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**From:** Noam Chomsky <[REDACTED]>  
**Sent:** Sunday, January 3, 2016 5:47 PM  
**To:** jeffrey E.  
**Subject:** RE: Re:

Infinity is indeed a mathematical concept, and a complex one, as we know. But unboundedness is a simple scientific (and common sense) concept. And that's all we need.

You and I have internal linguistic systems (I-languages), closely shared, identical in crucial respects. Either these I-languages have a longest sentence, say of length N, or they don't. Suppose the former, and let S be of length N. Then in your language and mine, "S and it's raining" isn't a sentence, which is false, QED.

Furthermore, if the longest sentence was of length N then our I-languages would either be immense lists of all sentences of length up to N (which would be far beyond the number of particles in the universe), or the sentences would be constructed by a generative process R, with an added instruction I saying: "Stop at N." Given the choice between R and R+I, no scientist would ever choose R+I and reject I. QED again.

So the sentences of I-language are an unbounded set, like our knowledge of the natural numbers. But that's the only notion of "infinite" that is necessary for the study of the biological system human language (or knowledge of arithmetic).

Noam

From: jeffrey E. [mailto:jeevacation@gmail.com]  
Sent: Sunday, January 03, 2016 12:10 PM  
To: Noam Chomsky <[REDACTED]>  
Subject: Re: Re:

we agree, that is why i try to stay away from the word infinity in broad use. infinity is really on a math concept.

On Sun, Jan 3, 2016 at 12:08 PM, Noam Chomsky <[REDACTED]> wrote:

Apes can gesture "I'm hungry," but their symbolic systems differ radically from human language in just about every significant respect.

There are very broad uses of language, but I think they're more confusing than helpful. There is a biological system: human language. The English word "language" (which, incidentally, doesn't translate easily, even to closely related languages) covers a lot more than that, just as "move" or "energy" in English cover a lot more than what scientists mean by the term. Seems to me a good idea to follow scientific practice and avoid the broad uses, except in informal discourse.

From: jeffrey E. [mailto:jeevacation@gmail.com <mailto:jeevacation@gmail.com> ]  
Sent: Sunday, January 03, 2016 11:55 AM  
To: Noam Chomsky <[REDACTED]>  
Subject: Re:

gesturing im hungry, ? does that need a language first with your broad definition?

On Sun, Jan 3, 2016 at 11:51 AM, Noam Chomsky <[REDACTED]> wrote:

Don't see how it would work. We can't tell stories until language is already available.

There are, of course, speculations about how language might have developed very slowly, first with short sentences, then longer ones, etc. One could interweave speculations about story telling into these. Problem with these tales is the usual one with speculation – one can imagine 1 million possibilities. Dick Lewontin's important paper on evolution of cognition is again relevant. And there is a more formidable problem: the leap to unboundedness is saltational, by definition, so nothing is gained by the speculations, a fact that many of those engaged in these efforts seem not to have grasped.

From: jeffrey E. [mailto:jeevacation@gmail.com <mailto:jeevacation@gmail.com> ]  
Sent: Sunday, January 03, 2016 11:25 AM  
To: Noam Chomsky <[REDACTED]>  
Subject:

how does story telling fit in to the origin of language. ? internal stories? overlay on music . alarms?  
how important are stories ?

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