

Why Look at Artificial Animals?

Geoff Cox & Adrian Ward

The paper asks: Why Look at Artificial Animals? paying homage to John Berger's essay 'Why Look at Animals?' published in About Looking, in 1980. In the culture of simulation, there is nothing natural about the way we look at animals, artificial or not – in fact, we appear to look at them artificially in new ways. In examining some of these ideas, the paper refers to software specimens from the project Vivaria.net <<http://www.vivaria.net/>>.

'Animals are not machines... Actually only machines are machines. Nothing else is made by human beings from parts and for purposes entirely supplied by themselves. Nothing else therefore can be understood simply by reading off those parts and purposes from the specifications.' (Midgley, 1979: xvi)

'But basically machines were not self-moving, self-designing, autonomous... Now we are not so sure... Our machines are disturbingly lively, and we ourselves frighteningly inert.' (Haraway, 1991: 194).

Animals are both like and unlike humans. If this was partly reinforced by human isolation from the wider world of nature under the culture of capitalism under late techno-capitalism, animals can be said to be increasingly both like and unlike machines - or to put it another way, machines are increasingly being classified according to the model of the animal. The inter-relationships are enduring ones, reactivated by changes in social and technological production, making the former distinction further complicated by the addition of artificial life-forms and the merging of biological and computational forms. The task of classifying and differentiating between animals, humans and machines is one performed with increasing amounts of difficulty, born out of complexity, to use an operative term.

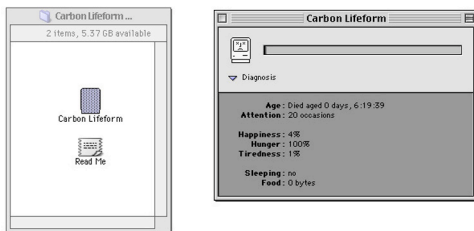
In his essay 'Why Look at Animals?' (1980), John Berger states: 'They belonged there and here. Likewise they were mortal and immortal. They were subjected and worshipped, bred and sacrificed.' (1980: 5) Pointing to the use of the connective 'and', when 'but' might be more easily anticipated, Berger reveals the inherent dualism in our historical relationship with animals. The distinction expresses a contradictory (even dialectical) impulse bound up with human evolution - from lowly four-legged beasts used as metaphor to two-legged ones with the advanced ability to use metaphor:

'If the first metaphor was animal, it was because the essential relationship between man and animal was metaphoric. Within that relation what the two terms - man and animal - shared in common revealed what differentiated them. And vice versa.' (Berger, 1980: 5)

According to Berger's thesis, animals begin to disappear during the process of urban industrialisation in the nineteenth century. In parallel, domestic pets multiplied, and adhered to the truism of resembling their masters in that they were separated from their natural way of life, and made to lead artificial lives in domestic environments. These pet artificial animals reflect the alienated conditions of late capitalism, expressing sentimental attachment and preferred property relations - but not the parallel autonomy of previous times. The pet and owner both lack agency (the power to act independently), as one jerks the other by its lead or responds to stimuli like Pavlov's dog. As part of the bourgeois home, the symbolic virtual animal also

follows this sad trajectory reduced to appearances, encapsulated in the over-production of anthropomorphic materials designed for family viewing and excessive consumption (far too many examples to mention, but Berger cites the work of Beatrix Potter and Disney). Children are the key players here of course, as they are both seen to not only like animals, but also to be like animals, and hence are required to engage with them as part of a process of socialisation through reflexive play (feed them, train them, take them to bed, bury them, and so on). This phenomenon is ever-developing, ranging from the adoption of real and toy animals to the more recent realistic animal toy robots - the Sony Cyberdog AIBO and Tamagotchi come to mind. Slavoj Žižek's essay 'Is It Possible to Traverse the Fantasy in Cyberspace?' (1999) describes these virtual pets as instruments of 'interpassivity' (rather than interactivity) turning children from carers into virtual murderers. Clearly, ideology is at work in the ways we observe animals and choose to characterise our relation to them in the home and in more public spaces (like zoos).

Similar anthropomorphic activity is often found when dealing with the computer. Most people have talked to their computer at some point; many assume that malfunctioning software is the result of bad behaviour, and that good behaviour can be encouraged by treating the machine gently or according to behaviourist principles. Operating Systems are guilty of propagating these myths too: you can get your Macintosh to say 'It's not my fault!' whenever a crash occurs. The *Vivaria.net* project contains software artworks that approach (life-like) code in a quite different manner challenging the usual representational forms, and questioning the ways in which programmers/artists look anthropomorphically at their code/artwork - seeing it create, perform, generate unexpected results, interact with other objects, feed, reproduce, crash/die, and so on.



Adrian Ward, *Carbon Lifeform*

Making reference to the tamagotchi, *Carbon Lifeform* software suggests that it is not necessary to artificially enhance the life-like appearance of something that purports to be a pet. Most pet software visually simulates an animal of sorts, lending a bitmap body to an entity that exists only as code, data and metadata. *Carbon Lifeform* consists of standard GUI widgets that are used to convey the general status of the pet. Its body is a UI-compliant document window, with a close and minimize button. The only suggestion of a simulated animal body is through the use of the happy/sad Mac icon that is used by classic Macintoshes to alert the user to hardware problems. Once installed, *Carbon Lifeform* needs to eat regularly - it takes bytes out of your files (so don't feed it anything important), and requires regular attention. Should your *Carbon Lifeform* die, your computer will die too (by shutting down without warning). Keeping the *Carbon Lifeform* alive is therefore a rather more critical task - and one that revolves around primitive logic routines, rather than complex behavioural patterns often deployed by A-life softwares. Perhaps *Carbon Lifeform* helps to regain a sense of autonomy that animals have lost in the last two centuries, if only because it does not conform to the same bourgeois ideas of what constitutes being a pet or artificial animal.

Rather like the objects in a museum, there exists a central paradox at work in the destruction of the natural world with its simultaneous preservation. In the case of zoos, Berger is saying that freedom as well as visibility is made artificial. We observe living objects as if they were dead.

The animal inhabits an artificial natural world, a simulated or virtual world of rocks and trees as fake as theatrical props. The animals are isolated and do not interact with other species, and they become as dependent as pets on their keepers for food and social arrangements and interactions, including the supply of mates for reproduction. In other words, zoos are mausoleums to life and survival and monuments to historic loss. Berger says: 'The zoo to which people go to meet animals, to observe them, to see them, is, in fact, a monument to the impossibility of such encounters.' (1980: 19) In the zoo, captive animals perform a symbolic but passive function to endorse scientific, economic and colonial power. In the gallery, it has become commonplace for artists to use biological metaphors and examine creativity in the light of scientific investigations in artificial life, simulating the characteristic processes of living things but what values are being reproduced alongside these works? It is now obvious that animal and machine (or organic and technical) processes are analogous and similarly contain self-organising functions but are there corresponding over-simplifications and an uncritical affirmative tendency at work?

Berger draws the comparison with art: 'In principle, each cage is a frame round the animal inside it. Visitors visit the zoo to look at animals. They proceed from cage to cage, not unlike visitors in an art gallery who stop in front of one painting, and then move on to the next or the one after next. Yet in the zoo the view is always wrong.' (1980: 21) Perhaps, this line of thinking serves to suggest that we now look at animals wrongly in new ways. According to Nichols (in 'The Work of Art in the Age of Cybernetic Systems'), the zoo exhibits the logic of a self-regulating system and simulated animal-nature and natural environment (1988: 34) - much like the idea of virtual worlds that presumes the (real) world as we perceive it to be real. Nichols captures the debate about artificial life through Benjamin's artwork essay on reproduction in questioning the presumptions that are made about what constitutes art or life.

Death Notice, posted 8th March 2003

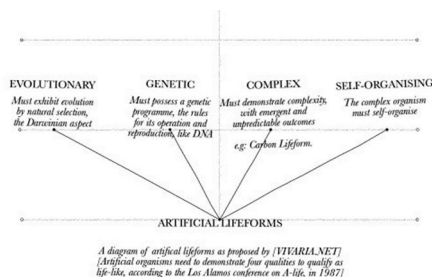
I should let you all know that animal.pl is now resting in peace.

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[root@omni bin]# telnet lurk.org 80
Trying 193.82.57.48...
telnet: Unable to connect to remote host: Connection refused
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Alex McLean, *animal.pl*

Another example from the *Vivaria.net* project is *animal.pl*, a single piece of software (art) that runs continuously on a server connected to the Internet. It performs many different activities, each of which is carefully prescribed and coordinated by the author to interact with other parts of the same software. It is through this self-sufficient design that the analogy of a lifeform is drawn. *Animal.pl* has an agenda, a voice, a policy, a purpose, and even a lifeline. All this without a single line of A.I. or A-life code. The software is written not from a scientific perspective (which merely propagates the equally restrictive notion that software is purely functional) but from a personal one - that of the author - where emotion and feeling is expressed through the craft of coding, and not through a mere simulation of feeling. Even so, *animal.pl* requires a connection to the Internet to operate, and requires other (human) animals to contribute to it before it can become active. In this sense, it externalises its complexity through its interfaces, demonstrating life-like behaviour. The software may even evolve into a new species as a result of its own actions - the last prescribed action *animal.pl* performs is to apply the GNU Public License to itself, offering itself for others to modify and adapt in new ways.

Undoubtedly former firm distinctions between animals, machines and humans are now unreliable - though of course the idea of the zoo was partly to reinforce the distinction in the light of Darwinism. On the contrary, life can now be generated by what Turkle calls 'unnatural selection' (1997: 149) - which seems even more unsettling than the former premise. How would one begin to establish whether life has been demonstrated or produce some kind of taxonomy based on this?



Vivaria.net taxonomy

The *Vivaria.net* project attempts to classify artificial lifeforms by appropriating Darwin's 'Divergence of Taxa' diagram, and, at least provisionally using the four characteristics of life suggested by the Los Alamos conference on A-life (in 1987). The dynamic taxonomy allows artists and programmers to add their projects to the diagram and identify the behavioural characteristics of the code - rather like a software repository. Furthermore, the aim is to express the idea of the diagram as a kind of organism in its own right. The diagram will evolve in a way that might express conflicting criteria, and a spurious scientific methodology. Users may add new branches to the diagram, as well as offer links to artificial lifeforms that should be classified under a particular branch. Are we simply suggesting that we categorise what constitutes life wrongly in new ways too?

You can trace the historical lineage here from artificial intelligence, as well as the influence of chaos theory in believing that mathematical structure lay beneath apparent randomness, and that randomness could generate mathematical structures. However, unlike traditional A.I. thinking, A-life relies on its fundamental equivalence to real life. Hence it is deeply controversial and ideologically-charged. When looking at artificial life, it appears tamed by the computer screen in much the same way as watching wild animals in a zoo; you are separated by the cage bars or glass. Furthermore, if once watching animals allowed humans to imagine being at one with nature, how does the human respond to the discovery that nature itself is programmable? In the culture of simulation, there is nothing natural about the way we look at these animals, artificial or not - we look at them artificially in new ways. Is the distinction between humans, animals and machines undermined or reinforced? Rather than the proliferation of animal representations being compensatory to historic loss, they have added to the disappearance according to Berger, rendered almost entirely distant by close inspection at a zoo or laboratory. If animals become ever more exotic and remote (1980: 24), is the attraction of artificial life merely its contemporary form? Berger thought the dualism between animals and humans had been lost, and goes further to suggest this as a link to totalitarianism. He continues bleakly: 'This historic loss, to which zoos are a monument, is now irredeemable for the culture of capitalism.' (1980:26). Berger made that statement in 1980. Is this sense of loss even more pronounced under present technological and cultural conditions? In looking, the imperative must be to shift not just from a politics of representation (the critical orthodoxy at that time) but a politics that takes additional account of generative processes, and questions of autonomy.

Why look? It would appear that under the conditions of techno-capitalism, humans are both like and unlike artificial animals, which is why we insist on posing the question in the first place.

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Biographies:

Geoff Cox & Adrian Ward work together on a number of projects including *Vivaria.net* <<http://www.vivaria.net>>, and are both trustees of the *UK Museum of Ordure* <<http://www.museum-ordure.org.uk>>. They have previously written 'The Aesthetics of Generative Code' (with Alex McLean) and 'The Authorship of Generative Art' <<http://www.generative.net/>>.

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