

Consciousness: a problem for naturalism

A review of
*The Truth About
Human Origins
(Chapters 5–8)*¹
by Brad Harrub and Bert
Thompson
Apologetics Press,
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Chapters 5 to 8 of *The Truth About Human Origins* deal with issues related to the human brain, language and consciousness, which are of crucial significance to the creation-evolution debate. Indeed, besides the difficulties these phenomena pose for naturalistic (i.e. evolutionary) accounts of human origins, they also raise doubts concerning the validity of naturalism in other respects. The naturalistic doctrine of ‘causal closure’, the claim that all physical events have sufficient physical causes, not only excludes the possibility of any kind of miracle or supernatural intervention in the physical world (such as God’s creation of Adam ‘from the dust of the ground’ or Christ’s resurrection), but also excludes the possibility that human beings possess a non-physical ‘soul’ that expresses itself through our words and behaviour.

The uniqueness of human language

Chapter 5 deals with the problem of the evolution of language. Human language represents a complete and complex functioning system of communication, which is without parallel throughout the animal kingdom. Harrub and Thompson evaluate, and rightly dismiss, claims by some evolutionists concerning the existence of primitive languages (or a rudimentary capacity for language) in various species of animals. There is an absolute qualitative gap between the production

of, and response to, signs (whether innate or conditioned) found in some animals, and the complex inflections and grammatical structures found in human languages. Animal communication lacks any grammar, but all human languages have highly sophisticated grammar. There exists no intermediate or transitional grammar among any species of animal.

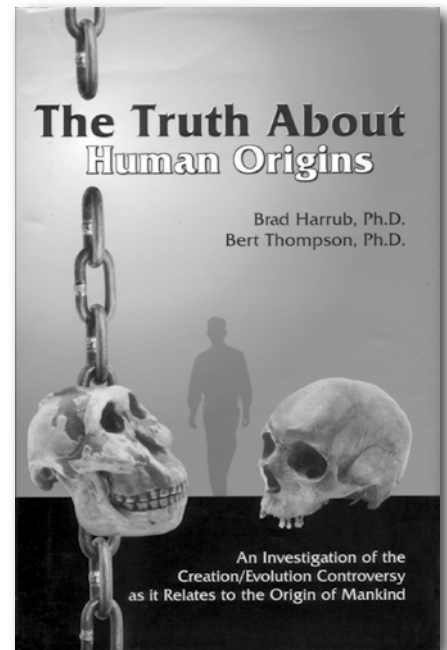
Furthermore, no human language is any more ‘primitive’ than any other. Harrub and Thompson discuss the theory developed by Chomsky of an innate ‘universal grammar’ underlying all human languages, and the problem that this poses for evolutionists, since no transition has ever been found between the absence of grammatical language (animals) and the completely formed grammar, instantiating this universal grammar, which is found in all human languages.

One good example is ‘recursion’, i.e. containing concepts within concepts. For example, ‘She told me that the ape squashed the banana’; ‘the ape squashed the banana’ is a concept within ‘she told me’. An ape would not have a clue about that, but even a young child would.

In addition, the problem is not confined to functional linguistics. Harrub and Thompson also discuss the biological substrates of language, including the neurological speech centres and the anatomical requirements for speech production. All of these pieces must be in place in order for language to occur.

The highly interconnected network of the human brain

Chapter 6 discusses the issue of the evolution of the human brain. This is a crucially important issue in human evolution because the brain is the one organ that is believed by evolutionists to have undergone radical development in humans compared to our alleged ancestors.



Theories of brain evolution in the past have often been seriously lacking in detail, partly due to the fact that the fossil record leaves little in the way of indicators of brain structure, but mainly due to our profound ignorance of just how the brain works (virtually any explanation will do when there is little data to explain). Evolutionary stories about brain development have often been almost exclusively concerned with the issue of cranial capacity and brain size, without regard for the internal functional arrangement of the brain.

However, the differences between the brains of humans and animals consist in far more than brain size—indeed, some species of animals have larger brains than humans. Even within human populations, there is no correlation between brain size and intelligence. The tremendous difference between human and animal brains does not even consist primarily in the greater number of neurons found in humans. Rather, it consists in their *interconnections*, that is, the way in which the human brain is ‘wired’. While it is true that the brain is not entirely ‘hard-wired’, and neural connectivity may be shaped by experience, nonetheless, this adaptive flexibility exists only within the constraints of a highly specialized

and incredibly complex innate network structure. Harrub and Thompson write, 'We believe that the brain deserves a great deal more respect than evolutionists are willing to afford it' (p. 216).

It is likely that as the functional organization of the human brain becomes better understood, that its uniqueness compared to the brains of all animal species will be further accentuated, and the irreducible complexity of its network subsystems will become increasingly evident. Superficial similarities will tend to disintegrate into complex dissimilarities. Detailed neuronal investigations and modelling of how certain kinds of processing are accomplished by the brain have, to date, only been successful in relation to relatively simple and low-level processing, such as segmentation of sensory input and control of motor output. These are the aspects of brain processing that would be expected to be the most similar between humans and animals. This has contributed to an unrealistic illusion that human brains are far more similar to animals than is actually likely to be the case. Creationists have good reason to look forward to advancements in brain science with considerable optimism about its implications for their position.

Human consciousness and the 'soul'

Chapters 7 and 8 cover the phenomenon of consciousness. The issue of consciousness is an important one, and is an area in which there is not very much work from a creationist perspective. There are actually two logically distinct questions with regards to consciousness and evolution. The first concerns whether consciousness, insofar as it is a biological phenomenon, could have evolved. The second issue, however, is whether consciousness is purely a biological phenomenon at all. If it is not, then obviously it could not have evolved, since neo-Darwinian theory only claims to explain the existence of biological organisms. If there is something more to the mind than merely the brain and if humans have an immaterial aspect as well as

a material one,² then naturalistic evolutionary theory is proved false, or at best, incomplete.

For this reason, the problem of consciousness might be considered the 'second front' in the battle with naturalism in science. Naturalism excludes any divine creation, but it also excludes the possibility of a non-physical soul that supernaturally interacts with the brain and body.

It is important for clarity's sake in examining the issue of the brain's role in consciousness to distinguish between what is actually scientifically known and what is pure philosophy. Harrub and Thompson tend to mix the two together, but mainly deal with the philosophical considerations. This is understandable, because when it comes to what is actually scientifically demonstrated, if we set aside naturalistic hubris, scientists are a long, long way from explaining consciousness in any sense of the word in terms of neurophysiology.

Physical analysis of the brain

The scientific evidence, from both animals and humans, can be classified into three broad categories. The first we might call correlation studies. These consist of brain imaging studies, such as Positron Emission Tomography (PET), Functional Magnetic Resonance Imaging (fMRI), or Event-Related Potentials (ERP), which note a correlation between activity in one region of the brain at a particular time and some psychological phenomenon, process or task.

The second groups of studies we might refer to as deficit studies. These studies involve demonstrating that when a

particular region of the brain is damaged, a corresponding psychological deficit is consistently noted. Neither correlation nor deficit studies explain *how* the region of the brain is involved in the psychological process in question; they merely establish that it is involved in some way. For this reason, they are incapable of excluding the involvement of a non-physical soul in the same process. If I observe the gearbox of a car, I may note that whenever the car is moving, the gears rotate, and that whenever the car is stationary, they do not. That hardly proves that the gearbox alone provides a complete explanation of the motion of the car. Similarly, if I damage the gearbox of a car, it may well no longer be capable of driving. Again, however, that hardly demonstrates that the gearbox alone makes the car move.

Such correlation and deficit studies are interesting, but they remain unimpressive as evidence that consciousness is purely a function of the brain, without a detailed and empirically testable explanation as to *how* this happens. Hand-waving explanations will not do. The situation is somewhat similar to what one finds if one looks in the scientific literature for explanations concerning how, say, tetrapods evolved from fish. There are plenty of vague generalities, but little in the way of comprehensive, empirically testable explanations.



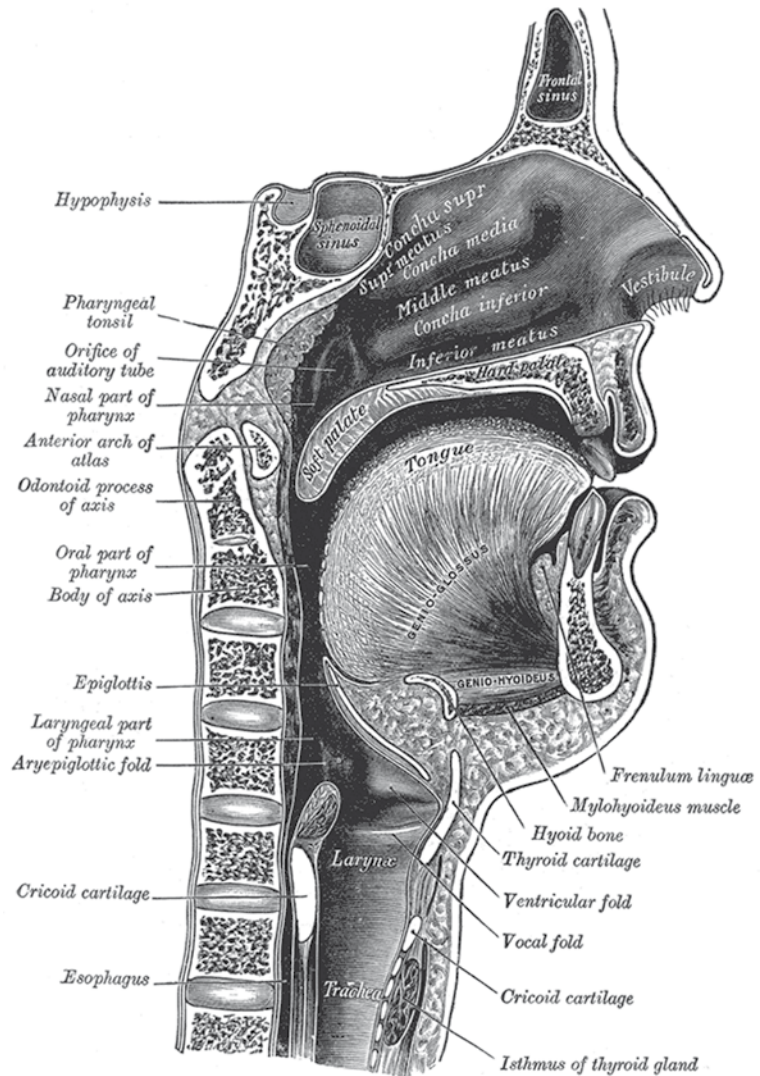
The incredibly complex pattern of interconnections in the human brain make it unlike any thing else in nature.

The third group of studies comprise actual detailed neuronal investigations and modelling of how certain kinds of processing are accomplished by the brain. These studies do actually tell us *how* the processing occurs. The problem, however, as has already been mentioned in relation to chapter 6, is that such studies have only been successful in relation to low-level information processing. They have not been able to get anywhere near explaining the high-level phenomena of consciousness.

Philosophical issues

Despite the hubris, therefore, scientific evidence that the physical brain completely accounts for consciousness is absent. There is strong evidence that the brain is involved in conscious processes. There is no evidence that consciousness is exclusively a function of the brain. It is this lack of evidence that perhaps leads Harrub and Thompson to spend most of their time on the philosophical side of the question. This problem is confounded by the fact that there is no agreed meaning for the term ‘consciousness’. It has become traditional to distinguish what has been called ‘the easy problem’ from ‘the hard problem’ of consciousness.³ The ‘easy’ problem concerns whether neuroscience can explain consciousness in functional terms, and account for the full range of all observable behaviour of humans and animals. ‘Consciousness’ in a functional sense denotes a particularly complex kind of information processing. The ‘hard’ problem concerns whether neuroscience can explain our subjective awareness or experiences (phenomenal consciousness), which in the analytic tradition are often called *qualia*. Some naturalistic philosophers, such as Daniel Dennett, refuse to acknowledge any subjective aspect to consciousness at all, and define it purely in functional terms.

Harrub and Thompson consider the various options and argue that some form of interactionist dualism, with



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humans consisting of both a physical brain and a non-physical component or components (soul and/or spirit), remains the best explanation for the phenomenon of consciousness. This conclusion seems sound both philosophically and scientifically. Unfortunately, the term ‘dualism’ is currently very unpopular within theology, due particularly to the influence of the influential liberal theologian Rudolf Bultmann on New Testament scholarship, which has filtered through to some evangelical scholars.

As a result, it is becoming increasingly common to find evangelical writers who deny any continued conscious existence after death and prior to the

resurrection (the intermediate state), which historically has been virtually universally accepted by orthodox Christians (e.g. Revelation 6:9–10, where the slain saints are shown to be conscious and asking God how long He will refrain from smiting the wicked on Earth, or the deceased rich man who was conscious and asking Abraham about his still-living brothers in Luke 16). Some who do believe in an intermediate state in which consciousness continues, nonetheless have a strange aversion to being labelled dualists, even though that label is obviously appropriate. In view of this situation, a few comments might be in order.

Biblical and theological issues raised

The term ‘dualism’ does not refer to one particular theory, but rather, is a descriptive term that can be applied to many different theories involving two things or concepts. Many different forms of dualism have been described, including theological, cosmic, spatial, eschatological, ethical, anthropological, and so forth.⁴

Theological dualism, for instance, involves making a clear distinction between the creator (God) on the one hand, and his contingent creation on the other. Any form of theism, including Christianity, logically must entail theological dualism. Similarly, it is hard to see how a Christian could not be an ethical dualist, since the Bible makes a clear-cut distinction between good and evil.

Other forms of dualism, such as spatial (heaven contrasted with Earth) and eschatological (this age contrasted with the age to come) have been identified in the Bible. So not all dualisms are inherently bad. Monists often argue that dualistic anthropology is a result of the influence of Plato on Christian thought. But Platonic dualism is only one form of dualism, and has little resemblance to the kind of holistic, interactionist dualism that has been the hallmark of Christian orthodoxy. For Platonists and Gnostics, the body was inherently evil and corrupt, and ‘salvation’ was seen in terms of a permanent escape or liberation from the body. However, for Christian dualists, the body is seen as only contingently corrupt due to the Fall and will be redeemed and perfected at the Resurrection. Thus, salvation for the Christian involves the ultimate restoration of the whole human being, both physical body and non-physical soul/spirit. These two forms of dualism, the Platonic/Gnostic and the Christian, are therefore fundamentally different.

Furthermore, it rarely occurs to such critics that the shoe of influence might be on the other foot. That is, the trend towards monism within Christian theology might simply reflect

the influence of modernism and its attendant materialism and naturalism. This is quite obvious with someone like Bultmann, but it is also true for evangelicals, as the whole creation/evolution debate illustrates.

Many modern Christians want to completely safeguard the Bible from the pronouncements of naturalistic science. In order to do so, they will read the texts in a way that avoids any possibility of conflict with whatever ‘science’ currently dictates is the case, regardless of whether this is the most natural reading or not. Since modern neuroscience, on the whole, insists that consciousness is fully explained by the brain (*because of an underlying naturalism*, not because of the evidence), Christians will attempt to read the Bible’s teaching on anthropology in a monistic manner, since they think that if they defend the idea of an immaterial soul, the Bible will be refuted by ‘science’. Amongst New Testament scholars more generally, however, the anthropological dualism of the New Testament is increasingly being recognized—so that, for instance, David Aune (2001) wrote:

‘The emphasis on the psychosomatic unity of the human person in the teachings of Paul, which is such a widespread theological presupposition among Pauline scholars who are the heirs of Bultmann’s influential work on Pauline anthropology, functions fairly well for an understanding of Romans 7 (for example), but founders when Paul turns to the subject of death ... the conception is basically one of anthropological duality’ (pp. 238–239).⁵

Conclusion

Harrub and Thompson provide an excellent overview of the empirical problems with evolution and naturalism in relation to the human brain, language and consciousness. However, being scientists rather than biblical scholars by profession, they seem largely unaware of the extent to which anthropological dualism has become

controversial within evangelical scholarly circles. Nonetheless, they provide a brief scriptural defence of this position which may prove useful, even if it does not address all the current points of dispute. For a more thorough and scholarly defence of the biblical case for anthropological dualism, however, it would be necessary to consult a work like Gundry⁶ or Cooper⁷.

References

1. These chapters of *The Truth About Human Origins* deal with neurophysiology and linguistics and called for a specialist to review them. The reviewer has a Ph.D. in the field of neuroscience. The other chapters deal with the fossil evidence, which is less novel.
2. The issue of whether ‘spirit’ and ‘soul’ are distinct immaterial components of human nature in addition to the physical body (that is, the debate between dichotomists and trichotomists), will not be addressed here. Although some trichotomists dislike being referred to as dualists, in the broad sense this is an accurate label, since they, along with dichotomists, believe in both physical and non-physical components of humans. Whether the non-physical aspect of humans can be further subdivided into spirit and soul is a separate question.
3. Güzeldere, G., The many faces of consciousness: a field guide; in: *The Nature of Consciousness: Philosophical Debates*, Block, N., Flanagan, O. and Güzeldere, G. (Eds.), The MIT Press, Cambridge, MA, p. 27, 1997.
4. Gammie, J.G., Spatial and ethical dualism in Jewish wisdom and apocalyptic literature, *Journal of Biblical Literature* 93:356–385, 1974.
5. Aune, D.E., Anthropological duality in the eschatology of 2 Cor 4:16–5:10, in *Paul Beyond the Judaism/Hellenism Divide*, Engberg-Pedersen, T. (Ed.), Westminster John Knox Press, Louisville, KY, pp. 215–239, 2001.
6. Gundry, R.H., *Sōma in Biblical Theology with Emphasis on Pauline Anthropology*, Society for New Testament Studies Monograph Series, Cambridge University Press, Cambridge, UK, 1976.
7. Cooper, J.W., *Body, Soul and Life Everlasting: Biblical Anthropology and the Monism-Dualism Debate*, William B. Eerdmans, Grand Rapids, MI, 1989.