

SPONTANEOUS NARRATIVE BEHAVIOUR IN *HOMO SAPIENS*: HOW DOES IT BENEFIT TO SPEAKERS?

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The fact that human beings universally put much energy and conviction in reporting events in daily conversations demands an explanation. After having observed that the selection of reportable events is based on unexpectedness and emotion, we make a few suggestions to show how the existence of narrative behaviour can be consistent with the socio-political theory of the origin of language.

1. Spontaneous narratives: a fundamental component of language

Dozens of times everyday, human individuals feel the urge to signal current events or to report past events to their conspecifics. In doing so, they respond to specific stimuli such as deviance, coincidences or emotion. This event reporting behaviour seems to be unique in nature (Boyd 2001), if we except bee dance and alarm calls, which may be seen as remote analogues. During conversational narratives, the speaker may hold the floor during several minutes, with no other interruption than minimal approval signals emitted by interlocutors. Within a Darwinian framework, the existence of such characteristic behaviour requires an explanation. How does this time-consuming activity, which deals most often with futile anecdotes that are unlikely to be of any direct interest for survival, benefit not only to listeners, but also to speakers?

We first show the importance of the narrative phenomenon by providing quantitative estimates. Then we outline a cognitive model showing that individuals respond to definite stimuli when selecting reportable events. Lastly, we look for plausible Darwinian explanations for the existence of narrative behaviour, in line with our socio-political account of the origins of language.

2. Narratives in daily speech

Human beings make extensive use of their language ability. Individuals have been observed to speak 15 000 words a day on average (Mehl *et al.* 2007). This

behaviour covers several activities which can be distinguished by the cognitive mechanisms involved. The two main components of language spontaneous use are *discussion* (argumentation) and *narration* (event reporting) (Dessalles 2007). The proportion of event reporting may vary significantly from one corpus to the next. Suzanne Eggins and Diana Slade (1997) observed the repartition indicated in Table 1 in the three hours of casual conversation data they collected during coffee breaks in three different workplaces.

Table 1: Distribution of conversational topic types in Eggins and Slade's corpus (1997 p. 265)

<i>Conversation type</i>	<i>%</i>
Storytelling	43.4
Observation/Comment	19.75
Opinion	16.8
Gossip	13.8
Joke-telling	6.3

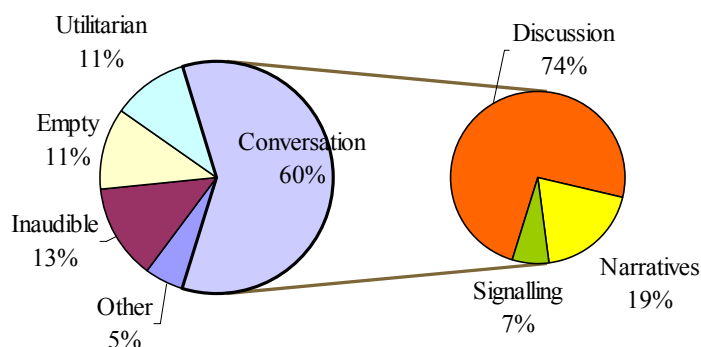


Figure 1. Distribution of utterance types in our own corpus, assessed through a sampling method.

Storytelling takes up the major share in this distribution. We made similar measures on our main corpus, composed of 17 hours of family conversations, recorded between 1978 and 1988. The distribution of conversation types was explored through a sampling method (Figure 1). The corpus has been digitalized, and 150 excerpts of 120 s. have been automatically extracted at random positions. For each excerpt, the central utterance (occurring at time 60 s.) has been assigned a category. Table 2 provides definitions of categories.

The small relative size of the 'empty' category reveals that in this family meal context, language is used 89% of the time. Conversation proper, which excludes utilitarian (more or less ritualized) speech, occupies nearly 70% of the

time (as most of inaudible utterances are likely to be conversational). Narratives and signalling together amount to 26% of conversation time. Though it is less than in Eggins and Slade’s corpus, event reporting still represents a significant share of spontaneous language use.

Table 2: Definition of utterance types

<i>Utterance type</i>	<i>Definition</i>	<i>Example</i>
Narratives	Reports about past situated events	Dishwasher breakdown which turned out to be a mere leak from a plastic bottle
Signalling	Drawing attention to current facts	Showing a new electronic personal organizer
Discussion	Dealing with problems	Who’s going to be the next Prime Minister
Utilitarian speech	Offers, requests,... (mostly in relation with food)	Offering more foie gras
Other	Songs, child screaming	Singing to bring a child to sing with
Inaudible	Superimposed noise, simultaneous conversations	
Empty	No speech, no utterance in progress	

Narrative speech contrasts with the other main discourse category, discussion. Superficially, the most manifest difference is that narratives deal with situated events, whereas discussion deals with problems and their solutions. When facts are mentioned during a discussion, they are most often not situated (*e.g.* ‘Fabius [a potential Prime Minister] makes a better impression on TV’), though there are borderline cases in which situated facts or genuine stories are recounted in support of an argument (there were no more than a couple of such occurrences in the sample). But narration and discussion can be opposed more fundamentally on the cognitive ground. Discussions consist in settling an issue or solving an epistemic puzzle. They proceed through a characteristic problem-abduction-revision procedure (Dessalles 2007). By contrast, event reporting relies on complexity drops and emotion elicitation (see below). Though narrative and argumentative moves may be intertwined in conversation, they remain often separate: arguments spark off arguments in a typical problem-solution alternation, whereas narratives spark off new narratives, generating a phenomenon known as ‘story rounds’ (Tannen 1984 p. 100).

Spontaneous narratives contrast with fictitious narratives as the facts they report are most of the time presented as having really occurred. They are also,

by far, more frequent (only one example in the sample can be considered fictitious, as it consists in describing the content of a cartoon). Though fiction seems to obey definite patterns (Hogan 2003), conversational narratives seem to be ruled by even more constraining imperatives. Any narrative must have an *interesting* point (Labov 1997), as otherwise speakers may be regarded as socially inept (Polanyi 1979 p. 211). In what follows, we propose a cognitive characterization of competent storytelling, before considering its possible biological role.

3. Aspects of narrative competence

The dozens of episodes that human beings relate for each other each day through conversational narratives represent only a tiny fraction of their actual experiences (Dudai 1997). The selection of reportable events (Labov 1997) obeys specific patterns. More precisely, reportable events must have at least one of the two following properties: be *unexpected* and/or arouse *emotion*.

3.1. *Unexpectedness*

The property of unexpectedness covers various aspects of newsworthiness, including deviance, atypicality, rarity and proximity (in space, in time, and social closeness), remarkable structures, and coincidences. Former accounts that equated unexpectedness with improbability (Dessalles 2002) left some cases unexplained. The consecutive lottery drawing 1-2-3-4-5-6 shows a remarkable structure and would be considered formidable news by most players, although its probability is not lower than ‘usual’ drawings (Dessalles 2006). Moreover, individuals consider situations that depart from the norm for some qualitative reason (like jogging nuns) unexpected, what probability theory fails to explain.

A new account equates unexpectedness with complexity drop: events are unexpected whenever they appear *simpler than usual* (Dessalles 2006).

$$\text{Unexpectedness} = \text{Expected complexity} - \text{Observed complexity}$$

Complexity is measured by the size of a minimal ideal description (Li & Vitányi 1993). A consecutive lottery drawing requires a shorter description than an ordinary one; a jogging nun is, because of her behaviour, rare or even unique in her kind, and thus easy to discriminate; recent events occurring in the vicinity are simpler than if they happened a long time ago in a remote place, because determining their location in time and space requires a shorter description; coincidences are almost twice simpler than expected, as the description of one term leaves the other almost entirely determined.

Complexity drop has a gradual and systematic influence on reportability. For instance, a fortuitous encounter is all the more interesting since the person one bumped into is *simple* (e.g. a close friend or a celebrity) and the place is remote enough to be *complex*, so that the contrast between the expected complexity and the actual complexity is maximum. The more remote the place, the more interesting the story. The closer the encountered acquaintance (or the more famous the encountered celebrity), the easier it is to report the event.

3.2. *Emotion*

Emotion is the other parameter that stimulates event reporting. Emotional situations are systematically shared, not only by those who experienced them in the first place, but also by the persons who are told the story first and who retell it as second-hand narrative, especially when the generated emotion was high (Rimé 2005 p. 162). In the following conversation from Neal Norrick's corpus (2000 p. 64), a young man recalls an accident story his aunt told him (transcription details omitted).

Mark: you know what happened to my one of my aunt's friends out in Iowa? Like when- when she was younger, she had a headgear from braces, and these two girls were wrestling around just playing around, wrestling. And one girl pulled her headgear off her mouth and let it snap back. And it slid up her face and stuck in her eyes and blinded her.

Jacob: wow.

Mark: isn't that horrid? That's horrid. Blinded her for life. Isn't that horrid. That's just- I mean just from goofing around.

Unexpectedness and emotion are often combined to enhance reportability. Unexpectedness here lies in the contrast between standard play situations, which are complex to discriminate from each other, and the actual situation which is unique by its consequences. Mark's final remark points to this contrast.

Studies show that emotion is reactivated during recounts, and this can be seen as a paradox (Rimé 2005 p. 109). Quite surprisingly, bringing back memories about negative emotions and sharing them with listeners is experienced as enjoyable by both parties. People like to talk not only about positive events, but also about events that generated fear, sadness, anger, guilt, embarrassment, contempt and even shame. They also like to listen to others' corresponding experiences, despite the fact that the evocation of such events produces negative feelings similar to the original ones. It seems that the pleasure of sharing these feelings compensates for experiencing them again.

4. Why are conversational stories told?

The pervasive presence of stories in conversations is an embarrassment for most accounts of the evolutionary origin of language. If language has been selected because of its effect on the welfare of the group (Victorri 2002; Castro *et al.* 2004 p. 734; Ritt 2004 p. 1-2) or as a fair exchange of information based on strict reciprocity (Pinker 2003 p. 28; Nowak 2006 p. 1561), then the efforts that speakers devote to tell stories for all to hear, most often with much emphasis to highlight interest, is incomprehensible. We would expect speakers to whisper minimal factual information to specific ears and then demand of listeners that they reciprocate. What may be true for crucial advice (such as which shares to buy on the stock exchange) does not apply to conversational stories.

Other accounts emphasize the educational value of language (Fitch 2004; Castro *et al.* 2004 p. 725). But stories are found to be spontaneously told, not only from adults to children, but also from adults to adults and even from children to adults. As soon as by nine months of age, children spontaneously point to unexpected stimuli (Carpenter *et al.* 1998). More generally, theories of language function that emphasize the practical value of information exchange are at odds with the fact that most stories are about futile matters. Unexpected events are, by essence, unlikely to occur again. Any practical processing of information would concentrate on vital information (danger, food, mating opportunities) and would neglect the myriad of anecdotal facts that fill daily chatter. Animals do not care about situations just because they are unexpected: they show no interest four-leaf clovers, they would regard a unicorn as a mere horse and they do not care about coincidences. Human communication, on the other hand, is universally replete with details about inconsequential episodes, just because of their unexpectedness, and this requires an evolutionary explanation.

The key difference seems to lie in human sociality: we crave the attention of others and narratives are a major way to do so (Boyd 2001). This makes sense within our political theory of the origin of language (Dessalles 2007), which states that individuals use language to demonstrate qualities that are in demand in the establishment of solidarity bonds. To fit in with the model, however, the qualities shown when telling stories must have political significance. In what way does the ability to produce unexpectedness and to elicit emotions correlate with being a valuable coalition partner?

Though these issues have not been properly investigated yet, we may mention a few hints. First there is a strong correlation between the ability to produce interesting stories and the ability to attract friends. All things being

equal, individuals who have something interesting to say are appreciated whereas boring individuals are avoided. A second hint might partly explain why interest relies in part on unexpectedness. Individuals, from early age on, are in competition to demonstrate that they knew first, as in the next exchange, observed between two children aged eight and ten:

M: Did you see there's more [hot-air] balloons up there this morning?

Q: Yes, I know.

M: You, be quiet! I'm not talking to you, I'm talking to the others. [To his father] Did you see there's balloons up there this morning?

Being the one to point out the presence of balloons has a degree of importance for M that Q's reaction could nullify. The *first-to-know* phenomenon is the most obvious case in which unexpectedness is produced. Reclaiming authorship for the news is understandable if, as we suggest, *language is display*. The informational quality that is displayed by offering scoop stories to conspecifics would correlate with the specific social context of our species (Dessalles 2007). Human beings form large coalitions (typically more than five individuals). Such coalitions must include informed individuals to take relevant coordinated action: members must know whom to follow in each context. It is thus better to choose friends among those who show that they are able to keep up to date with their physical and social environment.

A third hint is that the emotions displayed in stories are associated with solidarity values. By showing that they are able to experience empathy, pity, concern, indignation at cowardice, cheating or unfairness, that they admire selfless love and feats, individuals try to appear as ideal friends. If we accept that those emotions are hard to fake, then expressing them through stories is a reliable indication of the corresponding qualities.

Human beings are information oriented animals, who exchange stories on a daily basis. We tried to indicate how this fact, which is hard to explain in traditional accounts of language origins, can be a natural outcome of the particular socio-political organization of our species, in which individuals must compete by demonstrating their information qualities in order to attract friends.

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