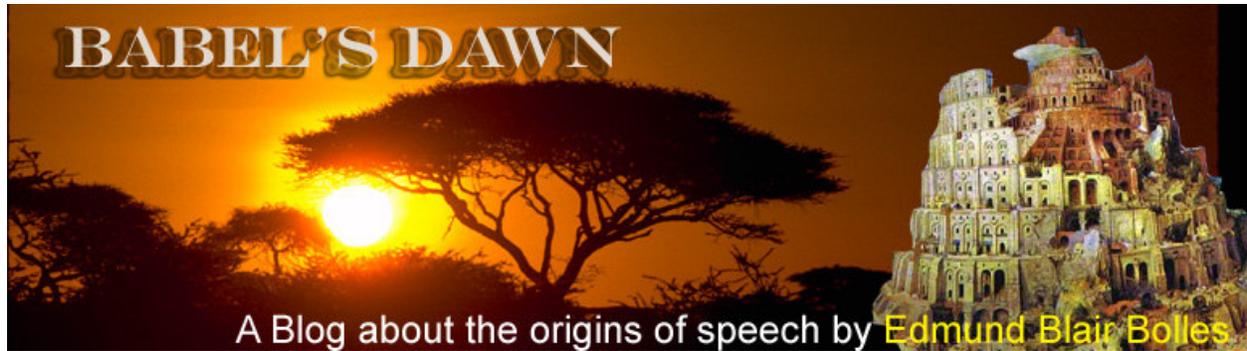


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Post of: September 6, 2009

## Three Years On: Transforming Our Natures



A painting of Lord Byron dressed in an Albanian costume. (See [Byron's Letters](#).)

Last week's post was the first for my third anniversary summing up of what I've learned by maintaining this blog. It focused my the main psychological lesson: the great break between apes and us is that humans have voluntary control over their attention, enabling us to think about things. In fact, a working definition of thinking might be the voluntary shifting of attention in an effort to

understand (i.e., know more about) a topic. This week I want to look at how that psychological discontinuity produces a sociological discontinuity, leading to a decisive break between ape societies and human communities.

Attention to things outside oneself is a defining trait of perceiving organisms, but organisms differ by where they direct their attention. To take an example from [William James](#), humans out walking their dogs will focus attention on a statue they happen to run across. Meanwhile the accompanying dog focuses attention on the smells arising from the statue's pedestal. Perhaps as they stand there a second walker-dog pair comes along. Dog greets dog. Human greets human. The dogs both join in sniffing at the statue's base. The humans exchange a few words. —“Who is that?” asks one. —“[Lord Byron](#),” says the other. —“Ah,” says the first, “that explains the Albanian hat.” —“Oh,” comes the reply, “is that what it is? I do remember that Byron was an Albanian enthusiast.” Then the dogs and their respective walkers go on their separate ways.

As they go off, the dogs are much wiser for the smells they have found. If one dog was a sharper sniffer, that dog is all the more wiser than the dog with the less gifted nose. Meanwhile, the people too are wiser, but they have become more equal than they were at the start. Their differences in knowledge have enabled both of them to learn from the other about what they were seeing. Here we see the great sociological advantage that humans have over dogs. We can benefit from each other's perceptions.

The general progress in knowledge that comes from such human encounters is so plainly useful that people wonder why other animals don't engage in such exchanges themselves. It all likelihood, two dogs sniffing at the same pedestal will recognize different smells because each one brings separate life histories to the moment, Surely they too would benefit by combining their knowledge. So why don't they?

The traditional explanation has been that dogs are not smart enough to use language, but that explanation worked only when being “smart enough” was too mysterious to allow for further inquiry. Now that we know that think requires the ability to voluntarily redirect attention, the argument becomes circular:

- We can think because we can voluntarily redirect our attention.
- We can talk because we can voluntarily direct our attention.
- Dogs can't talk because they can't think well enough [voluntarily direct their attention] to talk [voluntarily direct their attention].

The explanation for why dogs don't use language must be more profound than that they don't because they can't, but for the moment I simply want to notice the enormous sociological advantage voluntary attention gives us over other animals.

We saw that in a simple encounter at the base of a statue, language can enrich both members of a talking pair, and of course the educational uses of language have long been apparent. But there has been some confusion of late over the idea because other animals have been observed to educate their young. For example:

- Songbirds teach their young how to sing;
- Lion mothers teach their cubs how to kill;
- Macaque monkeys show their young how to floss their teeth(!). (video [here](#))

So it is clear that education is scattered throughout the animal world, but these examples all begin with attention by the young. The young songbird is naturally attentive to the songs of its elders, the lion cub is already interested in killing, and monkeys demonstrate flossing only when they

notice that young monkeys are already paying attention to their action. To put it as provocatively as I know how, humans are different because they engage in boring education.

Going back to our statue in the park, we can imagine a teacher passing by with a group of students and pausing to say, "This is a statue of a famous poet named Byron. How do you like his funny hat?" Some kids care, most don't. Uninterest is an inevitable result of being able to direct one another's attention. Animal attention is reflexive. A sensation catches their attention, or a deliberate action holds their attention while they perform a task. By definition, they are interested in the things they attend to. When attention is directed by another, the person being directed might not care.

When direction education sparks attention, however, it is transformative, producing an organism whose behavior cannot be predicted by its biology alone. Nobody can look at newborns and predict how they will be transformed by their education and their thoughts. Meanwhile, animal education is reinforcing. A lion who gets practice at killing while its mother holds the animal down learns how to be a successful lion.

On this blog, this transformative social arrangement has been illustrated by the "speech triangle" whose corners are speaker, listener, and topic. The speaker and listener routinely alternate roles, as the two dog walkers did in my earlier example and as speakers switch back and forth, their view of the topic changes and they come to know more about it. This triangle enables humans to maintain and sometimes build on what their forerunners learned. And once again, the benefits of this system seem so clearly obvious. The accumulation of transformative knowledge is the closest thing on earth to a free lunch. With very little sweat, we learn what the dead struggled desperately to discover, transforming our ambitions and lives in the process. So why do we alone have voluntary control of attention and the speech triangle that comes with it? I'll focus on that issue when I considered the third discontinuity supporting language, an evolutionary one.

#### Links:

Byron's Letters:

[http://www.albanianhistory.net/texts19/AH1809\\_1.html%20for%20information%20about%20his%20interest%20in%20Albania](http://www.albanianhistory.net/texts19/AH1809_1.html%20for%20information%20about%20his%20interest%20in%20Albania)

William James: <http://plato.stanford.edu/entries/james/>

Lord Byron: <http://englishhistory.net/byron.html>

Video of flossing monkeys: <http://news.nationalgeographic.com/news/2009/03/090312-monkeys-floss.html>