the British Academy of Management, St Andrews, Scotland.*
- Hibbert, P. and Huxham, C. (2005): Interorganizational learning: intentions and consequences, pp161-172, in: Gossling, T., Jansen, R. and Oerlemans, L. (eds) Coalitions and Collisions. Nijmegen: Wolf.
- Hibbert, P. and Huxham, C. (2005) A Little About The Mystery: Process Learning As Collaboration Evolves. European Management Review, 2:1 pp59-69 (both authors contributed equally).
- McQuade, A., Hibbert, P. and Oram, S. (2005): Dialogue, discovery, difference: finding meaning in the power asymmetries of collaboration. *Presented to the British Academy of Management, Oxford, UK. (second author).*
- Simpson, B. and Hibbert, P. (2006): Identity Change in the Context of Long-Established Traditions. International Journal of Public Administration (forthcoming - second author)
- Huxham, C. and Hibbert, P. (2005) More or less than give and take: manifested attitudes to inter-partner learning in collaboration, in: Weaver, K. (ed) (2005): Proceedings of the Sixty-fifth Annual Meeting of the Academy of Management (CD). ISSN 1543-8643. (both authors contributed equally).

APPENDIX 2 – DATA MAPS

The data maps for the three research cases are provided here. Because of the size of the maps, it was not possible to print them readably on a single sheet. Readers wishing to reassemble the full maps can copy the appropriate pages and connect the maps where along the dotted lines. There are three parts to the first of the maps (the regional business network) and six parts to the other two (the national science groups and European science network cases). These are presented in order below.

Regional Business Network: Part 1 of 3



Regional Business Network: Part 2 of 3



Regional Business Network: Part 3 of 3





National Science Groups: Part 2 of 6









National Science Groups: Part 6 of 6





European Science Network: Part 2 of 6





European Science Network: Part 4 of 6



European Science Network: Part 5 of 6



European Science Network: Part 6 of 6

