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Ans to the question no 1 -

a) With productivity, the system can create new expressions and the potential number of expressions is infinite. With fixed reference, there is a fixed number of signals in the system and each signal only relates to a particular object or occasion.

b) Because while other creatures use their own form of language to communicate, only the human language is one where we think about how we talk and why we use the words and language we do to communicate the messages, attitudes, etc. that we are trying to convey. Cultural transmission is a way that is used to explain how human language is transmitted culturally. Humans are born with an ability to understand language of some type hard wired in them, but learning a language is based entirely on where you live, and the people around you

who are speaking it.

c)

d) The functional anatomy of the brain has been a popular subject for study for a century or more, and thanks to novel technologies such as topographic EEG, optical brain imaging, and functional neuroimaging in general, much has been learnt.

Anatomically, the brain appears to have two halves that are approximately symmetrical. They are not separate, though, because they communicate constantly through a massive bunch of fibres called the corpus callosum. The brain has many centres serving different functions, but they are far from separate. The brain essentially functions as one organ. It controls movement, both voluntary and involuntary, body chemistry, thoughts, mood, and the intellect. Our personalities reside in the physical properties of the brain and are not separate from its integrated motor and sensory functions.

There can be no convincing argument in the absence of any evidence for there being two separate parts of the brain functionally. Perhaps some arguments have been put forth, but as bald arguments unaccompanied by evidence are not to be taken seriously, I have not bothered to check on them.

e) In the late 1970s a doctor. Who later won a Nobel Prize in 1981, discovered that after cutting the corpus callosum, the connective tissue that links the hemispheres together and acts as an information highway, allows each hemisphere of the brain to

act independently. What that means is, those who have had the procedure done were then able to do two completely separate tasks simultaneously.

The procedure was, and is still, the most effective way to mitigate the electrical storm in the brain caused by severe epilepsy. An epileptic storm begins in one hemisphere of the brain and by cutting the corpus callosum, only one hemisphere is affected.

What breakthrough that won him and his team a nobel prize was that he isolated sensory input for each hemisphere, left ear /left eye sends sensory information to the right hemisphere and right ear/ right eye sends sensory information to the left hemisphere and the left hemisphere controls almost exactly the right side of the body, the right hemisphere controls the left side of the body.

The totally rad thing he did was asking only one hemisphere a particular question, example the left language dominant hemisphere and the subject would respond verbally to answer. When the same question was asked to the typically silent right hemisphere, the left hand was capable of using letter cards to spell out an answer.

The kicker is the there are many documented cases where the right hemisphere produced a completely different answer than left hemisphere.

When some subjects were task with performing simultaneous tasks, by using the left and right arms, they literally would interfere with each other at the confusion of the person they are attached to. There is even one particular case where a man had to

use his right hand to prevent his left hand from striking his spouse during an argument.

That is just some of the amazing findings from that study, you should check it out.

But to answer your question, yes, one hemisphere is all we need and multiple people have had one removed and maintained a nearly average life afterwards.

Oh, and many functions lost by the removal of a hemisphere, began to develop in the remaining hemisphere.