Exploring inferences prompted by reading a very short story

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Introduction

It is a commonplace of foreign-language teaching that students' difficulties are largely to do with their linguistic proficiency. At intermediate or advanced level, we attribute such difficulties especially to unusual vocabulary and structures. At the same time, we also acknowledge that there may be a related competence to do with the culture of societies which use the target language. In order to develop such competence, cultural topics are explored in second-language English programmes by means of literature courses, 'civilisation' courses, or some other form of contextual, cultural description.

Arguably there is an important intersection between these two, historically and methodologically entwined areas of pedagogic interest, in the role played in communication by inference. Questions of language are involved, to the extent that different formulations prompt different lines of thinking on the part of listeners or readers. Questions of culture are involved, to the extent that background assumptions, which are acquired and stored in culturally-given orders of priority and accessibility, are combined with linguistic decoding of the utterance itself in order to arrive at a particular interpretation in a given context. Combined together, linguistic and cultural elements constitute what we informally call comprehension or interpretation.

In this paper, I advocate the value in the language classroom of shifting some of the emphasis of stylistic work, at intermediate and advanced levels, towards processes which combine linguistic form and background cultural assumptions to produce interpretations. Using the illustrative case of a very short story - only three sentences! - which nevertheless readily generates a large number of inferences varying interestingly between readers of different social experiences, I suggest that discussing the inferential dimension of discourse comprehension can make a valuable contribution to classes which try to bridge the customary gap between language teaching and literature teaching. My discussion takes the form of an informal report on (equally informal) recent experimentation with the three-sentence short story, which I have used on a number of occasions and with different kinds of student group.

Theoretical background

A lot of discussion has taken place in literary studies and cultural studies about the relative roles of text and reader in interpretation. Across a range of fields or sub-fields, textually-deterministic views, interested in the conventional meanings of linguistic (and other representational) forms, or in the prescription of subject positions, have increasingly given way to various kinds of audience ethnography. A still unresolved shift between these two

different approaches is reflected in current debate in a series of simplistic critical polarities: either the text tells us what it means, or we ascribe a meaning to it; either meaning is coded or it is whatever we infer; either meanings are conventional, or they are derived by some kind of computation.

In the essay 'Unlimited Semiosis and Drift', Umberto Eco draws attention to two longstanding hermeneutic traditions to which these various contrasts refer (Eco, 1990:23-43). One tradition seeks out a meaning authorised or intended by the original author, or in some other way existing as the discourse's objective nature or essence, independently of ourselves; the other interprets freely, allowing a potentially infinite number of different readings. Eco suggests that each of these views of interpretation involves a kind of 'epistemological fanaticism'; he encourages instead fuller recognition of a more complex communicative division of labour, and the imposition by context of major constraints or limits on interpretation.

One interest of inference is precisely that its operations lie *between* the different, polarised positions. Inferences are derived thoughts which either add to or alter the relative conviction with which an existing thought is held. They are typically triggered by sensory experiences, and in the case of written texts by the relation between linguistic forms and the situation in which a discourse occurs. Inferences relate discourse to context both in specific, local ways (e.g. in terms of reference assignment) as well as in more general ways, by connecting propositions expressed with the interpreter's encyclopaedic - socio-culturally formed - mental database. Inferences are not reducible to authorial intention; but they *are* constrained by context in ways which greatly circumscribe the range of what might be called adequate interpretations (Brown, 1995) or relevant interpretations (Sperber and Wilson, 1986).

Studies of inference in relation to language can be described as falling within at least four major strands. First, there is the general concern, in psychology, with inferential mechanisms, and with how expectation-driven processes involving prototypes, scripts and frames contribute to our mental models of the world (Clark and Clark, 1977; Johnson-Laird, 1983; Greene, 1986). Second, in discourse comprehension research (and in some studies of narrative), investigation is made of the 'situation model' which is generated by a reader or hearer as a text is processed. Such a situation model is an abstraction from the sentences of the discourse itself in the direction of an underlying set of more general propositions arrived at by means of an analysable series of inferences. The model is cumulatively integrated and updated, capturing the 'gist' of meaning as a representation in memory, available for recall and various kinds of manipulation (Kintsch, 1974). Third, in discourse analysis, interest in inference is focused more on how specific linguistic forms contribute to the production of meanings; discourse analysis draws on a variety of theoretical models, according to Gillian Brown, 'to describe listeners' behaviour as they listen to spontaneously produced language which they try make sense of while attempting to put that understanding to immediate use in a context' (Brown, 1995:4). Inferences may be isolated for examination in this framework by means of constrained context experiments, such as Brown's own Map Task and Stolen Letter Task. Fourthly, pragmatics investigates precisely when, how, and why inferences are triggered by specific linguistic forms: to complete the basic propositional form of an utterance by disambiguation, reference-fixing or generality-narrowing, for instance; or alternatively when presuppositions or various types of implicature are generated (Levinson, 1983; Thomas,

1995). Such investigations seek to develop general, explanatory accounts of interpretive behaviour (see Grice, 1989; Sperber and Wilson, 1986).

Because what is being investigated in such approaches is narrowly-defined theoretical issues, such studies are understandably not much concerned with detailed readings of particular, naturally-occurring pieces of extended discourse. For literary and cultural studies, by contrast, the principal questions of interest surrounding interpretation are those which relate textual meaning to cultural reception. But what is meant by reception sometimes remains obscure.

In literary studies, focus is often on brilliant, exemplary readings (such as those of a William Empson or a Roland Barthes). But the status of such readings - as between the uniquely insightful and the generally available - is less often discussed. As an empirical study of how variant readings and misreadings serve as the basis for cultural value judgements and tastes, in fact, I.A.Richards's *Practical Criticism* (1929) remains as seriously neglected today as it is widely celebrated, almost seventy years after publication and despite many reader-response successors.

In media and cultural studies, how far variant interpretations are dependent on local textual meanings is frequently obscured by commitment to audience ethnographies influenced by the writings of Clifford Geertz (e.g. Geertz, 1973). There is a tendency - somewhat simplifying Geertz - to regard meaning as whatever sense an audience makes of a text as they embed it into their own, existing social relations; the potentially analysable process of making meanings is collapsed into a general concept of 'meaningfulness'. The principal task in studying meanings, accordingly - as pre-packed responses and uses - becomes that of relating interpretations to each other and to social forces which are assumed to underpin them (e.g. as 'dominant' readings, 'oppositional' or 'resistant' readings).

Surprisingly little work is being done, it seems, to connect variant, unevenly socially distributed interpretations which are the products or outcomes of interpretive activity to the processes of interpretation which give rise to them. Suggestive theoretical frameworks have been proposed (e.g. Sperber's 'epidemiology of representations' (Sperber, 1996)). But little work of an empirical kind exists at present.

The classroom activity

The activity described here is not a contribution to theoretical debate. My interest lies in drawing attention in the classroom to interpretive processes which generally occur spontaneously and without pause for reflection. The three-sentence short story I have chosen is narrated in Michael Herr's book *Dispatches*, a dramatised account of his own reporting of the Vietnam War. Herr explains how a seasoned but maverick G.I. tells him the story, which he considers 'as one-pointed and resonant as any war story I ever heard'. But when he waits at the end of the three sentences for more, and then asks what happened, the G.I. merely looks as if he feels sorry for Herr and would not 'waste time telling stories to anyone dumb as I was'. 'It took me a year', Herr concludes, 'to understand it.' (Herr, 1978:13-14).

Part of the interest of the narrative, it seems, lies in whatever interpretive 'extensions' are

made from the relatively straightforward words of the text itself. There is what could be called, informally, a high 'inference-to-text' ratio, arguably characteristic of condensed forms such as the aphorism, proverb, sonnet, TV advert, pop song, or haiku. In each of these forms a substantial amount of bridging and completion work is required of readers.

The activity I describe focuses on the process of 'extending' what is directly said. It seeks to reconstruct processes by which, step by step at different stages in reading, we arrive by means of inference at an overall interpretation. A series of informal classroom sessions was conducted with different groups consisting of between 20-30 participants; sometimes participants were native-speakers, sometimes not. On one occasion, sessions took place within an introductory semantics and pragmatics course.

Early versions of the activity were aimed simply at encouraging students to talk about interpretation. Participants were invited to write a brief description of their overall interpretation before efforts at step-by-step reconstruction. It quickly emerged, of course, that this procedure unhelpfully confused recall and reconstruction of the story as a whole with a step-by-step protocol. I accordingly modified the format, projecting each sentence for a given period on OHP and asking participants to write down their inferences before the next sentence was projected. In more recent workshops, two parallel group-types have been set up: one group-type is given the 'Vietnam context' summarised from Herr ('VC groups'); the other is not, and its members rely instead on context-construction on the basis of their own experience and generic and cultural expectations ('NVC groups'). This procedure promises at least some indication of how far specific contextual assumptions made explicit prior to reading may prime interpretive trajectories.

The task

The story itself runs:

> (1) Patrol went up the hill. (2) One man came back. (3) He died before he could tell us what happened.

Students were asked to fill in responses to a series of tasks in relevant boxes which together make up a grid. After being shown the first sentence for about a minute, they were invited to indicate in one column up to four inferences they derive from it (having also been advised that inferences represent additional thoughts derived from material presented and are likely to take the form of a series of sentences). In a second column participants were asked to identify word(s) or expressions in the text which they believe to be responsible for triggering a reported inference. Where an inference appeared not to depend on a specific expression, but on something else, respondents were asked to try to describe what they thought prompts it. After completing the two columns for Sentence 1, participants were asked to repeat the same procedure for Sentence 2 and Sentence 3.

Once inferences had been listed in this way, participants were invited to consider how far links exist between inferences drawn at different stages, possibly amounting to 'inferential chains' leading towards more general inferences constituting the 'point' of the story.

Discussion topics then followed. Do inferences fall into types or classes, and if so how can such types be described? How does a reader know when to stop interpreting, given the apparent scope to introduce almost any amount or type of background knowledge to keep an interpretative process going? To conclude the session with questions about responsibility or accountability for text interpretation, each discussion was broadened finally towards the issue of validity. Are some inferences more legitimate than others? Is there, for instance, a point at which a reader begins to misconstrue or 'over-interpret', possibly by developing tangential thoughts rather than following interpretive paths prompted by the text itself?

Discussion

While it would be near-impossible to devise a classroom activity of this kind without forming some expectation about possible outcomes, it was difficult to anticipate sentence-by-sentence results. By the time I had decided to use the story, I had already assimilated not only all three sentences but also the Michael Herr context; my attention had been drawn away from alternative possibilities.

It is widely recognised, in any case, that in empirical studies inferences turn out to be far more complex and messy than textbook accounts suggest. Where there is no title or initial description to establish a frame of reference for a text, for instance, radically divergent paths can follow from model-building in reading (Johnson-Laird & Wason, 1977:344). Even so, on the basis of narrative research within the Kintsch tradition (e.g. Graesser and Zwaan, 1995), a number of different types of inference might be expected. These include inferences about: the intended goal(s) of an agent's actions; causal antecedents of a given event; causal consequents, or forecast causal chains arising from a stated event; characters' emotions, or how a given event is experienced or interpreted by characters; and states, properties or attributes which are not themselves causally linked to or prescribed by explicit description given in the text.

Feedback

In general terms, the types of inference reported in the activity do fall within the broad categories predicted by psychological studies of narrative. After being exposed to **Sentence 1**, for instance, most inferences do tend to be about who the agents making up the 'patrol' are, presumably prompted by a need to disambiguate the word 'patrol'. In VC and some NVC groups, such inferences range from the vague 'a group of men in uniforms', through 'a military group on exercises', to the far more specific, 'an American troop preparing for an attack'. Non-military alternatives among NVC groups, with implications for subsequent scenario-construction, include security guards, a police squad, a motor vehicle recovery lorry, a mountain rescue team (drawing also on 'hill'), and another unspecified emergency rescue team.

Inferences are also common about where the patrol is. 'Went' signals movement away from the narrator, and 'up' suggests that the patrol is 'in a valley' or on 'flat land' with a hill nearby ('there was only one hill to go up'). Location and topography in turn prompt

inferences about purpose: 'there was something on top of the hill to see'; and, 'the hill is a connection for people to go somewhere'.

For VC groups especially, 'patrol' suggests an element of routine action, surveying or guarding terrain: 'It's a part of a patrol's job to investigate the place'; 'a patrol is in its process, part of a regular action'; and, 'it's better to see the terrain from the top of the hill'. For one reader, 'the soldiers marched up the hill in search of the enemy'. One VC reader writes, 'they are getting ready to fight'; while another, NVC reader simply infers, more speculatively, 'patrol tells us it was a war',

Interestingly, relatively few inferences are reported in my sessions about characters' emotions or attitudes: only that 'the patrol were commanded to go up the hill, they wouldn't have gone otherwise'. Nor have inferences picked up much on the distribution of given and new information signalled by use - and elliptical omission - of articles: the clipped opening 'Patrol' (implying either an omitted indefinite or definite article, without reference to any particular patrol), but three words later 'the hill' (without an identifier, but somehow already-given knowledge). Inferences might have been anticipated along the lines that the story deals, allegorically or at least in an illustrative way, with general cases rather than in particulars, an impression reinforced by generic similarity with parables ('A man was walking...') and with children's narratives ('Jack and Jill went up the hill'). But such inferences have not appeared in the protocols.

On reading **Sentence 2**, readers might be expected to strengthen and extend their situation model with inferences less directed towards initial identification. (No supplementary inferences are reported reinforcing the scenario-geography, for instance, despite the re-occurrence in Sentence 2 of a deictic verb, 'came', indicating motion towards the speaker.) More attention seems likely to be paid by readers at this stage to causal implications between the two sentences.

On the basis of presumed coherence relations between Sentence 1 and Sentence 2, readers typically assume that the 'man' returning is a member of the patrol mentioned in Sentence 1. In VC groups, by adding an assumption that patrolling is a regular duty which requires collective returning and repeating, readers might also infer some sort of incident (to the extent that for not everyone to come back amounts to a break-down in usual procedure).

Predictably, the circumstances of the man returning do offer the principal focus for inferences: 'the man who came back could not face the enemy'; 'the man who came back turned his back on his fellow soldiers (but was then killed 'due to turning back')'. For one reader, 'the man who came back was too tired', and in another reading, 'in the end of the day he felt better and came back'. In another reading again, 'the one man didn't like what was up there and left'. Fairly specific purposes are indicated by some readers: 'the man came back to seek support'; 'the man came back because he had information for the officers'; 'the man forgot something'; and, 'the one man could be an informer'. In one vivid speculation, 'the man had witnessed the crime and died of shock-related cause'.

More elaborate scenarios reported include one in which 'the man came back alone because it would be easy for him to hide if he had to'; in another, 'the man came back to get something

or to relay a message'; and for another reader, 'the man who came back needed medical attention'. Inferences about intention and volition are made in at least one account: 'one member of the patrol decided not to be a member of the patrol any longer'; but a contrasting agency on the part of others is inferred in other readings: 'the patrol sent one man back', and, 'the man was commanded to come back for a reason'.

Alongside inferences about the returning man, inferences are also commonly made about what has happened to the rest of the patrol. By a standard quantity implicature, the inference is regularly made that the others did not come back. For VC groups, introducing stereotypical military assumptions again adds a further inference: that something adverse has happened to them - with the absence of 'only' before 'one' suggesting that somehow it is not surprising that the patrol did not all come back together.

The 'ambush scenario' to which these various inferences typically lead is reinforced in other inferences, too, such as, 'the patrol DID get involved in a fight with the enemy - and lost'. More specifically, 'the patrol were shot dead and one survived'; or again, 'the man is the only survivor, the others are either dead or captured'; 'the patrol team had been kidnapped and one man had escaped'. But the 'ambush' situation model is not developed by all, or even most, readers. For some, 'other people from the patrol remained up the hill, the rest of the patrol continued what they were doing'; or alternatively, 'the rest of the patrol decided that they wanted to stay on top of the hill';

After reading **Sentence 3** - and having been told at the outset that the story consists of only three sentences - more general interpretive inferences might be expected, possibly focused on the significance of what has happened cumulatively in the three sentences. Some inferences following Sentence 3, however, remain very general, simply continuing the theme of Sentence 2 inferences (and resembling delayed responses): 'there was something ominous on the other side of the hill'; 'if he got wounded, then something violent was going on'; or, 'something like a shoot-out has taken place'.

As a development of the 'ambush' scenario, a further causal inference now becomes common: that the man died of wounds received during the ambush, rather than, for instance, succumbing to longstanding ill-health. Among NVC groups, on the other hand, different situation models lead to significantly divergent inferences at this stage. Prompted presumably by 'hill', inferences include one that, 'the rescue team only rescued one man from a group of climbers'; and another that, 'the man fell over and died on his way down'. Some readers suggest that the man 'died because he was too weak to continue the journey'; 'he died of exhaustion because the camp was too far'; and 'maybe he died from a natural death, from exhaustion, steep hill, or a heart attack'. In a small number of accounts - all without specified reference back to the text itself - the man 'committed suicide because he couldn't handle the battle and the atrocities'; and 'the man committed suicide in order to avoid telling what actually happened'. In other accounts again, 'maybe he was killed because he was going to blab about what he saw'. More mysteriously, perhaps, 'somebody killed the messenger'.

Only a small number of inferences anticipate events beyond the final situation described: 'the people he returned to wanted to know what had happened (this is important information alongside his own death)'; 'the camp will never know what happened'; and 'another patrol

team will be sent up the hill'. A still smaller number offer 'meta-inferences' about the point of the story: 'we will never know what happened to him'; 'the 'us' were more concerned with what had happened than with the fact that he'd just died'; or, most generally, 'the Vietnam war was pointless'.

Finally, when the Michael Herr context is revealed to NVC groups during discussion, an instantaneous recasting of interpretations often takes place, loosely analogous to the conscious re-parsing of a grammatically-ambiguous, garden-path sentence. At this point, parallel interpretations derived from alternative assumptions offer themselves for contrastive discussion, especially regarding the relative contribution made to interpretation by textual and contextual cues.

Conclusions

As is evident from the informality of the questions and responses, the exercise reported above works principally as encouragement to reflect on interpretation, rather than as a controlled experiment. Readings produced in classroom conditions cannot in any case be considered representative: they replace spontaneous, on-line processing with close, analytic reading and slow-motion reconstruction, and are more like problem-solving than reading at usual speed or with what we simplistically call average attention. For this reason, workshops involving such reading remain of only marginal interest to discourse comprehension research.

Such sessions are unlikely to contribute much to textual hermeneutics, either. No attempt is made in the activity, for instance, to examine the particular sequence of related inferences which the story prompts for any one reader, or to disentangle relations between cognitive processes and the cultural content of assumptions which are introduced in order to derive inferences. Huge, unexplored questions also surround the distribution of inferences (or even inference classes) between different groups of readers, different types of learner, and different stages in the reading process. It would be misguided, accordingly, to attach any research significance to data presented here.

For classroom workshops to become interesting in research terms, more focused protocols would be required. Such protocols would need either to pose more carefully-formulated questions or alternatively to constrain far more narrowly the context within which inferences are drawn. Experimentally, such protocols might take a number of forms, including think-aloud protocols, question-answering protocols, question-asking protocols, or recall and summarising protocols. What enables controlled procedures to contribute to our understanding of reading is less the particular research design they choose to follow than the tighter focus they attempt on exactly how inferential mechanisms and cultural assumptions combine to create implicatures. That, I would argue, should be constantly a central question for interpretive audience and reception studies. As constraints on reporting interpretation are made more precise, of course, other interesting and equally important cultural questions may be filtered out, especially questions about how impulses of identification and desire can hi-jack or even obliterate what we conventionally think of as text-processing. Investigating aspects of response of this kind calls for new kinds of study which will ultimately need to be linked into accounts of linguistic decoding and inference.

It is not only research, however, which produces valuable work on meaning. Pedagogic initiatives are also essential. The short-story activity exposes students' need to enhance their abilities in articulating interpretive commentary, and in particular to distinguish forms from meanings. Very commonly, participants view the two as simply stuck together, and respond to questions about the meaning potential of particular forms in terms of their own, already-fixed interpretations of those forms in a given context. Clearer differentiation is needed, too, between the properties and relative stability or cancellability of different kinds of meaning effect, ranging from logical entailment, through presuppositions and strong and weak implicatures, to various kinds of identificatory involvement. Improving acuity in inferential communication needs to be given a higher priority in language studies, if students are to understand adequately the extent of social variation in how utterances or texts are understood, or to tackle the issue of how far respective parties are responsible for the meaning of any given act of communication. Such abilities, I believe, form an important part of understanding social discourse, whether at an interpersonal level or as regards public news, debate or entertainment - hence the continuing significance of I.A.Richards's argued connections between the study of interpretation and the promotion of broad cultural literacy.

But how could an 'inferential stylistic' pedagogy along the lines suggested help L2 learners? Three main points should be made. Firstly, such activities function methodologically much like existing task-based learning in 'language through literature' approaches. Close reading tasks are presented, and then followed (when results have been collected together) by comparison between findings and general group discussion. Such discussion links reflection on the particular text with more general theoretical investigation; reading is in this way to some extent defamiliarised, and opened for reflexive consideration.

At the same time, however, the emphasis placed on inference differs in some respects from most work in pedagogic stylistics. Instead of working from observation of local features in the text outwards into an overall reading, or alternatively from a general, overall reading back into formal features which support it, an inferential approach works at reading as a cumulative, time-based, model-building practice. Representational properties of language, even of a printed text, are set within a temporal and social process; and meaning is explored as a relational construct rather than as an essential property fixed either to the text's author, its structures, or to a particular reader.

Also distinctive about such an approach is its emphasis on the intersection between linguistic and cultural dimensions of interpreting. Such an emphasis may be useful to L2 learners in two ways. First, when a learner faces difficulties in understanding an utterance, linguistic clues offered in successive steps of the discourse prompt and reinforce relevant inferences; practice at recognising triggers and monitoring ongoing comprehension may therefore sharpen interpretive skill. Second - more controversially - whenever a learner enters a new communicative situation, she or he goes already armed with a major resource: general cognitive, in addition to specifically linguistic, skills. Although the role of general cognitive skills in language understanding is often critically subordinated to proper appreciation of cultural differences (leading in some formulations to the thesis of complete epistemological incommensurability), it may boost a learner's confidence to reinforce a sense that more is taken into a communicative interchange than just some learnt structures and vocabulary.

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Inevitably it would take more than one discussion of a three-sentence short story to develop an adequate case for treating the reading of texts in the language classroom as a practice significantly dependent on non-linguistic processes of cognition. But the activity described here, I hope, signals one way, among others, of encouraging that perception within existing language and literature pedagogies.

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