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Human Nature: Unitary or Fragmented? – Biblical Language and Scientific Understanding*

Our humanity, as the Holy Spirit speaks of it to all cultures through the writers of Scripture, is that of material beings who live in community and can relate to God. A human person’s life (the soul) is somatic (the body), a set of individual achievements and viewpoints (the mind and heart), which can be evaluated as a whole (the flesh and the spirit). This biblical conception of a unitary human nature conflicts with both clerically fostered ideas that the dead have temporal consciousness and also the rationalistic dualism of ‘the ghost in the machine’. On the other hand, this concept of a psychobiological unity in human life is consistent with scientific research into the neural bases and the cultural origins of the conscious and unconscious mental processes involved in our actions, thoughts and feelings.

Keywords: human nature, psychological science, life, mind, soul, spirit, body, flesh.

1 Introduction

Aims and methods

Divine inspiration (Job 32:8: 2 Tim. 3:16) of the writers in the Old and New Testaments of the Christian canon has been recognised by the community of believers down the centuries. These authors and editors necessarily thought within their own culture and primarily intended to communicate to others in their own time and locality. Hence, technical historical and literary studies are indispensable to a proper understanding of the detailed original meaning of the text.

Nevertheless, the Spirit of God speaks down the ages through these scriptures to any member of each and every human society. Bringing the Bible to everybody in the world has been a key part, and on occasion the only means, of fulfilling Christ’s commission to his followers to tell the Good News to all humanity. Therefore the essentials of what God reveals in Scripture must be accessible to ordinary people in any time and place. What biblical Christians

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must believe is the clear teaching of the text of the canon of Scripture, taken together within the separate contexts and understood independently of specifics of the readers' and the writers' cultures that may not be shared in other social groups.

Thus, the approach of this paper is to seek a framework of the unequivocal mind of the Spirit through the Bible about the nature of our humanity. This is then compared with views on human nature that are consistent with current theoretical understanding of the systematic empirical evidence available on how ordinary people's lives work.

Both interpretations are utterly fallible, of course, both of the Book of Salvation (and of Creation and much else) and of the Book of Nature (and of Society, it must be said, if 'nature' is taken in a narrowly physicochemical sense). That liability to error is not just this author's but also that of any consensus in our time about biblical teaching or about scientific and historical evidence. Nonetheless, we cannot risk ignorance, lack of love or even eternal condemnation by a lack of commitment and there is no human enterprise free of danger of mistake. So let us attempt to face the facts of human life by open and critical examination of both of these resources.

**God's unity and human fragmentation**

The biblical writers set humanity at the centre of the Creator's purposes for the universe. Human beings have been given the world in order to continue the divine activity within it (Gen. 1:26b–31a); indeed, such a way of life is in our nature, for we have been made in the image of God (Gen. 1:26a). The corruption of that image by our rebelliousness has served God's greater plan (Gen. 3:22), subsequently revealed to be the gathering up of humanity and the rest of the universe into divine love through Jesus Christ (Eph. 1:10, 2:6; Col. 1:17,20,27, 3:4). God's purposes for the world are now carried out most directly through ordinary men and women filled with the Spirit of Jesus (see for example John 1:12, 14:15–20, 15:26; Eph. 1:19,23; Col. 2:10a; 1 Tim. 1:13–14).

This vision of God's purposes for human life has long been threatened, however, by fragmentation of three sorts. Each fissile tendency is addressed in Scripture, in the different ways appropriate to the problem.

One sort of fragmentation is that human groups and individuals set themselves against each other. The Bible diagnoses the root cause as human antagonism to God's purposes in creating and sustaining the universe (e.g. Gen. 1:1; Isa. 53:6; Rom. 1:18–19.28). The Christian Gospel includes both wholesness among the nations (Gal. 3:8; Rev. 22:2) and redemption of the personal hostilities and griefs into diverse and loving community within the kingdom of God (1 Cor. 12:12–26; Eph. 4:16; Rev. 21:3–4).

Another sort of problem that we have with the Biblical vision is arguably an inevitable consequence of our finiteness and temporality, quite apart from our corruption by sin. The New Testament (NT) conception is of the one, eternal
God who is also eternally three – almighty Father, incarnate Son and personal Spirit (e.g. Jn. 14:16; Col. 1:15–17; 2 Cor. 13:13). Logically, one entity cannot be three entities. However, it is not a requirement of logic, nor of any other argument yet established, that language and thought as we can have them will adequately describe all aspects of (God’s) eternity and its relation to (our) time. (Mere arithmetic even is incomplete, as Gödel famously showed.\(^1\))

The third sort of fragmentation is the topic of this paper. It may relate to the doctrine of the Trinity and it certainly relates to war, personal violence and socioeconomic exploitation, but these connections cannot be elaborated in the present space. This problem is the splits in human nature as understood by many inside and outside the Church. Thinking Christians today widely assume that the human individual is fragmented into body and soul (to use the language of older versions of the Bible), earthly and spiritual, instincts for evil and the grace of goodness, or a Creator-sustained determinate determinate brain and a Redeemer-responsive free will.

The first issue for this paper is whether or not biblical language requires us to regard ourselves as being a mixture in this life of mechanical matter and free spirit, as unstable as oil and vinegar. Then some suggested historical and current origins for disparities between key biblical concepts and common conceptions of human nature will be mentioned. The idea of fragmented human nature will be compared with a unitary view of the human person which is consistent with scientific investigation of how we act, think and feel.

The latter part of the paper considers if we must accept that we are all divided within ourselves – faithful Christians included (Gal. 5:17) – in such a radical sense that you and I each have two identities, the good one and the bad one.

2 Biblical Concepts of Human Nature

First then, let us consider the Old (OT) and New Testament usages of the commonest Hebrew and Greek words most relevant to the nature of humanity. Where it aids clarity, commentary from the point of view of a scientific psychologist is added. Nevertheless, claims concerning the meanings of biblical concepts stand or fall on how the text should be understood by the ordinary person living in any time and place. Any argument fails that can be shown to depend on a particular scientific theory or historical, theological or philosophical analysis rather than on the cross-culturally plain meaning of the biblical text. Defence of such an intersubjective methodology against ‘post-modern’ critiques is not attempted here. Nor should what follows be misunderstood as an attempt at literary scholarship. We simply seek a broad understanding of how the biblical writers thought about human nature.

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Kings James Version 'soul' = LIFE

The OT Hebrew word *nephesh* and the NT Greek word *psuche* were both mostly translated as 'soul' in the King James Version of the Bible in English (KJV). That word is now archaic and so the alternative English words selected by scholarly modern translations of the Bible can be particularly illuminating. Brief summaries are given in the New Bible Dictionary² of OT and NT usage of these and other words considered later in this paper.

Close correspondences in vocabulary and usage between OT Hebrew and NT Greek are to be expected since the NT writers were immersed in the OT. Indeed, the Greek of the Septuagint OT has been a major resource in understanding the Hebrew text. However, actual usages in different passages must be primary.

It is commonly thought that the modern English equivalent for *psuche* (and therefore *nephesh*) is ‘mind’. A cognitive psychologist like myself might be expected to read the combination of *psuche* and *logos* as the ‘science of mind’. This fits comfortably with the assumptions that psychology is the science of (human) consciousness and that self-awareness is what constitutes the human soul. However, as argued later, scientific study of consciousness is parasitic on empirical analysis of the mental organisation of what is achieved by public actions and reactions. The term ‘behaviour’, in a somewhat bogus sense to cover all intentional and involuntary activities, is used in contemporary science and medicine to refer to objectively measurable aspects of acts and reactions in perceived situations. Psychology can therefore be called the science of behaviour, i.e. mentally organised performance of observable activities. This is perhaps what a scientist should understand by the KJV 'soul'.

An additional reason for such a scientific interpretation of *nephesh* and *psuche* is that behaviour should be regarded as constitutive of animal life, in much the same way as Newton regarded motion as constitutive of matter. Aristotle thought that a force had to be applied to an object to keep it moving, because he did not allow for friction. Similarly, many have presupposed, including psychological theorists³, that internal drives or external goads and incentives are required to get behaviour going: this might be called the puppet-on-a-string model of mind. By contrast, a ‘Newtonian’ paradigm for psychology is that living animals are always behaving (at least while they are awake). What science has to explain is the differences in the way that a human being or a member of another species acts or reacts on different occasions.

*Psuche* might then be translated as ‘mind’ or ‘behaviour’ in this spontaneous, overtly expressed sense. However, the connotations of *nephesh* are perhaps better carried by the translation ‘life’.² This does little violence, if any, to *psuche* either, if the life of a human being or other sentient animal is by and large their mentally

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organised behaviour. The terms ‘soul’ and ‘life’ are indeed coupled in the cliché ‘life and soul of the party’, which means someone who acts in a manner that helps the social occasion to be lively. The scientifically ill-defined concept of ‘lifestyle’ carries some of the same connotations. So, if we had to choose one modern English word for the KJV’s ‘soul’, perhaps we should opt for ‘life’.

Biblical usages of *nephesh* and *psyche* to refer to specifically human living overlap considerably with those of *ruach* and *pneuma* (spirit) and *leb* and *kardia* (heart). So let’s now consider these terms.

*KJV ‘heart’ = MIND*

OT *leb* and NT *kardia* both mean ‘heart’ but usually in a metonymic rather than anatomical sense. They stand for states of mind such as those in which the heart pounds without physical exertion to drive it. Cardiovascular physiology of stress is indeed turning out to be of prime importance in the social psychology of health.

Occasionally words for other viscera are used in the same sense, e.g. *ketayoth* (Ps. 7:9) and *nephos* (Rev. 2:23), ‘God searches the hearts and kidneys’ (bladder-stretching fear?). A ‘gut feeling’ can be an intuition emerging from a demand on every resource a person has. As Jesus said, what a person is comes from the person’s heart (Mt. 15:18–19; Lk. 7:45).

The central meaning of ‘heart’ in such contexts is, in scientific terms, the mental states and personal traits of motivation, emotion and personality. In current psychological jargon, this field is known as ‘hot cognition’.

Biblical words more often translated ‘mind’ may centre rather on ‘cold cognition’. This covers the more calculating or literary forms of mental activity, such as thinking, remembering, imagining, deciding and so on – what used to be called the faculty of cognition. Such words are *yetser* (Isa. 26:3), *dianoia* (Heb. 10:16), *noema* (2 Cor. 3:14) and *nous* (Rev. 17:9).

Nevertheless, this heat and cold are both within a single mind. Quite correctly, the KJV translators did not divide between rationality and emotionality in following the Greek text: ‘scribes . . . reason[ed] in their hearts, [How dare] this man speak blasphemies!]’ (Mk. 2:6; cf. Lu. 5:22).

Whether heated or cool, these are all types of mental performance that are both evident in action and also presumed to be experienced by anyone expressing themself appropriately to the occasion. These biblical words may be closer to the modern English sense of the word ‘mind’ than the arguably broader *nephesh* and *psyche* (above). For obvious reasons though, we cannot rename Psychology as Cardiology!

*The human body*

Caution is needed in extracting a biblical view of the human body in relation to the human soul or mind, because Hebrew and Greek words for body are much rarer in the Bible than those for soul/life and heart/mind.
There are several etymologically related OT words for 'body' in the sense of what is still there after life has expired, namely a body or corpse. Of these, gewiyyya is the commonest form, although there is also a specific word for carcase (nebelah). Other OT Hebrew words translatable as 'body' are metonymic, such as bone (etsem) or skin (geshem).

Characteristically of Greek, soma is more abstract and so has fewer synonyms: it occurs frequently in all Gospels and most Epistles in usages indistinguishable from those of the English word 'body', and so is used in all translations.

A use of soma of interest for our purposes is in Matthew 10:28, 'Do not be afraid of those who kill the body but cannot kill the soul; rather be afraid of God, who can destroy both body and soul in hell.' This seems consistent with the concept of survival of the soul after death of the body. Nevertheless, the phrasing is also consistent with survival of the body too, until the whole person is consumed in the fires of Gehenna (the rubbish tip outside Jerusalem). In addition, it would be hazardous to base doctrine on a single saying which Jesus had shaped to his hearers' experience.

Paul carries over to soma the concept (detailed below) of the 'flesh' as our sinful nature, e.g. 'the power of the body of sin' (KJV) or 'the sinful self', i.e. 'our old being' (Rom. 6:6). Yet we cannot wax metaphysical about this (un)spiritual meaning of 'body' either, because he also uses soma to assert that 'your body is the temple of the Holy Spirit' (1 Cor. 6:19). Moreover, later in the same epistle (1 Cor. 14:44–49), Paul contrasts our physical soma, made from earth like Adam's, with the resurrected spiritual soma which is like the Man from heaven and indeed the life-giving Spirit. In 2 Cor. 5, our earthly body is oppressive housing that will be torn down and replaced with a heavenly home (verse 1); yet that eternal residence too is a soma (verse 3); indeed, we shall not be rid of our mortal body but only of its mortality: it will be 'transformed by life' (verse 4). Furthermore, this transformation is happening here on earth, as Jesus' life is seen in our bodies (2 Cor. 4:10) – clay pots, yes, but only by comparison with the treasure they hold (2 Cor. 4:7).

So these usages are arguably consistent with the position that the whole of the human person is a physical body, just as all the glories of literature are ink on paper. Scriptural language does not require us to split our biological nature from our spiritual nature: indeed, some intimations are directly to the contrary (2 Cor. 5:4 above; Rom. 12:1). This indistinguishability of the living body (soma) from all the person parallels the suggestion above that the soul (psyche) is understandable as the person who is expressed in physical acts and reactions (the mind in behaviour).

The human spirit

The biblical meaning of the 'spirit' of a human being has been defined as the 'animating principle' of that person. This is a bit like Molière's doctor's explanation of a sedative's effect as the operation of a 'dormative principle'. Our
spirit is our life! (So also, where the Holy Spirit is, there is Life.) As in the Latin root for the English word 'spirit', the Hebrew ruach and the Greek pneuma are both words for breath or wind. This metonymy of breath for a human way of living is readily understood in contemporary terms. If you take the breath from the body, you are left with a corpse. If you take the human spirit from a living person, you are left with a zombie. Even a perfect-looking human body might seem subhuman if an unremediable extreme of mental disorder, requiring institutional care from infancy, had reduced that person to a conscious and well groomed but totally 'dispirited' entity. Indeed, such is the interconnectedness of human nature that what might be considered complete spiritual vacuity does not in fact generally occur without terrible physical disorders as well.

It may therefore be legitimate to take human spirit to be the whole person, like human body, mind and life. Yet the spirit of a man or woman has a distinctiveness, as indeed the body, the mind and the life each have their own distinction. A simple concept that captures many biblical distinctions is that the spirit is the human being in potential relationship to God. At the extreme, this conception of spirit is purely that of status (rather like legality), not of any process or content of the person's life.

However, the 'God-shaped gap' in the human soul cannot be considered to be a faithful translation of most biblical uses of ruach and pneuma: they are more psychological or indeed biological or social. The connotation is of the person's particular character and way of life, including attitude to God. If there is any distinction from nephesh and psuche, perhaps the Hebrew word is closer to the life or activities we share with other animal species, whereas the Greek word refers more to peculiarly human qualities, i.e. the sum total of human actions which reflect our biological, social and mental nature. This may be why the categories of body and spirit may appear even more polar than body and soul.

Hence, the issues within contemporary science that correspond to the biblical idea of the human spirit might perhaps be characterised as those broad aspects of the organisation of behaviour that distinguish historical Homo sapiens (sapiens) from other contemporary species including the non-human primates.

3 Body/mind dualism

Biblical scholars have long emphasised that the Old and New Testaments reflect a view of human nature as a psychosomatic unity and that there is no division between sacred and secular aspects of human life. A contrast is frequently drawn between this 'Hebrew' outlook and an allegedly dualistic classical and post-classical 'Greek' view. However, we must be as wary of reading modern dualism back into Greek philosophy as of misunderstanding what the Old and New Testaments say to every era and culture. We should not forget that Judaism had long been subject to hellenisation by New Testament times, just like Rome.

The ancient Greek thinkers had no illusions about ghosts walking around in machines, somehow manipulating material levers by non-material willpower.
and turning electrical impulses in nerves into pleasures, pains, the right answer to two plus two and a heartfelt prayer to God. Aristotle\textsuperscript{4} suggested that we think of the soul as the functioning body and of the body as the medium through which the soul is expressed. He doubts that body and soul are separable, like a ship and its sailor. Rather, they are integral like the personal seal on a document and the wax that is the seal. In an elegant albeit empirically thin manner, he anticipated the application of scientific method to the minds of human beings and members of other species, by observing their overt activities and testing hypotheses as to the causal processes underlying that category of phenomena.\textsuperscript{5}

\textit{Church doctrine}

One frequently voiced view is that the Bible teaches that a human person is composed of three parts – body, soul and spirit. However, the latter distinction between soul and spirit has been disputed in various ways. For example, a person can be said to have just one part that relates to God, which is ‘soulish’ when unredeemed and ‘spiritual’ when restored to communion with God.

A major biblical source for a doctrine of one (or two) non-bodily part(s) of human nature is the New Testament letter-writing by Paul. Yet an irony basic to this paper is that Paul’s usual word for the soulish, sinful form of human life is the thoroughly physical term ‘flesh’ (Rom. 8:3, 5; Gal. 5:19–21; Eph. 2:3; Col. 2:1; etc.) and once the word ‘tent’ (2 Cor. 5:2), and even our ‘bodies’ (Rom. 8:23). Moreover, the new humanity in Christ – the spirit of the saved believer, on this exposition – is described also in physical terms, as ‘clothing’ (2 Cor. 5:4; Gal. 3:27; Col. 3:9) and by implication as again the human body itself, after it has been fully redeemed and created anew (Rom. 8:23; cp. 1 Cor. 15:35–55).

A secular source for belief in a soul separate from the body is a search for some sense in the notion of survival after death. This unwarranted hope becomes all the more desperate when concepts of heaven and hell have become less meaningful. We must be wary of reading this revived preoccupation with the immortal soul back into what biblical writers have to say to less desperate people as well as to our age. The woman who had been widowed seven times by the Sadducees’ hypothetical bunch of brothers (Mk. 12:18–22) could conceivably be raised as seven women, perhaps each sharing a temporal life up to the death of her raised husband. However, raising is done by the God of the living, not of the dead, and so resurrection life is not bound by marriage in this mortal life (Mk. 12:24–27). The medium at Endor (1 Sam. 28:7–25) convinced King Saul that he was talking with the dead prophet Samuel by saying that she could see an old man in a cloak: Saul’s conception of bringing the real Samuel back from the dead was jointly physical and social. Nothing in the Bible contradicts what every realistic person knows: when human beings die, their bodies, minds and personal relationships are destroyed. When God recreates

\textsuperscript{4} Aristotle, \textit{De Anima}.

them in resurrection, it is physically, mentally and as a social entity. After God had raised him from the dead, Jesus ate fish and invited the doubter to touch his wounds, in order to demonstrate socially, emotionally and intellectually as well as physically that he was not a ghost but the living Lord (Lk. 24:37–43; Jn. 20:20.27). Paul taught that resurrection is like God’s raising of the glorious plant from the buried seed – very different in composition but one and the same in identity (1 Cor. 15:35–38). Indeed, Paul wrote that it was plain foolishness (verse 36) to puzzle about how rotted bodies can come to life again; the raised person is created by God (verse 38), just as he creates human beings in this life different from other mammals, birds and fish (verse 39) and also the different beauty of the sun, the moon and the stars (verses 40–41), let alone of the extraordinary moons we have recently seen around other planets, and of the farflung galaxies.

Despite all this, the bipartite view of human nature (as a body and a soul, spirit or soul/spirit) has dominated Western Christendom for most of the last millenium. The doctrine that each person has an immortal soul, separate from the body, apparently first became central in the early Middle Ages with the sale of indulgences. Earlier Christian neoplatonism provided fertile theological ground for such income support to local pastors. Nevertheless Plato’s doctrine of ideal forms was an extreme in ancient Greek philosophy and its implication of an Ideal of personhood casting a shadow of humanity as we see it hardly warrants the inference of a persisting Ideal for each individual. New Testament Greek usage forces nothing on other cultures that was not in the hellenised Judaism of the time. As indicated by the incident already cited (Mk. 12:18, 28), it was a sharp point of difference among Jewish theologians whether or not there is a general resurrection.

Hence later, when translation of the Bible from Latin, increasing literacy and the beginning of observational and theoretical science meant that anybody could peruse God’s Book of Nature and God’s Book of Revelation independently of each other, the Church’s teaching about a soul independent from the body became open to challenge. Then, with the triumph of the mechanical philosophy in Newtonian physics, Christians and sceptics alike began to see living beings as a special sort of machinery: Descartes crystallised a massively influential but highly unstable version of the bipartite view, in which the human body and brain is an animal machine, built out of clay by God and in breathed (i.e. spirited) with a divine soul (Gen. 2:7) but basically working like the hydraulic statues in the gardens of Versailles at Descartes’ time.

**Scientific investigation**

The different branches of natural philosophy that became chemistry and physiology also combined early on in the work of Lavoisier and others,

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7 Plato, The Republic, Book VII.
developing the scientific bases of modern medicine. Medical scientists began to 
see themselves as squeezing the soul out of the human body, first up into the 
brain and then, it seems to present-day mechanists, right out through the top 
of the head! As physic and surgery became increasingly technical and effective, 
the medical practitioner's traditional conception of the whole person was 
reduced, in some hospital practice at least, to a skinful of physiological systems 
more or less inconveniently associated with a soul, or at least with a centre of 
consciousness or mind that could be talked to. When this mind itself 'went 
wrong', that was still illness that needed treating and so a rather anomalous 
medical specialty of psychiatry developed. Cartesian dualism became institu-
tionalised in the health services.

Nevertheless, in the early mid-19th Century, some of those imbued with the 
spirit of modern science began to appreciate that evidence of all normal and 
abnormal mental processes could be found in what people or animals did in 
experimentally manipulated situations or under systematic observation of their 
spontaneous actions and reactions (and talk or writing were actions, just as 
much as piling up boxes to reach a banana or finding your way through a 
maze). Thus the sciences of mind and behaviour were born, and scientific 
human psychology in particular.

From that start, and continuing today to some extent within and even more 
outside the academic discipline and professional practice of psychology, there 
was considerable confusion and controversy about the nature of the mind, 
action ('behaviour'), the self and various forms of awareness ('consciousness'). 
What I believe is the key distinction was fully clarified half a century ago by 
philosophers and psychologists independently (though both Wittgenstein and 
Broadbent's predecessors were based in Cambridge). On the one hand, there is 
the objective performance achieved by the mental organisation exposed by 
action – the perceiving, remembering, thinking, desiring, etc., which is open to 
testable theorising about its causal structure, as in any other science. On the 
other hand is the subjective viewpoint that the agent might express of her or 
his act and situation. Expressing how things seem (phenomenology or the 
contents of consciousness) is a matter of artistic creation: we can admire it; we 
can empathise with it; but we cannot contradict, test or measure it, because 
nothing objective is being claimed. In particular, saying how things seem is not 
a report of how things are in a second world of appearances to which the 
speaker has private and incorrigible access, parallel to and independent of the 
real world we all can observe: the literal concept of introspection is incoher-
ent, and so a Dualism of neurophysiology and consciousness (e.g.) is 
scientifically unnecessary as well as biblically questionable.

That is not to say that expressions of how things seem are unusable scientifically. To the contrary, what people think they remember of an incident, can see in a picture or taste in a food or are trying to achieve by one of their activities are invaluable data for working out how they are actually performing in giving that answer. This is not only a psychological scientist's job of course. It may be what a police detective, an industrialist or marketeer or a person's friends or professional helpers should be doing.

Yet it turns out that it is possible to work out how a performance is achieved without distinguishing among what the person is aware of, what not aware of, and what no person could be aware of. Indeed, the distinction between conscious and non-conscious mental processes is much harder to draw empirically than is appreciated by most people who discuss the (over-)general topic of 'consciousness'. All the same, psychologists are generally agreed now that some mental processes are unconscious and others may be sub conscious or conscious; consciousness can be further divided into focal or peripheral awareness, differences in the types of information being processed, and so on. However, these are all distinctions among types of performance by an individual at a given moment. They are different sorts of achievement by a unitary mind.

Psychologists draw diagrams which seem to divide up the mind into boxes connected with arrows. Indeed, those with something to say about human life these days usually try to express it in a chart of some sort. Unfortunately for scientific understanding, what goes on in a box and what happens along an arrow is often underspecified, unlike an engineer's functional diagram. Nevertheless, some sets of mental processes can be distinguished functionally and/or in anatomically localised brain activity, for example modules for different aspects of psychological performance, or codes representing the context of performance in different ways. Furthermore, as in other sciences, most psychologists specialise in one area of the field - for instance, speech, visual perception, learning difficulties, personal relationships, and so on. This is perhaps a sophisticated version of the old 'mental faculties', the classic big three being cognition (e.g., memory, thought, perception), affect (emotion) and conation (the Will, motivation or decision-making). These and indeed the mental, bodily and interpersonal aspects of a human life are conceptually quite distinct. Nevertheless they cannot be causally divided from each other. These functions and levels are all analysed out of single examples of a human life. So, none of this fragments human identity, however fragmented the academic discipline may become at times, any more than distinctions among a supernova, a piece of superconductor and the helium nucleus prevent them from all being parts of a single universe (and all studied by physicists) or there is any mystery about how in one motor car both a steering wheel and the road wheels work together with the petrol in both the tank and the piston chambers.

In short, as best I can understand, a human being is a psychobiosocial unity – a whole living individual in whom one can see mental, bodily and interpersonal aspects. The present paper does not claim that this is definitively asserted in the Bible nor am I saying that this is (yet) the fully realised consensus in psychological and related sciences. What I suggest is that this unitary (or triune) view of a human person, as entirely mind, only body and totally acculturated, is fully consonant both with biblical uses of language about aspects of human life and with scientific knowledge accumulated so far about human nature.

4 **Flesh = (1) MUSCLE, (2) SINFULNESS**

The second major divide that some have seen inside human nature is disputed among world religions and lies at the root of a heresy that arguably still infects the Christian Church. This division is between the two sides in the battle that takes place within the life of the believer (and maybe in unbelievers too) between the world, the flesh and the Devil and the holy, the spiritual and the Holy Spirit. The heresy is Manichaeism, the rejection of the material universe and sensual pleasures as inherently evil and the striving for an isolated, ascetic existence communing with God. This is a strand in some Eastern religion also.

Such dualism of evil bodily desires and saintly spirituality can arise from confusing two distinct senses of a biblical word for the material apparatus with which we carry out our actions, usually translated 'flesh' in the KJV. The literal sense of flesh on bones is not contrasted with the spiritual life anywhere in the Bible but in the NT 'flesh' in a second sense of sinful human nature is contrasted with 'spirit'. If these two meanings are conflated, we appear to have a contrast between the sinful body and the godly spirit. Then it is easy to harden the distinction to the ontic status of body and mind in Cartesian dualism. Then the human body and by extension the whole material universe must be evil, while the good is the human spirit and its escape from this life to the presence of God.

However, this outlook conflicts with much teaching about the spiritual potential in ordinary human life, given in both the OT and the NT. Also it leads to a denial of the humanity of Christ. For that reason Manichaeism was proscribed as heretical by the early Church. Nevertheless, the heresy about Christian spirituality took root in the institutional Church. Arguably, it pervades evangelical as well as catholic Christianity even in 1998, as indicated by some ordinary believers' ignorance and embarrassment about physical sensuality (erotic or not) and by continued clumsy handling of issues of sexuality by leaders of protestant denominations.

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Flesh as skin and muscle

The general uses in the Bible for the Hebrew basar and Greek sarx are very similar. The literal English translation remains 'flesh', in the modern sense of (roughly) the muscles on the limbs, as in the grandmother's concern that her skinny young grandson get some flesh on his bones (e.g. Judg. 8:7; Dan. 1:15) or the term 'flesh foods' to cover fish fillet as well as beef steak and chicken breast (e.g. Ex. 12:8; Lev. 6:27; Rev. 19:8; or indeed the reverse predation in 1 Sam. 17:44).

Human flesh in the OT and NT, however, is something more inclusive than the stuff that preoccupies a bodybuilder. Sexual union makes the man and the woman into one flesh (Gen. 2:24; Mt. 19:6), as therefore biological relatives are too (Gen. 29:(12),14, 37:27; Judg. 9:2; Rom. 1:3). A person's flesh is the whole of their body (Prov. 14:30) or indeed their mortal life (e.g. Ps. 16:9), as in the Incarnation (sic, Latin caro, flesh; 1 Tim. 3:16a; Heb. 5:7; 1 Jn. 4:2). Moreover, basar and sarx can be the human species (Gen. 6:12; Ps. 56:4; Mk. 13:20; Lk. 3:6, cp. Jn. 17:2) or basar even the whole animal kingdom (Gen. 6:17ff).

An etymological case might be made for regarding both sarx and pneuma as aspects of the body. Flesh is the muscle, fat and skin on the bones of the limbs and torso. Breath is the product of the lungs in the chest cavity. In that sense, they belong over and under the skeleton, respectively, and are equally of the body. Admittedly, flesh is 'all too solid', whereas breath is gas or vapour. Nevertheless, a moment's thought blows away the immateriality of breath, except as a simile: you can feel the touch of even a breath of wind and see its effects on the leaves of the trees. Indeed, although a puff generated by the diaphragm cannot compare, the blast of a gale can be as forceful as a heave from all the musculature of the back and legs.

If therefore sarx and pneuma can both be bodily and both be mental, these terms hardly provide a basis for fragmenting human nature into body and mind.

Flesh as the sinful self

Such usages of the term 'flesh' are all descriptive of the life that human beings share with other animal species, much like soma, psyche and even pneuma. There is however a more value-laden set of usages for basar and sarx, obviously based on the descriptive sense but distinct from it. This is 'flesh' in a sense which is contrasted with 'spirit', a sinful self that opposes sanctified character. This morally or spiritually degrading human 'flesh' is referred to particularly often in Paul's writings, but also occurs elsewhere from early to late in the NT writings, for example in Jesus's saying in Mark 14:38, 'The spirit is willing but the flesh is weak' and the KJV phrase 'lusts of the flesh' (1 Jn. 2:16; 2 Pet. 2:18). It should be noted that the Johannine epistle also uses sarx for Jesus coming in the 'flesh'. That is, the word for Christ's earthly life, which was sinless (2 Cor. 5:21; Heb. 4:15), is also used by the same author for our sinful life. So, these two uses of 'flesh' must not be conflated.
In Genesis too, connections between the body and evil are acknowledged without separating off the spirit as the only good part of human nature. As well as shaping us from dust, the Creator breathes human life into us (Gen. 2:7). The pleasures of eating can be a temptation and exposure of the body can be shaming (Gen. 3:6&7), while perhaps it is our spirit that breathes our divine impulses to recognise ourselves in others (Gen. 2:23) and our God seeking us out (Gen. 3:10). So, private and public human life is a battle ground between evil and good; that snake Satan and the Lord God are at war within and between Adam and Eve. As Paul teaches, not only does the individual believer reign with Christ but also the principalities and powers in human society have been defeated at the Cross.

Flesh vs spirit

Some of Paul’s language makes it easy to regard the ‘flesh’ as the human body or the whole of the tangible, visible, material world in which we (currently) live, while the ‘spirit’ is imprisoned in our body and the material world, longing for the freedom of eternity (or of nirvana perhaps, in Buddhism). If this material(istic) flesh is also inherently evil, that way lies the heresy of the Manichees. Worldliness is not necessarily materialism, however. The sins of the flesh are not limited to bodily idleness, physical comforts, gluttony, promiscuity and coveting more and more property or money.

Thus we should resist the obvious identification of sinful flesh with the human body and the spirit with the human mind, at least as swayed by the Holy Spirit of God. In any case, Paul’s usage is readily ascribed to different aspects of the mind, for he writes of ‘fleshly desires’ (KJV) and desire is a mental state or process.

This is one basis for the tripartite view of human nature as body, soul and spirit. Fleshly desires are the 'soulish' part of man, while the openness to God and the Christian’s redeemed life is the 'spiritual part'. Whether the flesh is identified with the unitary soul-body or with a soul distinct from the body may have divided thinkers in the past but neither is required by Scripture, any more than splitting soul from spirit.

Paul is articulating a Christian view of the historical conflict between bad and good – evil desires versus right intentions. The Evil One and his Creator are not just battling in the heavens, leaving the Christian’s unredeemed nature to do battle with his or her redeemed nature. The Spirit and Satan are also engaged within the life of the believer. The Enemy is permitted to attack his and our God through us, albeit in ways that leave us individually responsible: this is at least one way of understanding the language that Paul uses in Romans for the spiritual battle in mature Christian experience.

5 Moral conflict

Psychological theories

Paul’s antinomies connect with some complex scientific issues. What aspects of the mind (or the person) are the flesh and the spirit? Are they the combatants
identified by the Renaissance and the Romantics, the passions and the reason? One may doubt that the spirit is free of emotions or never lost for words: the Holy Spirit of God at least 'pleads for us with groans which cannot be uttered' (Rom. 8:26 KJV). Nor does the fleshly self lack for rationales and conceptual facility!

Is the contrast between the depths of the heart (and lungs) and the surface (or skin) of the personality? Is it the important difference in Psychology between what a person expresses non-verbally and the verbally expoundable states of mind? Should we reawarm the old chestnut of innate behaviour versus learned behaviour? None of these seems much like Paul's experience of the flesh at war with the spirit.

More plausibly, Freud may have recapitulated Paul in the psychodynamic doctrine of the Ego versus the Superego, with an added twist from the Id. The story of Dr Jekyll and Mr Hyde further dramatises such conflict. However, while human powers of dissociation can be underestimated, the postulation of homunculi solves no problems and many have questioned if the diagnosis of multiple personality disorder is ever helpful.

Another dubious scientific interpretation of sinful 'flesh' is as our biological inheritance, which has to be overcome 'spiritually' by cultural invention or indeed divine redemptive intervention. To be sure, human 'beastliness' is all too evident, if that term is not an insult to the 'beasts' – though chimpanzees turned out to be carnivores like us and can be cannibals too as Jane Goodall in due course observed. Yet the impulses of the human spirit are as much part of our biological and cultural inheritance as are the impulses of what Paul calls the flesh. Altruism is as natural as prudence. Also, altruism would not be possible without prudence. It is when a choice has to be made between altruism and prudence that a prudent action may be selfish.

There is no fragmentation here but processes of check and balance that are necessary within any complex unitary system. At most, spirit and flesh are differently important sides to our nature: both are necessary to the whole of life but, on occasions when both cannot be satisfied, then the enlightened human spirit challenges equally natural human flesh, in this non-physical evaluative sense of that word. In the language of morality, the conflict is between lower and higher principles – for example, a lesser good with its attractions which is incompatible with a greater good, harder to achieve perhaps, or less visible to others. There is nothing wrong with loving yourself as well as your neighbour: Christ reaffirmed it as the second commandment, no less. Nevertheless, following the first commandment or, even more, the law of Christ may on occasion require the neglect of normal prudence.

We have to sleep (and eat). Spiritual living is not possible without at least the personal minimum of rest (and food). Yet at times a spiritual demand requires resistance to physical tiredness (Mk. 14:38). The distinction between sinful flesh and sanctified spirit can be regarded as a religious or ethical evaluation of different sets of processes within the same mind. They need not
be different sorts of mechanism. They are better or worse in a non-empirical way, either inherently or in their outcome.

So there is an aspect of our bodies that drags us down; indeed, it is in our muscles, one might say – that is, in our behaviour. Yet there are also aspects of our human abilities and dispositions that raise us up, or at least point us to life on a higher level: these can be called our spirit, but they are also as fully biological and social as they are intellectual and emotional.

**Development of moral understanding**

Psychological science awaits systematic work on such key issues in moral dynamics. Thus far, developmental psychologists have been content to map the types of argument in children’s performance at different ages in response to scenarios that pose moral dilemmas. Lawrence Kohlberg (reviewed with her own work by Nancy Eisenberg\(^{15}\)) has proposed six stages of moral development, from self-advantage through peer conformity to legalism (Stage 5) and finally acknowledgement of principles of justice and respect for others' wishes (Stage 6). This sequential categorisation fits the evidence quite well. Only a minority of adults reach Stage 6 in Kohlberg’s tests, and this does not preclude a lot of Stage 5 and still ‘lower’ thinking.

There is of course the further scientific question how far such awareness of principles affects action in real situations. Psychological science (and biblical theology) also have to allow for the philosophical issue of how to justify ethical principles: Kohlberg assumes that people at Stage 6 decide for themselves but that is incoherent because the essence of ethical reasoning is avoiding arbitrariness of choice.

In addition, there is a fundamental operational problem in rational ethics. Although principles such as universal justice and respect or love are objective (once stated, who can refute their relevance to decisions?), they are formal and so can be rather ambiguous by themselves in some concrete situations (though not on many other occasions). Questions arise about the relative values to be put on justice and mercy or peace, on a longer life or a richer life, on near and far future generations, and so on. Some of these conflicts of principle may be resolved by more specific ideals such as the life of Jesus of Nazareth or the Way transmitted by his apostles. Nevertheless, within the Judeo-Christian tradition or specifically among biblical Christians, there are pacifists and those who accept the concept of a just war, socialists and liberals, vocations to be a professional Christian and Christians with a professional vocation, differences over when a human life starts or when it ends, and so on.

**Responsible choice and choosing the good**

The Bible, however, is more about moral psychology than moral philosophy. The New Testament centres on the corruption of innocence during the course

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of personal development and the purifying transformation wrought by the mind of Christ. All too often, people make a practice of doing what they know to be wrong, whether it be great evil or merely the second best; moreover, they seek others with similarly low standards (Rom. 1:32b). This weakens the will and sooner or later even dulls the conscience (Rom. 1:31a). While spiritual growth enhances our ability to make free (real) choices, these mature choices also increasingly accord with God's will.\textsuperscript{16}

This is entirely compatible with some trends in developmental psychology and in philosophical ethics, little attended to by the mainstream as yet. A deterministic psychology of moral responsibility can I believe be based on self-developed decision-making processes ruled by principles that are ethical in character, although the rightness or wrongness (or just the moral priority) of a particular principle a person is considering can always be opened to re-evaluation.

Thus, a young person who has been insufficiently exposed to ethical considerations may have only native wit later in life to bring to mind all the principles relevant to a decision (cp. Rom. 2:14). A person who has no well elaborated personal or social model for ways of living will have difficulty in fleshing out ethical principles and in resolving conflicts between evils or goods. Such people still know right from wrong (Gen. 3:22a; Rom. 1:32a, 2:15); indeed, they may not behave any worse than ethically sophisticated people. Nevertheless, those lacking in high principle (such as Mosaic social laws) or inspirational example (such as Jesus of Nazareth) are liable to have difficulty managing the demands of casuistry even with deliberation, let alone automatically. They are unlikely to be swayed by a principle or a practice that has never been part of their own life.

The philosopher Susan Wolf\textsuperscript{17} has argued a similar case for developmental preconditions of freedom of choice through reasons rooted in earlier habits of action. This may correspond also to some extent with what the developmental psychologist Margaret Donaldson\textsuperscript{18} regards as emotional maturation of personal insight. Donaldson's psychological thinking has been stretched by reading religious writings in the Buddhist tradition. Her approach appears to be subjectivist about values, however. It may be hard to test empirically too.

Yet current philosophical discussion of scientific approaches to human nature is oddly silent on dualities of good and evil. Books on brain and mind, even for the general public, tend these days not to address issues about values, apart from occasional references to the problem of evil (as a knock-down proof of atheism). Some may suspect that advocacy of eliminative materialism and neural determinism is of a piece with ethical scepticism and personal amoralism, as well as with the professed atheism or agnosticism. When religious alterna-

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tives are acknowledged in current metascientific controversy (e.g.\textsuperscript{19}), there is no hint of implications for practical principles.

This makes current cognitive and neural science seem very blinkered to psychologists from the social and applied sides of the science. The key issue for moral responsibility and social action is not neurophysiological or evolutionary determinism but psychological determinism. Psychological determinateness is equally a key issue in spiritual growth, since the flesh and the spirit are two aspects of the one human individual: ‘The good that I would I do not: but the evil which I would not, that I do. . . . Who can deliver me. . . . God through Jesus Christ our Lord’ (Rom. 7:19, 24–25 KJV). Notice too that the human mind is not an isolated system but a nexus of external relationships. The Holy Spirit comes into a believer’s life and gives that person’s spirit increasing dominance over that person’s fleshly self. That power of evil is not fully endogenous either: ‘greater is he that is in you than he that is in the world’ (1 Jn. 4:4). Such interactions of environmental determinants with cognitive traits are the stuff of applied psychology.

Thus, NT teaching on the spiritual growth of individual believers, and in Christian communities as well, provides a challenge to develop much further the fundamental scientific understanding of human behaviour and the application of other basic science to widely acknowledged social problems. Hear what Jesus says to those human scientists who know the Gospel, ‘Lift up your eyes and look on the fields, for they are white already to harvest’ (Jn. 4:35b).

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