



Against Animats

Ricardo Sanz, Carlos Hernández, Jaime Gómez and Manuel G. Bedia
UPM Autonomous Systems Laboratory / University of Zaragoza



Animats are **artificial animals**, a contraction of anima-materials. The term includes physical robots and virtual simulations. Animat research, a subset of Artificial Life studies, has become rather popular since Rodney Brooks' seminal paper "Intelligence without representation". The word was coined by S.W. Wilson in 1991, in the first proceedings of the Simulation of Adaptive Behaviour, which was also called From Animals to Animats.

The investigation in the **European Project ICEA** tried to address the reverse-engineering of mental architecture from mammal brains. Implementations inside the project and beyond it -in other European and non-European projects- are building animats as a vehicle for advancing science and technology.

The ICEA project tried to clarify the real value of bio-mimetic robots, determining the quality of their contribution to several areas of human knowledge. The conclusion is devastating:

Animats are not good engineering because they ignore the basic dogma of engineering: fulfill pre-established requirements.

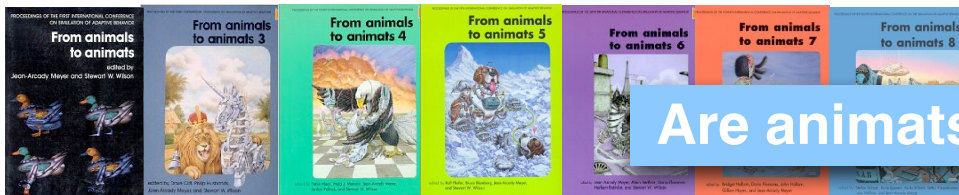
Animats are not good biology because their technical hacks pervert any biological modelling relation -there are no rigorous mappings between biology and machine.

Animats are not good psychology because rigorous experimental settings are lacking and experiments are ad-hoc built to self-fulfill the expected results.

Animats are not good philosophy because they neglect explicating their core conceptualisation and assumptions, not providing a natural-artificial unifying ontology.

Animats are not good physics because there is no mathematical theory where to match systematic quantitative measurements.

Hence, the question is: What are animats good for ?



Are animats a form of art ?

Animats are just toys to mesmerize youngsters, journalists and general population.

This helps appearing in the media, be popular and, eventually, get public funds.



Mesmerize may refer to the act of **animal magnetism**

Animal magnetism (French: magnétisme animal), in its most common usage today, refers to a person's sexual attractiveness or raw charisma. But the term originally signified a magnetic fluid or ethereal medium residing in the bodies of animate beings, as postulated by Franz Mesmer.