

**Part III - Leaving the field**  
***Analysis, Theory and Learning***



# 10. Bridging: From Story to Analysis

Learning history experts describe the need overall for a researcher to move with agility between the three different orientations of the mythic, the pragmatic and the research (Roth and Kleiner 1998; Roth and Bradbury 2008). Roth and Bradbury describe the need to explicitly switch from the “*dispassionate stance and in-depth knowledge of a research oriented behavioural scientist*” who draws out analytical themes from the data, to the engaged and immersed storyteller who crafts the jointly told tale from it, and on finally to the pragmatic “*master teacher...*” who is tasked to communicate in a succinct way the lessons that have been learnt (p.356). Likewise in this dissertation I have been moving between these orientations. The previous section with its detailed field accounts and emphasis on method has been more towards the ‘mythic’ orientation. This chapter marks a shift now to the more analytical ‘research’ orientation that ushers in the final part of this thesis. I am leaving the field now or at least I am in the late stages of inquiry in it. I am reflecting on it and trying to draw out, at a step removed what has been the learning in this research and whom does it serve.

In Chapter 4 I introduced Bruner’s idea that, as humans, we occupy two distinct modes of thought – the ‘narrative’ and the ‘paradigmatic’. Then, and later in Chapter 5, I described that one essential characteristic of a learning history form is that it mixes story and analysis. I raised the question as to how easy or effective it was to mix these two modes. I return now to that earlier question and to look more closely at the role of analysis in learning history.

# Analysis in Learning History

## Current role of analysis

Analysis relates to the 'research' orientation of learning history that comes to the fore when the researcher is faced with multiple transcripts, field notes and public reports from which she must create a learning history that follows the precept of being 'true to the data' (Roth and Kleiner 1998). Roth and Bradbury describe how, through a process of systematic distillation, meaningful themes can be drawn out. The approach they describe is much like a standard qualitative data analysis and they liken it to a form of grounded theory (Roth and Bradbury 2008 p.355). Grounded theory, as first 'discovered' by Glaser and Strauss in 1967, is theory that is inductively built from the data up as opposed to theory that is being deduced and proven by testing data against theoretical assumptions and hypotheses (Glaser and Strauss 1967). Though there has been some rhetorical wrestling between Glaser and Strauss since then, the basic principle relevant to this discussion still applies: with this kind of analysis themes arise from the data rather than being pre-determined. The researcher is finding rather than looking. So in standard qualitative research terms the results of learning history distillation could be called theory. However in an action research context, building theory in this way is not usually a primary goal. As Roth and Bradbury write:

Because the goal of the learning history is to reflect the insight and learning of the organization and not the testing of theory by researchers, we use the term 'distillation' to signify the efforts of this analytical process to maintain the essence and character of the participants' narrative.

(Roth and Bradbury 2008 p.355)

Analysis in learning history is described then as a means of reaching a valid, grounded and meaningful narrative rather than an end in itself. It supports the mythic orientation by ensuring a rounded story and it supports the pragmatic orientation by coalescing themes into communicable learnings. In their description of the distillation process for a learning history project at the car manufacturing company called AutoCo, Roth and Bradbury describe how the research team generated themes from research data through a

process of analytical brainstorming and clustering. This was done in isolation from the 'insider' participants. The resultant themes were presented back in the document and communicated outwards into the organisation. In this case analysis resided wholly within the research-orientation and was conducted in support of the 'pragmatic' orientation. All three orientations are in the service of creating learning and value for the participants in the learning history process. I agreed with this primary purpose but questioned with my work if there was not an opportunity to open the analysis step up more and so broaden its scope both in terms of adding value to the field and, perhaps more controversially, to the academy.

## **Analysis in this research**

Because it is working across several organisations, there has with this research been more of an opportunity to broaden out the analysis step, to make it more inclusive and to theorise from it. The 'open-system' approach of learning history described in Chapter 4 was defined as occurring at two levels – the individual organisational level and the institutional level. Reflecting this there are also two levels at which analysis occurs.

## **Analysis in the individual learning histories**

Working at the individual history level, the approach to analysis has been similar to the AutoCo example. I went through the transcripts of the interviews and annotated them systematically as I read and listened. I marked up key quotes, added reflections that occurred to me and I identified themes. The excerpt of the Southampton transcript that is shown on the next page illustrates my annotation. Some of these themes I then peppered through the history to support the narrative. All of them I coalesced and summarised in a long table in an appendix to each history. As you will have seen at the end of Merton, I framed these as provisional and discursive rather than authoritative. I offered them for comment. In this way I was exposing the analysis at an early stage and so was inviting the participant into that sensemaking process. Readers often did comment on the tables. The intention with all this was to be appealing simultaneously to the narrative and analytical mode of thought of the reader. As with the presentation of the narrative, the analysis is presented in a 'writerly way' with the purpose of evoking rather than imposing meaning for the active reader.

As I moved through the learning histories I found that the themes I was annotating often linked to themes I had already identified in the previous histories. The excerpt below from the Southampton transcript also illustrates this:

**EXCERPT FROM THE ANNOTATED SOUTHAMPTON TRANSCRIPT**

**Interviewee:** At that same stage, this is independent of the work I was doing, we were developing the heat module down at the station. Mike Smith who was then the chief accountant...became director of resources in due course – so right at the top of the organisation – he was central in getting the thermal well dealt with. I wasn't involved in it. *We later moved together. He and I had very similar objectives. I was able to relate to what he was trying to do with the heat agenda and he was able to use what we were trying to do in the planning area to put sustainable heat and energy into the planning context.* This was in the late 80s/early 90s so we were quite far ahead.

Key quote highlighted

Theme identified

**THEME: A flowing together of different agendas (just like at Kirklees!)**

General themes

**GENERAL THEME: Converging Agendas & Mutuality enable innovation to occur**

<b>Nott'ham</b>	<b>Merton</b>	<b>Barnsley</b>	<b>Kirklees</b>	<b>Southampton</b>
<b>Diverging agendas</b>	<b>Solarcentury</b>	<b>Yorkshire Forestry and Barnsley</b>	<b>Yorkshire Housing and Kirklees Energy Group</b>	<b>Mike+Bill Planning and Sustainable energy. Shared goals. Enabling organisation.</b>
	<b>Green Alliance Merton ....others</b>			

Reflections

*Researcher Reflection: Now isn't that interesting – here's someone again who was good with numbers not too far from the centre of things.*

**Figure 45 An excerpt from the annotated Southampton transcript**

As Southampton was the fifth learning history the theme of converging agendas and mutuality could now be identified across the piece. Similarly there were other recurrent themes that had deepened as I had gone along whilst others had fallen away. The table of themes shown in the appendix of the Southampton learning history illustrates just how many were coalescing across the histories. Together these themes were saying something general about what it takes to innovate to reduce carbon in local authorities. This then was moving my analysis up to the second level – the institutional level - where the opportunity for collaborative analysis and theorizing particularly arises.

## Analysis at the institutional level

Because my research has been spread across several organisations, its theoretical

scope is broader than a single-project focussed learning history. Having completed Southampton I then worked across the five learning histories to produce a meta-analysis and this will be presented in the next chapter. Here I want to put that analysis in context. It has not been as completely worked to conclusion as a standard qualitative analysis and this was deliberate. The primary purpose of this research has been to facilitate and amplify learning in the field in which I have been engaged. The analysis is another powerful way to do that. So my strategy has been oriented at getting participation in that analysis so that learning might occur. But a side-effect of this has been that there is a much greater opportunity for collaborative development and validation of the analysis than with a single-project learning history. So rather than working my meta-analysis to the  $n^{\text{th}}$  degree, I chose to continually expose it and to inquire into it with others from the field.

By the time of the learning history workshop I had coalesced a set of meta-themes that seemed to run across all the learning histories. I presented this incomplete analysis back to the workshop participants as provisional and contingent. I did not emphasise it, but the participants engaged with it and found it interesting. As the digital story of the workshop shows however, the main emphasis was on participants running their *own* analysis of what it is that enables or inhibits innovation for carbon reduction rather than their response to my analysis.



**Figure 46 Participants conducting their own analysis at the workshop**

I provisionally crosschecked the thirteen themes they identified against my analysis. It was a different analysis, cruder (naturally) but not incompatible. 'Culture and Mindset'

had come out as the most important theme. This supported the bias of my themes that also dwelt primarily on how people work together and what they think rather than on external drivers. But more importantly these workshop themes increased the polyphony of the analysis. The thirteen participative themes were another analytical voice in the research, and one that was equally valid. On the website it was these themes I chose to feature rather than my own.



**Figure 47 Participative themes 1 to 5**

I continued to open up my analysis in presentations, on the website and in the small group work with B&NES. There we worked directly with my analysis. In session I presented it in a provisional, inquiring way. When the director responsible for 'Risk & Audit' nodded and shook his head in grim recognition at the presentation of the meta-theme 'Risk' I knew this was a point of validity for the analysis. But I also drew on the rich taped conversation that ensued. It added nuance and identified links that I previously had not made. I updated the analysis accordingly.

Thus, echoing the open-system approach with stories, where the iconic stories were democratized alongside the experience of the participants, the analysis in this research has been opened up and offered back into the system. There it has validated and developed.

This preamble explains how I worked with the 'research' orientation to analyse, inquire and collaboratively build theory from the bottom up. The resultant analysis is mindfully



provisional and forever incomplete but it is proposed nonetheless to have value both in its own right as a theory and as a vehicle for further learning and inquiry in the field that generated it. It is presented in the next chapter.



# 11. Questions about Innovation

What does it take to innovate to reduce carbon in local government? The research started with the observation that across the field of local authority there seemed to be pockets in which groundbreaking, carbon reduction projects had taken place. By using learning history to get inside some of these projects and by then looking across them thematically some general insights can be drawn about the experience of innovation. This chapter presents these insights in the form of six meta-themes which have resulted from a bottom-up analysis that I conducted across the five learning histories. Before presenting this analysis I want to delimit its scope.

## The Scope of the Analysis

As the last chapter explained what is proposed here is a partial analysis. The many themes that recurred across the learning histories were aggregated, coalesced *and* boiled down into six key areas that I called meta-themes. So these meta-themes represent the centre of gravity of the analysis rather than the analysis in its entirety.

There is also the overall question of how well the five learning histories themselves represent the field of innovation for carbon reduction in local government. There were other innovative projects in local government beyond those that I featured in the research. Starting out I planned to feature between five and eight projects. What I had not anticipated was the effort involved in each history. The first draft of each took approximately a month to complete. The subsequent sign off and addition of perspectives also took time. As I got into the research, I soon realised that I would be lucky if I managed to complete even five histories, and I set about selecting those five as broadly as possible.

As I described in Chapter 2, I selected examples that were geographically disparate and that featured different technologies and approaches. However the decision to stop at five histories was dictated as much by practicality and time as it was by any sense that my findings had started to saturate.