ED 388 531                                          SO 024 953

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TITLE           Progression in Children's Ideas about History.
                Project CHATA (Concepts of History and Teaching
                Approaches: 7 to 14). Draft.
PUB DATE        93
NOTE            26p.; Paper presented at the Annual Meeting of the
                British Educational Research Association (Liverpool,
                England, United Kingdom, September 11, 1993).
PUB TYPE        Speeches/Conference Papers (150) -- Reports -
                Descriptive (141)

EDRS PRICE      MF01/PC02 Plus Postage.
DESCRIPTORS     Causal Models; Child Development; *Childhood
                Attitudes; Educational Research; Elementary Secondary
                Education; Foreign Countries; Historiography;
                *History Instruction; Student Attitudes
IDENTIFIERS     Great Britain

ABSTRACT
                This paper reports on the current progress of the
CHATA Project (Concepts of History and Teaching Approaches, 7 to 14),
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history teaching and the thinking of researchers, particularly the
shift of interest from children's substantive historical concepts to
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considerations involved in understanding children's ideas about
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model of the development of children's ideas of historical evidence
is discussed. The paper also includes examples of tasks employed to
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analysis. (EH)

# PROGRESSION IN CHILDREN'S IDEAS ABOUT HISTORY

This paper reports on the current progress of the CHATA Project (Concepts of History and Teaching Approaches, 7 to 14) funded by the Economic and Social Sciences Research Council (ESRC) as part of its programme: *Innovation and Change: The Quality of Teaching and Learning*.

The project is set in the context of changes within history teaching and the thinking of researchers, in particular the shift of interest from children's substantive historical concepts to their second-order understandings of structural concepts like evidence, account and cause in history.

Some methodological considerations involved in understanding children's ideas about history are discussed, with special attention to the progression of ideas with the notion of 'levels' of understanding. CHATA should provide evidence as to the stability of children's ideas across different historical content. A provisional model of the development of children's ideas of historical evidence is discussed.

The paper also includes examples of the tasks employed to investigate children's ideas of evidence and cause in history and discusses a selection of children's responses in the light of early analysis.

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# PROGRESSION IN CHILDREN'S IDEAS ABOUT HISTORY

## PROJECT CHATA
Concepts of History and Teaching Approaches: 7 to 14

Paper given at the Annual Conference of
The British Educational Research Association,
Liverpool, 11th September 1993.

Peter Lee, Rosalyn Ashby and Alaric Dickinson

[Draft: not for publication or quotation without the consent of the authors.]

## 1. The Context of the Project

In recent years much interest and concern has been expressed by politicians and others about the purpose and quality of history teaching, levels of attainment and progression, and what it is realistic and appropriate to expect of children studying history between the ages of 7 and 14. In the UK there has been a contested redefinition of school history resting on a model which is explicitly constructivist, in which second-order structural concepts organise substantive knowledge and understanding, and in so doing provide the key to progression (both by defining the terms in which it takes place, and setting limits upon it). However, despite much interest in these issues in many countries, there exists little articulated theory with respect to the learning and teaching of history, and the empirical foundations of what does exist are not extensive.[1]

Research on children's thinking and understanding in history concentrated in the 1960s and 1970s on investigating children's understanding of substantive concepts like *king, peasant, factory* and *revolution*.[2] The work was Piagetian in character, and approached history in much the same way as Inhelder and Piaget approached children's thinking in natural science.[3] This raised problems of methodology; whereas an experiment in *The Growth of Logical Thinking* provides (at least potentially) all the evidence required, if only the subjects use it, it is simply not possible in history

to develop a test in which 'all the evidence is in'. In addition conceptual difficulties were raised about the nature and analysis of the concepts under investigation; there seemed to be no specifically second-order concepts, only notions borrowed from economics, politics or sociology.[4] A move to second-order ideas - to the investigation of children's understanding of second-order concepts including evidence, cause, empathy and story and account - offered to solve some of these difficulties. It was also easier to see some structure in the development of children's ideas about second-order concepts, whereas their understanding of substantive concepts seemed to follow unpredictable paths mirroring both the complex interrelationships of such concepts and shifts in their meaning over time.

Similar changes were apparent in the teaching of history as well as research. The most important single driving force was the feeling that in studying history children ought to have to think as well as remember. This led teachers to look for ways in which history could be given a more rigorous structure, something that might provide a basis for progression in children's understanding of history, as opposed to the aggregation of historical facts, or the memorizing of accounts. In a seminal publication, Denis Shemilt, probably the most influential figure in the development of the 'new' history, urged that adolescents should learn 'something of the logic of history and the meaning of such key ideas as 'change', 'development', 'cause and effect' and so on'.[5]

Second-order concepts like evidence and change appeared to offer a way of picking out what was different about history, and here teachers and researchers began to share a common agenda. Researchers reacting against the Piagetian framework of investigation into children's thinking were increasingly treating history as *sui generis*, a very particular way of looking at the world which had to be properly taken into account if children's ideas were to be understood. Two distinct strands are discernible in this discipline-specific research. Some researchers (perhaps appropriately labelled post-Piagetian) moved away from the Piagetian paradigm, arguing against its mechanical application in history, but accepted its power and were reluctant to dismiss it in its entirety.[6] Some others (an Anti-Piagetian tendency) attacked the whole Piagetian tradition as irrelevant to history, and claimed - perhaps not altogether convincingly - to have abandoned it completely.[7]

In the mid-1980s these changes in history teaching and research influenced the reform of public examinations for 16 year-olds (GCSE), and, despite opposition from some politicians and historians, have also influenced the attainment targets and the assessment system for history in the new National Curriculum established in England, Wales and Northern Ireland as a result of the 1988 Education Reform Act. It is against this background that the CHATA project is proceeding.


## 2. The CHATA project

The CHATA Project (Concepts of History and Teaching Approaches at Key Stages 2 and 3) is divided into three phases: investigation of the progression of children's ideas of *historical enquiry* and *historical explanation* between the ages of seven and fourteen years; the development of instruments for investigation of teaching approaches in history and for categorizing the way in which history is seen in relation to the wider curriculum; and finally exploration of the relationship between pupils' concepts of enquiry and explanation, curriculum contexts and differences in teaching approach. This paper will limit itself to a discussion of some issues involved in the first phase, for which data collection is complete, and analysis has recently begun.

CHATA builds on a continuing tradition of small-scale qualitative research carried out over a period of 15 years or so.[8] The main aims of Phase 1 of the project are to test and refine provisional models of children's understandings derived from earlier work, and to develop new models where no adequate existing models are available. In order to do this CHATA is investigating a number of possible sub-strands in the concepts of enquiry and explanation, in particular evidence, accounts, rational understanding, cause and explanatory adequacy, and will examine the possibility of constructing models of progression for the wider over-arching concepts.

In the trial stage of Phase 1 the Project employed video and interview methods, together with pencil-and-paper tests. (Approximately 600 written responses were collected.) In the main investigation in Phase 1 pencil-and-paper responses have been collected from over 300 subjects between the ages of seven and fourteen, across three batteries of tests. More than 120 of this main sample have been interviewed on all three batteries (on three separate occasions). Of these 120 subjects, just over 50 are seven-year-olds, approximately 30 are ten-year-olds, 20 are eleven-year-olds, and 20 are fourteen-year-olds. In addition we have video data on 96 children working in groups of three, each group doing one battery of tests.

The test batteries themselves are designed to investigate children's ideas about historical *enquiry* and *explanation* in history. These over-arching concepts are sub-divided into five strands: *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*) Each battery seeks to elicit children's ideas in a number of different ways, so that there is internal triangulation as well as triangulation across the three batteries.

We are now involved in the analysis of this data. As yet it is too early to say anything by way of conclusions, so this paper will concentrate on some theoretical and methodological issues raised by the notion of progression in history in the context of models under development, give examples of test material employed, and discuss some illustrative responses.


# 3. Some methodological considerations

## Researching history
There are important differences between investigating children's concepts in history and investigating their concepts in natural science. The subject-matter of history does not consist of experimentally manipulable objects, available to direct inspection. In history there is no apparatus to manipulate in front of researchers. (One point of such manipulation is in any case missing: history is not concerned with making general statements about the behaviour of physical objects.) This means that in history it is never possible to present children with all the evidence they require to arrive at the solution to some problem, even using everyday understandings. There is always a more or less arbitrary limit in what is put before children to enable them to show how they tackle a problem. Given that children approach the past with very different sets of experiences and expectations about what is humanly possible or likely, it is difficult to make secure decisions as to what subjects 'need to know'.

The written word acquires particular importance in history. Researchers have to strike a balance between risking incomprehension in the face of complex concepts, and simplifying to the point where subjects are denied certain cognitive moves by the constraints of the simplification. This is

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not a problem unique to history, but it has a particular importance in history, first because history is so dependent on linguistic manipulation, and second because teaching and research in history have turned their attention to second-order concepts. Pictures and objects do not alleviate the first problem, because subjects must, in Collingwood's words, look through them, not at them. And because it is not possible to produce protocols of children's observable behaviour directly relevant to the investigation of their ideas, except the element of behaviour which is linguistic, it is hard to get at subjects' 'working', as opposed to their 'results'.

A problem with second-order concepts of the kind under investigation in CHATA (and which drive the National Curriculum assessment system in history) is that they are as much philosophical as historical concepts. As such they are likely to remain tacit, not in the usual weaker sense in which to say something is tacit is to say that it is not spoken or made explicit, but in a much stronger sense. Asking children direct questions about historical evidence, or even what they think about historical evidence, tends to produce responses which are very difficult to interpret; if the questions are about cause or rational understanding the results can be quite exotic. Under pressure to consider matters they have not only never confronted, but cannot even fit - as questions - into any meaningful context or human activity, children say what comes into their heads. It is hard to know whether such remarks are deeply significant or merely devices to maintain the confidence of the interviewer. Without an unjustifiably strong attachment to the psychopathology of everyday life, there is no way of reading off the status of the responses directly from the responses themselves. In any case, having a particular concept of cause does not entail being able to give an account of that concept. And assent to a proffered account, even where the account is an attempt to construct a valid representation of the subject's ideas from initial responses, and is offered by way of feedback, notoriously demands caution, particularly with younger children.

This forces the researcher back onto an indirect approach: perhaps it is possible to infer tacit ideas from the way in which children tackle historical tasks? A further difficulty immediately arises: how far are the skills demands imposed by the task distorting either the target understandings, or our access to them? There are several elements involved here, most of them too obvious to warrant mention, but the more interesting ones are linked to the concept of *level*, and will be pursued in the section below. In any event, the indirect approach emphasises the hypothetical and conditional nature of any claims about children's ideas in this area. The best research of this kind can hope to achieve is an internally consistent system which is not disconfirmed by what children do. The expectation is that subjects will behave *as if it were true* that they believed certain ideas. This is not so fragile as it may seem; beliefs might arguably be subject to the same strategy as Alasdair MacIntyre employed in his definition of intention: 'the meaning of "intention" is elucidated by a categorical reference to behaviour supplemented by a hypothetical reference to avowals'.[9] Whatever its conceptual underpinnings, however, this kind of constructivism is evidently high-risk in practice. There is no guarantee that children will have sets of ideas that are genuinely coherent, even with a notion of coherence of the kind that might be provided by a move like MacIntyre's. Over what range can we expect such ideas to be coherent?

The relationship between substantive content in history and the development of children's second-order 'structural' concepts is unclear, and no systematic work has yet appeared to shed any light on it. As already indicated, early attempts to find common routes taken by children from simple to sophisticated substantive ideas in history ran into difficulties: the concepts were interwoven in such complex ways, and children approached them from such different starting points that little progress was made in understanding substantive conceptual development in history.[10] The move to second-order concepts avoided the immediate problem only at the expense of creating another: how far do second-order ideas remain stable in the face of changes in substantive content? Our inability to

answer this question is a strong reason for employing some form of triangulation across different substantive content in any attempt to acquire a better understanding of children's second-order ideas about history.

## Levels and progression

At this point it may be appropriate to make some simple remarks about some current conceptual schemes which provide a framework for handling progression in children's ideas and abilities. A central notion here is the idea of a *level*, which is (loosely) tied to the concept of progression. The minimal meaning of *level* allows for its use as a basis for assessment. Assessment levels are categories of achievements. A level is, on this reading, some convenient criterion-related category to which responses may be allocated. If it is to make sense a level should fit into a hierarchy of levels; the hierarchy may be single or multi-stranded, but it should normally stick to one of the two possibilities available for progression - understandings or skills. In research, by contrast, the idea of a level is related to theoretical and empirical studies of how children think, and imports its own set of assumptions.

This suggests an elementary distinction between two different types of categorization, which might be called *assessment levels* and *construct levels*. There is obviously a degree of overlap here: in theory at any rate levels of achievement should have some connection with what children actually do, and so there should be some relationship between the way children tend to behave - at least as suggested informally by evidence gathered from the examination performance of a wide range of candidates - and the levels system used to rank their performance. This informal evidence mirrors the more formal empirical warrant demanded by research, and in some cases examination evidence has proved invaluable in more formal investigations. (This is true of examination work done in the Schools Council 'History 13 to 16' Project, for example, and the examinations for the new Cambridge History Project 16 to 19 follow-on course may prove similarly useful.)[11] Nevertheless, research clearly has its own purposes and standards which are not necessarily the same as those involved in examinations.

The notion of level as it is used in CHATA picks out something more than the minimal assessment notion. The hypothesis is that it is possible to find sets of tacit ideas that allow or inhibit certain cognitive moves. (Strictly speaking, of course, talk of 'finding' sets of ideas is misleading. Such a project is in fact doubly constructivist. In the first place it assumes that children operate with constructs which are more or less effective in handling the problems that 'history' throws up, where 'history' means whatever is perceived by them as history. In the second place the research attempts to construct a model of those constructs. The model is constructed and tested, not found: it is a postulate, not a discovery.) Children who handle history as though they believe that historical agents are more stupid than we are, but share our goals, beliefs and values, will run into severe difficulties in dealing with certain kinds of historical problem, or even in making sense of certain passages of history. An assumption that people in the past might see things in a different way from us overcomes the conflicts posed by the lower-level ideas, and opens up new possibilities for further conflicts at a higher level. Levels are higher or lower because they create or solve more or fewer problems, because the ideas with which children work can have greater or less explanatory power. In particular, higher-level ideas can resolve problems created by the limitations of lower-level ideas.

Triangulation on the basis of separate tests should enable us to say something about the persistence of ideas in the face of different content. But we have also attempted to design tests which *each* offer more than one kind of evidence about children's ideas. The hope was that we might be able to

predict the level at which subjects respond to one form of question from knowledge of their response to another form. In particular, as well as requiring free-form responses, some tests require subjects to choose between statements, each of which represents a possible answer to the question at a particular level. If we can show consistency of level between free-form and statement-selection responses, we will have grounds for arguing for levels in the strong sense. This is a high-risk strategy: it will be quite surprising if we have succeeded in writing statements which subjects at a particular level select: and given that subjects were offered a range of responses to choose from. some of which are 'obviously' superior to others. it will be surprising if we are able to find any significant degree of consistency in their responses.

Underlying this strategy is the hypothesis that it may be possible to give sense to the notion of explanatory equilibrium at different levels, achieved through sets of tacit ideas. (Piagetian resonances of the notion of equilibrium would be amplified if it were to be interpreted by reference to *field, mobility* and *stability*, but there is no intention to import the full Piagetian theoretical apparatus here: merely to engage in some pragmatic borrowing.) The idea of an equilibrium is at least as important in its negative as in its positive mode. It is possible that at least two kinds of de-stabilization occur. One form is when subjects (perhaps with increasing experience) see that their initial solutions to a problem leave questions unanswered, or actually create new ones. This may lead to the establishment of a new, higher level equilibrium. The other form may occur when a task simply imposes too many demands. There is no reason here to expect a new equilibrium, merely, given less demanding tasks, a return to adequate functioning at the old one. In both cases, however, there appears to be the possibility of a more or less complete breakdown of the subject's normal procedures for handling the kind of problem in question. Attempts to solve the problem at a higher level, or to meet the demands imposed by task overload, can lead to responses at a very low level, with the apparent collapse of a range of understandings and skills outside those under test.

This sort of breakdown was apparent in early work on rational understanding; it also seemed to occur with 'A' Level students working on the Cambridge History Project.[12] In the latter case it was particularly noticeable when students were attempting to evaluate a pair of tightly written, closely related, but clashing hypotheses, in the face of a body of evidence. The task of conceptualizing the nature of the clash between the proffered hypotheses sometimes appeared to overwhelm the understanding that the sources could not be taken at face-value: students who normally handled evidence *as* evidence lapsed into treating it as information, and fell back on matching strategies usually more common at Year 6. (It is not that such strategies are ever entirely absent in any cohort of 'A' Level history students. merely that they are much less common.) Other examples occurred where students were handling taught distinctions between rational and causal explanation in the context of evaluating a proffered explanation: the normal historical subtleties dropped away, and (for example) specification of or distinctions between different groups were blurred into '*They* did this', or '*People* thought that'. If some concept of 'breakdown' is sustainable in the face of empirical evidence. it might offer a further reason for taking levels of the more ambitious kind seriously.

If our strategy fails, *one* reason might be that the notion of distinct levels is (at least) unworkable. It may be that the plethora of different strands of ideas cannot (either in principle or in practice) be woven into any relatively simple and robust scheme of levels. The basis for understanding progression may lie not in any particular set of levels, but in a multiplicity of alternative routes in the relevant concepts. And for some of these, we can hope to be able to claim to know something. Failure at this level should not mean that the research will have produced nothing of practical value. Clarification of children's ideas is valuable in itself, but, more immediately, even models which offer snapshots at more or less arbitrary moments in a process of change may have enormous

heuristic importance. They can provide a clearer sense of what is at issue in addressing children's ideas in teaching, and offer a coherent basis for assessment. These would be acceptable payoffs.

## 4. Models of progression in history

The construction of models of children's ideas is a task fraught with difficulties. How does one begin? Colleagues in science use anthropological analogies: researchers must cross the bridge from the country of adult practitioners to the land of child conceptions, and explore it, necessarily using the conceptual apparatus they have come to know and love in their own country. The problem is a very general one, and one with which historians are familiar from pursuing their ordinary business of trying to understand the past. It is too deep to be discussed properly here: we will simply make the assumption that it is possible to produce interpretations of other people's conceptual schemes, or parts of them, which allow their behaviour to be consistently interpreted, win some degree of assent from those who operate with those schemes, and even permits their behaviour to be treated as more or less predictable in the loose everyday sense. There is no scientific method (in the narrow sense) available at this point; the exercise is a hermeneutic one. Historians traditionally enjoin those who wish to make sense of the past to read in it until they know what the people they study will say next.[13] Anthropologists live among their subjects with somewhat similar ambitions. The first steps for researchers into children's ideas are obvious enough: to work alongside children, to watch them, to set them tasks, to try to teach them and to see what children do with what is offered. Classroom teaching experience, small-scale piecemeal investigations using video-recordings, examination experience: all these can provide the first tentative ideas as to what will be fruitful ways of conceptualizing children's assumptions.

Just as a historian must try to grasp the ideas of those under study, but is free to make sense of them in ways which go beyond their own framework, so research into children's ideas, while trying to say nothing false, may operate within a wider framework than the one subjects employ. But where research is investigating progression, there is also an irreducibly normative element involved. There is some notion of the higher levels of understanding of pre-existing concepts, and those concepts already carry with them and exemplify a structure. The structure, if accepted, sets out the internal differentiation and the boundaries of the area under study. So, investigating children's ideas about history, we try to construct a model of the development of ideas about *evidence*, and even as we do so it becomes clear that this is a proleptic use of the concept. We have split off an area of children's thinking about history on the basis of our conceptual schemes, not theirs. There is nothing illegitimate in starting with our own framework. The experience which children try to organize is already structured by adults on the basis of shared forms of life, and these forms of life are (to a great extent) available to children too. We have reason to believe that some conceptual schemes are more powerful than others: induction into these is part of what education is about. What is important is that, however we begin, we can show where children's structures differ from ours.

Similar issues apply at a smaller scale. If we start by investigating the development of children's ideas about evidence, we may soon find that such a progression ignores important internal structure: we should perhaps think in terms of other strands like context, questions asked, and testing. The trouble is that there is no reason to suppose that the structure is anything other than fractal: we can split strands into sub-strands indefinitely. But then who is to say what is a sub-strand as opposed to a strand? Why not start with children's notions of a historical question, rather than pull it out of their conception of historical evidence? In the end we must accept that, just as a historical

*reconstruction* is in fact a *construction*, so any hermeneutic effort can only produce something justifiable, not the only interpretation.

Our initial models of children's ideas are therefore starting points derived from adult conceptions as modified by the experience of working with children. They are subject to adjustment in response to our data: where a model links ideas that do not seem to go together in subjects' responses, the model will be revised; where children make moves which are not available in the model, it will be extended; where children seem to be making distinctions which the internal structure of the model does not allow, new strands will be added; and if ideas held in one strand seem to predict those held in another, the model will be restructured in terms of the more predictive strand. But none of these adjustments will guarantee that the model is an accurate representation of children's ideas: merely that it is a workable construct.

Even as a workable construct a model may have only a limited shelf-life. It may be useful only under current conditions: for example, while teaching remains as it is, while examinations are set in present ways, and while children see history handled in roughly the way it is now in the media. There is unpublished evidence from follow-up studies of the Schools Council Project 'History 13-16' undertaken after the Evaluation Study which suggests that teaching substantially modified the way in which children's ideas on historical evidence developed. Any model produced by CHATA will be, in Shemilt's phrase, like sheep paths seen from high up: it will be the way most children happen to go at the moment; there will be no necessity in the progression.[14]

In the box below the preliminary model of ideas on historical evidence, based on earlier small-scale video-recordings, is set out in Roman letters; the modifications suggested during trialling of the test materials are given in italics. The modifications are based only on informal analysis of the trials responses, and are offered here as no more than an example of ways in which the model might be modified and refined as we analyse the final Phase I data. The model is made up of statements about interlinked ideas, and while there is some reason to suppose that these ideas are indeed likely to be held in clusters of this kind, we cannot yet say with any real security what these are, let alone how strongly they are linked. The notion of a level here is one in which children operate with relatively stable sets of ideas, and those ideas are increasingly powerful from level to level. Children, for example, who have a concept of *evidence* can make sense of and use source material that would defeat pupils operating with a concept of *information*. At the information level children tend to regard conflicting sources with irritation: if they accept that there is a problem about what may safely be said, it is one which can be solved by counting the sources. If two sources agree and one is at odds with the others, the odd one is plainly wrong and the presence of two sources which say the same thing is simply a case of redundant material. Even at a testimony level pupils are convinced that historians are helpless in the absence of truthful eyewitnesses: it is only when they begin to acquire a concept of evidence that they understand that historians can use sources to answer questions which those sources were not designed, by a writer or maker, to answer.

# PROVISIONAL MODEL OF EVIDENCE LEVELS

## LEVEL 1: Pictures of the past
The past treated as if it is the present: pupils treat potential evidence as if it offers direct access to the past.
> *Probably a useful category*

Questions about the basis of statements about the past do not arise, <u>nor is material questioned even as correct or incorrect information.</u>
> *Underlined passage probably incorrect: children operate with true / false distinction, but it has no methodological basis.*
> *Given statements to test against (potential) evidence, children are as likely to use the statement to knock out the evidence, as to use the evidence to knock out the statement.*

Conflicts in potential evidence are not registered even as conflicts in information.
> *Too simple: material that threatens what children **want** to be true is noticed .*

## LEVEL 2: Information
The past treated as fixed, finished and - by some authority - known; pupils treat potential evidence as information.
> *Broadly correct. Given statements to test against evidence, children match information, or count sources to solve the problem.*

Questions arise about whether the information offered is correct or incorrect, but no methodology is attributed to history for answering such questions beyond an appeal to superior authority (bigger or better books, cleverer authors).
> *Satisfactory for documentary material, but ignores children's archaeological knowledge. You can dig up things, and these give unmediated information. (You can even - in effect - dig up stories.)*

Conflicts in (potential) evidence indicate incompetence on the part of the authors of books, or wilful awkwardness on the part of teachers.
> *Too simple: conflicts can arise because information is missing: no one has dug it up or read the right book. This may not just be incompetence: the book might have been lost, and no-one knows where to dig.*

## LEVEL 3: Testimony
The past reported either well or badly.

Questions as to how we know about the past are regarded as sensible: pupils begin to understand that history has a methodology for testing statements about the past. Conflicts in potential evidence are thought appropriately settled by deciding which **report** is best.

Notions of bias, exaggeration and loss of information in transmission supplement the simple dichotomy between truth-telling and lies. Reports are often treated as if the authors are more or less direct eyewitnesses: the more direct, the better.
> *Probably more or less satisfactory.*
> *BUT:*
> *As with previous levels, needs differentiation of sub-strands.*
> *For example, **plausibility testing** very evident here in the form of "they would, wouldn't they", or, more sophisticated, "How could she/he know?"*
>
> *But note that testing for plausibility against everyday assumptions as to what is possible occurs at the previous level.*

# PROVISIONAL MODEL OF EVIDENCE LEVELS
## Continued

### LEVEL 4: Scissors and Paste
The past can be probed even if no individual reporter gets it right: we can put together a version by picking out the true statements from different reports and putting them together.

> *In the words of one pupil to another: "You take the best bits out of this one, and the best bits out of that one, and when you've got it up, you've got a picture."*

Notions of bias etc. are supplemented by questions about **whether the reporter is in a position to know:** it is not assumed that a report by an eyewitness is necessarily best, or that reports must be by witnesses.

> *Underlined passage may be misplaced: should be in next (higher) level?*
> *Plausibility testing is still of reports, but compares credentials of reporters.*

### LEVEL 5: Evidence in isolation
Statements about the past can be inferred from pieces of evidence. Evidence will bear questions for which it could not be testimony, and many things may be evidence which are not reports of anything, and so historians may 'work out' historical facts even if no testimony survives. Evidence may be defective without questions of bias or lies - what weight it will bear depends on what questions we ask of it.

> *May appear earliest with physical objects (as opposed to written sources)... '''*
> *We remain shamefully ignorant about children's handling of artefacts.*

Pupils begin to understand that the overall picture constructed on the basis of evidence by the historian may itself be turned back upon the evidence to evaluate that evidence. (Evidence does not provide fixed points unless we choose to make them so.)

> *Almost certainly misplaced. Should be indicator of next level. But needs investigation: often hard to distinguish between this reflexivity and simple appeal to everyday plausibility.*

### LEVEL 6: Evidence in context
Evidence can be made to do the sort of work picked out in the previous level only if it is understood in its historical context: **we must know what it is meant as, and how it relates to the society which produced it.**

This involves the suspension of certain lines of questioning, and a provisional acceptance of much **historical work** as established fact (a known context). We cannot question everything at once.

Contexts vary with place and time (a sense of period begins to be important).

> *At the moment this seems a reasonable shot at which ideas make the difference*
> *Our current work only deals with pupils up to Year 9 (14 year-olds), so it is harder to refine this.*
> *But Cambridge History Project work suggests higher levels:*
> *especially ideas about the way different kinds of claims relate to evidence.*

# 5. Examples of tests and responses

The examples used in this paper are taken from the first battery of tests. As with the other batteries, enough substantive material was presented to the children to allow them to tackle questions on individual progression strands within an overall theme which provided the content of a self-contained unit. The theme of the first battery was the invasion and occupation of Britain by the Romans, and their subsequent withdrawal.

## Evidence

The provisional model given above provided a working hypothesis. The Cambridge History project (a course following on from the Schools History Project, and intended for 16 to 19 year-olds) provided further insight into how to construct a test which might expose children's ideas for handling evidence and interpretation. Test materials would need to include at least two claims which had a relationship with the sources provided, together with a coherent set of sources that, if treated in certain ways, showed that they were regarded as information rather than evidence, creating tension or conflict if treated merely as information, but allowing such conflicts to be resolved if taken as evidence. This approach maintained a clear relationship between a claim to knowledge and the grounds on which it rests. Designing these tasks is extremely difficult if they are to reveal the understanding of pupils who may operate with a very wide set of ideas. These difficulties are exacerbated if the same materials are to be used on pupils ranging from 7 year olds to 14 year olds.

The evidence material used by 10 to 14 year-olds is given in the insert between pages 11 and 12 of this paper. The three stories relate to the six sources in different ways. (For 7 year-olds the volume of test material was greatly reduced, and only two stories were offered.) Story B relates to the sources used as evidence and accounts for, and explains, all six sources. Story A lends itself to the total weight of the written sources treated as collective information, including somewhat implausible claims. Story C's claim rests on the visual, active sources of Arthur as a hero in the middle ages. Story C also provides its own rationale for its claims and appears powerful on the basis of length and detail. The children were asked to choose the story they thought was best according to the clues, to provide a reason for their choice, and to say which clues were helpful or unhelpful in making this choice. They were then asked to consider why somebody else might choose the other stories.

Children make a variety of recognisable moves in handling what their teachers call 'evidence'. For some subjects making decisions about historical claims is a matching exercise. Details from a story are picked out and matched to corresponding details in the clues to confirm a choice that may already have been made quite irrespective of the clues. For example. Story A is chosen because

> Clue 2 says that Arthers 12th battle was at Mount Baden and that is what it said in the Story A. Also in clue 2 he killed 960 Anglo Saxons on his own - so does story A. Everything in clue 2 matched story A.

Clue two was most important in helping to decide
> because everything in clue 2 matched story A.

Clue 4,5 and 6 didn't help at all
> because they did not have the information I needed.

For some subjects, the story or claim takes precedence over the clues, which only have a place if they support the chosen story. In the following example, Story C is chosen because

People who are interested in the past sometimes argue about whether something is true or not. Below are three stories from three different books.

READ THE STORIES CAREFULLY

> **Story A:**
> About the year 500 there lived a very brave king of the Britons called Arthur. He fought the Saxons and won all his battles. In his twelfth battle at Mount Badon he killed 960 Saxons himself.

> **Story B:**
> About the year 500 a leader of the Britons fought the Saxon invaders and defeated them several times. One of his battles was at Badon Hill. He became a hero.

> **Story C:**
> About the year 500 there lived a King called Arthur. Arthur and his knights fought a big battle at Mount Badon. Arthur wore heavy armour with a picture of Mary mother of Jesus on it. This helped to make him very brave when he rode into battle. At the battle he killed many Saxons.

Sometimes we have CLUES to help us to decide how true a story is. We have some clues about this story.

STUDY THE CLUES CAREFULLY

> **Clue 1: Written in 540 by a British Monk called Gildas**
>
> Some Britons were murdered by the Saxons, some were made slaves. Some fought back under a leader called Ambrosius. Sometimes the Britons won the battles and sometimes the Saxons won. There was a big battle at Badon Hill. I know about this because I was born in the year it happened.

> **Clue 2: Written in 800 by a Welsh Monk called Nennius**
>
> The war leader was called Arthur. His twelfth battle was on Mount Badon. At the battle Arthur killed 960 Saxons all on his own. He won all the battles he fought.

> **Clue 3: Written in 1125 by a Monk called William**
>
> At the battle of Mount Badon, Arthur killed 900 Saxons all on his own. He had a picture of Mary, mother of Jesus on his armour.

14

Clue 4: A painting done in 1400 showing King
Arthur killing Mordred.



Clue 5: A picture of King Arthur
and his knights fighting the
Saxons, drawn about 1400.



Clue 6: A drawing of a soldier of
the 400s and 500s (based on
finds dug up by archaeologists).

15

I think that it was the most accurate.
Clue 3 was most important in helping to decide
because the clue is the most accurate to the story.
There were clues that didn't help at all
because I chose the story and the clue 3 had the most information I needed but the other two did not give me any information to the story I chose.

It seems natural to regard the following extract as an indication that the subject is treating the historian's problem as one of handling information.
My reasons for choosing Story A are "There are a lot of facts. It tells you when it happened, who he fought, he had won all his battles, it was his 12th battle and where it was and how many he killed... clue 2 also contains facts that agree with those in story A. Clue 5 shows what the scene was like... Clue 3 doesn't have any real facts apart from saying that he had Mary on his armour. Clue 4 just shows Arthur killing someone.
There is an awareness here of the seductive nature of detail. The subject suggests that some people will have chosen Story C
because it provides them with details such as what he was wearing. Maybe they think that the person who wrote it knew what he was talking about because he gave them details.
This even suggests that this subject is aware of how persuasive detailed information can be in validating itself.

Other characteristic moves might be regarded as a sign that the problem is seen as one of finding reliable testimony. The subject in the next example argued that Clues 6 and 1 were most important in helping to decide
because they were both based on things that happened soon after or around the time of the battle. How can someone, 1000 years after the battle know what the battle scene looked like? that is why I disregarded clues 2,3,4,5.
However, the response suggests that this is still a very limited understanding of the idea of testimony. Clues 2,3,4,5 didn't help at all
because they were written ages after it happened and were probably lies, all lies and the authors probably didn't have a clue and just felt like being creative ... I do believe it is important that things are believed only if the person who wrote /drew it was alive or saw it when it happened.

Other subjects recognise the importance of testimony but go beyond this to consider it in relation to other available evidence, and some even operate with a notion of disconfirmation. Another move is to treat coherence as adding weight to testimony, making it 'more likely'. Sources are then treated as a set rather than being picked off one at a time as isolated voices from the past. Context becomes important. Story B
fits in best with clue 1, the story that was written by someone who lived in the era. Because of this it is more likely to be correct... clue 6 helped me to eliminate clue 3 and so also story C because this mentions him wearing heavy armour which was not used at the time.

This reference to context is very clear in the following response to a question asking how one might decide whether it was likely that Arthur had a picture of Mary, Mother of Jesus, on his armour (as suggested by Clue 3):
By finding out wether Arthur was religious and by finding out if Arthur wore Armour or not.

Children's responses are often complex, and any attempt to categorize a subject's response must obviously take the whole picture into account. Subject W91M chose story B because "it fitted the clue that wasn't exaggerated, written by a monk in 540, who was alive at the time. Both the other stories were exaggerated" This response would fit the provisional model at Level 3: Testimony.

This seems confirmed by his "Clue 1 helped me the most because it was written by a British monk who lived at the time this happened and he obviously is not biased in anyway as he is not putting down either the Britons or the Saxons." He goes further than this in explaining "All the clues were helpful, even if they were biased. They show that he did become a hero as they all show him killing or winning fights or tell the tale of how great he was". He appears to be clear that story B can account for all the clues and whether they are biased is not the issue - they still need to be accounted for, and are, in story B. In considering why some people might have chosen Story A, the subject claims "some people may have chosen Story A because more of the clues agree with story A than story B". As he recognises that matching details is a move someone might make this choice must have been available to him but rejected. He follows this by saying "Story A makes him sound a hero which is exactly what some people want to believe". His next sentence makes it clear that he is able to see exactly how the clues can relate differently to the different stories "People might choose story C because this has lots of information, most of which is included in the clues". Taken as a whole W91M's response appears to go beyond Level 3: Testimony; he rejects the matching of information as a possible move, recognises that bias does not make potential evidence useless, and so is able to accommodate a wide range of sources within a claim by his choice of Story B.

W92M chose Story A "because all three written clues say Arthur himself killed 900 - 960 Saxons as Story A says. The written clues also say this was at Badon Hill which also complies with Story A." He matches information without reference to its validity other than that of numerical weight. There is no attempt to consider the likelihood or plausibility of this claim. He explains that "Clues 1, 2, 3 and 5 were helpful because they all agree (apart from 4) that Arthur fought against the Saxons, whilst 4 shows no sign of Mary on Arthur's armour." Validity is again identified by numerical weight and what the eye can or cannot see. His response seems to fall within the information category of Level 2, but there may be an element of Level 1: Pictures of the Past, operating here in his dealings with picture sources. This seems confirmed when he follows this by saying "Clue 6 did not help at all because it does not show anything about Arthur". In responding to the question that considers why someone might have chosen the other stories he suggests: "Some people might have chosen Story B because it mentions an English leader fighting the Saxons at Badon Hill. Some people might have chosen Story C because it mentions Arthur and the fact that there was a fight at Badon Hill." This attributes the same tactics to other's choices as the one he used in his, matching specific items of information. What something 'mentions' is obviously important to him. Perhaps his choice did rest on some notion of numerical weight even though he is wrong in claiming that all three written clues say Arthur himself killed 900 - 960 Saxons. Source 1 does not mention any specific number. It may be that he was including Story A in "all three written clues".

Both these pupils responded to the question - 'Clue 2 tells us that Arthur killed 960 Saxons. How would you decide whether this was true?' W91M wrote "Is it possible for a man to kill 960 men in one battle. I believe it is impossible so I decided it is not true." W92M wrote "By looking at primary sources and by finding out the number of people in the battle." The subject has perhaps been taught about primary sources but does not have a workable understanding of what these can do. His use of the term does not help him here. There is no understanding of the type of thing he is trying to test or what might count as a test. W91M on the other hand is clear about how he would decide.

W93M chose Story C "because it has a lot of detail and description in it. Also I have heard it before. Clues 1, 2 and 3 helped best because some of the facts in the clues were in Story C. Clues 4, 5 and 6, didn't help at all because the pictures didn't really show any facts or figures." The meaning of the word 'fact' to this subject is in the type of thing that can be picked out in a very particular sort of way, not anything that actually needs to be established or validated. He makes no

distinction between Clues 4, 5 and 6. They are all just pictures, so the distinction that he makes between facts in the written clues and the absence of facts in the picture clues, does not take account of the type of picture clues he has available.

W94M's response highlights the difficulties faced in the trialling stage. "I chose story A because I like the story of King Arthur and I watch as many as possible on TV so I believe A. None of the clues helped me. Clues 1 - 6 weren't helpful at all." Trialling the tests had revealed the propensity of some children to choose between the stories for a variety of reasons. These reasons did not necessarily include a consideration of the validity of a claim in relation to the sources, but solely on the basis of internal dimensions, or the internal power of a story in relation to the internal power of competing stories. Some of these ideas are of course more powerful than others, but are still limited in connection with understandings about evidence. At least one interviewee explicitly asked to be allowed to decide on a story first before looking at the sources. Asked for a rationale particular children who took this path responded by saying things like: "It is the most like the story I know already"; "I've seen it on television"; "I like it because it tells me about how brave Arthur was"; "It has lots of details like names and dates and numbers so it must be right"; "because it's longer, so it must be better than the others"; "because it's shorter and more straightforward". These were not all merely low level responses to the task: some responses were "this story explains more than the other". Where responses like this were followed by validity testing against sources it was possible to see very high level ideas operating. The test had to take account of, and identify, those children who made their initial choices in this way - i.e. before taking the sources into account. Initial trials suggested certain possible categories for each story in connection with this type of response and the test offered children a box containing statements which they could use to justify their choice, by underlining from the given list a reason that was most near their own. Three different lists had to be provided to fit the choice of story as it was clear that each of the three stories produced its own range of reasons for being preferable to the other two.

Systematic analysis has only just begun so it is difficult (not to say unwise) to try to offer anything more at this stage. Initial forays in the stacks of responses suggest that the revised model does provide a basis for children's sets of ideas about evidence but that further adjustments will need to be made to that model and refinements developed within the levels.

## Cause
Several different approaches were used to elicit ideas about cause. Three of these will be illustrated (open questions, cause boxes and conflicting explanations) by reference to items from one battery of tests. (The other batteries used logically similar items, but different content.) Historical material sufficient to enable children to form a judgement 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 question is reproduced in full in Appendix 1.) 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. (See Appendix 2.) 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.

Subjects 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. 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. 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 narrativization strategy but showing some awareness of the different status of the connections they make. At interview children using a narrativizing strategy will talk in terms of 'beginning here', and use 'and then' or 'and next' as link expressions. On rare occasions spontaneously, and sometimes under pressure from the interviewer, some subjects will pause in dismay when they see - during the course of explaining to the interviewer what they have done - that one box does not make another happen, but precedes it, or is part of a pattern of joint causes. 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. Actions and events are often treated separately from background conditions. Sophisticated ideas of causal structure seem to be operating here. (See Appendices 3, 4 and 5 for examples of different strategies.)

The question based on the two alternative explanations sheds light on children's ideas about causal structure and about the status of causes. Some children will only allow one explanation to be correct, others will accept both, but treat them as interchangeable and discrete. Some children decide that adding the two explanations together will give a better explanation, but still others argue that one makes the other happen, or even, taking a more sophisticated line, is necessary for the other. They insist that both explanations are valid, but treat them as exhibiting a structure which means they cannot merely be added to one another, and are not interchangeable: one child characterised them as 'direct' and 'indirect' causes. Few children have any strategy for testing an explanation except by checking that the statements in it were true; for most, a cause is epistemologically speaking on a level with a statement of fact, and is either something that happened or existed, or is not. Nevertheless some children (usually able fourteen-year-olds) suggest counter-factual thought experiments. and even comparisons with similar phenomena in different times or places as a means of evaluating explanations.

During the course of analysis over the next few months we will attempt to develop, test and refine our crude picture of children's understandings of cause and explanation, evidence and the other strands we have picked out. 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. We will investigate the relationship between different strands, and perhaps be able to comment on the possibility of speaking meaningfully about progression in the over-arching concepts of enquiry and explanation, as well as in specific more narrowly conceived strands. These are goals which we may not achieve, but any moves towards them will help us to develop a workable concept of progression in history which can serve as a basis for assessment, a diagnostic tool for teachers, and a means of addressing pupils' ideas as directly and effectively as possible.

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# NOTES

[1] Early work in this field has, with two exceptions, used small scale samples. The two exceptions are the evaluation of the Schools Council History 13-16 Project (see Shemilt, D., *History 13-16 Evaluation Study*, Edinburgh, Holmes McDougall, 1980) and the CHATA Project, funded from 1991 to 1995 by the Economic and Social Research Council.

[2] See, for example, Chariton, K., *Comprehension of Historical Terms*, unpublished BEd thesis, University of Glasgow, 1952; Wood, D. M., *Some Concepts of Social Relations in Childhood and Adolescence Investigated by means of the Analysis of Definitions*, unpublished MEd thesis, Nottingham, 1964; Coltham, J., *Junior School Children's Understanding of Historical Terms*, unpublished PhD thesis, University of Manchester, 1960; Hallam, R. N., 'Logical Thinking in History', in *Educational Review*, Vol. 19, 1967, and 'Piaget and Thinking in History' in M. Ballard (ed.), *New Movements in the Study and Teaching of History*, London, Temple Smith, 1970, and *A Study of the Effect of Teaching Method on the Growth of Logical Thought, with special reference to the teaching of history using criteria from Piaget's theory of cognitive development*, unpublished PhD thesis, University of Leeds, 1975; and Rees, A., *Teaching Strategies for the Assessment and Development of Thinking Skills in History*, unpublished MPhil thesis, University of London, 1976.

[3] Inhelder , B. and Piaget, J., *The Growth of Logical Thinking*, London, Routledge and Kegan Paul, 1958.

[4] This way of putting things begs important questions: politics, for example, is arguably best understood as history, social science and philosophy. It also ignores the temporal extension and shifting meaning of concepts used in history, and the relation between concepts and historical particulars.

[5] Shemilt, D., op. cit., p.4.

[6] Dickinson, A. K. and Lee, P. J., 'Understanding and Research', in A.K. Dickinson and P.J.Lee (eds.), *History Teaching and Historical Understanding*, London, Heinemann Educational Books, 1978; and Shemilt, D., op. cit.

[7] Booth, M. B., 'Skills, Concepts and Abilities: The Development of Adolescent Children's Historical Thinking', in *History and Theory*, Beiheft 22, Middletown, Weslyan University Press, 1983; and Booth, M. B., 'Ages and Concepts: A Critique of the Piagetian Approach to History Teaching ', in C. Portal (ed.), *The History Curriculum for Teachers*, Basingstoke, Falmer Press, 1987.

[8] See, for instance, Dickinson, A. K. and Lee, P. J., 'Making Sense of History', in A.K.Dickinson, P.J.Lee, and P.J.Rogers (eds), *Learning History*, London, Heinemann Educational Books, 1984; Ashby, R. and Lee, P J., 'Children's Concepts of Empathy and Understanding in History', in C. Portal (ed.) op. cit.; and Cooper, H., *Young Children's Understanding in History*, unpublished PhD thesis, University of London, 1991.

[9] MacIntyre, A.C., *The Unconscious, A Conceptual Analysis*, London, Routledge & Kegan Paul, 1958, p.57.

[10] Coltham (for example) grappled with pupils' substantive ideas. and was more successful than most (Coltham op. cit.), but this whole research programme almost completely ground to a halt in the mid-1970s. It is now beginning to be revived: Hilary Cooper's work with primary children (op. cit.), and the research of Maria Do Ceu Melo, currently in progress in Portugal, both partly deal with substantive concepts.

[11] A great deal of work in connection with the Schools Council Project 'History 13-16' was done after the formal Evaluation Study, and involved longitudinal studies (unpublished), together with more informal evaluation of examination response patterns, some of which is hinted at in the reports of the Southern Regional Examinations Board. See the reports of the SREB in the late 1970s and early 1980s. Shemilt (op. cit. 1980). See also his 'The Devil's Locomotive', *History and Theory*, Vol.XXII, No.4, Middletown, Wesleyan University Press, 1983; 'Beauty and the Philosopher', in A.K. Dickinson, P.J. Lee, and P.J. Rogers (eds), op.cit. 1984; and 'Adolescent Ideas about Evidence and Methodology in History' in C. Portal (op. cit.), all of which are of central importance in this area.

[12] Lee, P.J., 'Explanation and Understanding in History'; Dickinson, A.K. and Lee, P.J. 'Understanding and Research'; both in A.K. Dickinson and P.J. Lee, (op. cit.) 1978.

[13] Elton, G.R., *The Practice of History*, Sydney, Sydney University Press, 1967.

[14] The analogy of sheep-paths is from private discussion with Denis Shemilt. Our own guess is that the paths for second-order concepts are relatively constant in comparison with those for substantive concepts partly because of the high level of generality of second-order concepts, and partly because they are not issues which children have had to think about, or in connection with which they have encountered interventionist moves from teachers. As this changes, models may have to change too.

Question 11. This question is to help you do the one on the next page. Do this one first.

## WHY DID THE CUP BREAK?

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### HOW TO DO THIS QUESTION

Choose any boxes which help explain why the cup broke.
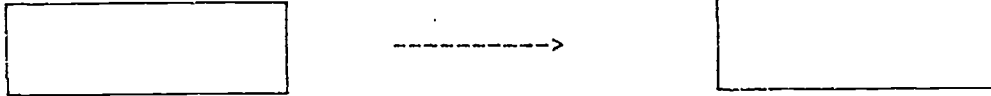Join them up to show in the best way you can why the cup broke.
[The boxes are not in any special order]
Make the best explanation you can.
Draw in arrows to make the joins.
An arrow from one box to another means: the first box helps to explain the second box.

Like this:

```
┌──────────────┐                          ┌──────────────┐
│              │        -----------> │              │
│              │                          │              │
└──────────────┘                          └──────────────┘
```

This box    helps explain    this 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 cup broke.

### Make the middle box happen!

---

### SHOW WHY THE CUP BROKE

```
┌────────────────────┐                              ┌────────────────────┐
│       Box 1.       │                              │       Box 4.       │
│    The cup was     │                              │ The floor was hard │
│  made of china.    │                              │                    │
└────────────────────┘                              └────────────────────┘


┌────────────────────┐      ┌────────────────┐      ┌────────────────────┐
│       Box 2.       │      │     SO:-       │      │       Box 5.       │
│  The cup was very  │      │  THE CUP BROKE.│      │   Jane and Fred    │
│     breakable.     │      └────────────────┘      │ both tried to grab │
└────────────────────┘      Explain this box.       │      the cup.      │
                                                     └────────────────────┘


┌────────────────────┐                              ┌────────────────────┐
│       Box 3.       │                              │       Box 6.       │
│  The cup hit the   │                              │   Jane and Fred    │
│       floor.       │                              │  dropped the cup.  │
└────────────────────┘                              └────────────────────┘
```

# Appendix 2

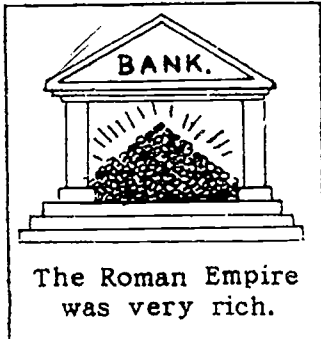## Question 10. Why were the Romans able to take over?

[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.
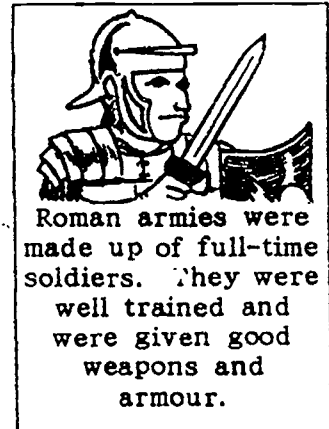Join them up with arrows to show most clearly why the Romans were able to take over.

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!

BANK.

The Roman Empire was very rich.

Box 1

Roman armies were made up of full-time soldiers. They were well trained and were given good weapons and armour.

Box 4

The Roman Empire was kept in order and looked after properly.
The Emperor's orders were obeyed.

Box 2

SO:—
THE ROMANS WERE ABLE TO TAKE OVER MOST OF BRITAIN.

Explain this box.

Second clash.
After the 2 smaller battles, the Romans beat the main army of Britons at a great battle by the River Medway.

Box 5

HATE

The Britons did not all have the same leader. They lived in separate groups, each with its own leader.
Some Britons hated other Britons more than they hated the Romans.

Box 3

First clash.
Soon after the Romans landed, the Britons attacked them with two separate armies.
The Romans beat each army one at a time.

Box 6

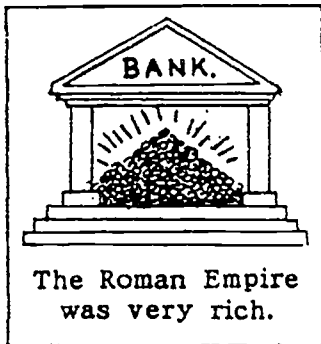## Question 12. Why were the Romans able to take over?

[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.
<u>Join them up with arrows to show best why the Romans were able to take over.</u>
Make the best explanation you can.
An arrow from one box to another means: <u>the first box helps explain the second box.</u>
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.
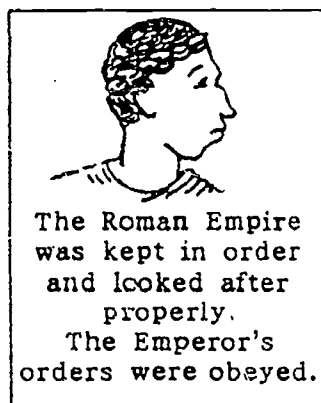
## Make the middle box happen!



BANK.

The Roman Empire
was very rich.

Box 1

Roman armies were
made up of full-time
soldiers.  They were
well trained and
were given good
weapons and
armour.

Box 4

The Roman Empire
was kept in order
and looked after
properly.
The Emperor's
orders were obeyed.

Box 2

SO:-
THE ROMANS WERE
ABLE TO TAKE
OVER MOST OF
BRITAIN.

Explain this box.

<u>Second clash</u>.
After the 2 smaller
battles, the Romans
beat the main army
of Britons at a
great battle by the
River Medway.

Box 5

HATE

The Britons did not
all have the same
leader.  They lived
in separate groups,
each with its own
leader.
Some Britons hated
other Britons more
than they hated
the Romans.

Box 3

<u>First clash</u>.
Soon after the
Romans landed, the
Britons attacked
them with two
separate armies.
The Romans beat
each army one at a
time.

Box 6

24

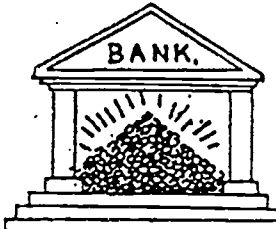## Question 12. Why were the Romans able to take over?

[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!

BANK.

The Roman Empire
was very rich.

Box 1

Start

Roman armies were
made up of full-time
soldiers. They were
well trained and
were given good
weapons and
armour.

Box 4

The Roman Empire
was kept in order
and looked after
properly.
The Emperor's
orders were obeyed.

Box 2

SO:-
THE ROMANS WERE
ABLE TO TAKE
OVER MOST OF
BRITAIN.

Explain this box.

Second clash.
After the 2 smaller
battles, the Romans
beat the main army
of Britons at a
great battle by the
River Medway.

Box 5

HATE

The Britons did not
all have the same
leader. They lived
in separate groups,
each with its own
leader.
Some Britons hated
other Britons more
than they hated
the Romans.

Box 3

First clash.
Soon after the
Romans landed, the
Britons attacked
them with two
separate armies.
The Romans beat
each army one at a
time.

Box 6

# Appendix 5

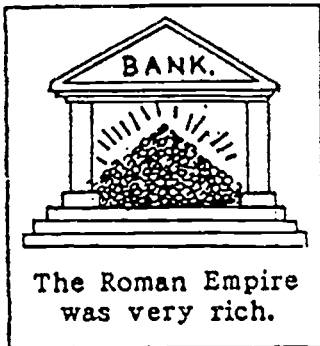## Question 12. Why were the Romans able to take over?

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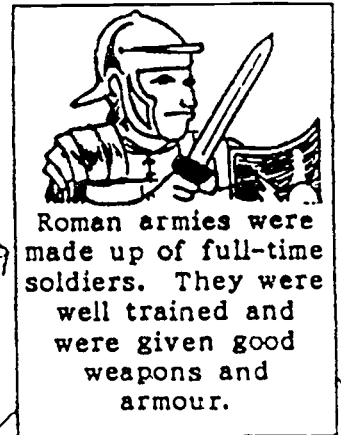Join them up with arrows to show best why the Romans were able to take over.
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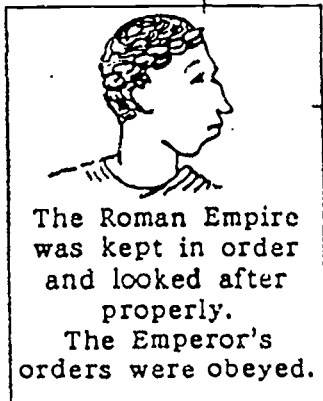BUT don't make joins that don't help explain why the Romans were able to take over.

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2u