Conversation and Remembering: Bartlett Revisited

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SUMMARY

Bartlett's book Remembering (1932) is frequently cited as a major forerunner of the information processing approach to memory and cognition. This approach has itself been criticized by one of its founders, Ulric Neisser (1982), for its narrowness and artificiality compared with the nature of remembering in natural contexts. A re-examination of Bartlett's work demonstrates that it offers little basis for an information processing approach, but rather that it offers the foundation of a much broader, culturally contextualized and functional approach to the study of everyday remembering. Three particular themes are discussed: the integration of social judgements and affective reactions with cognition, the role of conventional symbols in the coding and communication of experience, and the importance of conversational discourse. Bartlett's best-known studies, involving the method of serial reproduction, are shown to be microcosmic demonstrations of the process that he was most concerned with—that of conventionalization of symbols rather than of the workings of an individual's memory. It is argued, again beginning with Bartlett, that everyday remembering may be most fruitfully studied in terms of its personal and social functions, and particularly through its realization in discourse.

INTRODUCTION

'Remembering is a function of daily life, and must have developed so as to meet the demands of daily life' (Bartlett, 1932, p. 16).

The aim of this paper is to discuss the relationship between conversational discourse and remembering. The argument is that conversational discourse, in which people draw upon and share with each other their past experiences, provides exactly the sort of context in 'daily life' in which everyday remembering can best be studied. The specific ground of the discussion is a re-examination of Bartlett's (1932) often and increasingly cited book, Remembering: a study in experimental and social psychology. The aim is not to set the historical record straight, nor to provide any sort of definitive account of Bartlett's work. Rather the prime concern is with the value of such a re-examination for certain issues which are currently significant in cognitive psychology and in the study of social cognition.

The demonstration of the reconstructive nature of psychological functioning at both the individual and the social levels is frequently cited as Bartlett's principal legacy to modern psychology. In fact there is in Bartlett's work much more that is of contemporary relevance. Three points merit particular attention: first, the power of his

An earlier version of the argument presented here was included in the July 1986 newsletter of the Laboratory for Comparative Human Cognition, University of California, San Diego.

0888–4080/87/020077–16$08.00
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Received 7 July 1986

Revised 27 October 1986
work for providing a more integrative and functional approach to human mentality: second, his attempt to offer a unified version of how symbolic materials are transformed within and between individuals and social groups; and third, his pervasive use of reported conversations in gaining and substantiating important insights into the nature of remembering in particular, and of mentality in general.

Modern references to Bartlett's (1932) book tend to be acknowledgements made for the historical record, rather than efforts to derive substantial theoretical insights or empirical data. Indeed, readers of the contemporary literature would be forgiven for assuming that there existed two books under the same title: one on cognitive aspects of individual recall, and another on social factors influencing recall. On the one hand cognitive psychology claims the work as a pioneering version of schema theory in which certain reconstructive properties of human information processing were worked out in advance of the modern computer-modelled analogies (frames, scripts, story grammars, etc.; e.g., Anderson, 1985; Mayer, 1983). On the other hand social psychologists, sociologists and anthropologists have emphasized the social dimension in the work. In the social psychological context it is viewed as an early seminal study of the group and individual processes that underpin rumour (Allport and Postman, 1947; Douglas, 1980) and which facilitate the transmission of symbols and concepts represented in folk traditions and mythologies.

These two traditions have, ironically, reconstructed Bartlett in their own image. The one commonality which unites them is the notion of schematic reconstruction. This is indeed a theme which permeates Bartlett's work, but it is only one of several. Three other, equally significant themes will be outlined, which together tend towards an integration of the two traditions, all of which have much to say in relation to certain modern issues in the study of human mentality. These three themes are the unity of mentality, the process of conventionalization, and the importance of conversational discourse.

The unity of mentality

It was essential to Bartlett's empirical and theoretical work that the subject of study was the activity of remembering rather than the faculty of memory. He conceived of remembering as a functional, affect-driven activity in which any distinction between the processes of perception, imagination, affect, understanding and motivation was essentially arbitrary. Feeling and affect were key features in the schematic grasp of reality which lay at the root of all psychological activity. Bartlett was concerned not simply with how our memories work, but with understanding the nature of conscious and self-conscious human activity in real social contexts. Through the study of remembering he hoped to reveal the essential unity of mentality and its functional adaptiveness to everyday existence.

Conventionalization

The second major continuity in Bartlett's book is his pervasive concern with what he termed 'conventionalization'. Indeed, as he reveals in a later work (Bartlett, 1958, chapter 8), 'conventionalization' was originally intended to be the title of the book eventually published as Remembering. It is the name that Bartlett gives to the process by which cultural symbols and communicated materials in general take on their
recognized properties. It is a process at once central both to individual schematic remembering, and to the role of culture and communication in human knowledge and understanding. The method of serial reproduction, famous as a paradigm for the study of memory, was essentially designed to capture the process of conventionalization. Remembering was for Bartlett not simply the recalling of experience, but rather a fundamentally symbolic process both rooted in and constitutive of culture, forming and formed by symbols and meanings transmitted in texts and pictures.

**Conversational discourse**

Finally, it will be argued that there is a hidden thread in Bartlett's book—that of conversational discourse. Despite his use of various formal procedures such as the methods of 'description', of 'repeated' and 'serial reproduction', Bartlett's work is replete with reported speech, quotations from discourse with his subjects, of what they said to him and he to them. It will be argued that conversational discourse with his subjects was a major basis of Bartlett's insights, though he did not examine the discourse directly, but rather took it as evidence for his subjects' underlying thought processes.

These three neglected themes are basic to the discussion which follows. However, rather than simply taking each in turn and re-examining Bartlett's book, these themes are drawn upon to define a set of important issues for the modern psychology of remembering. These are:

1. The role of 'feeling' and 'attitude' in remembering. This is essential to the issue of the unity of mentality.
2. The nature of cross-modal 'symbolic remembering', where what is to be remembered was experienced in a different form from that in which it is recalled (e.g. a narrative account of witnessed events, or a written account of spoken conversation). Particularly important is the relation between experience and language, and the importance of conventional symbols in everyday human mentality.
3. Remembering as a function of conversational discourse, where remembering occurs in the context of communicative purposes that often override simple notions of reproductive accuracy, and where the social dimension of symbolic remembering is most accessible to examination.

**FEELING AND ATTITUDE**

Within modern cognitive psychology acknowledgements to Bartlett (1932) frequently cite the studies of serial reproduction of stories and pictures, together with the theory of organized mental schemata (e.g. Anderson, 1985; Weisberg, 1980, Mayer, 1983). The modern laboratory-based study of the role of cognitive schemata, mental models, plausible inferences, etc. in the recall of prose passages owes a great deal to the legacy of Bartlett’s work. He discovered that people tend to 'rationalize' what they recall, imposing conventional meaning and order on whatever is remembered. But in Bartlett’s own account this rationalization was 'only partially—it might be said only lazily—an intellectual process... the end state is primarily affective' (1932, p. 85). Indeed, the
affective basis of remembering was well established in pre-war experimental psychology and psychopathology (Rapaport, 1961; Freud, 1960), and in the 'New Look' psychology of the 1950s (e.g. Bruner, 1957). Its relative neglect until recently (Bower, Monteiro and Gilligan, 1978; Forgas, 1981) has owed much to experimental psychology's preoccupations with cognitive information processing. The affective and contextual aspects of schemata are emphasized here since their cognitive character is already familiar in the literature. Furthermore, an emphasis on these other aspects of schemata clearly highlights the necessity to approach mental functioning as a unitary process.

Bartlett himself was critical of the notion of mental 'schemata', a term he borrowed from Head's (1920) work on the neural representation of motor skills. He disliked Head's notion of the cortex as 'the storehouse of past impressions' (Bartlett, 1932, p. 200), and preferred instead the notion of schemata as 'organized settings'. For Bartlett, schemata were not static knowledge structures stored in the brains or minds of individuals for the interpretation of experience, but rather were functional properties of adaptation between persons and their physical and social environments. Their essential properties therefore were social, affective and purposive, the basis of actions and reactions in the contexts of living one's life. It is ironic that Bartlett's use of Head's term 'schema' has been assimilated into a cognitive psychology which, while acknowledging Bartlett's use of the term, distorts its meaning in a manner that Bartlett's work has made familiar.

Amongst the terms used by Bartlett, 'schema' is a little misleading to modern psychologists, who are familiar with the uses of the term by theorists of cognitive development (Piaget in particular), and of adult cognition (e.g. Rumelhart, 1975). More indicative of Bartlett's psychology was his more frequent use of the terms 'attitude', 'feeling' and 'organized setting', all of which he evidently preferred to 'schema'. Attitude in particular conveyed the notion of mental processes in which cognition, affect and purpose were indistinguishable, where a person's general psychological stance towards things was what mattered. Zangwill (1972) notes that 'Bartlett's use of the term attitude owes much to Betz's term Einstellung, which broadly signifies mental posture or set' (p. 126). Materials made sense to people in terms of their functional significance and the reactions they evoked. The term feeling had been explored in an earlier paper (Bartlett, 1925), and similarly included both affect and judgement, as it does in colloquial English ('How do you feel about the arms race?'). Organized setting, as we have pointed out, evokes the notions of context and relationship; mental processes are functional in relation to a person's activities and purposes.

These notions of attitude, feeling and organized setting, despite their different meanings, are all terms which Bartlett used in an effort to capture the essential integration of individual mentality and culture, of cognition, affect, and cultural symbols. They combine to undermine any neat division of mental processes. It is seldom acknowledged that the studies of serial reproduction occupy only two of the nineteen chapters of Bartlett's book Remembering. The earlier parts of the book are concerned largely with perception, imagination and description. It was clear to Bartlett that the same underlying psychological principles were at work throughout—'in order to understand what we remember, we must set in relation to this how and what we perceive' (Bartlett, 1932, p. 15). Memory, perception and imagination were bound together in the same everyday processes of mentality. It is only the experimental psychologist who, in the service of controlled empirical study, has needed to prise
them temporarily apart. The closest that modern theorists come to capturing this essential cognitive unity is in Neisser's (1976) notion of the 'perceptual cycle', and in Schank's (1982) fusion of perception and memory. However, these models are still basically cognitive rather than 'attitudinal', while approaches that do stress the importance of affect (e.g. Zajone, 1980; Bower et al., 1978; Forgas, 1981; d'Andrade, 1981) are typically restricted to mood and emotion, often in the pursuit of connections with brain function. Indeed, Forgas (1981), whose work emphasizes the importance of affect in memory, cites Bartlett as an early schema theorist with no reference to what he had to say on the role of affect in remembering.

The importance of 'attitude' (involving a fusion of personal and social significance, affect and cognition) was evident in a study of conversational joint recall (Edwards and Middleton, 1986a). Participants in a group discussion were required to recall together as much as they could of a feature film that they had each recently seen (Steven Spielberg's E.T.). Personal evaluations and emotional reactions were the basis of many particular recollections. Moreover, a marked transition was noted when, after completing the required narrative reconstruction, the discussants relaxed into a free exchange of non-sequential recollections—favourite scenes and moments from the film, particularly poignant events, and such. The preferred basis of recall was evidently one of affective and evaluative significance (e.g. 'I cried most when ... ', 'Tell you what got me, the bit when ... '), rather than systematic reproduction, and it was also obvious that the sharing, comparing, agreeing and disagreeing of these feelings with those of other people was the important business. The participants were at pains to establish their own rememberings and evaluations in relation to those of the other people in the group. The importance of affect in the context of remembering is not simply a matter of the involvement of emotional states and moods. It is that affect is a prime marker of significance, of why things matter to people, of what makes them memorable or worth talking about (cf. Schank, Collins, Davis, Johnson, Lytinen and Reiser, 1982).

The sort of remembering that Bartlett studied was one dictated by affect, attitude and social context. But the issue remains, are these things essential aspects of remembering per se, or else merely influences on remembering, interferences that experimental studies of memory do well to remove? Several psychologists, in the pursuit of some notion of pure memory traces, have argued that much of Bartlettian schematic remembering is not really 'memory' at all (see, for example, Zangwill, 1972; Gauld and Stephenson, 1967). The alternative stated here is that the social, functional and discursive bases of remembering are inherent properties of human mentality. The pursuit of metaphors to do with storage and retrieval, and of the neural basis of these isolated individual processes, is founded on a fragmentary and decontextualized view of human mentality which is largely responsible for the poor match that we find between the findings and theories of experimental psychology and the practices of everyday life (cf. Neisser, 1976, 1982; Cole, Hood and McDermott, 1978; Rogoff and Lave, 1984).

One of the major keys to the relationship between individual mentality and social context is, of course, language. The study of remembering must unavoidably deal with the relationship between language and thought. Furthermore, a study of everyday discourse (to be distinguished from the familiar use of semantic systems as models of memory structure) offers a natural bridge between the individual and the social; one indeed in which the functional and affective significance of things finds direct expression.
CROSS-MODAL REMEMBERING: THOUGHT AND LANGUAGE

The terms 'mode' and 'cross-modal' are used here to refer not to the sense organs but to the forms of symbolization or representation in which any material is experienced and later remembered. In this sense most modern studies of memory and remembering, including Bartlett's reproduction studies, are methodologically single-modal. Input is in the same mode as output—stories recounted as stories, sentences recognized as sentences, pictures recognized as such or reproduced as drawings. There is an excellent methodological reason for this; it affords a direct comparison between input and output, and therefore concrete evidence of any intervening mental operations. In addition, a great many studies of memory involve memory for verbal materials. The nature of language permeates our understanding of memory, both long-term and short-term. Indeed, 'semantic memory' is a term used to denote general knowledge structures (Tulving, 1972). However, it can be argued that much of everyday remembering is cross-modal, and even that it is the essential function of language to be cross-modal. This has important implications for the study of remembering.

To substantiate the cross-modal nature of much of everyday remembering it is necessary to distinguish two sorts of remembering, which may be called sensory and symbolic. These are distinguished by modality and the involvement of language rather than by duration. Typologies of memory are usually based either on stage or depth of information processing (Atkinson and Shiffrin, 1968; Craik and Lockhart, 1972), or else distinguish 'actual memories' (Schank, 1982) from general knowledge structures (cf. Tulving, 1972). The aim here is to offer not a competing theory of the nature of individual memory, but simply a useful distinction in terms of which to discuss the role of language in remembering. The distinction between sensory and symbolic remembering has more affinity with Bruner's (1964) notion of 'modes of representation' than with current conceptions of memory.

Sensory remembering is the sort where past experiences are recalled or recognized in a form based directly on that in which they were experienced. It includes the sort of conscious remembering involved in Schank's (1982) 'reminders', and also, at a more basic level, the essential continuity between past and present experience embodied in Neisser's (1976) 'perceptual cycle'. It is inherently single-modal. Symbolic remembering involves putting things into words, into conventional and communicable symbols. This includes such matters as long-term memory for text, and recounting eye-witnessed events. It is inherently cross-modal, and is closely bound up with the conventions which link thought and symbol.

It is important that we avoid confusion due to the conventional restriction of the term 'cross-modal' to mental operations involving more than one of the different sensory channels. The notion of cross-modal remembering applies to those occasions on which, to borrow some information-processing terminology, experiential input is coded differently from remembered output. But these occasions are not only ones on which the difference is one of sensory modalities, such as reading some text for later recitation (visual input to vocal-auditory output), or hearing a passage that later has to be written out (auditory input to visual-manual output). They include also symbolic recordings, such as the occasions on which visual experience is later put into words, as when testimony is given of witnessed events, and even when oral discourse is later reproduced in written form. As we have shown elsewhere (Edwards and Middleton, 1986b), written accounts impose upon oral experiences their own textual conventions.
So we are drawing a working distinction between sensory and symbolic remembering, and arguing also for the importance in everyday remembering of the symbolic re-coding of experience.

The importance of such re-coding lies not only in the information-chunking economies of mental processing articulated by Miller (1956). It lies also in the cultural nature of the process. Even the sensorily experienced world is one largely of culturally meaningful objects and artefacts—the built environment, manufactured things, conventional social events and occasions, and, of course, signs and symbols, language, conversations with other people. We live in a world of shared significance with other people, and we remember it in terms of those significances. The re-coding of experience is a cultural and often a communicative process, which we should expect to be shaped by the cultural forms in which it is done, and also by the communicative conventions and requirements of the occasions on which things are remembered. Let us return now to Bartlett and see where these arguments take us.

Bartlett's studies of remembering were concerned with symbolic remembering. However, his major concern was not strictly with memory or remembering at all, but with the process of 'conventionalization'. By studying a certain sort of remembering, Bartlett hoped to shed light on a major issue that had engaged his attention since his early experiences amongst the Swazis of East Africa (Bartlett, 1923, 1932), and continued to do so throughout his life (Bartlett, 1958). This was the process of cultural symbol formation—of how cultural forms and meanings originate and are shaped through transmission, and of how they shape and are shaped by human mentality. The method of serial reproduction was adopted as a means of examining at the social-psychological level the cultural process of conventionalization of symbolic materials. The various transformations of these materials (rationalizations, reductions, omissions, etc.) were microcosms of general symbol formation in the wider culture. It is not surprising in this context that Bartlett could not reconcile his notion of remembering with the prevailing notion of experiential memory traces. The important point to realize here, though, is that his pervading interest in conventionalization imposed certain constraints on his methods and materials, constraints which become serious distortions when his studies are taken to be studies simply of memory or remembering. These distortions arise from two features of Bartlett's methods which were dictated by the issue of conventionalization: the use of serial individual reproductions, and the use of a single-modal methodology.

Bartlett's concern with conventionalization led naturally to the study of how textual and pictorial materials are reproduced from memory, and this has in turn influenced a great many subsequent studies of memory for textual materials. However, if we ignore conventionalization for a moment and consider the essential nature of text, of discourse generally and of relations between experiencing and remembering, it is immediately clear that the serial reproduction studies are unlike much of everyday remembering. This observation rests on two points. First, it is the very nature and function of written text that it provides a permanent record which can be repeatedly consulted and copied verbatim (Olson, 1977). Reliance on memory is more naturally involved in oral discourse. Second, it is the essence of oral language that it is a two-way means of communication through which knowledge and experience can be conceptualized and exchanged between people. It is clearly not the essence of discourse that people engage in one-way chains of messages in which the task is to accurately convey someone else's text from memory. People generally recall and recount things that interest them and
that they assume might interest the people they talk to, and people talk back, react, interpret, prompt, remind each other of things, misunderstand, disagree, and so on. These everyday conversational events are the stuff of symbolic remembering.

Symbolic remembering is all about relations between thought and language. It is a commonplace of cognitive psychology that long-term memory involves 're-coding', that memory for non-linguistic materials may undergo language-determined transformations (Carmichael, Hogan and Walter, 1932), and conversely that memory for text involves non-linguistic processes, plausible inferences, mental models and the like (Bransford, 1979; Johnson-Laird, 1983). When the experimental task is to recall or recognize textual materials, these processes appear as interesting discoveries about our mentality—our memories are inferential, not literal as might be expected. But only a simple associationist or a mental faculty theorist would expect such a thing. What is happening in these studies is that psychologists are forcing naturally cross-modal materials into a single-modal methodology, invariably finding that cross-modal effects leak through the experimental design; subjects image words, label perceptions, make inferences and evoke models of reality to interpret the text. People unavoidably deal with language cross-modally; this is, arguably, language's principal function.

It is a legacy of S–R associationism that memory is still defined, despite whatever complexities, as retention. It is the measurable discrepancy between input and output. By implication, without a measure of input there is no measure of memory. Furthermore, input and output have to be in the same modality for discrepancies to be measurable. It is unfortunate that Bartlett's forgotten concern with conventionalization served to reinforce the adoption of this input–output methodology as the one to adopt for studying memory in general. Indeed, the method has become the theory. Information processing is the transformation of input through successive stages into output. What has been lost is an understanding of the essential nature of everyday remembering (cf. Neisser, 1982). We have to find ways of studying cross-modal remembering: the search takes us back to Bartlett.

Bartlett's (1932) experimental studies of remembering did not actually begin with reproductions, but with descriptions. In Chapter 4 of Remembering he presents the findings of some 'preliminary' studies in which people were asked to recall, via verbal description, a set of five drawings of military men's heads, with appropriate hats identifying rank, depicted on picture postcards of the era (the First World War). These studies are of particular interest because they represent a cross-modal methodology which Bartlett later abandoned in favour of repeated and serial reproduction. The findings anticipated many of those of the later studies. The faces were recalled and described largely in terms of 'affective attitudes' influenced by 'conventional notions about soldiers of a given rank. These were the more effective because a great war was in progress; but complications of exactly the same kind noticeably affect our reactions to faces and to facial expressions at all times' (ibid., p. 53). Bartlett goes on to note a variety of reconstructive descriptions based on conventional and attitudinal schemata.

Despite the fruitfulness of the method of description, Bartlett eventually abandoned it in pursuit of the processes of conventionalization, in favour of the methods of repeated and serial reproduction. But if we are interested more generally in the nature of everyday symbolic remembering, the method of description has two great advantages. It affords a study of cross-modal remembering, and it puts the relationship between language and experience at the heart of the study, where on the present argument it belongs. The necessary abandonment of the ability to closely monitor
input–output discrepancies is a considerable price, but there are some compensations. Bartlett himself managed to derive from the method essentially the same general principles that are usually attributed to his later studies using serial reproduction. Indeed, as with Bartlett’s pictures and with other cultural products such as feature films, there is considerable scope for close examination of ‘input’. Moreover, we avoid the tendency for the input–output method to dictate theory, making it possible to pursue an understanding of everyday remembering without reducing it to an ultimately neural model of information processing. Furthermore, our understanding of the nature and functions of oral discourse and written text (e.g. Brown and Yule, 1983; Freedle, 1979; Tannen, 1982; Chafe, 1980), together with the availability of audio and video recording equipment, render possible today the study of things which were virtually impossible for Bartlett. It is now a feasible enterprise to study the mnemonic potential of everyday discourse.

DISCOURSIVE REMEMBERING AND METACOGNITION

Bartlett’s conversations

As soon as we begin to examine how people remember things in the context of everyday activities and conversations the importance of input–output matching quickly diminishes. The psychologist’s concern with precise measures of input–output discrepancies does not reflect what, in many cases, people are trying to achieve in recalling or recounting things. Objectivity would often be a more appropriate criterion than accuracy, but there are plenty of other criteria. Remembering often serves functions which place a low premium on accuracy, as for example in recounting an interesting tale. Discursive remembering is subject to social and discursive norms such as the avoidance of being boring, the pursuit of humour and entertainment, and the more basic conversational rules which include strictures against including too much detail, however accurate, for the listener’s needs (Grice, 1975). Bartlett was well aware of the nature of everyday remembering:

The actions and reproductions of everyday life come largely by the way, and are incidental to our main preoccupations. We discuss with other people what we have seen, in order that we may value or criticize, or compare our impressions with theirs. There is ordinarily no directed and laborious effort to secure accuracy. We mingle interpretation with description, interpolate things not originally present, transform without effort and without knowledge (Bartlett, 1932, p. 96).

It is clear from this statement that Bartlett’s conception of everyday remembering was one that frequently involved conversational discourse and social comparison. In everyday life, ‘literal recall is extraordinarily unimportant’ (ibid., p. 204). Indeed, everyday remembering is, on Bartlett’s account, something rather different from the chained reproductions through which he sought to capture the processes of conventionalization.

Although Bartlett undertook no formal study of conversational remembering, it is a remarkable fact, already noted, that the book Remembering is full of examples of it. Throughout the book, Bartlett quotes what his subjects said to him, and uses this
reported speech as evidence of the schematic psychological processes at work in perception and remembering. Obviously, reported speech was the formal basis of the 'Method of Description' discussed in the section on cross-modal remembering. But Bartlett also draws on comments that people made about the pictures, and about their own perceptions, images and memories. For example, he reports what his subjects said about the clarity of particular remembered visual images of faces:

'The colonel, because of his moustache.'
'The colonel is the clearest because of his marked facial characteristics.'
'The colonel: I put this down to the moustache and the grim expression.'
'The captain, because I prefer the naval type.'
(Bartlett, 1932, p. 56).

It is this sort of task-oriented dialogue with his subjects about their mental processes, rather than simply the formal data themselves, that was the major basis of Bartlett's insights and arguments. It was in the course of this metacognitive dialogue that his subjects offered to Bartlett direct evidence of the sorts of reflective, schematic and attitudinal mental processes that could only be inferred indirectly from the serial reproduction data. 'Because I prefer the naval type' is a direct expression of the role of interest and attitude in visual memory. These uses of 'because' are notably similar to those discussed in Edwards and Middleton (1986a); in conversational remembering, people routinely offer metacognitive justifications and arguments for the comparative validity of their mental processes. It is clear that Bartlett's subjects were not simply reporting their mental processes, but doing so in the context of a dialogue with Bartlett in which they were answering questions, explicating and explaining things to an investigative psychologist.

Most of Bartlett's theorizing about the role of schemata, of affect, attitude and conventionalization, was worked out long before he used the method of serial reproduction. Some of his earliest studies (reported in Remembering, Chapter 2) concerned the imaginative imagery evoked in people by inkblots, before Rorschach (1921) devised his well-known psychodynamic use of them. Bartlett's subjects used their imaginations on request—i.e. in dialogue with Bartlett:

The instructions were: 'Here are a number of ink-blots. They represent nothing in particular, but might recall almost anything. See what you can make of them, as you sometimes find shapes for clouds, or see faces in a fire'. (Bartlett, 1932, p. 34).

Bartlett presents an analysis of his subjects' responses, of the variety of imagery and the importance of affect and personal interest. But again, important insights and even his theoretical constructs were derived not merely from the data proper, but from dialogue about the task:

The subjects themselves... frequently called attention to this fact. 'You ought to be able to tell a lot about a man's interests and character from this sort of thing,' several of them said (ibid., p. 38).

This subject said he had distinct visual imagery throughout, but never of himself. He came to his scenes through having what he called the 'feel' of an experience. That is to say, a predominantly affective attitude was set up (ibid., p. 41).
Ask the observer to characterize this general impression psychologically, and the word that is always cropping up is 'attitude' (ibid., p. 206).

This use of experimenter-subject dialogue continued throughout the studies of remembering. Bartlett quotes a subject who attempted to recall the story 'The War of the Ghosts' after a period of 6½ years: 'Was it on a pilgrimage that they met a hostile party and one brother was slain?' (ibid., p. 77). Bartlett notes:

The story as he constructed it is full of rationalizations and explanations, and most of the running comments of the subject concerned the interconnexion of the various events and were directed to making the whole narration as coherent as possible (ibid., p. 78).

It is arguable that, in spite of Bartlett's use of formal experimental procedures involving comparisons of input data with recalled output, the more important basis of data and theory was in fact his dialogues with his subjects. Indeed, Bartlett also describes how he derived much theoretical and methodological insight from discourse with his colleagues (as, of course, we all do). In Thinking (1958), he provides an account of how the notion of using repeated stimuli was formulated in conversation with Ward, the concept of schemata in conversation with Henry Head, and of how the notion of serial reproduction was suggested to him by Norbert Wiener.

**Discourse and metacognition**

One of the central issues that Bartlett raised was that of self-consciousness, what might now be termed 'metacognition'. This was purportedly the key to any organism's ability to transcend the temporal order of events:

> to go to that portion of the organized setting of past responses which is most relevant to the needs of the moment. . . . An organism has somehow to acquire the capacity to turn around upon its own 'schemata' and to construct them afresh. This is a crucial step in organic development. It is where consciousness comes in; it is what gives consciousness its most prominent function. I wish I knew exactly how this is done (1932, p. 206).

This apparently rather ineffable process of becoming aware of one's own schemata, couched by Bartlett in terms of individual 'organisms' and their development, could well have a basis in discourse itself. Despite his heavy use of discourse in the construction of his ideas about mentality, Bartlett appears to have looked through rather than at discourse. His subjects were formulating and communicating conceptions of their own mentality in conversation, as Bartlett himself was doing. For Bartlett, introspection was simply a device for revealing things about mentality, and language was a means of expressing them. The possibility arises, however, that introspection and metacognitive discourse are in fact interesting social-cognitive processes in their own right, and amenable to study via an analysis of discourse itself. The importance of language in the transcendence of the serial chain of behaviour has been well established since Bartlett's time (e.g. Lashley, 1951; Bruner, 1964), though the importance of conversational discourse in this process remains to be worked out. It is important not
simply that language offers displaced reference, but that people avail themselves of this device and communicate, compare and argue their various perspectives with each other. This is indeed the social basis of what we have called 'symbolic remembering', the use of language to construct joint understandings which are accessible and communicable via a common code (i.e. conventional symbols, grammatical rules and rules of interpretation). The role of language in memory derives from this more basic role of language in the establishment of commonality and difference of perspectives through discourse (cf. Freyd, 1983).

In his book Remembering, Bartlett made heavy use of conversational discourse without studying it directly, or explicitly considering its importance. By the time he wrote Thinking (1958), he had become aware of its importance as a fundamental process, which he termed 'everyday thinking':

Everyday thinking can also be termed 'immediate communication thinking'. It can find expression in speech, or in some kind of miming, or it can be written (Bartlett, 1958, p. 164).

Though still not looking directly at language itself, Bartlett clearly had come to the opinion that an understanding of everyday cognition and its social basis would have to be rooted in everyday conversation. This is a point of considerable contemporary significance; the royal road to an understanding of ordinary mentality is surely via the study of everyday discourse.

Varieties of discourse

Discourse has been discussed here largely as if it were a unitary phenomenon. Of course, it is no such thing. In symbolic remembering, the nature and content of what is remembered will be heavily determined by the sort of discourse through which it is done. In many respects the current understanding of the workings of memory is a function of the very limited communicative contexts in which psychologists have asked subjects to perform for them. These have been invariably, as they were for Bartlett, efforts in which subjects were asked to be as accurate, as literal or as complete as possible, for no purpose other than co-operation with the investigator's requirements. In ordinary life, people remember things for their own reasons, and seldom is accurate or complete recall either necessary or even the principal object of the exercise. Outside of the experimental laboratory, people remember things incidentally and by accident (Salaman, 1970; Schank, 1982), and also deliberately for a variety of purposes such as telling funny stories, persuading people of a point of view, arguing for or against a given version of events, where a concern for accuracy may even be a hindrance.

Bartlett's subjects' story reproductions had an important characteristic which Bartlett did not discuss. They were constrained by a literary style which is the more obvious the further we are from the time, place and cultural milieu in which the studies were done (Cambridge University in the 1920s). Even within such a closely constrained paradigm as a psychological experiment on story recall, variations are found of a sort which are essentially textual rather than, in the simple sense, mnemonic (see Edwards and Middleton, 1986b). The transformed reproductions reported in Remembering have a stylistic quality that mimics the more florid conventions of some late nineteenth- and early twentieth-century literature. This literary style contrasts sharply with the tersely
written reproductions to be found in modern replications. Indeed, all of Bartlett’s narrative reproductions are clearly re-writes, by the subjects, of the material, rather than simply rememberings of it. The role of discourse in remembering is sensitive to the various types, styles and uses of discourse, both spoken and written, within the culture to which the people concerned belong. Language is a medium of culture, and the role of language in memory is social–psychological. Its importance in individual acts of remembering derives from the fact that individual mentality is socialized by language. Furthermore, the importance of language is compounded as soon as memories are communicated, as soon as one person’s remembering becomes another person’s experience; joint versions of events are negotiated in discourse, and are subject therefore to the dictates of whatever sort of discourse it is.

CONCLUSIONS

The very familiarity of Bartlett’s theory and methods is probably responsible, ironically, for the scant attention generally paid to the original work. But this modern familiarity is a distorted one, based largely on the theory of schemata and the method of serial reproduction, and the assimilation of these into post-Neisser (1967) cognitive psychology. In re-examining some of the original work an attempt has been made to highlight important aspects of it which merit more detailed attention by modern psychology (the importance of affect, ‘attitude’ and the cultural basis of symbols) and also some aspects of it which have misled subsequent work (the substitution of conventionalization for everyday remembering, and the hidden importance of conversational discourse). The intention in emphasizing the importance of discourse in remembering is to argue that discourse provides the most natural basis for studying social cognition in general. The study of discourse in the functional contexts of everyday life offers the bridge between the individual and the social that Bartlett sought throughout his work, and attempted to capture through the conventionalization of successively remembered symbolic materials.

While discourse as a phenomenon in its own right, as well as its psychological underpinnings, have received plenty of attention in the recent literature of linguistics and cognitive science (see, for example, van Dijk and Kintsch, 1983), the emphasis in this work has remained that of elaborating the knowledge structures and cognitive processes that individuals employ in textual comprehension. Memory processes, the contents of memories, and the social and cultural contexts of remembering are treated as contributory elements in comprehension and production.

Little concern is given to how conversations and other sorts of discourse are directly instrumental in the realization and constitution of both individual and collective remembering. It is unfortunate that the major tradition of psychological investigation that cites Bartlett’s work has turned its attention to processes that go on inside the individual, where the method of comparing input with output has become reified as a model of mentality itself—of information processing.

Bartlett was truly concerned with social–cognitive issues. He was concerned not with the ways in which social factors affect individual cognitions (e.g. Stephenson, Brandstatter and Wagner, 1983), where two heads are seen to be more effective than one, but rather with the inherently social basis of mentality itself. It made no sense to Bartlett to isolate the components of mentality as consisting in the Platonic divisions of
cognition, affect and conation. Mentality was driven by the criteria of functional adaptiveness to the social conditions and contexts of everyday existence. The full force of Bartlett’s critique of the theory of mental faculties has been lost in a tradition which, while citing him as an antecedent, takes as its subject-matter individual mentality, defines for investigation a cognitive component, and proceeds to divide this methodologically invented entity into its component stages, levels and processes. It is not Bartlett’s legacy that cognitive social psychology (e.g. Eiser, 1980) and the study of individual memory (e.g. Baddeley, 1976) have become so widely separated.

A distinction has been drawn between ‘sensory’ and ‘symbolic’ remembering, defined qualitatively in terms of either a single-modal or a cross-modal relationship between experience and remembering. In symbolic remembering, experience is coded and transformed for communication. Two main points have been emphasized about symbolic remembering: first, its basis not merely in the thought–language relationship, but in discourse, in relations between people; and second, its functionality. Discursive remembering is functional in two ways. It is part of the essentially human activity of constructing shared mentality, and it is functional also at the level of the pragmatics of conversational content—people talk about what is significant and interesting to them, and have to make calculations regarding what is interesting and significant to others. Memory is coded for communication and significance, rather than for accurate representations of experience. It is not so much that people are not very good at remembering, as that they are very good at making the past serve the present: ‘To be mistaken about details is not the result of a bad memory, but of the normal functioning of human memory’ (Loftus and Ketcham, 1983). The argument presented here is that we need to seek the basis of symbolic remembering in terms of functions in everyday discourse before looking for its explanation in individual mentality and biology.

REFERENCES


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