

Evidentiality and Narrative

- **Narrative and development**

There is a growing consensus that our self-understanding and many of our most important complex cognitive skills rest on our ability to construct narratives about ourselves and others. We know ourselves first and foremost as characters in an ongoing autobiography. We make sense of our own actions and conative states as well as those of our fellows by situating them in the context of stories in which they make sense. The inability to tell a good story is not just a minor social failing; it is a failing to be social at all.

There is also a growing consensus that narrative competence is an acquired skill, and that it has an extended developmental track. Nonetheless, that track has not been comprehensively mapped. A certain amount is known about the early stages, and some surprising evidence has demonstrated that development extends well into adolescence. But very little is known about the middle childhood years.

We can distinguish between a narrative's *coherence* and its *cohesion*. A narrative is *coherent* to the extent that the story hangs together, has a central storyline, has characters with relatively stable dispositions, a beginning, middle and end, etc... These are broad, open-textured qualities, and may be subject to cultural variation and to literary style. (On this dimension, William Faulkner or David Foster Wallace, may be faulted, and four year olds may look pretty good, depending on one's standards.) A narrative is *cohesive* to the extent that it is represented in language that cues the listener and reader to the relationships between fragments of the narrative, using such devices as appropriate pronominal reference, appropriate tense markers, conjunctions, relative clauses, etc... Cohesion is more regular, and more stable across cultures, and covaries more directly with age and cognitive development than does coherence. Indeed, cohesion is used as an assessment criterion in some language development instruments.

Until approximately the age of four, normally developing children, contrary to their grandparents' reports, do not produce discourses that qualify as narratives. Their discourse lacks both coherence and cohesion; this is not just a matter of degree, but of fundamental structure. Their discourse is either punctal or associative, and such coherence or cohesion as is represented is supplied by the listener, not by the child. This is why young children are so strikingly incompetent at talking with someone who does not share their knowledge of the topic under discussion. While children at this age are developing increasingly sophisticated skills at pretence, these skills are primarily enactive, and while they almost certainly scaffold the development of narrative skills, they precede them. It is one thing to be a character in a story; it is another to tell a story about that character.

Between approximately age four and age six, children's narrative competence develops dramatically. First, children shift from mere descriptions of observable actions to the attribution of conative states and the representations of goals and purposes. At about

this time, they also begin to respect discourse representation conventions such as the introduction of nominal antecedents for pronouns, and restrictions on indefinite and definite articles. A bit later, doxastic, epistemic and indirect speech verbs enter narratives, enabling reference to participants' mental states, and inferences. Finally, devices for indicating temporal relations appear, allowing clear sequencing of multiple events, and the use of tense to distinguish figure from ground, e.g. the difference between, "while he was eating, the train was stolen," vs "while the train was stolen, he was eating," each of which is much richer than "the train was stolen and he was eating."

There is a reciprocal connection between the development of Theory of Mind and the development of narrative competence. Theory of Mind, of course, is not a single, monolithic capacity that emerges in an instant. Component theory of mind skills emerge quite early both ontogenetically and phylogenetically. For instance, infants as young as one year demonstrate the ability to track gaze, as do adult chimpanzees. On the other hand, these basic skills hardly suffice even to solve simple false belief puzzles, though they may enable simple deception. An understanding of desire clearly precedes an understanding of belief; understandings of the conditions of perception may precede both of these, but the connection to belief fixation is a later attainment.

Many have urged that Theory of Mind is fully in place when, and only when, a child can attribute a false belief to another. But even this capacity, while it postdates the simplest capacities comprised by Theory of Mind, is far from the pinnacle of this cognitive development. Second order belief attribution lags about a year behind. And second order attribution is a crucial cognitive skill for beings like us. For the ability to deploy this knowledge in inference and in the development an explanatory narrative about another's behavior develops even later, and it is not until a child can deploy this knowledge in sophisticated reasoning and narration that it makes sense to say that she understands the role of the mind in human life. So, while the emergence of early Theory of Mind makes narrative possible, narrative makes the completion of Theory of Mind possible.

Adults have a crucial role to play in teaching the narrative skills that enable the transition from primitive to mature theory of mind. In many cultures, children are surrounded by tales: fairy tales, folk tales, pretence scenarios, retellings of family dramas, all of which entail bringing together motives, reasons, misunderstanding and their resolution, and differing perspectives from different characters. These practices examples of the use of cognitive state attributions in the prediction, explanation and rich description of behaviour. But we must not overlook another crucial function that they serve: They also demonstrate the range of linguistic devices that enable both the attribution of these states and the narrative cohesion necessary for them to play their role in narration. While adult-child interactions clearly serve this pedagogical role, insufficient attention has been paid to cross-linguistic or cross-cultural study of the variation in such interaction, and to the range of devices that might subserve this function.

But narration is good not only for the development of Theory of Mind skills, however important they are. It is also the basis of our self-understanding, and hence of agency in the full sense. And we know, that just as four year olds are not simply tiny adults with

self-understandings comparable to our own, that even adolescents do not have a mature autobiographical narrative or a complete sense of reflective agency. The fact that this skill is mastered so late in life, coupled with the complexity that often confronts adolescents can often have tragic results.

While we are developing an increasingly rich picture of the beginnings and the end of the development of narrative competence and so of self-understanding, the middle years of childhood remain opaque. There are reasons for this. First of all, this period has not been as exciting to scholars as the dramatic years of early childhood or the fraught years of adolescence. (Recall Freud's term: *latency*.) Second, and more importantly, the onset of literacy and the demands of primary education constrain development, and variation in educational approaches introduces so much noise that results are hard to interpret.

It turns out, however, that some of the world's languages incorporate an important grammatical device the development of competence with which extends significantly into middle childhood. Moreover, that device may have important roles in the narrative self-understanding of children. These languages are those with evidential systems. By studying the acquisition of evidentials we may gain important insights into the development of narrative self-understanding in childhood.

- **All about evidentiality**

Evidential morphemes are grammatical devices that express the nature of the speaker's evidence for a statement. All languages have words to represent the source of one's evidence, but about one-quarter of the world's languages have a specialized grammatical system for encoding what type of evidence the speaker has for her statement. (Aikhenvald 2004)

Certain attitude predicates ("I saw that...", "I infer that...",) also convey information about the speaker's epistemic grounds for a statement, but evidentials differ from attitude predicates in three ways. First, an evidential does not take a subject of its own, and must be oriented to the speaker.. That is, the evidential expresses what kind of evidence the speaker has for the statement. Evidentials, however, do not have their own grammatical subjects, unlike for instance "heard that." For attitude predicates there must be a subject (*I* heard that; *She* heard that; *John* heard that) and that subject need not be the speaker.

Second, evidentials convey *how* the speaker's epistemic state was achieved rather than the *nature* of the epistemic state itself (such as the degree of certainty). Even hearsay evidentials do not necessarily qualify the speaker's commitment to the truth of the assertion.

Third, unlike attitude predicates, evidentials generally occur only in main clauses and do not introduce a syntactically subordinate clause. Thus, although they may convey the same information as "I infer that," "I saw that" or "They say that," evidentials apparently do not involve complex recursive syntactic structures.

The kind of meaning conveyed by an evidential also seems to be systematically different from that conveyed by epistemic modals. Epistemic modals express *how likely* the information is to be true, or how *certain* the speaker is, while evidentials convey the *nature of the evidence* that the speaker has. (Oswalt 1986, de Haan 1999, Hardman 1986, DeLancey 2001, Lazard 2001, Plungian 2001 and Aikhenvald 2004). Evidentials are used to make unqualified assertions, and an inference or hearsay evidential does not necessarily express that the speaker is uncertain.

As Rooryck (2001a, b) pointed out, we can often *infer* the degree of certainty from the type of evidence, and vice versa. For example, if someone claims that something “must” be the case, we can infer that he or she has reasonably reliable evidence for it. Conversely, if someone makes it clear that a claim is made based on her having witnessed the actual event, we can infer that she is quite certain that the claim is true. In short, epistemic modals express a speaker’s judgment about probability or necessity, which may be based on the type of evidence she has for her assertion, while evidentials express the type of evidence the *speaker* has for her claim and may therefore warrant a judgment by the *hearer* about the probability of the assertion being true. Evidentials hence differ markedly from all three of these devices attitude predicates, adverbs and modal auxiliaries, despite the fact that they may serve some of the same semantic and pragmatic roles these devices play in languages such as English.

We noted above that evidentials are *egophoric*. The egophoricity of evidentials gives them a special role in autobiographical narrative construction. In a language (such as Tibetan, which we consider below) in which evidentials are mandatory in most sentences, representing one’s own source of evidence for the claims one makes is a central aspect of any assertion. Inasmuch as the development of competence with evidentials reflects the development of one’s own reflective knowledge of one’s own epistemic states, this competence reflects competence in autobiographic narrative. It follows that understanding the information conveyed by others when they use evidentials hence requires projecting an epistemic biography that makes sense of their evidential use. Once again, it is impossible to understand evidentials without representing at least the skeleton of a narrative in which one’s interlocutor acquires evidence of some type for the claim he has just made.

All of this gives rise to an important and fascinating acquisition puzzle. Since the felicity conditions of the use of an evidential consist in the evidence (generally in the past) that the speaker has for an assertion, those felicity conditions (or their failure for that matter) are in general not available in the discourse situation in which evidentials are used. It is therefore somewhat mysterious how children project not only the correct meaning on evidential expressions, but even that those expressions are evidentials. Solving this problem will provide an interesting window into cognitive development.

Tibetan is a head-final language in which the main verb of most sentences is a form of the copula or a verb of existence. Tibetan evidentials are distinctive forms of the copula or the verb of existence, and so, in virtue of the mandatoriness of such verbs in Tibetan, evidentiality is a feature of virtually every Tibetan assertion or question.

Most descriptions (Garrett 2001, Denwood xxx) of the Tibetan evidential system distinguish three categories of evidentials—direct, ego and indirect. We find it useful to distinguish a fourth category—neutral—which is used when a speaker is noncommittal about the kind of evidence for the assertion. Direct evidentials are reserved for cases in which the speaker has directly witnessed a situation with her own eyes and also to report internal states. The direct evidentials in Tibetan are *'dug* and *song*, the latter of which is a direct evidential for past tense. So, when a speaker says *Tsi tsi pha gir 'dug* (there is a mouse over there), she is *asserting* that there is a mouse over there, and indicating by the use of *'dug* that she *saw* it.

Indirect evidentials are used in cases in which the speaker does not directly witness a situation about which she is making a claim, but has some kind of indirect evidence for the assertion. The indirect evidentials are *yod sa red* and *yod kyi red*. *Yod sa red* is used when one has direct experience of specific evidence for the truth of the utterance, but does not directly witness the situation described. For instance, a speaker could say *Tsi tsi pha gir yod sa red* (there is a mouse over there) when she directly sees mouse footprints in the dust, but does not see the mouse. Note that when she says this, she is *asserting* that there is a mouse over there just as much as she would be if she used *'dug*, but is revealing that though her evidence for this assertion is perceptual, she does not see the mouse itself.

Yod kyi red is an indirect evidential used when the information is non-perceptible, for instance hearsay, general knowledge, or inference from general facts. So, if a speaker says *Tsi tsi pha gir yod kyi red*, she is *asserting* that there is a mouse over there, but indicating that she infers this. Perhaps the mouse is always there at this time every day, or perhaps this is the place where there are always mice, or maybe some reliable source told her that there is a mouse there.

Ego evidentials are used when a speaker is reporting a state of her own mind or body to which she has privileged access, accessible to her alone. Ego evidentials are used, for example, to talk about hunger or emotional states. The ego evidential morphemes in Tibetan are *yin* and *yod* as well as *'dug*.

In addition to the explicit direct, indirect and ego evidential categories, Tibetan includes a neutral evidential category (*red*, *yod red*). These verb forms give no information about the kind of evidence on which the speaker is relying, but are infelicitous where the direct or ego evidential would be felicitous. They are thus like the indirect evidentials, but are less committal with regard to the precise nature of that indirect evidence.

There is another interesting feature of the grammar of the evidential system in Tibetan that will allow us to ask some further questions. While evidentials are always egophoric, and in declarative sentences therefore always reflect the point of view of the speaker, in Tibetan, when asking a question, a point of view shift occurs in which the questioner anticipates the point of view of, and hence the evidential to be used by the respondent. So, for instance, even though I would have no direct evidence regarding the contents of your room, if I am asking you a question over the telephone about whether there is a pen

on your desk, I would use the *'dug* evidential in the question, anticipating that *you* will have direct perceptual evidence that would settle the question, and so that you would use *'dug* in your answer.

- **Developmental track in Tibetan**

Tibetan children use the evidential *'dug* early (by age 2), and well before they use any other evidentials, even the neutral evidentials which appear soon after initial uses of *'dug*. However, it appears both from the distribution of expressive uses and from the inability to make effective use of the use of *'dug* by others that these early uses do not reflect a representation of the evidential force of this particle. Instead, children appear to take *'dug* to be simply a generic form of the copula.

By age 3-4, Tibetan children discriminate *'dug* from the class of indirect evidentials. At this age, they are able to determine that a speaker using *'dug* is a more reliable informant than one using an indirect evidential. However, at this age it is not clear whether children are representing these particles as evidentials or as epistemic modals. That is, they may be taking *'dug* to mean *must be* and *yod kyi red/yod sa red* to mean something like *could be*.

We do know that by age 5-6, Tibetan children treat these particles grammatically as evidentials, as opposed to modals. For instance, they always take denial of a sentence containing an evidential to be a denial of the content of the matrix sentence, as opposed to the denial of the felicity of the evidential. This contrasts with modals, whose felicity can be denied independent of the judgment regarding the truth value of the matrix sentence they govern. At this age children also begin to respect the point of view shift in questions, using evidentials in questions in a way that appropriately anticipates the felicity of the evidential to be used by their respondent.

Mastery of the distinction between the two indirect evidentials in Tibetan, however, is not achieved until much later, around age 9-10. Until this time, while *yod kyi red* appears in children's speech as a contrast to *'dug*, *yod sa red* never appears, and *yod kyi red* is often used when *yod sa red* would be felicitous. Indeed, when this distinction is important, and at earlier ages when even distinctions between direct and indirect evidentials are important, we find that children often avoid commitment either by using elliptical (such as one word) utterances that avoid the evidential (something permitted in casual spoken Tibetan, just as it is in English) or by retreating to neutral evidentials.

Until approximately age 9-10 Tibetan children are insensitive to the distinction between the two indirect evidentials. That is, they fail to mark, or to exploit, the distinction, represented by all adult Tibetan speakers, between specific inference and general inference, between knowing that you are home because I see your bicycle on the porch and knowing that you are home because your reliable spouse just told me so.

We might ask what cognitive skills enable them to master this distinction. First, we note that this transition is developmentally much too late to depend simply on basic Theory of

Mind skills, even the representation and use of false belief, as these are well in place in normally developing children by age 4 or 5. Even higher-order false belief skills are in place by age 6 or 7. We have discovered that children's ability to draw inferences based upon available signs develop more slowly. As we have learned from Kahneman and Tversky, Wason and a host of their successors, even those with tenure in Philosophy departments fail elementary inferential tasks.

Everyday inference is itself a complex and rich phenomenon. Even to exploit obvious, readily available information in direct, simple-minded logical inference requires a host of skills whose structure and developmental trajectory is little-understood. One needs to *notice* the relevant information (the footprint in the snow), and moreover, notice *that* it is relevant to the task at hand (finding the thief who came after the snowstorm). One needs to know *that* an inference is called for (he won't turn himself in), and moreover, to know what *kind* of inference is necessary (inductive, based on shoe size and criminal record) and *how* do draw inferences of that kind (the logical form of a Bayesian inference). So we see that even elementary reasoning requires us to draw on a host of skills, information, purposes and so forth.

We have found that the development of both receptive and expressive competence with Tibetan evidentials correlates not with the development of Theory of Mind skills, but with the development of inferential competence. In particular, children do not master the distinction between general and specific inference evidentials until they are very good at tasks that require them to infer unseen events from visible signs even when these tasks do not require the use of any evidentials. This suggests that the mastery of this portion of Tibetan grammar demands not simply linguistic maturation, but the development of a broad range of non-linguistic cognitive skills. It also suggests that the kind of reflective awareness of one's own epistemic activity (and the representation of that kind of epistemic activity in one's interlocutors) that is necessary for the distinction between these evidentials matures quite late in middle childhood.

- **Teaching Evidentials**

Reflection on the task confronting a young native speaker of Tibetan as she masters the evidential system of her native language suggests some significant obstacles. Reflection on these obstacles in turn suggests the broad role of narratives and of didactic parent-child discourse in language learning. The principle obstacle is this: The information encoded by evidentials is almost never present in the discourse situation in which Tibetan evidentials are used. That is because the felicity conditions for evidentials comprise states of affairs in the past of the speaker that are not explicitly represented in typical discourses. For instance, consider two speakers in the living room each reporting the presence of yaks in the kitchen (in an outhouse). Dolma says, *gyag thab tshang nang la 'dug* (there is [direct] a yak in the kitchen); Tashi says, *gyag than tshang nang la yod sa red* (there is [specific inference] a yak in the kitchen). Dolma conveys, but does not state, that she saw the yak. Tashi conveys, but does not state, that he saw something (perhaps a trail of yak footprints going into the kitchen) that warrants his confident assertion.

Now, consider poor little Yangzom's task, as she tries to figure out what the difference in meaning between *'dug* and *yod sa red* is given data like this. *Nothing* in the discourse situation as it stands provides information regarding the difference in felicity. Without fairly explicit conversational intervention by adults or access to an oracle, Yangzom is doomed. This is more than normal stimulus poverty. If we imagine an accumulation of plausible discourse situations, we would imagine that the child would converge on a distinction between two degrees of certainty, or reliability: *'dug*, she should conclude, means *must* and *yod sa red* and *yod kyi red* each *could*. But Tibetan children do eventually master the system. How?

The answer seems to be that adults come to the rescue, and that they do so using extended, contrastive elucidations of the distinct felicity conditions of the evidentials, drawing attention explicitly to the distinction between the felicity of direct and indirect evidentials to children as young as 2. (examples) These examples show that the mastery of *'dug* relies first on examples in which the felicity conditions for this evidential *are* present in the discourse situation.

There is a further device Tibetan that helps here. The demonstrative *'dug ga* used, almost always with a demonstrative gesture, to elicit shared attention on a focal object (like the English *look!*) This draws a child's attention over time not only to the object of shared attention, but to the fact that *'dug* is being used to reflect the fact that something can be seen by the speaker. This demonstrative construction probably plays a crucial role in scaffolding the evidential meaning. When the time comes to master the distinction between *yod sa red* and *yod kyi red*, the fact that *'dug* is in hand is a real facilitator. For when *yod sa red* is felicitous, there is always some *other* state of affairs—the relevant evidence—for which a *'dug* statement is felicitous, unlike *yod kyi red*. *gyag gi rjes pha gir 'dug!* (*There are [direct] yak footprints over there!*)

- Development of Narrative competence
 - Chandler—third party vs first person narrative and the narrative self
 - What do evidentials teach us about this?
 - What difference might they make, if any?