An earlier post ([Language and Thought](http://aristotle2digital.blogwyrm.com/?p=778)) reflected on the question as if language effects the way we think and if so by how much. The general conclusion is that the hypothesis that a native speaker can only think thoughts for which his mother tongue possesses a word (the so-called Sapir-Whorf thesis) is unsupported by either common sense or by empirical evidence. However, there are numerous examples of language shaping the habits and attitudes of its native speakers in interesting and, sometimes, surprising ways. Attitudes, being what they are, range over the entire gamut of human emotions and the emotional foci for this discussion will be humor and whimsey.

Nothing seems to separate the lower animals from humans as much as the abstract sense of humor. While mankind shares a sense of pleasure and mirth with more primitive animals no other species exhibits humor in a spoken language littered with abstract concepts, double entendre, and shades of meaning. A man and a dog may both laugh at someone slipping on a banana peel but only the man will find a ‘man bites dog’ joke funny (although if he does he still qualify as human?). And if machines will ever get to the point where they can mimic man then they better learn to tell a good joke or, at least, laugh at one.

Topping the list of mirthful, silly constructions, is the buffalo grammar. For those unfamiliar, a short summary is in order. The word buffalo can be used as a noun (i.e. the large herd animal also known as a bison), an adjective (as in the city of Buffalo), and as a verb (meaning to fool, puzzle, baffle of mystify). This flexibility allows English speakers to create all sorts of sentences consisting solely of that one word.

Some examples will help to illustrate. (Note that a given sentence may have multiple meanings only one of which is used in the illustration.)

1 word:

<Buffalo! – an exclamation or ejaculation meaning look there is a buffalo over yonder.>

2 words:

<Buffalo buffalo. – a sentence meaning that bison are animals that succeed in fooling others.>

3 words:

<Buffalo buffalo buffalo. – a sentence meaning that the trickster Bison hail from that fine city in western New York state.>

4 words:

<Buffalo buffalo buffalo buffalo. – a sentence meaning that those con-artist Bison from Buffalo perpetrate their nefarious schemes on other, unsuspecting large herd mammals coming from other regions of the country.>

5 words:

<Buffalo buffalo buffalo buffalo buffalo. – a sentence meaning that those nefarious western New York bisons, wanted nationwide for their fealoneous behavior, make victims of members of their own community – truly reprehensible undertaking.>

The following youtube video gives more background (although they use another definition for buffalo as a verb – to intimidate or bully).

<iframe width="560" height="315" src="https://www.youtube.com/embed/TWbzjGIec20" frameborder="0" allow="autoplay; encrypted-media" allowfullscreen></iframe>

Far funnier is the video by Cleardino that maps a 8-buffalo-long sentence eventually into Japanese dogs in Tokyo doing unspeakable things to each other.

<iframe width="560" heig-ht="315" src="https://www.youtube.com/embed/ry3EwECnQic" frameborder="0" allow="autoplay; encrypted-media" allowfullscreen></iframe>

At the heart of all the mischief caused by all these bison is the concept of lexical ambiguity in which words with multiple senses or meanings can produce sentences and similar structures that are just flat out funny (and confusing).

In 2006, author Lynne Truss provided another wonderfully colorful and beautifully ambiguous string to add to one’s lexicon: *Eats Shoots & Leaves*. The subtitle of the work *The Zero Tolerance Approach to Punctuation* reveals that her true purpose is to guard society against ‘plummeting punctuation standards’ but for this work we will concentrate on the pandas (giant pandas actually) that gracefully adorn her cover – or at least as gracefully as pandas can do anything.

Depending on the punctuation, specifically the placement of commas, and context different meanings can be wrung from those three innocent words.

For example, suppose the panda in question is currently incarcerated in what animal rights activists may characterize as a gulag-for-lower-life-forms but which you and I may end up calling a zoo. Faced with the problem of panda nutrition when may be inclined to bring our black-and-white inmates eats, shoots, and leaves meaning food from the local pub (eats), bamboo shoots, and the leaves from a particular nice tree over on the west side of the cage.

Further suppose that an expert on mammalian physiology with a specialty in primates and having world-class expertise in pandas comes by while we are trying to feed one of our bouncing bears potato chips. He may disgustingly shake his head and yell ‘eats shoots and leaves’ meaning ‘that bear consumes plant shoots and tree leaves’.

Furthermore, suppose that our panda, now aware of our shabby treatment, pulls a loaded revolver (but from where) and ends our miserable existence. At the inquest, there may be a witness who describes what he saw, in present tense so as to increase the vividness of his description, by saying:

<I tell ya. I am looking over at the cage. The panda eats, shoots, and leaves. Very cold-blooded he is.>

meaning that the panda ate a bite, pulled a gun and shot us, and then skedaddled back to China since there are no extradition agreements that will bring him to justice in the US.

Clearly Truss intends us to take punctuation so seriously that she is willing to use humor to drive her points home.

And lest the reader thinks that this kind of fun is confined only to English consider the following very old and venerated poem in Chinese.

<iframe width="560" height="315" src="https://www.youtube.com/embed/9jtiw721RAg" frameborder="0" allow="autoplay; encrypted-media" allowfullscreen></iframe>

This kind fun (and confusion) makes natural language a real challenge for machine intelligence. For now, systems are barely able to translate language constructions intended to be clear and communicative. So it seems a safe bet to say that AI has a long way to go before it is impishly playing with the language. But when it does, that’s when we should start worrying or maybe laughing, I just don’t know.