

An example of conceptual analysis: What does 'X is angry with Y' mean?

Mostly extracted from this paper published in 1982:

Towards a grammar of emotions,

Aaron Sloman,

New Universities Quarterly, 1982, Vol 36, No 3, pp. 230--238,

Available online here:

<http://www.cs.bham.ac.uk/research/cogaff/81-95.html#emot-gram>

A POSSIBLE ANSWER UNFOLDS

X must believe Y to be to be responsible for something which violated one of X's motives, e.g. X believes Y did something X disliked, or that Y failed to do something X wanted done.

This is not sufficient, for X might merely regret the occurrence, or forgive Y, and not be angry.

For X to be angry, his belief must interact with a [motive-generator](#) to produce a new motive: he must want to do something to violate one of Y's motives.

X's new motive need not be selected for action: it need not become an intention, for instance because X is afraid of the consequences of acting on it, or disapproves of vengeance.

Alternatively, execution of the intention may be postponed.

This is not yet enough. X may have the desire, but put it out of mind, and calmly get on with something else, and in that case he would not be angry.

Anger involves a fairly intense, desire to do something to Y: the desire should frequently 'request attention', so it will frequently come back into X's thoughts, making it hard for him to concentrate on other activities.

This aspect of anger and other emotions makes essential use of 'interrupt' mechanisms which can be shown to be desirable within any intelligent animal or robot with multiple motives in a complex and partly unpredictable world.

For [rational](#) anger, the desire to harm Y must not be one which X would have had in any case.

The new desired it must arise out of the belief that Y has violated one of X's motives:

E.g. the desire to harm Y should be [redirected](#) to Z on learning that it was Z, not Y, who was responsible.

Further, X must to some extent regard Y as a responsible agent who intended to do what he did.

This sort of anger is possible only in animals able to represent others as having beliefs, motives, etc., and capable of suffering.

More primitive species might merely respond with violence to violators of their motives.

Some humans are like this.

Unconscious or irrational anger is possible too, and would require some of the conditions to be modified.

In irrational anger X's desire to harm Y might not be linked into X's cognitive mechanisms in such a way that it disappears when it is discovered that Y was not the cause of the violation of X's motive.

Some of the states and processes might be conscious, others unconscious.

In particular, even if the information about internal processes is accessible to self-monitoring processes, the monitoring routines need not have the descriptive resources to characterise what is happening accurately.

Besides producing mental disturbances i.e. constantly intruding into X's decision making, anger may also produce physical disturbances, such as sweating, shaking, feelings of tension, tendencies to perform violent actions, such as stamping, thumping objects.

These are sometimes related to mechanisms required for survival and achievement of complex goals.

For instance, it is sometimes necessary suddenly to reorganise the movements of hands, arms, legs, etc.

However, it is not necessary that anger involve any such physical effects. If X satisfied all the other conditions he could rightly describe himself as being angry, even very angry, despite not having the physical symptoms.

The anger might then be described as 'cold' or 'cold-blooded'. Yet the feeling could be strong, insofar as it constantly intruded into thoughts and decisions, and insofar as X strongly desired to make Y suffer, and suffer a great deal.

What does all this imply about the information processing mechanisms in typical humans?

Which other organisms are capable of being in these states, or in various subsets of those states?

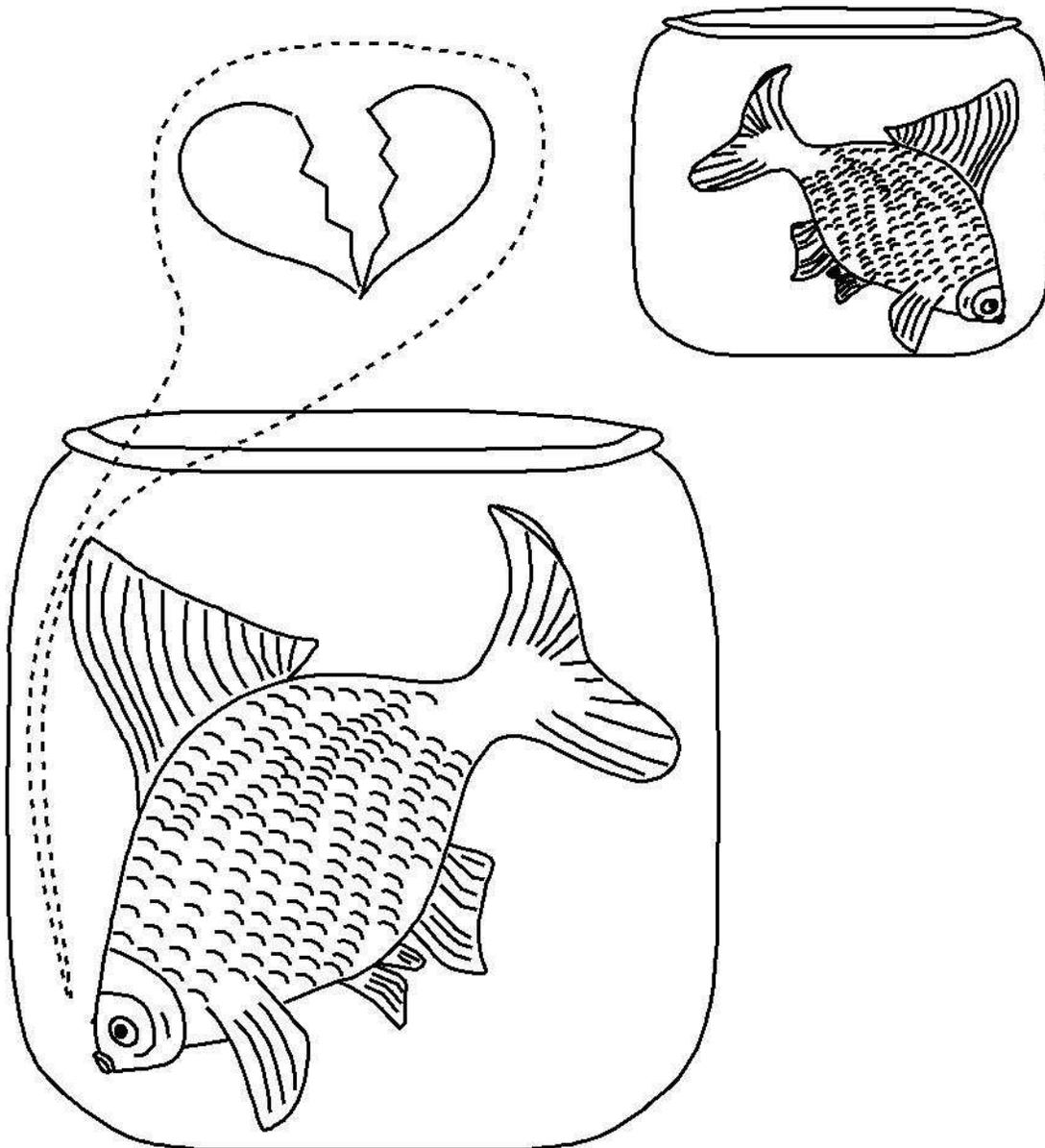
At what stage in biological evolution did anger first become possible?

Can a fish be angry with another fish?

We can ask similar questions about many other mental states and processes.

Can a goldfish long for its mother?

If not why not?



NOTE: Aristotle on anger

On 23 Apr 2017 Eva Hudlicka kindly drew my attention to Aristotle's analysis of anger, about which I was previously completely unaware:

<http://rhetoric.eserver.org/aristotle/rhet2-2.html>

NOTE: The CogAff (Cognition and Affect) Project

Later developments of these ideas led to the idea that biological evolution produced multiple "layers" of information processing that could be divided into at least three major categories: reactive, deliberative, and meta-management (sometimes called reflective), in addition to three "towers" (in the terminology of Nilsson's 1998 textbook on AI), namely sensory, motor, and "central").

Some of the phenomena involving reflex reactions and emotional states suggested an additional potentially disruptive mechanism sometimes referred to as the "alarm" subsystem.

These ideas were developed and extended in the cogaff project
<http://www.cs.bham.ac.uk/research/projects/cogaff/>

A (free) online tutorial on conceptual analysis can be found in Chapter 4 of *The Computer Revolution in Philosophy: Philosophy science and models of mind*. (1978)
<http://www.cs.bham.ac.uk/research/projects/cogaff/crp/#chap4>

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