

Theme: Language of Science (nonfictional text)

Text: Review of 'Brain Story' with professor Susan Greenfield (July 2000) author: anonymous

www.facingthechallenge.org/brainstory.htm

Increasingly, the 'scientific' explanation of our lives is to claim that all our beliefs and experiences are conditioned and controlled by the action of chemicals within our brains.

For example, **Brain Story** with professor Susan Greenfield, on BBC2 on Tuesday evenings at 9 o'clock from 18th July 2000 onwards argued that our experiences of God are just a product of our brain chemistry.

- 5 It would be more accurate to say that this series described how scientists can re-create some of our most important religious feelings by tampering with our brain chemistry or electronics. But the clear implication we are supposed to draw is that these feelings or beliefs are not valid. We can not only explain them, but explain them away.

In a recent interview in the Radio Times professor Greenfield said:

- 10 *Some people are frightened that when we understand the brain, we reduce it to atoms, molecules and chemicals and lose the magic of all we hold dear. I hope it's not offensive that we question religion, for example. I try to sit on the fence and say if someone has a religious experience, it can be matched by a change in a certain part of the brain, so how do you know if it comes from there or from planet Zog?*

But she was being a little less than honest in claiming to sit on the fence. She went on to say this:

- 15 *I don't personally believe in God but don't say so in the series. I respect people's beliefs and present them with facts, and because we can describe the brain in terms of its components, it doesn't mean we're reducing it to those components.*

- It is worth noticing some of the verbal sleight of hand which is going on here: she respects people's **beliefs**, but presents them with the **facts**. (Your beliefs clearly could not possibly be based on facts, could they?) We can reproduce people's religious **feelings**, so we can explain their religious **beliefs**. (There could not be anything more to faith than 20 feelings, could there?) We need to be constantly alert to this kind of sleight of hand.

Notice also the arrogance of this claim: Are we really at the stage where we can 'explain the brain in terms of its components?' Not hardly - unless you can give someone an injection which will make it possible for them to speak Chinese!

- 25 The kind of argument put forward in **Brain Story** is not particularly new. It is only put forward as new on the basis that we now know so much more about how the brain works - yet the reality is that we still know very little about how the brain does work - nowhere near enough to justify the sweeping claims that are being made.

For all professor Greenfield's expertise in her subject, there are holes in this kind of argument.

- For example, think about what is happening as you look at this computer screen. There are biochemical changes going on in your brain - synapses firing, neurotransmitters being exchanged - which correspond to the act of seeing the 30 screen.

A brain surgeon might be able to stimulate your brain with electrodes or chemicals in such a way as to duplicate what is going on when you look at the screen. If she knew enough, she might (in principle) be able to duplicate the precise effect of reading these words.

- 35 But what would this prove? Only that your brain works in a particular way when you read these words. It would not prove that the words are not there, would it? (In fact, you could argue that the chemical changes in your brain as you look at the screen are evidence that something is there.)

The decision whether there is a real computer screen in front of you has to be taken on other grounds than the occurrence of a chemical process in your brain - grounds of external evidence.

- 40 In fact, the 'Brain Story' argument is deeply flawed and even self-refuting. If it were true, we could **never** actually know it was true.

What do I mean? Well, suppose that, as a result of my experiences (scientific research) and beliefs (theories) I come to believe that all my beliefs and experiences are simply the result of brain biochemistry, and therefore not valid. Then this belief itself is just as invalid as any other (including, for example, belief in God). This amounts to a belief that all beliefs are meaningless. If it were true, this kind of thinking would prove that **all** thinking is useless.

Annotation:

'Facing The Challenge' (see Uniform Resource Locator = internet address) is produced and distributed by Focus Radio as a Bible based response to the challenges of postmodern culture. Focus Radio is a mass media and multi media agency based in the UK.

Assignments:

- 1) Give an outline of the topics and ideas that mark the scientific aspects of this review.
- 2) Analyse the structural elements of the text that reflect the underlying controversy.
- 3) Put your findings in assignment 2 into a larger context: How compatible or incompatible are the worlds of scientific thinking and the humanities (that include – among others – literature and religion)? You should refer to your reading experience of *Brave New World* in your answer.