

# The Intelligence in ETI

What can we know?

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# Talk plan – from Abstract

What is the functional specification of the brain? *On Earth we can argue it is to serve the Sequential Imperative.*

Thinking about ETIs - *we can assume certain characteristics of their biology which include the need for a brain and for that brain to have certain properties.*

It can be argued that *ETI's brain must also serve the Sequential Imperative.*

From that it can be argued that *ETI's language and cognition must have certain properties.*

# Functional Specification

The functional specification of the brain is that it serves the Sequential Imperative. The brain stores and contrives enduring representations which have to be mapped into and out of the temporally organized world.

Behaviour is sequencing.

Perception is de-sequencing.

This is true of all terrestrial brains, regardless of size.

# Biology

We can assume characteristics of ETI's biology. ETI has a brain, sensors and articulators. ETI's brain must also, therefore, serve the SI – that is what brains do wherever they are.

The details of ETI's neural architecture or actual biology do not matter. Here on earth bird brains are quite different from mammal brains – yet both serve the SI.

So for ETI it is also true that behaviour is sequencing and perception is de-sequencing.

# ETI's brain

Assume an ETI's brain is linked to articulators and sensors – serving the SI. This doesn't tell us anything about what sort of sensors or articulators it has.

However – ETI's brain must be able to cope with the complexities of multi-tasking, and the exploitation of complex behaviour to create language. If not then we would not call it intelligent.

ETI has to be able to make a telescope, or LHC, to qualify as interesting to us.

# Intelligence in ETI

We can say the Intelligence in ETI is a bit like our own – it must address the same problems.

The problems of language development and use we should be able to understand even if we cannot understand their language.

Cognition is likewise going to be familiar, if not closely similar. Shared problem solving is likely to be similar (distributed cognition can be assumed).

# Knowing ETI knowing us knowing ETI...

Mutual understanding of problem solving means that we can safely assume ETI will understand the problems of SETI, and know we know this.

The shared problem/solution space means more selective and justified targeting, avoidance of messages, and perhaps just chilling out and waiting until we can be seen to be looking optically.

That's what we can know of ETI's intelligence.