

Project Chata

Concepts of History and Teaching Approaches: 7 to 14

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'Innovation and Change in Education: The Quality of Teaching and Learning'.**

The Economic and Social Research Council (ESRC) is currently funding a major research programme entitled 'Innovation and Change in Education: The Quality of Teaching and Learning'. The overall aim of the programme is to increase our understanding of teaching and learning in the context of radical change within the educational system in the UK. Ten projects have been funded over a five-year period from 1991-95, with a total of £750,000 being allocated to the programme. The projects are based at different centres within England and Scotland, and cover a wide range of subject areas at pre-school, primary and secondary level. The programme is coordinated by Professor Martin Hughes from the University of Sheffield.

Alaric Dickinson and Peter Lee are co-directors of *Project Chata*, one of the projects within this programme. The *Chata* project is concerned with teaching approaches and children's concepts of history, and is divided into four phases:

- Phase 1** Investigation of the progression of children's ideas of history between the ages of seven and fourteen years.
- Phase 2** Development of instruments for investigating teaching approaches in history and for categorizing the way in which history is seen in relation to the wider curriculum.
- Phase 3** Exploration of the relationship between pupils' concepts of historical enquiry and historical explanation on the one hand and curriculum contexts and differences in teaching approach on the other.
- Phase 4** Longitudinal work at a case study level (funded 1994-96), the main aim of which is to develop an understanding of the progression paths followed by children.

The article below is a revised version of a paper written during phase one of the project and published in *Partnership and Progress: New Developments in History Education and History Teaching*, edited by Peter John and Peter Lucas and published by the University of Sheffield Division of Education in 1994.

Investigating Progression in Children's Ideas About History

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Introduction

Two of the fundamental assumptions of the *Chata* project are that children's ideas about the nature of history must be understood and addressed, and that second-order concepts such as evidence and explanation produce the key to progression (by defining the terms in which it takes place and by setting limits upon it).¹ Children's ideas about what history is and what is involved in doing it may appear strange, even laughable. However, such ideas are the constructs by which each child makes sense of the world, past and present. These ideas are often tacit, and are not all-or-nothing achievements. If they are not addressed as part of school history then they may continue undisturbed; or changes may occur which, by default, are not influenced by history teaching. In order to address such ideas, teachers and publishers have to know what the ideas are, or at least what they are likely to be.

In the past 15 years advances in our knowledge of children's thinking and ideation in history in the secondary years have been achieved through the Schools History Project (13-16), both the public examinations and its attendant research (Shemilt, 1980; 1983; and 1987), and through a number of small-scale studies (Dickinson and Lee, 1978; Booth, 1983; and Lee, 1983). New light has been shed on children's strategies for making sense of the past and their concepts of *evidence* and *explanation* by the use of video-recordings of teacherless problem-solving groups designed to reveal the processes of children's thinking in history (Dickinson and Lee, 1984; Ashby and Lee, 1987). Early models of children's ideas derived from work at Key Stages 3 and 4 (pupils aged 11-14 and 14-16 years) provide a theoretical framework which in principle extends over the whole age range. However, work at Key Stage 2 (pupils aged 7-11 years) is at present insufficient to support such claims, though valuable pioneering work has been undertaken in the UK by John West, Joan Blyth, Peter Knight and Hilary Cooper (West, 1981; Blyth, 1982; Knight, 1990; and Cooper, 1991, 1992). One of the aims of phase one of the *Chata* project is to find out how far existing models of children's ideas, derived mainly from work with pupils aged 11 to 16 years, offer an adequate framework for Key Stage 2, and whether these models require finer resolution at the lower levels or more radical changes (either by adjustment at the lower levels or by overturning the models as a whole).

At the time of writing, data collection for phase one of the project is complete and analysis is under way. As yet it is too early to say anything by way of conclusions. This chapter, therefore, concentrates on consideration of the programme of work undertaken in phase one, on offering some insights into the workings of a funded-research project in history in education, and some first reflections on our test data and development of preliminary models of children's ideas.

Phase One programme and methodological considerations

Construction of preliminary models

The initial task was to establish provisional models of progression in children's ideas about evidence and explanation in history, as the basis for empirical testing later in the phase. The models were intended to provide frameworks for mapping children's ideas about evidence and explanation, seeking to define key features of the concepts of evidence and explanation in terms of which children's ideas may be characterized, to identify clusters of ideas which may be treated as relatively coherent and stable patterns, and to order these clusters in hierarchies of levels corresponding to the development of children's ideas. On the basis of previous work and after analysis of the concepts involved, preliminary hierarchies for investigation were constructed for the stems *evidence*, *accounts*, *rational understanding* and *cause*. It was expected that investigation of these stems would shed light on other possible stems, including pupils' notions of *explanatory adequacy*, *objectivity* and (perhaps) the *ontology of history*.

Design and trial of preliminary test materials

The next step was to construct preliminary tests to investigate pupils' tacit understandings of *cause*, *rational understanding*, *evidence* and *accounts*. In general these tasks were designed to work across the full age range of Key Stages 2 and 3. It was assumed that Year 3 pupils (aged 7-8 years) might require special materials, and in some cases special tasks, but the order of preference for strategies was to be:

- (1) tasks open to the whole of Key Stage 2 and Key Stage 3, using the *same* materials;
- (2) logically identical tasks, using different materials graded in terms of reading-age etc.;
- (3) separate tasks for Year 3 pupils.

Regarding the substantive history from which the tasks were to be drawn, it was envisaged that this would normally derive from History Study Units in Key Stages 2 and 3, but strategy (1) would mean that HSU material from one Key Stage might be used to provide the basis for tests at both Key Stage 2 and Key Stage 3. It was also envisaged that some tasks for Year 3 children might be based on everyday as well as historical materials.

Small groups of children in Years 3, 6, 7 and 9 were video-recorded working through the tests. Examination of the data suggested that the initial hierarchies for evidence and rational understanding offered a useful basis for investigation, but that the postulated hierarchy for cause was unhelpful. The first test devised for accounts produced poor quality data in consequence of setting too high a skills threshold. Video-recording of unaccompanied children working through tasks set in the tests provided rich data for older children but ran into difficulty with Year 3 pupils, whose discussions were sometimes so elliptical as to provide little evidence of the ideas at work. Semi-structured interviews had always been envisaged as part of the apparatus of investigation, but these took on a new importance for work with younger pupils.

Modification/redesign and further trials of test materials

As a result of this early exploratory work, pencil-and-paper tests were constructed for use with larger groups of pupils to provide data on *cause*, *evidence* and *rational understanding*. The second cycle comprised two evidence tests, two cause tests and two rational understanding tests. The evidence and the rational understanding tests were designed to allow the development of finer-grained models of progression at lower levels, and (in the case of the former) to suggest hierarchies for *plausibility*. The *cause* tests were still exploratory, since several stems presented themselves as possibilities, but no pragmatic or theoretical ground for thinking one more basic than others was apparent.

The six tests were administered to groups of approximately 100 children from Years 3, 6, 7 and 9. Given that this phase of the project was concerned with the construction and testing of a model of progression, not accounting for it, the sample was chosen on the basis that it should be reasonably representative of the population (rural and urban schools, mixed ability classes and selective classes, etc.), and would in the first instance at least be treated globally. Pupils (680 in all) were drawn from nine schools in Essex, including rural and urban primary schools, a selective secondary school, and two Roman Catholic schools (the later to show up possible effects of substantive differences in religious beliefs on one test of rational understanding which dealt with Anglo-Saxon oath-helping and trial by ordeal). In addition, two schools from London and one from Hertfordshire were used. The pencil-and-paper tests were used to provide a basis for interviewing small groups of pupils from each class where time and facilities in the school allowed. Interviews were carried out immediately subsequent to the completion of the pencil-and-paper tests.

Large-scale testing of revised models

For the main data collection stage of phase one, three batteries of tests were produced, each designed to investigate children's ideas of *evidence*, *accounts*, *cause*, *rational understanding* and *explanatory adequacy*. (It is possible that we may also be able to say something about children's ideas of objectivity.) Pencil-and-paper responses were collected from over 300 pupils between the ages of seven and fourteen, across three sets of tasks (on three separate occasions). More than 120 of this main sample were interviewed on all three task sets. Of these 120 children, 53 were from Year 3, approximately 30 were from Year 6, 18 from Year 7 and a further 18 from Year 9. (Numbers here are approximate because, in the case of a few responses, final checks have to be made that all tasks were completed in full.) Each battery of tests sought to elicit children's ideas in a number of different ways, enabling internal triangulation as well as triangulation across the three batteries. For instance, the different approaches used to elicit ideas about cause included open questions, cause boxes and conflicting explanations. (Each battery used logically similar items but different content.) The following account of the *Chata* approach to eliciting ideas about cause was part of a paper given at the 1993 Annual Conference of The British Educational Research Association:²

Historical material sufficient to enable children to form a judgement (in the first test battery) on why the Romans were able to conquer Britain was given to the children: it covered

background information on Rome and Britain, and the events of the Roman conquest. The question presented to the children took the form of a paradox:

There were lots of Britons in Britain.
The Roman army that went to Britain wasn't very big.
The Britons were fighting for their homes.

SO WHY WERE THE ROMANS ABLE TO TAKE OVER MOST OF BRITAIN?

This was asked first in the form of an open question, for which children had to write a few lines in answer. (The immediately following questions will not be dealt with here: one was designed to ascertain whether children could distinguish reasons for action - why the Romans invaded Britain - from causal factors contributing to Roman success; and others were intended to shed light on children's ideas of conditionship and the generalizability of causal explanations.) The children were then asked to draw arrows linking boxes to show why a cup broke: this was partly a device to familiarise them with a certain kind of exercise - the apparent abandonment of history at this point was accounted for in these terms - and partly a means of seeking evidence about their everyday causal notions. The boxes contained short sentences which might have some bearing on the breaking of the cup: some described events ('the cup hit the floor'), some referred to states of affairs ('The floor was hard'), and some described actions ('Jane and Fred both tried to grab the cup'). There were six boxes in all that might be used in the explanation. The next question asked the children to do the same thing in order to give the best explanation they could of why the Romans were able to take over most of Britain. This time the six boxes contained statements about the Roman Empire or about the Britons. In both the cup and the Roman take-over questions, children were told that an arrow from one box to another meant that the first box helped explain the second, and that they could have as many or as few arrows as they needed. They were also told that more than one arrow could go into or out of a box. Finally, in the third approach, two different - very brief - explanations were offered to the children. One set out two simple background conditions for Roman success, and the other offered an event which was both a key step in the Roman conquest, and an immediate cause of their success:

The Romans were really able to take over most of Britain because the Roman Empire was rich and properly looked after.

The Romans were really able to take over most of Britain because they beat the Britons at the battle by the River Medway.

Pupils were then asked 'How there can be two different explanations of the *same* thing?' Subsequent questions asked whether one explanation was better than the other, how they could check to see if one was better than the other, and how they could check to find out if either explanation was a good or bad explanation.

One part of the rationale behind these questions is an attempt to discover whether there is any kind of depth-structure in children's handling of causal explanation. Some children simply give haphazard lists of causal factors in answer to the open question, and then in the box-questions make a few single joins to the centre box which has to be explained. (See Appendix 1.) They behave as if causes are discrete and additive. Others give a narrative of events in the open question, and then narrativize the box-question. Typically this consists in producing a linear sequence which may encompass all the cause boxes, or just some of them. (See Appendix 2.) There appears to be a range of ideas operating here, with some children treating processes and states of affairs as if they were events, and others using a narrativizing strategy but showing some awareness of the different status of the connections they make. Finally, some children construct a causal argument in answering the open question, and then use arrows to produce what can only be described as an analytical schema for the box-question. Background conditions are picked out as separate starting points for different, sometimes separate and sometimes interlinked, causal chains which lead into the events for which they are conditions. (See Appendix 3.) Actions and events are often treated separately from background conditions.³

Analysis of this data is now in progress. As yet it is too early to talk of findings. When data collection has been completed it is anticipated that it will be possible to report extensively on the progression of children's ideas about historical enquiry and explanation in history. We hope eventually to arrive at a model which identifies consistent strategies pursued by children, suggests relatively stable sets of ideas, and allows the characterization of progression in these ideas in terms of their increasing power and scope. At this stage of the research, however, we can do no more than report initial thoughts about some of the provisional models in the light of our preliminary testing. Given the further constraint of the word limit on this article, the main focus in what follows here will be on progression in children's ideas about rational understanding, one of the stems for which provisional models already existed.

Children's ideas about rational understanding

Establishing what people were seeking to do, and why, is essential for understanding actions and can help us to understand events (though it cannot in itself explain *why* things happened). Such understanding involves establishing how agents saw the situation (their particular circumstances) and what they were trying to do (their intentions) in order to reconstruct their reasons for doing what they did. But what clusters of ideas are children likely to bring to bear with regard to explaining and understanding the actions, beliefs, institutions and social practices of people in the past? What progression seems likely?

In our initial investigation of progression in children's ideas about rational understanding we were able to draw upon the models suggested by Denis Shemilt (1984), Rosalyn Ashby and Peter Lee (1987), and Martin Booth *et al* (1986). To enable both internal triangulation and triangulation across the tests, three tests for rational understanding were developed in phase one of the *Chata* project, each containing a combination of free-form and closed items. One of these tests was a further development of the Anglo-Saxon trial by ordeal test used in our earlier work (Dickinson and Lee, 1984; Ashby and Lee, 1987). Two new tests were developed (on Claudius' reasons for the invasion of Britain, and on the reasons for executing all the slaves in Pedanius' house following his murder by one of these slaves in AD 61). In each test pupils were given materials containing an apparent paradox - an action which appeared to lead to the opposite of what was intended or a social practice which could not be understood in terms of twentieth century beliefs and values - plus some background material describing material conditions and wider beliefs and values. Pupils were then asked a number of questions about the likely reasons for the particular action or practice.

As analysis of the responses proceeds we should be able to say something about the consistency with which children operate 'the same' ideas in the face of different content and different tasks. It will also be important to relate the development of children's ideas across stems. (For instance, analysis of the *Chata* data should shed light on the extent to which children's ideas about reasons for action and understanding historical situations are related to their ideas about causal explanation.) But our first move has been to consider what strategies and clusters of ideas children seem likely to bring to bear in the stems being investigated. With regard to explaining and understanding people's behaviour in the past, the responses examined so far seem to suggest at least the following phases and clusters of ideas.

The baffling past

For some children it is hard even to conceptualise actions in any terms other than the description under which they are encountered in the first place. In response to our questions children in this phase typically say or write 'I can't explain', or repeat the words of the question (for instance, 'They used the ordeal to decide if someone was guilty or not'). When encouraged they can usually recount in some detail what happened in, for instance, the various ordeals. Some

children think it appropriate to add personal comments such as 'Trial by ordeal would hurt my hand' and 'I would not put my hand in'. But such comments do not, of course, amount to explaining *why* the Anglo-Saxons used the ordeals to decide if someone was guilty of a crime! For children in this phase it is a *baffling past*, a past with actions and social practices which may arouse their interest but which they cannot explain.

The 'divi' past

Children at this level do re-conceptualise the behaviour under study, but in their own terms (not those of people in the past) and with an assumption of superiority towards people in the past. Our investigations, past and present, have found examples in almost every class, regardless of age, of pupils who do not assume any need to find out about the particular values and beliefs of people in the past and actually view them as intellectually and morally inferior. Such thinking is evident in the following extract in which a pupil (Year 6, age 11) - who argues on the second test that killing the 400 slaves after the murder of Pedanius was stupid - says of the ordeals:

Ridiculous....Well I think it was really because - I don't know about [the hot water and the hot iron ordeals] because I've never struck my hand in hot water or carried a hot iron three metres, but I know that anyone who gets thrown into the bottom of the pool would float because I've tried it - but I think it really is ridiculous though because its.... You can't expect people to prove not guilty when there were trials and ordeals like that because you know they're going to be guilty. They won't be innocent because it's just something that's impossible to think and as I say, I don't know about the other two because I've never tried them but it's, I think it's silly, it's ridiculous....

....Swimming. Because I go swimming every week now. [Inaudible] takes me and I like, you know, just letting myself go with my goggles on and I try and stay under but I can't. It's like physically impossible and you just come up again. It's silly, it's absolutely ridiculous.

An interesting, subordinate feature here is the distinction made between comments on the cold water ordeal, for which the pupil claims to have relevant experience, and the other two ordeals; and much later in the conversation (not reported here) the pupil is clearly assuming that there are good reasons for looking at happenings from different perspectives (though the two mentioned are those of the pupil and the interviewer, both twentieth century perspectives). If these assumptions were to be developed in various ways then new clusters of ideas could be brought to bear with more explanatory power. For the moment, however, there is no indication of the presence of an assumption that explaining past behaviour should include trying to establish the reasons why, for example, the Anglo-Saxons could have thought such practices appropriate. The dominance of an assumption of superiority towards the past means that paradoxical actions and social practices are seen as part of a *'divi' past*.

The ignorant past

A key assumption at this level is that the behaviour of people in the past is to be seen, not as stupid, but rather as something to be explained in terms of their being 'not as clever as us' (where 'clever' is predicated on achievement, not ability). At this level pupils still see no reason to try to find out about the beliefs, values and material conditions of people in the past as a way of discovering why those people would have thought particular actions and social practices appropriate. For them the paradoxical behaviour to be explained is seen as part of an ignorant past. This categorization is a fragile one, and it remains to be seen if it is best thought of as a subdivision of the previous level. There appears to be a division between children who think in terms of folly, and those who ascribe ignorance to the past, but in young children the use of words like 'clever' makes it hard to be sure what is happening. Sometimes there is little doubt: Leon (14) was clear that 'their brains are not as connected as ours'. In addition, we have to distinguish legitimate criticism of a past worthy of understanding, and the assumption that all that needs explaining is its basic absurdity.

Generalised stereotypes

A key assumption at this level is that people in the past were very much like those today, and that actions, institutions and practices can be understood by reference to a 'conventional' or stereotypical account of people's intentions, values and goals. Such thinking is evident in the response of a Year 7 pupil who writes:

Claudius decided to invade Britain because he wanted to show everybody how great and powerful he was. He also wanted to prove that he was the best emperor of all time and wanted to have all the wealth and riches he could get and wanted to be friends with the Romans so they would like him....

Nothing puzzles me because all of the reasons are common today - that people want to be powerful and the best, that they want to be rich and happy, and that they want their citizens to like them and to have lots of friends to help them.

Particular actions and practices may still be judged to be stupid but the assumption which is most influential at this level, and which decides the level of explanation, is the assumption - evident also in the following response - that behaviour can best be explained by drawing upon generalized stereotypes to provide reasons for actions.

They believed that God would have seen whether the ordeal was true or false. They were all very strong believers. In the ordeal of the hot water or the metal bar nobody's hand is going to heal up in three days. It wasn't their stupidity but their beliefs that made them do this. (Year 7, Age 12)

In general at this level there is still no indication of a genuine concern or attempt to reconstruct the particular situations and ideas of people in the past.

Everyday empathy

Key characteristics of thinking at this level are that children assume that there is point in empathising (reciprocating positions) with people in the past, that actions and institutions and practices are to be understood by reference to the specific situation in which people found themselves, and that motives, values, beliefs and attitudes of people in the past were very much the same as those of people now. Consequently those thinking at this level make a genuine attempt to work out salient features but relying on some form of personal projection and generalizations of how people react. This seems to be the strategy being employed by a Year 9 pupil when he explains the killing of the 400 slaves after the murder of Pedanius as follows:

There were thousands of slaves in these big houses and mines and farms and rich establishments. These were the slaves that would take note of what happened to the 400, so sort of like, like, if the 400 had been let off they, these are the sort of slaves that would think, 'Ah, there's lots of us and one master so maybe we could all get free', but because all of them were, all the other 400 were killed these are the sort of people that would think, 'Right, we're not going to try that'.

Restricted historical empathy

A more powerful strategy arises when it is assumed that actions, practices and institutions are to be understood by reference to evidence of the specific situation in which people found themselves, and recognise and operate the need to view the action from the perspective of particular people in the past. A Year 9 pupil shows a concern for, and grasp of, Claudius' particular intentions and view of the situation when responding, in writing, to the question 'Why did Claudius decide to invade Britain?':

Because Claudius saw Britain as being an easy-target. His trained experienced fighters could easily tackle the small divided armies of Britain without much loss of life, and could take British supplies and minerals (they thought of much tin, gold and pearls). This would improve public opinion of him as he would have conquered another country for the Roman Empire, and would replenish Roman coffers with new gold and pearls.

Another Year 9 pupil moves between present and past perspectives when she writes:

No it doesn't puzzle me why the Anglo-Saxons used the ordeal. I think that in our society it would be hard not to find this sort of thing strange, but if you try and place yourself in their circumstances and with their beliefs, it does not puzzle me why they believe in the ordeal as a method of finding out if someone was guilty of a crime.

Even at the level of *restricted historical empathy* pupils accept that people in the past saw things in a different way from us, but cannot take this much beyond the specific circumstances in order to relate these differences to other beliefs, values and material conditions. Hence understanding of items of behaviour is even now potentially unstable. Pupils may still resort to exasperated criticism of what they see as futile beliefs, or ignorance. Only when everything can be seen in a wider context will this instability disappear, and attempts to reconstruct that wider context are the mark of a new strategy.

Contextual historical empathy

It is clear from the responses of some pupils that they assume that in order to explain the problematic action or institution it is also appropriate to set it in a wider context of beliefs, values and material conditions, and to differentiate between the values, goals and habits enshrined in a past institution or social practice and those prevalent today. This strategy is evident in the responses of two adults (who generously agreed to complete the pencil-and-paper tests):

Question *Why do you think the Anglo-Saxons used the ordeal to decide if someone was guilty of a crime?*

Adult 1 Will of God type of behaviour. The fasting - a cleansing process - then the special church service and confession. If you were innocent, God would see to it that you survived the ordeal. In a hierarchical society, God was the most powerful figure and he was 'used' to maintain law and order.

Do you think an Anglo-Saxon would have explained in the same way as you have about why they used the ordeal?

From our 20th century perspective, and with a different set of rules and procedures, it is difficult to understand the motivation/reasons for another structure. On the one hand it seems simplistic - on the other, quite strictly delineated. Our viewpoint would be different from that of an Anglo-Saxon.

Question *Does anything puzzle you about the Anglo-Saxons using these ways of finding out if someone was guilty?*

Adult 2 No - it is not puzzling given the structure of the community. The importance of crime was probably greater than today as villagers were dependent upon working together, coupled with their belief that God was very much like a man.

1. Different community structure.
2. Smaller communities, therefore less crime and more important.
3. Ordeal part of very ordered system of management.
4. Strong belief in God's powers and likeness to man.

From our earlier work we know that some pupils can achieve this level of understanding by Year 9. In the responses so far examined as part of the *Chata* project there are examples which certainly come close to this strategy. For example, the following response by a Year 9 pupil is beginning to fit the ordeal into a wider social context:

Their different values and ideals would have meant that 'God would decide' about whether or not they were guilty. By using this system, they felt that God would definitely chose correctly. It also included the values they had in the social system (how much each man's oath is worth).

Conclusion

Aficionados who looked at our earlier work will recognise moves arising from our current work in which we are seeking to give greater resolution to models developed in that earlier research. Generally the hierarchies postulated earlier seem to be holding up well. Thus initial analysis of the *Chata* data has also suggested the addition of one or two further phases with regard to rational understanding, and it looks as if it may now be possible to achieve a finer-grained picture of how children's ideas develop.

Similar work is now going on in other areas. In the work on evidence, an investigation of children's ideas about testing claims against evidence has suggested some particularly promising moves. We hope in particular to look at children's notions of plausibility which seem to develop in parallel with their ideas of evidence and also, very interestingly, with their ideas of rational understanding. There is some sign in the responses of a move from generalised everyday plausibility to an understanding of plausibility within a context of different ideas, beliefs and values. (When there is a claim about action and children are trying to assess whether people were likely to have done that sort of thing and whether that sort of thing was likely to happen, they need to recognise that events in past times are likely to be different from what they are now.) There is also some sign from the initial analysis of *Chata* responses that there may be very little connection between the development of children's ideas in areas which, on the face of it, one might reasonably expect to fit together, for instance cause and rational understanding as parts of explanation. If confirmed by further investigations, this would have considerable implications for assessment and for the composition of attainment targets and levels of attainment such as those contained in the history national curriculum.

Perhaps the most striking feature of early analysis is that some seven-year-olds are performing at higher levels than some 13 or 14 year-olds on at least some of the tasks. (The Kings College London project has found similar large variations in children's understanding of key concepts in the areas of mathematics and science.) This finding raises important questions for researchers (what causes these variations?); for policy makers (how can a national curriculum take account of such variations?); and for teachers (what are the implications for their work in the classroom?).

As analysis of our data proceeds we shall be trying to improve the resolution of existing models by examining the ways and extent to which different but related ideas may be held by children as clusters. We shall be seeking to construct new models and investigating relationships in the development of children's ideas across models. Last, but not least, we shall be hoping that, by the time the main phase of analysis is complete in late 1995, we will have made significant progress towards repaying our debt to the many teachers and pupils involved in the *Chata* Project by providing further insights into progression in children's ideas about history.

Notes

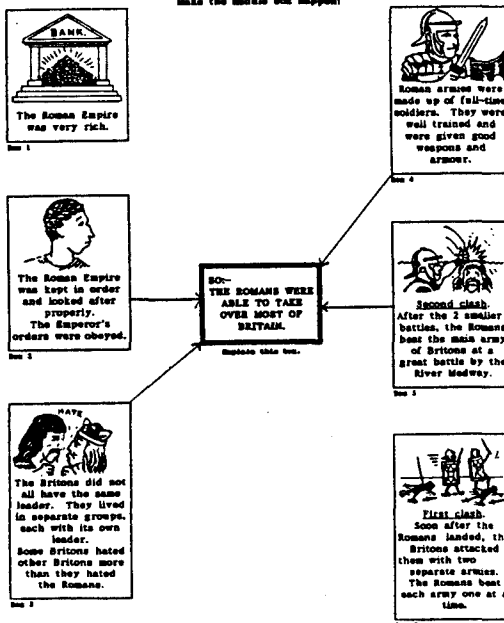
1. For this project 'second-order' means something more than a higher order of substantive concepts within a field; the higher order to which reference is being made is a meta-level, in terms of which the discipline is given epistemological shape.
2. Peter Lee, Rosalyn Ashby and Alaric Dickinson, 'Progression in children's ideas about History', BERA Annual Conference, Liverpool, September 1993. Details of this paper are available on ERIC (the US Federal Data Base). For further details about ERIC consult Cincinnati Bell Information Systems (CBIS), 7240 Fullerton Road, Suite 110, Springfield, Virginia 22153-2852, USA.
3. Further consideration of methodological issues, test material and responses, and indications of a progressive structure in children's ideas about cause is to be found in Lee, Dickinson and Ashby, "'There weren't any facts in those days": Children's ideas about historical explanation', in Martin Hughes (ed.), *Teaching and Learning in Changing Times*, Blackwell, 1995.

References

- Ashby, R. and Lee, P. (1987), 'Children's Concepts of Empathy and Understanding in History', in C. Portal (ed.) *The History Curriculum for Teachers*, Basingstoke: Falmer.
- Blyth, J. E. (1982), *History in Primary Schools*, New York: McGraw Hill; Open University Press 2nd edition, 1989, Milton Keynes: Open University Press.
- Blyth, J. E. (1988), *History 5-9*, London: Hodder and Stoughton.
- Booth, M. (1983), 'Skills, Concepts and Attitudes: the Development of Adolescent Children's History Thinking', *History and Theory, Beiheft 22*, Middletown.
- Booth, M. et al. (1986), *Empathy in History: From Definition to Assessment*, SREB Working Party, Southampton: Southern Regional Examinations Board.
- Cooper, H. (1991), Young Children's Understanding in History, Unpublished PhD thesis, University of London Institute of Education.
- Cooper, H. (1992), *The Teaching of History*, London: David Fulton.
- Dickinson, A. K. and Lee, P. J. (1978), 'Understanding and Research' in A. K. Dickinson and P. J. Lee (eds), *History Teaching and Historical Understanding*, London: Heinemann.
- Dickinson, A. K. and Lee, P. J. (1984), 'Making Sense of History', in A. K. Dickinson, P. J. Rogers and P. J. Lee (eds), *Learning History*, London: Heinemann.
- Knight, P. (1990), *Primary Teachers' Conceptions of Child Development in History Learning*, Lancaster: St Martin's College Lancaster University.
- Lee, P. J. (1983), 'History Teaching and Philosophy of History', in *History and Theory, Beiheft 22*, Middletown.
- Shemilt, D. (1980), *History 13-16: An Evaluation Study*, Edinburgh: Holmes McDougall.
- Shemilt, D. (1983), 'The Devil's Locomotive', in *History and Theory, Beiheft 22*, Middletown.
- Shemilt, D. (1984), 'Beauty and the Philosopher', in A. K. Dickinson, P. J. Lee and P. J. Rogers (eds), *Learning History*, London: Heinemann.
- Shemilt, D. (1987), 'Adolescent Ideas about Evidence and Methodology in History', in C. Portal (ed.), *The History Curriculum for Teachers*, Basingstoke: Falmer.
- West, J. (1981), *History 7 to 13*, Dudley: Dudley Teachers' Centre.

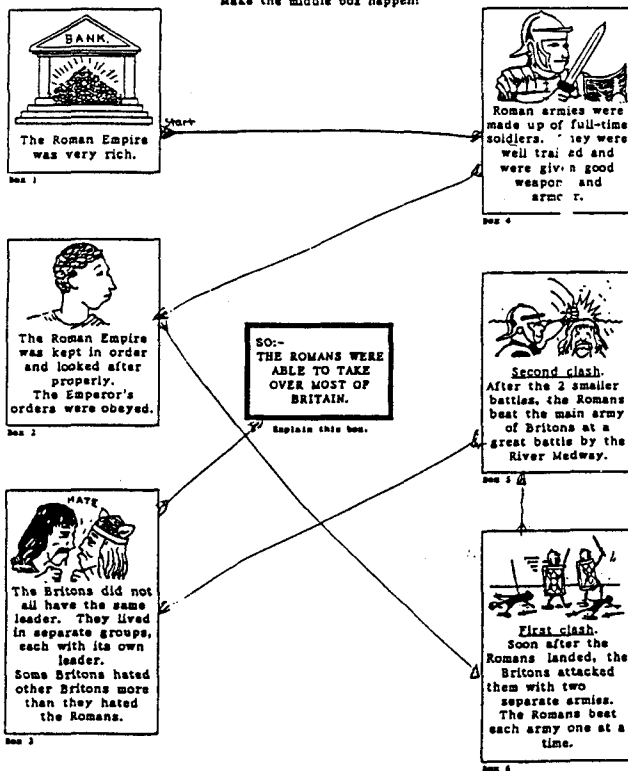
Appendix 1

Question 12. Why were the Romans able to take over?
 [The boxes on this Chart are not in any special order!
 Choose any boxes which help explain why the Romans were able to take over.
 Join them up with arrows to show how they explain why the Romans were able to take over.
 Make the best explanation you can.
 An arrow from one box to another means: the first box helps explain the second box.
 Use as many joins as you need. You can have more than one arrow to or from a box.
 BUT don't make joins that don't help explain why the Romans were able to take over.
 Make the middle box happen!



Appendix 2

Question 12. Why were the Romans able to take over?
 [The boxes on this Chart are not in any special order]
 Choose any boxes which help explain why the Romans were able to take over.
 Join them up with arrows to show best why the Romans were able to take over.
 Make the best explanation you can.
 An arrow from one box to another means: the first box helps explain the second box.
 Use as many joins as you need. You can have more than one arrow to or from a box.
 BUT don't make joins that don't help explain why the Romans were able to take over.
 Make the middle box happen!



Appendix 3

[The boxes on this Chart are not in any special order]
 Choose any boxes which help explain why the Romans were able to take over.
 Join them up with arrows to show best why the Romans were able to take over.
 Make the best explanation you can.
 An arrow from one box to another means: the first box helps explain the second box.
 Use as many joins as you need. You can have more than one arrow to or from a box.
 BUT don't make joins that don't help explain why the Romans were able to take over.
 Make the middle box happen!

