

## Re: the liver and the brain

**Source:** <http://sci.tech-archive.net/Archive/sci.cognitive/2004-09/0087.html>

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**From:** r norman ([rsn\\_\\_at\\_\\_comcast.net](mailto:rsn__at__comcast.net))

**Date:** 09/02/04

Date: Thu, 02 Sep 2004 07:39:51 -0400

On 1 Sep 2004 19:38:02 -0700, [feedbackdroids@yahoo.com](mailto:feedbackdroids@yahoo.com) (dan michael) wrote:

>r norman <[rsn\\_\\_at\\_\\_comcast.net](mailto:rsn__at__comcast.net)> wrote in message  
>news:<[p81cj0dpssidqvd146ckens4c5hss9t0tb@4ax.com](mailto:p81cj0dpssidqvd146ckens4c5hss9t0tb@4ax.com)>...  
>  
>  
>> >The interesting question is whether the perceptual systems of the  
>> >ungulates are already as developed at birth as are their motor  
>> >systems, or whether much of the perceptual development doesn't take  
>> >place after birth, as in cats/humans/etc? It would be advantageous, in  
>> >a survival sense, if a baby zebra could both run away from the lion  
>> >that's chasing it, and also be able to recognize what a lion is,  
>> >shortly after birth. Hmmm ..... ????  
>>  
>> The difference you refer to is the distinction between precocial  
>> (capable of function at birth) vs. altricial (helpless at birth).  
>>  
>  
>  
>I looked through all of the abstracts cited, but they didn't really  
>address the issue I mentioned above. However, armed with the new  
>words, I'm doing some hunting around on google ... thanks.  
>  
>  
><http://www.google.com/custom?&q=altricial+precocial+ungulate>

They don't address perceptual systems specifically, but rather behavior and neural development. Incidentally, your google search still includes the (to me) strange reference to ungulates. That is not a type of animal that is suited to much research. Rodents and small mammals are much better candidates for study. Birds, also, show striking differences in development and are often used as the prime examples of the difference between altricial and precocial strategies.