

Re: Evolution and Love

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- *From:* "Glen M. Sizemore" <gmsizemore2@xxxxxxxxxx>
 - *Date:* Fri, 9 Dec 2005 13:47:31 -0500 (EST)
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"William Morse" <wdmorse@xxxxxxxxxxxxx> wrote in message
[news:dnb4g2\\$98d\\$1@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:dnb4g2$98d$1@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx)

> "Kartik Rajan" <rajan.kartik@xxxxxxxxxx> wrote in [news:dmnem7\\$2ud5\\$1](mailto:news:dmnem7$2ud5$1)
> @darwin.ediacara.org:

>

>> The choice of polygamy vs monogamy in species may be based on group
>> dynamics in a particular species, based on their habitat, diet etc.
>> Polygamy as an evolutionary strategy has the advantage that it allows
>> individuals to spread their genes in a large number of offspring. Such
>> individuals store their 'eggs' in a number of 'baskets' and pass their
>> genes on to the next generation by virtue of numbers.
>> In monogamous species, the individuals of both sexes contribute more or
>> less equally in bringing up their offspring. The males parent less
>> offspring and store all their eggs in one basket so to speak. They
>> invest considerably more in each offspring.

>

> You are intermingling two different concepts – K vs. r selection, and
> relative parental investment. K selected animals have few offspring and
> invest a lot of resources in each, while r selected animals have many
> offspring and invest few resources in each.

>

> According to the parental investment theory, animals with much greater
> total female parental investment are polygynous, those with equal male
> and female parental investment are monogamous, those with greater male
> parental investment are polyandrous. But you can have an animal that is K
> selected but polygynous (e.g. deer), or an animal that is r selected but
> monogamous (e.g. some of the cichlid fishes)

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>

>> Some believe, love is an evolutionary adaptation that ensures that in
>> monogamous species both individuals, stay together. This ensures that
>> their offspring are adequately cared for till they mature.
>> Monogamy is not a universal trait though, it exists in species where it
>> offers an advantage over polygamy based on their surroundings,
>> behaviour, diet etc.
>> I dont know if anyone has actually checked if polygamous animals
>> 'experience' feelings of love, but they probably dont as love is most

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>> likely characteristic of pair bonding monogamous species.

>

> Statements about what feelings other animals experience can only be
> informed conjecture, at least until our understanding of neurobiology is
> a heck of a lot better than it is today.

This view, despite its ubiquity, is hopelessly out of date. A philosophical understanding of the problem has been available at least since 1945. As I have pointed out here, many times, drug discrimination is proof positive that non-human animals can be trained to report what appear to be private behavioral events* ("feelings"). In a paper that is currently under review, my wife and I argue that the same methodology can be applied to analyzing "pain" in non-human animals. Neurobiology lags far, far behind a behavioral understanding of such phenomena. Behavioral experiments can, currently, and for the foreseeable future, provide much more insight into such phenomena than neurophysiology, which is about at the level where we can describe the habituation of gill-withdrawal reflex in *Aplysia*.

*I have designed behavioral experiments that get at whether or not non-human animals in drug discrimination experiments are observing private behavioral events, or observing public behavioral events, albeit from a unique perspective. Or, at least, the experiments can rule out the public case. If non-human animals respond accurately in drug discrimination experiments, but observers are unable to discriminate that these animals are drugged, the case is strengthened that the subjects are responding to private stimuli. The key would be in the dose-effect function, since there is no doubt that humans (and probably other animals) can be trained to discriminate drugged from non-drugged animals at high doses.

But many animals appear to

> "love" their children; dogs show something like "love" to their masters;
> and many animals show signs of friendships that are very akin to "love".
> So while I agree that love is characteristic of pair bonding monogamous
> species, I think an emotion very similar in character exists among other
> species.

>

> Yours,

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> Bill Morse

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- **References:**

- ◆ **Re: Evolution and Love**

- ◇ *From:* Kartik Rajan

- ◆ **Re: Evolution and Love**

- ◇ *From:* William Morse

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