

MODULE TITLE: Cultural Context of Architecture IV  
MODULE CODE: ARC303B2  
HAND OUT No: 12

Related Reading:

Anderson J A, 1996, Communication Theory, New York, The Guilford Press  
Bachelard G, The Poetics of Space, Boston, Beacon Press, 1994  
Bickerton D, Language and Human Behaviour, University College Press, 1996

### Artificial Intelligence

I think the first thing I need to propose is that by using the term intelligence we mean to describe a quality in something that appears to think as well as to act.

<http://en.wiktionary.org/wiki/intelligence>

By using the term 'reflex action' or 'reflex response' we often and perhaps mostly mean an involuntary response, one that makes the behavioural relationship to some 'thing' almost machine like. Our own reflex actions, including catching a ball thrown at us or to us, are what some people call hard wired. By this they mean that our neurons and axons are connected up so that the firing of a neuron leads inexorably to the firing of others, often connected to muscles so that we 'catch' the ball thrown or at least attempt to do so.

We sometimes say that our pet is intelligent because it does something clever. We do not often say that our pet has perceived some 'thing' and responded to it as if in a causal fashion so as to create a behaviour pattern that indicates some mental action in addition to a reflex response to its perception.

A large amount of our behaviour is similar but not the same as a reflex response. I like the term 'sedimented' because it makes me think of a settling of a number of grains of sand into a single mass. Some people say that we sediment into a normal pattern of behaviour, which although we use the term normal is in fact unique to each of us; this is an example of a description that is generic to human beings. All that is required is for us to occupy space and behave in that space in a similar way for enough time and we sediment into what amounts to a reflex relationship to stimuli – 'things' we see every day get very similar responses time after time (and of course that can include the people we live with or spend time with).

### Normal Behaviour

When we behave normally we often mean that we are sedimented into a pattern of behaviour that we have become used to or familiar with.

If we use the term society for the collection of individuals constructed by whatever means so as to allow the use of the term for that collection, then we can say that society may be understood as stable most particularly when it is full of normal individuals sedimented into an economic and political model of one sort or another.

For later reference please note that the sedimented society (given that we may later contest the term society as a 'thing' and replace it with a constructed relationship to discourse) is not a thing but a knowledge set that includes movement and space and thus behaviours, movement in space.

What we seem to be able to do, and do more than any other species, is to imagine the set of movements in what Bickerton calls 'offline' conditions [Bickerton. D, 1996]. This means to say that rather than only being able to think in space, the medium in which we move, we can also think in phenomenological space which is still in space but includes phenomena that are made by the body and particularly in the brain.

The study of the brain itself relates cognitive science to this subject area and this particular field of study 'cognitive science' is closely linked to Husserl's 'invention' of phenomenology in order to talk about objects in the brain. As yet the study of this field of knowledge is still in the process of being explored, we do not know quite how the brain works! Whenever we talk about stuff that we cannot identify in space we call the talking about it 'metaphysics' or 'data about physics' which means 'stuff that we can only imagine that is meant to describe stuff that we do not need to imagine (all the time at least) because we can touch and sniff it'

[http://en.wikipedia.org/wiki/Cognitive\\_science](http://en.wikipedia.org/wiki/Cognitive_science)

### Recursive Behaviour

I suggest that we use the term recursive behaviour to describe intelligence because recursive means to nest or repeat a 'thing' and especially to put that 'thing' in a relationship to other 'things' or relationships.

<http://en.wikipedia.org/wiki/Recursion>

It is this ability to relate a 'thing' to something other than its present relationship or perception that strikes us as clever or intelligent. Simply to act reflexively is to be determined by whatever comes our way; we would react directly and predictably to whatever comes into our perceptual orbit. Recursive behaviour is the ability to stop and allow recursion to take place so that alternatives present themselves phenomenologically, in other words our brain provides us with alternatives and we can allow it or prevent it from doing so.

Bachelard refers to us allowing recursive behaviour as 'dreaming'

People describe things as they are without really experiencing the primitive "*a primitiveness that belongs to all, rich and poor alike, if they are willing to **dream***" p.4 "*dream is more powerful than thought*" p.16

*Italics and emphasis added by me*

### The problem with Artificial Intelligence

Is that it mistakes intelligence for rational or planned recursive behaviour and that is not intelligence but mechanics or at best or if you will/like robotics.

In writing about communication theory Anderson [Anderson J A, 1996] ends his book with the same comment as the Frankfurt school's post structuralist proposal that each individual is biologically free to interpret what it will from what is perceived. This proposal would mean that space has limitations in its ability to communicate/share meaning because the biologically free individual will take what it perceives and behave recursively. We may decide to stop recursive behaviour and in so doing form an agreed relationship to perception, as indeed we do in ritual and concepts of 'correct' behaviour and interpretation.

So is learning simply a communicative necessity rather than intelligence?