

## Re: Analog vs Digital

**Source:** <http://sci.tech-archive.net/Archive/sci.bio.evolution/2004-06/0233.html>

---

**From:** John Wilkins ([john\\_SPAM\\_at\\_wilkins.id.au](mailto:john_SPAM_at_wilkins.id.au))

**Date:** 06/24/04

Date: Thu, 24 Jun 2004 04:29:26 +0000 (UTC)

<RobertMaas@YahooGroups.Com> wrote:

> > *From: john\_SPAM@wilkins.id.au (John Wilkins)*  
> > *The bird's wing, though, merely resembles human designed wings – it*  
> > *was not designed to reduce drag or maximise fuel efficiency. Those*  
> > *that did better than others and were hereditary spread to fixation*  
> > *in some ancestral population.*  
>  
> *I agree. The \*verb\* "design" does not apply in this case.*  
> *There was no designing process involved.*  
>  
> > *There \*is\* no design here.*  
>  
> *I disagree. The \*noun\* "design" \*does\* apply in this case. The result*  
> *of the random process of mutation and selection was a "design" in the*  
> *sense of some pattern that is useful toward functioning of some*  
> *device. The "design" in a bird's wing is part anatomy and part*  
> *biochemistry. The principals of operation of a bird's wing are such and*  
> *such (involving neurotransmitters, muscle cells, tendons, leverage,*  
> *porous bones, feathers to catch air, tipping angle of attack to vary*  
> *drag and lift, overall balance, etc.). What single word, other than*  
> *"design", would you prefer for such principals of operation of a*  
> *naturally-evolved device (more correctly: an artifact of a*  
> *naturally-evolved genome)?*

"Anatomy"? "Life-cycle"? Why use a loaded term like "design", other than because such terms resonate with our inherited tendency to anthropomorphise nature?

But, to be consistent, I will reject "function" too, as a term that properly applies only to a transformation in a model that represents a natural system. I really must submit that piece to a journal...

>  
> > *Everybody \*says\* they are "really" talking about some process that is*  
> > *not intentional or forward looking, etc. But the language they use*  
> > *misleads them anyway, when they draw conclusions in ordinary terms.*