

# Evolution of play



<http://www.youtube.com/watch?v=XqTUG8MPmGg>



<http://www.youtube.com/watch?v=b3JFmrlgWAK>

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Broader context:

Evolution of behavior

Expensive behavior

Non-functional (?) behavior

What is play?

- Performance of the behavior is not fully functional in the form or context in which it is expressed
- The behavior is spontaneous, voluntary, intentional, pleasurable, rewarding, reinforcing, or done for its own sake
- It is incomplete (generally though inhibited or dropped final elements), exaggerated, awkward, or precocious; or it involves behavior patterns with modified form, sequencing, or targeting
- The behavior is performed repeatedly in a similar, but not rigidly stereotyped, form during at least a portion of the animal's ontogeny
- The behavior is initiated when an animal is adequately fed, healthy, and free from stress or intense competing systems.

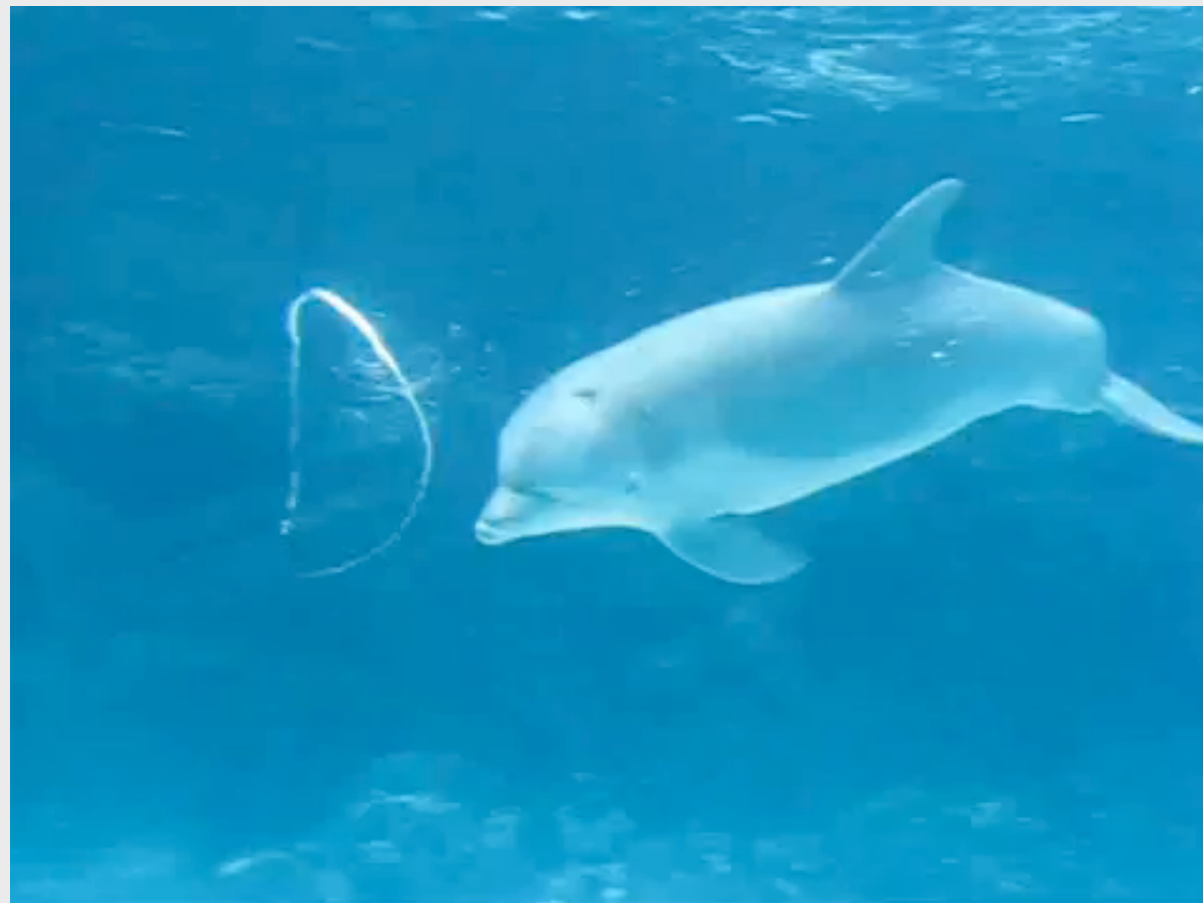
Why semantics of play?



<http://www.youtube.com/watch?v=gil4q7FVRC8>



<http://www.youtube.com/watch?v=nVayAAI9S1M>



<http://www.youtube.com/watch?v=TMcf7SNUb-Q>



<http://www.youtube.com/watch?v=tygyZm8MWgl>

# Traits associated with play

- Sufficient metabolic resources
- Efficient aerobic system
- Familiar and risk-free juvenile environment
- Ability to accumulate more energy than can be shunted to growth
- Escape from the need to behaviorally thermoregulate
- Innate precocial exploratory and arousal [interest, not sexual] mechanisms
- Specific motivational and behavioral systems
- Relatively high survival rate of offspring

# Why play?

- Maintenance of abilities
- Development of skills
- Burning off extra energy (?!)
- Increases social status