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The Origin of the Soul: New Light on an Old Question

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Introduction

The aim of this article is to show how new developments in the philosophy of mind may assist Christian theologians to enunciate a satisfactory theory of the origin of the soul.¹ This goal assumes that traditional representations are inadequate and that it is possible to talk meaningfully of the 'the soul'. The latter has been disputed by modern analytical philosophy, following Wittgenstein. Space disallows discussion of such criticism except to suggest that its *epistemological* claims, however valid, do not logically entail anything about the *ontology* of human persons.² My first assumption, viz., that traditional Christian explanations of the origin of the soul are inadequate, constitutes the argument of the first part of this paper. I have deliberately restricted my purview here, in what is not primarily an historical article, to those theories which have some relevance for contemporary Christian theology. Of the three historically important ideas about the souls origin: pre-existence, traducianism, and creationism, only the latter two shall be considered.³ Finally it should be noted

¹ What I mean by the 'soul' will emerge in the course of subsequent discussion.

² See L. Wittgenstein, *Philosophical Investigations* (tr. G. E. M. Anscombe, Oxford, Blackwell, 3rd edn, 1978) sections 239, 384 etc. Cf. N. Malcolm, *Problems of Mind* (London, George Allen and Unwin, 1971). For a useful reply to this sort of philosophy see H. D. Lewis, *The Elusive Mind* (London, George Allen and Unwin, 1969); *The Elusive Self* (London, Macmillan, 1982).

³ The theory of the pre-existence of souls had its most famous Christian exponent in the third century Alexandrian Greek Father Origen. See his *First Principles*, 1. 8, 2; 2. 1, 1f; 2. 9, 1; *Against Celsus*, 7, 50. Origen's views were quickly rejected by the Church on a number of grounds.

that the entire argument is set against the background notion that any Christian doctrine of the origin of the soul must be compatible with personal survival of death.⁴

II. Traditional Christian Theories of the Origin of the Soul.

Traducianism.

The term 'traducianism' is derived from the Latin word '*tradux*' which means 'layer'. All souls are, as it were, derived ultimately from the one original soul of Adam. This view has its philosophical roots in Stoicism, which considered the soul to be made up of a special sort of fine matter.⁵ The most important representative of traducianism was the early African Father Tertullian (c. 160–220 A.D.). Tertullian taught that the soul is 'handed on' from parent to child through the organic process of generation.⁶ In procreation the soul as well as the body passes on part of itself to its offspring, so that the whole person, soul and body is derived from the substance of the progenitors.⁷

'In the first creation (of Adam), therefore, there were two different and distinct elements, slime and breath, which produced man. Thus, by the mixture of the seeds of their substances, they gave the human race its normal mode of propagation. So, even now, two different seeds flow forth together, and together they are implanted in the furrow of their seed plot, and from both there develops a man. In this man, in turn, is a seed contained according to his own species . . . And so from one man, Adam, flows this whole stream of souls . . .'⁸ Such a conception entails

Firstly, the doctrine has never claimed to have a base in the Bible and so could not be put forward as an object of faith. Secondly, it raises a number of insuperable problems concerning the matter of personal identity. For details see A. W. Argyle, 'The Christian Doctrine of the Origin of the Soul', *Scottish Journal of Theology*, 18, 1965, 284–287; C. Hodge, *Systematic Theology* (London, Nelson, vol. 2, 1888), 66–67.

⁴ I have discussed the nature of the soul in relation to personal survival at length in my unpublished M.A. thesis *The Intermediate State* (Deakin University, 1984).

⁵ See A. Dihle, 'psyche in the Greek World', in *TDNT*, 9, 613–614; A. A. Long, *Soul and Body in Stoicism* (E. C. Hobbs and W. Wuellner (eds), Claremont, Centre for Hermeneutical Studies, 1980), 8.

⁶ Tertullian, *On the Soul*, 100.27.

⁷ Tertullian, *On the Soul*, 27.5.

⁸ Tertullian, *On the Soul*, 27.8–9.

the seminal identity of the whole race with Adam, and so provides a simple explanation of the transmission of original sin.

Although Tertullian's materialist leanings failed to find favour, a more refined form of traducianism known as 'spiritual traducianism' or 'generationism' persisted in the patristic Church.⁹ Generationism maintains the spirituality of the soul by arguing that the seed is only the instrumental and not the principal cause of the production of the human soul. The soul is transmitted in a manner only analogous to physical transmission. This view still provides a simple explanation for the universality of sin but does not entail any material identity between Adam and his ancestors. Gregory of Nyssa adopted such a view,¹⁰ and Jerome claimed that it was the position of 'the majority of Western Christians'¹¹ at his time. The immensely influential Augustine, although always tempted to believe that in creating the soul of Adam God created in it once and for all the souls of all men, finally concluded that no single doctrine of the origin of the soul could be proved by either scripture or reason.¹²

In evaluating traducianism it must be immediately acknowledged that the materialistic form as found in Tertullian is without contemporary support.¹³ This is not only because of the pre-scientific character of Stoic metaphysics, but also because the thesis itself is exposed to weighty objections. In particular there would seem to be a problem with the notion of a soul dividing. One way to put this is to claim, as Argyle does, that: 'the soul, the "ego", is one and indivisible, and it is inconceivable that one "ego", or two, should generate another in this way.'¹⁴ The point here is that if the soul is somehow regarded as the kernel or essence of the person (an attribute which would be accepted by traducianists) and if the person is regarded as indivisible, then traducianism, which involves the division of the soul, must be

⁹ See Argyle, 'Origin', 288–289; J. F. Donceel, *Philosophical Anthropology* (New York, Sheed and Ward 1967), 441.

¹⁰ Gregory of Nyssa, *Making of Man*, 29.

¹¹ Jerome, *Letter to Marcellinus*, 1.1.

¹² Augustine, *On Free Will*, 3. 20–21; *Letters*, 166. 4,9; *On the Soul and its Origin*, 4.11, 15–16. For further details see E. Gilson, *The Christian Philosophy of St. Augustine* (tr. L. E. M. Lynch, London, Victor Gollancz, 1961), 51.

¹³ The question of the advantage of such a theory in explaining the transmission of original sin is irrelevant to the logical plausibility of the theory itself. (A corollary cannot be made the basis for a theorem.) Cf. Hodge, *Systematic Theology*, 289.

¹⁴ Argyle, 'Origin', 289.

false.¹⁵ A more sophisticated objection trades on the notion that the soul is immaterial. Eric Mascall says: '(traducianism) becomes simply unintelligible if we try to apply it to a subsistent spiritual entity which is located in space only in the sense that it animates a spatially extended body.'¹⁶ That is: only things in space can divide, the soul is not in space, therefore the soul cannot divide. Since the major premise of this syllogism is true by definition, then providing one accepts the minor premise (as Christian theology traditionally has) then the conclusion necessarily follows. It would seem that materialist traducianism is untenable.

The situation is not however so clear with generationism. The two major arguments against this theory are closely related. A central adage of Scholasticism states: *Omne agens agit sibi simile*. (Every agent produces an effect which resembles itself.) If, as this principle insists, like can only produce like, then a body can only produce a body, and not a soul which is unlike a body.¹⁷ Or to look at it from the other side, since we know that the soul possesses properties not present in matter, namely, the ability to understand, no corporeal power could ever possibly have produced the soul. We must regard the soul as not only immanent in but also transcendent to the life of the physical organism with which it is associated.¹⁸ It cannot therefore owe its origin to physical forces.

If the above objection is interpreted in the narrow sense that any property residing in an effect must be present in its cause then it is clearly false. As Paul Edwards says: 'Brain tumours . . . lead to all kinds of psychological states, but we do not for this reason refuse to regard them as causes of the latter.'¹⁹ The Scholastic objection however is more radical than this, it is in fact rooted in the belief that there is a hierarchy of existents, the highest finite earthly existent being the human mind. The quality of 'being' of

¹⁵ Space once again forbids a proper development of this argument, but for considerations that persons are necessarily indivisible see J. Moor, 'Split Brains and Atomic Persons,' *Philosophy of Science*, 49, 1982, 91-106.

¹⁶ E. L. Mascall, *Christian Theology and Natural Science* (London, Longmans Green, 1956) 279.

¹⁷ See e.g. M. J. Gruenthaner, 'Evolution and the Scriptures', *Catholic Biblical Quarterly*, 13, 1951, 21.

¹⁸ See St. Thomas Aquinas, *Summa Contra Gentiles*, 2. 68 and 79; Mascall, *Christian Theology*, 279.

¹⁹ P. Edwards, 'Panpsychism', in *The Encyclopedia of Philosophy* (P. Edwards [ed.], New York, Macmillan, vol. 6, 1967), 27. Cf. J. F. Donceel, 'Causality and Evolution: A Survey of Some Neoscholastic Theories', *New Scholasticism*, 39, 1965, 307.

the soul is not only dissimilar to that of the body but is of a different order. The soul is ontologically too far 'above' the body to have been produced by it.²⁰ If the soul is as dissimilar from the body as this position claims then all conceivable forms of generationism are non-viable. Indeed, given that classical generationism accepts the simple and subsistent nature of the soul the theory is patently internally inconsistent.²¹ This leaves the Christian theologian with only two options, either to develop a new model for generationism or to accept that the soul must come into being by a direct act of God.²² The second alternative has been preferred by the majority of Christian scholars and is known as 'creationism'.

A final argument against generationism is pithily put by Aquinas: 'if the generation of a thing is the cause of a thing's being, then its corruption will be the cause of its ceasing to be. The corruption of the body, however, does not cause the soul to cease to be, since the soul is immortal.'²³ This argument may be immediately dismissed. The soul may be immortal by reason of its inherent properties (as St. Thomas believed), or by virtue of a miracle. The second alternative, which is conceivably compatible with an amended model of generationism, has been favoured by many Christian theologians of Reformed persuasion.²⁴ That is, even if the soul depends upon the body for its origin it can depend upon God's power for its survival.

The above brief discussion is sufficient to indicate that the older form of generationism lacks the philosophical tools from its own background²⁵ to establish as possible that the soul owes its origin to the body. It is my intention in the second part of this paper to

²⁰ Aquinas, *Summa Contra Gentiles*, 2. 68, 6 and 8; 'the intellectual soul cannot be educed from the potentiality of matter since the intellectual soul altogether exceeds the power of matter . . . it is ridiculous to suggest that an intellectual substance is . . . produced by a power corporeal in nature.'

²¹ Cf. Argyle, 'Origin', 290.

²² Non-theistic philosophers can of course reach a different conclusion. Given the improbability of an association between two entities as the body and the (putative) soul, some form of materialism must be true. Namely, talk of the soul is merely a way of talking about certain specialised functions of the body. See e.g. D.M. Armstrong, *A Materialist Theory of Mind* (London, Routledge and Kegan Paul, 1968), 30.

²³ Aquinas, *Summa Contra Gentiles*, 2. 86,9 and *Summa Theologiae*, 1a. 75,6.

²⁴ E.g. G. C. Berkouwer, *Man: The Image of God* (tr. D. W. Jellema, Grand Rapids, Eerdmans, 1962), 248; M. J. Harris, *Raised Immortal* (Basingstoke, Marshall, Morgan and Scott, 1983), 237.

²⁵ Which is essentially that of Platonic dualism. See J. Pelikan, *The Emergence of the Catholic Tradition* (Chicago, University of Chicago Press, 1971), 45-51.

show how recent advances in the philosophy of mind obviate these difficulties.

Creationism

Creationists believe that God creates each soul *ex nihilo* and individually at the very moment he joins it to the developing organism. This has been the overwhelming opinion amongst Christian theologians since the fifth century²⁶ and is the official teaching of the Roman Catholic church.²⁷ The major philosophical argument for this is stated by Aquinas: 'since the soul does not have matter as part of itself, it cannot be made from something as from matter. It therefore remains that the soul is made from nothing. And thus it is created . . . the soul belongs to the genus of intellectual substances, which cannot conceivably be brought into being except by way of creation.'²⁸ This is the 'scale of being' argument encountered above in opposition to traducianism, and here it is used positively to prove that the only way a thing like a soul can come into existence is by creation.

That God could create every soul *ex nihilo* is not to be doubted, for his omnipotence is able to produce any entity which does not possess mutually contradictory properties.²⁹ The crucial assertion however is that it is logically impossible for souls to come into being by any other means than creation. One might reply to this that the question of the origin of the soul is an empirical one, and since there is no logical *contradiction* in a soul being produced by a body, however implausible this might seem, the truth of creationism cannot be established conclusively by reason. I think that a position like this one is defensible, but it needs a great degree of filling out if it is to be persuasive. This is to be a major task of the latter part of this paper.

A second major argument for creationism is an ethico-theological one. Argyle states: 'Creationism . . . is more consistent with the reverence with which Jesus taught us to regard our souls. It is difficult to believe that so sacred a possession, destined for

²⁶ For a host of references to primary sources see Argyle, 'Origin', 290-292.

²⁷ For references to the official Roman Catholic statements see T. C. O'Brien, tr. and ed., *Summa Theologiae* (London, Eyre and Spottiswoode, vol. 26, 1965), 7, footnote h. For discussions on the timing of the creation of the soul in relation to embryonic development (a matter of no direct concern to this paper) see the articles in E. C. Messenger (ed.), *Theology and Evolution* (London, Sands, 1952), 219-332.

²⁸ Aquinas, *Summa Contra Gentiles*, 2, 87,3 and 4.

²⁹ One might also appeal by analogy to the creation of angels as pure spirits.

immortality, should be evolved by an act of our parents.³⁰ One possible danger in this argument is that it could easily lapse into a non-Christian dualism, whereby the immaterial soul is regarded as inherently 'higher' (ethically) than the 'lower' or bodily part of man. The Christian doctrine of creation however regards everything in itself as good (Genesis 1:31). More directly the argument overlooks the possibility that God has ordered creation in such a way that men and women have been endowed with the sacred trust and responsibility to bring forth ensouled persons. Argyle has in fact set forth a false dichotomy, either man or God is responsible for the production of the soul; I shall shortly argue that the soul owes its origin to both God and man.

A final argument appeals to Scripture. The *locus classicus* here is Genesis 2:7, '... then the LORD God formed man of dust from the ground, and breathed into his nostrils the breath of life; and man became a living being (*nephesh hayyah*).'³¹ This text has been taken to show that body and soul are distinct and have different origins, the body from the earth and the soul from God.³¹ Such an exegesis of the text is not however supported by an analysis of the use of its key terms in the Old Testament. *Nephesh* (breath) is not only found in men but also in animals³² and even a dead body can be called a *nephesh*.³³ When the word is used in place of the personal or reflexive pronoun³⁴ we seem to be close to our modern conception of man as a person. This data makes it plain that in Genesis 2:7 *nephesh* cannot simply be translated as 'soul', for it is man and not some part of him that is designated a living *nephesh*. The text distinguishes between body and life not between body and soul.³⁵ Even if one were to overlook all these facts the verse is too full of anthropomorphisms to be treated as a scientific text underlying creationism.

Added to the fact that there do not seem to be any conclusive arguments in favour of creationism weighty objections have been raised against it. The first of these is that creationism commits the Christian theologian to an indefensible dualism. Whether creationism is construed of in terms of an Aristotelian anthro-

³⁰ Argyle, 'Origin', 292. Cf. E. J. Fortman, *Everlasting Life After Death* (New York, Alba House, 1976), 41-68.

³¹ See e.g. Aquinas, *Summa Contra Gentiles*, 2, 87,7; Hodge, *Systematic Theology*, 70.

³² Leviticus 24:18. Cf. Genesis 9:4; Leviticus 17:11, 14; Deuteronomy 12:23.

³³ Leviticus 21:1; Numbers 6:6; Haggai 2:13.

³⁴ Genesis 49:6; Leviticus 11:43f; Deuteronomy 13:7; Psalms 3:3; 11:1; 35:7; 88:15; 120:6; 142:5; Proverbs 11:17; Isaiah 3:9; Jeremiah 5:9 etc.

³⁵ Cf. G. von Rad, *Genesis* (tr. J. Bowden, London, S.C.M., 1972), 77.

pology or a Platonic-Cartesian one³⁶ in all cases the relationship between soul and body is represented as a radically asymmetric one. Such anthropologies hold that human bodies to *be* human bodies require human souls to inform them, but human souls need their bodies only so that they may be able to perform certain of their *functions*. Such dualism is problematic on a number of grounds. Firstly the contemporary consensus amongst biblical theologians is that the Scriptures think of man as a unity rather than as a union of body and soul. Anthropological dualism represents a scientific and analytical interest not only foreign to but contradicting the biblical emphasis on man as a psychosomatic unity.³⁷ Secondly, all forms of dualism are confronted by the philosophically difficult problem of how two entities as different as the body (material, spatial, divisible) and the soul (immaterial, non-spatial, indivisible) can interrelate. With so little in common how do these two substances combine to form the human person who in our everyday experience seems to be uniate?³⁸ Whilst I would not claim, as most philosophers of mind do, that dualism is incoherent, it is unwise to saddle Christian theology with a philosophically disreputable doctrine when more plausible alternatives may be available. Creationists however have no room to move in this matter for creationism as doctrine has its foundation in a strong dichotomistic view of human nature.

Another major problem for creationists is a strictly theological one. It begins with the observation that: '... on the seventh day God finished his work which he had done, and he rested on the seventh day from all his work which he had done.' (Genesis 2:2). This straightforward statement implies that God no longer creates; and this message cannot be dismissed on the grounds of the text's simple everyday style for its fundamental theological thesis can be supported by profound philosophical argumentation. Karl Rahner has made

³⁶ On the philosophical and historical distinctions between these doctrines of man see J. F. Donceel, 'Immediate Animation and Delayed Homination', *Theological Studies*, 31, 1970, 76-105.

³⁷ Space does not permit me to develop this point, but see the excellent work of W. Eichrodt, *Theology of the Old Testament* (tr. J. Baker, London, S.C.M.; vol. 2, 1967); R. H. Gundry, 'Soma' in *Biblical Theology* (Cambridge, Cambridge University Press, 1976).

³⁸ See the criticisms of dualism by G. Kyle, *The Concept of Mind* (London, Hutchinson, 1949), 10-66; J. Teichman, *The Mind and the Soul* (London, Routledge and Kegan Paul, 1974), 13-14; M. D. Wilson, 'Body and Mind from the Cartesian Point of View', in *Body and Mind* (R. W. Rieber [ed.], New York, Academic Press, 1980), 49.

one such statement: 'the Christian understanding of God and the world . . . (is) that God as creator of the material world is the transcendental ground of everything but not the categorially and spatio-temporally localised cause for a determined individual thing and indeed is seen to be working rather through "secondary causes" in this respect. There are difficulties even for Christian understanding if the coming into existence of the individual spiritual souls at particular points in space and time were in no way the result of the world and of its natural development due to secondary causes and if, as it were, God's creative activity could be grasped "*in vacuo*" and in a "worldless" sense, so that God's causality would be an activity in the world *beside* other activity of creatures, instead of it being the ground of activity of creatures.'³⁹

For those not used to the language of neo-Scholasticism Rahner's comment requires some explanation. Classical Christian metaphysics has accepted as basic for its understanding of God's relationship with the world the distinction between divine causality outside of space-time and which gives to created effects their very being and creaturely causality which is spatio-temporal and incapable of producing new being.⁴⁰ Rahner's problem is that creationism would, as it were, bring the divine causality down into the world, so that God, in making souls, would be routinely acting *in* the world rather than producing the order of the world itself. The repeated creation of souls *ex nihilo* in absolute independence of the causal efficacy of creaturely forces would leave us with a picture of God filling up gaps in the history of the world with his activity. Creationism therefore (unwittingly) shatters the traditional way of thinking about God's working in the world by means of sustained secondary causes.

Most modern theologians would want to bolster this metaphysical argument by appealing to the scientific data in the case of human evolution. Joseph Donceel puts it like this: 'Evolution is so obviously a gradual process. Anatomically *Homo sapiens* differs so little from

³⁹ K. Rahner, 'The Unity of Spirit and Matter in the Christian Understanding of Faith', in *Theological Investigations* (tr. K. H. and B. Kruger, London, D.L.T.; vol. 6, 1974), 174. Cf. Donceel, *Philosophical Anthropology*, 441.

⁴⁰ The notion of the 'primary' or 'transcendent' causality of God has a long history in Christian metaphysics. It forms for example the basis for Augustine's defense of the possibility of miracles (*City of God* 21. 7-8) and of Aquinas' 'Second Way' of proving the existence of God (*Summa Theologiae* 1a. 2, 3). In essence it is simply a way of formalising the traditional Christian belief in the creation of all things *ex nihilo*. For an explication of this understanding see James Ross, 'Creation', *Journal of Philosophy*, 77, 1980, 614-629.

the other *hominidae*, that primitive man must have stood even nearer to them. Why then introduce a special divine intervention into this process of gradual development?⁴¹ The other arguments against creationism also find increasing support from the accumulated evidence of the role of heredity in every aspect of human development.⁴²

The advocates of creationism are aware of these objections. Hodge challenges the theory of the role of secondary causes by appealing to the phenomenon of regeneration as a clear cut example of a direct and regular exercise of divine efficiency.⁴³ His example however is an unhappy one for it fails to take into account the difference between the order of grace and the order of creation.

The order of creation refers to God's regular working in the world whereby all things, whether material or spiritual, are dependent upon God as primary cause for their being and activity. The order of grace however refers to a much more restricted sphere; in Christian theology it refers to the reconciling action of God's love through Jesus Christ directed to those human beings he is calling to himself. Only in the order of grace is man saved. No classical Christian theist doubts that regeneration and many other events in the order of grace (miracles) take place by direct divine action, but the origin of the soul is in the order of creation. What reason have we to believe that in his day-to-day running of the world God wholly bypasses secondary causes?

Eric Mascall defends creationism on the ground that it is indeed on a par with God's normal way of working in the world. '... the creative activity of God is present to any being throughout its existence . . . no more than in the case of the beginning of the world can it be supposed that this first moment (of the existence of the soul) marks a change in the creative activity of God . . . the creationist view of the origin of the human soul does not involve a suppression of the natural order by a miraculous intervention on the part of God.'⁴⁴ I believe that Mascall has missed the point. Firstly, it is not strictly correct to say that 'the creative activity of God' is constantly present to all creatures during the span of their existence. This would imply that God was always creating whereas, given the fact that he has

⁴¹ Donceel, 'Causality', 314. Cf. K. Rahner, 'Theological Reflexions on Monogenesis', in *Theological Investigations* (tr. C. Ernst, London, D.L.T.; vol 1, 1961), 296.

⁴² Cf. J. Hick, *Biology and the Soul* (Cambridge, Cambridge University Press, 1972).

⁴³ Hodge, *Systematic Theology*, 74.

⁴⁴ Mascall, *Christian Theology*, 282-283.

already created the world, he now *preserves* it in being.⁴⁵ By glossing over this distinction Mascall fails to come to terms with the objection that apart from the initial fiat act of creation God does not produce new being. It is not *when* God does things that is at issue, for anti-creationism is compatible with a belief in God's timeless activity, but *what* God does that is being debated. The objection is that God's regular way of working in the world is contradicted by the creationist thesis; Mascall does not tackle this point. Similarly his remark that the creation of the human soul does not entail a suppression of nature is true enough but irrelevant. This is because the origin of the soul on these terms is *supernatural*; the problem is not that nature is frustrated but that it is bypassed. Elsewhere Mascall tries to alleviate this difficulty by arguing that each soul is tailor-made to fit a particular body,⁴⁶ God correlates certain of its mental properties with the genetic endowment of organism with which it is to be joined. This hypothesis however only illustrates the dilemma which faces creationism. The more one stresses the logical necessity for the soul to be produced *ex nihilo* the sharper the problems raised by philosophical dualism, but the more creationism accommodates itself to the empirical findings of natural science the less room that is left for the traditional notion of a spiritual soul.⁴⁷

One final difficulty which creationists have not adequately dealt with is the relation between the origin of the soul and the transmission of original sin. Original sin may be conceived of in two basic ways. Roman Catholicism understands it in terms of a loss of original righteousness: all mankind following Adam are *deprived* of the supernatural gifts primordially bestowed by God on man to make possible perfect obedience.⁴⁸ Reformed theology understands original sin as a native disposition in man, following Adam, to rebel

⁴⁵ The distinction between creation and preservation is a simple one. The preserving act of God is that whereby he maintains in being that which he has already given being. If we were to speak of 'continuous creation' in any literal sense this would imply that things were continually going out of existence and new things were being created to replace them. Such a doctrine impugns the faithfulness of the Creator. For further details on the importance of this distinction see Aquinas, *Summa Theologiae*, 1a. 45,3; 1a. 46,2; 1a. 104,1 and 2; G.C. Berkouwer, *The Providence of God* (tr. L. Smedes, Grand Rapids, Eerdmans, 1952), 66-70; E. Gilson, *The Elements of Christian Philosophy* (New York, Mentor-Omega, 1960), 215ff.

⁴⁶ Mascall, *Christian Theology*, 280; *The Openness of Being* (London, D.L.T.; 1971), 265.

⁴⁷ The notion of a created entity correlated to pre-existing matter also seems a strange one, at least it departs from the only dogmatically certain example of creation: the original production of the universe.

⁴⁸ See e.g. Aquinas, *Summa Theologiae*, 1a. 2ae. 79-85.

against God. Man is not only deprived he is *depraved*.⁴⁹ Creationism makes any theory of original sin difficult to expound because it severs all organic connection, other than physical, between successive generations of human beings. However we conceive of the transmission of original sin, it must involve something more than bodily continuity, for guilt cannot be attributed to non-conscious matter. Yet creationism, with its insistence on the atomic production of each soul *ex nihilo*, seems to leave no room for any continuity other than a bodily one. What sense can it make to say that each separately created soul (for it is the soul or mind which is the locus of sin) is 'in Adam'?⁵⁰

Those Reformed theologians who accept creationism face a difficulty not shared by Roman Catholics. If original sin is in the soul at its point of origin, and each soul is produced *ex nihilo* by God, then God is responsible for the production of an entity disposed to rebel against him. Such a conception comes close to making God the author of an evil. It should be noted at this point that this situation differs radically in its moral implications from the case of God *sustaining* an evil will in an adult person, for what creationism entails is that God *creates* a new being with an evil tendency. It is difficult to see how creationists can avoid this problem without either modifying their position or falling into a form of moral theory which excludes God from the order of his own moral government.

The above brief review should be sufficient to indicate that a host of philosophical, theological, ethical and biblical problems confront creationism. Although no single one of these may be a conclusive refutation I believe their combined weight makes it imperative for Christian theology to seek an alternative theory for the origin of the soul. At this point then I wish to outline some recent developments in the philosophy of mind in order to build up a general model of a new form of generationism superior to all the traditional models so far examined in this paper.

II. An Emergentist Theory of the Origin of the Soul

1. *The Concept of Emergence*

The concept of 'emergence' can perhaps best be explained in

⁴⁹ See e.g. L. Berkhof, *Systematic Theology* (Grand Rapids, Eerdmans, 1953), 244-245.

⁵⁰ I am not supposing that by saying this I am in any way explaining how original sin is transmitted. All I am pointing out is that creationism exacerbates the difficulties of this doctrine. On these matters see G. C. Berkouwer, *Sin* (tr. P. C. Holtrop, Grand Rapids, Eerdmans, 1971); S. L. Johnson, 'G. C. Berkouwer and the Doctrine of Original Sin', *Bibliotheca Sacra*, 132, 1975, 316-326.

contrast with the programme of scientific reductionism. If the world is thought of as a hierarchy of levels of organisation: physical, chemical, biological and social, a reductionist programme seeks a final explanation of all phenomena in terms of the basic laws of the structures and their interactions at the lowest level, viz., in terms of sub-atomic physics. This means that all causation is 'upwards' (in level terms) and genuine novelties cannot appear. Emergentism accepts the notion of levels but claims that differences between levels are more than a matter of degree of integration and that in principle it is not always possible to predict the characteristics of a higher level from those of a lower level.⁵¹ Karl Popper talks about emergence in this way: 'The idea of "creative" or "emergent" evolution . . . is very simple if somewhat vague. It refers to the fact that in the course of evolution new things and events occur with unexpected and indeed unpredictable properties, things and events that are new more or less in the sense in which a great work of art may be described as new.'⁵² Examples commonly given of emergent phenomena are crystalline structures, life, feeling, and of particular interest for this paper, the emergence of mind.

2. Materialist Theories of the Emergence of Mind.

Given the prevailing temper of most modern science and philosophy it is hardly surprising that the vast majority of emergentist theories of mind are materialist.

C. D. Broad early worked out a form of emergent materialism in which he claimed that since it cannot be ruled out *a priori* that material substances cannot have the power to think, i.e. it is not logically impossible for what is material also to be mental, it is possible to consider mind to be an emerging characteristic of the material.⁵³ Or, as Richard Taylor put it: 'there is no absurdity in supposing a physical body of a certain kind to have feelings.'⁵⁴ What all materialist philosophers commonly deny is that the mind or soul is an emergent entity. It is not a thing which can be considered in or

⁵¹ See S. C. Pepper, 'Emergence', *Journal of Philosophy*, 23, 1926, 241. Cf. P. E. Meehl and W. Sellars, 'The Concept of Emergence', in *Minnesota Studies in the Philosophy of Science* (Minneapolis, University of Minnesota, vol. 1, 1956), 239-252.

⁵² K. Popper and J. Eccles, *The Self and its Brain* (Berlin, Springer-Verlag, 1977), 21. (The discussion below uses 'soul' and 'mind' interchangeably.)

⁵³ C. D. Broad, *The Mind and its Place in Nature* (London, Routledge and Kegan Paul, 1968), 61-79, 625-652.

⁵⁴ R. Taylor, *Metaphysics* (Englewood Cliffs, Prentice-Hall, 1963), 27 (my emphasis).

of itself but is rather a property of the physical body.⁵⁵ This sort of position has been worked out in detail by Mario Bunge.⁵⁶ For Bunge; '... emergentist materialism can be summed up in a single sentence, to wit: Mental states form a subset (albeit a very distinguished one) of brain states (which in turn are a subset of the state space of the whole organism).⁵⁷ Bunge is worth mentioning here, not because his 'emergent psychoneural monism' is persuasive,⁵⁸ but because he is willing to allow that organisms with mental abilities constitute a level of their own. He points out that it is more useful to understand minds or souls in terms of organisms than in terms of brains; this is also the approach of probably the most important contemporary emergentist philosopher, Joseph Margolis.⁵⁹

Margolis wants to affirm on the one hand 'that whatever there is or exists is composed only of matter or is suitably related to what is composed only of matter', but he denies 'that all mental and psychological attributes are reducible to physical or material attributes.'⁶⁰ His work is essentially an extended argument that human persons and culture are emergent entities whose existence is inexplicable in terms of the properties of any lower level phenomena. Cultural processes are self-reflexive, and particularly through the emergence of language persons emerge as cultural entities. Yet because persons are particulars they are 'embodied' in the physical world, they are ontologically dependent on, even if not reducible to, physical bodies.⁶¹ Margolis has gone further than the other philosophers mentioned above by insisting on the reality of mental properties as properties of non-physical entities, viz., persons. However attractive Margolis' description of the evolution of the person may be, his notion of embodiment leaves no room for personal survival after the dissolution of the body. For at least this basic theological reason the current form of his hypothesis must be rejected.⁶² At this point I would like to build upon the various

⁵⁵ See M. Kinsbourne, 'Brain Based Limitations of Mind' in Rieber *op. cit.*; 155–175; A. Seth Pringle-Pattison, *The Idea of Immortality* (Oxford, Oxford University Press, 1922), 65 ff.

⁵⁶ M. Bunge, 'Emergence and the Mind', *Neuroscience*, 2, 1977, 501–509.

⁵⁷ Bunge, 'Emergence', 507.

⁵⁸ For major objections to all forms of materialism see the works cited above by H. D. Lewis and Karl Popper and also M. Bakan, 'Mind as Life and Form', in Rieber *op. cit.*, 131–154.

⁵⁹ See especially J. Margolis, *Persons and Minds* (Boston, Reidel, 1978), and 'Emergence', *Philosophical Forum*, 17, 1986, 271–295.

⁶⁰ Margolis, *Persons*, 4.

⁶¹ Margolis, *Persons*, 14–25; 'Emergence', 292.

⁶² For further comments see C. S. Evans, 'Separable Souls: A Defence of "Minimal Dualism"', *Southern Journal of Philosophy*, 19, 1981, 325.

insights of the philosophers mentioned above in order to construct a new type of generationist theory of the origin of the soul.

3. 'Minimal Emergentist Dualism' and the Origin of the Soul.

Of help here is the work of the Christian philosopher William Hasker.⁶³ Unhappy with both the classical dualist and materialist positions Hasker wishes to speak of the emergence of the soul in the context of the normal evolutionary and individual development of organisms. Mental properties naturally emerge in suitably composed organisms because all matter is a bearer of awareness, of low grade in inorganic forms, of progressively higher grades up the evolutionary scale. The analogy which Hasker appeals to is that of an ordinary magnet and its magnetic field. 'As the magnet generates its magnetic field, so the organism generates its conscious field'.⁶⁴ The basic contrast with dualism is that the 'soul-field' is not 'added' to the material organism but is built up from it in the same way as the magnetic field of a magnet is a combination of the magnetic fields of the many micro-magnets which go to make it up.

My general response to Hasker's work is a positive one, for I consider that in the notion of the 'generation' of the soul is to be found the basic concept for a new form of generationism. I must however reject the form of his thesis on two grounds. Firstly, by attributing even basic mental properties to matter *per se* he advocates a form of panpsychism. But what evidence do we have that atoms, say, have an 'inner life' of any sort? Or how could we ever know if they did?⁶⁵ Panpsychism is also too close to pantheism to be entertained by orthodox Christianity. Secondly, if the mental properties which go to make up the soul inhere in matter then the death and decay of the body must mean the end of all personal life.

Striking out from Hasker I consider that the origin of the soul in its fullest sense is to be ascribed to both physical and interpersonal factors. It would seem that the physiological level alone is able to account for many of the basic properties of the soul such as feeling, vision, audition and awareness. This seems so for we attribute these properties to various living things below man which we would not usually consider as 'ensouled'. According to my schema complex arrangements of organic molecules generate mental fields over and above matter itself. The more complex the combination of organic

⁶³ W. Hasker, 'The Souls of Beasts and Men', *Religious Studies*, 10, 1974, 256-277; 'Emergentism', *Religious Studies*, 18, 1982, 473-488.

⁶⁴ Hasker, 'Souls', 272.

⁶⁵ See the objections raised by Edwards, 'Panpsychism', 28-30.

molecules, or more specifically, the more complex the nervous system of an organism, the fuller its mental properties will be. Only in man does the central nervous system possess a degree of complexity sufficiently developed to produce a 'soul-field' with the higher mental capacities of self-consciousness, abstract thought and linguistic ability. I accept the suggestion of R. W. Sperry that '... conscious awareness is ... a dynamic emergent property of cerebral excitation ... different from and more than the neurophysico-chemical events out of which it is built.'⁶⁶ The particular value of this position is that it affirms the existence of mental forces transcending material processes but does not claim that, in the ordinary course of events, these mental phenomena can exist apart from the brain mechanisms that generate them. I am proposing that the immensely complicated configuration of nerve cells and their electro-chemical interactions which compose the functioning cerebel cortex in man creates a new level of existence (the mind) which possesses genuinely novel properties compared with the levels below it. In this model the 'energy' responsible for the existence of the mind comes from the central nervous system; but this 'energy' is not to be identified with the mind itself whose composition is best described by the vague term 'spiritual'.

Much more could be said about the steps leading up to the development of a full human person. In the work of Margolis and Bakan (cited above) are many details of how social relations and especially language are necessary instrumental conditions for the development of the highest mental properties such as abstract thought. It is almost self-evident that a person, or a 'fully developed soul', only comes into being subsequent to the development of language in an interpersonal environment. This viewpoint is also strengthened by the consideration of the theological notion of personhood. In addition to the purely philosophical aspects mentioned above a full and proper treatment of the concept of a 'person' would have to mention the central place of human interrelationship with God. That is, the authenticity of personhood depends upon hearing and relating to God in his Word. Such a process is of course progressive.⁶⁷

The application of these ideas to the problem of the origin of the

⁶⁶ R. W. Sperry, 'A Modified Concept of Consciousness', *Psychological Review*, 76, 1969, 533. Unfortunately many of Sperry's remarks are ambiguous between a non-reductive materialism and the sort of dualism I wish to advance below.

⁶⁷ For material concerning the relationship between divine and human personhood see P. Bertocci, *The Person God Is* (London, Allen and Unwin, 1970); J. Drury, 'Personal and Impersonal in Theology,' *Theology*, 87, 1984,

soul is not a difficult one. At conception the newly originated organism receives a genetic endowment which in the normal course of events will lead to the gradual development of an increasingly complex nervous system. As this nervous system progressively comes into play *in utero* it generates a 'soul-field'. At first this 'soul-field' will only possess lower level mental properties, such as the ability to feel pain, but by the time of birth it will have developed sufficient intensity as to be able to perform certain basic conscious operations. With time the infant becomes more and more a part of a human community so that through social interaction it progresses toward self (soul) maturity. According to this perspective there is no single point at which an individual may be said to have 'received' his soul. The soul like the body develops gradually.⁶⁸ It is this difference in time span, plus the reference to neurophysiological and cultural factors, which marks off this model from older forms of generationism. Nevertheless it should be counted as a type of generationism because it holds that the basic components underlying the production of a new soul come from parents.

Most of the advantages of this new system over creationism are obvious. It is compatible with the full details of a theory of organic evolution,⁶⁹ it enables a proper place to be given to the data of heredity, it provides for a real link between generations so as not to exacerbate the difficulty of formulating a doctrine of original sin, and it does not contradict the unitary anthropological emphasis of the Bible. Two important matters may however seem to have been omitted—does God have any role to play in the origin of the soul, and can 'minimal dualism' cope with the problem of death?

4. *Emergence, God and Survival*

On the basis of what has been said it may seem that no place has been left for God to be involved in the production of the soul. I know

427–431; H. H. Henderson, 'Knowing Persons and Knowing God', *Thomist*, 46, 1982, 394–422; R. H. King, *The Meaning of God*, (London, S.C.M., 1974); J. Zizioulas, 'On Human Capacity and Incapacity', *Scottish Journal of Theology*, 28, 1975, 401–407, *Being as Communion*, (London, 1985).

I have chosen not to pursue this line of thought because it would take me beyond the central intention of this paper, which is to consider the beginnings of truly human life and not its development.

⁶⁸ This is the main point in Russell Coleburt's paper: 'The Special Creation of the Soul', *Downside Review*, 90, 1972, 235–244.

⁶⁹ It does not however presuppose the mechanism of phylogenetic development to be coherent.

of no better way of refuting this allegation than by summarising the brilliant work of Karl Rahner on this area.⁷⁰

Rahner begins by drawing out the implications of the Christian doctrine of creation. All things whether material or immaterial owe their origin and continued existence to God, as such Christian theology cannot conceive of spirit and matter as being in opposition. Not only do all things come from God but the proper goal of all things is God. The whole universe, even in its material reality, has a single goal, its salvation, transfiguration and accomplishment in the kingdom of God. The universe is the scene of a real becoming, not just in the sense of new combinations of already existing elements but in the sense of self-transcendence, an active surpassing of self. The becoming of the material world under God's government has its orientation towards man in whom alone it achieves subjectivity and personhood, the prerequisites for fellowship with God. That all real becoming involves self-transcendence entails a necessary reference to God. '... real becoming is not just duplication but a surpassing of self in which what becomes really becomes more than it was and yet this "more" is not simply something added to it from the outside (which would cancel out the notion of genuine intramundane becoming). If this is so, and if such becoming in which more comes into being is to have a reason for this "more", then this 'effectively becoming self-surpassing can only take place by the fact that the absolute being (God) is the cause and basic reason for this self-movement of what becomes... Since every finite causality works in virtue of the absolute being within the finite and this always and essentially, so that the finite being has its own being and activity precisely through the existence of the absolute being within it, we can and must grant causality to the finite being; even causality for what is more than itself and towards which it surpasses itself.'⁷¹

In other words what I have termed the emergence of the soul Rahner here speaks about in terms of self-transcendence: matter produces spirit. This property of self-transcendence cannot be ascribed to secondary causes considered in themselves, but is an ability given to them by God under the influx of his power as primary cause. Thus the emergence of the soul is absolutely dependent upon the sovereign power of God. Unlike the case of creationism, since

⁷⁰ Rahner, 'Theological Reflexions,' *op. cit.*, 'Spirit and Matter,' *op. cit.*, 'Hominisation', in *Sacramentum Mundi* (K. Rahner [ed.], London, Burns and Oates, vol. 2, 1968), 294-297.

⁷¹ Rahner, 'Spirit and Matter', 174-175.

God is here conceived as the ultimate source of all real becoming, the origin of the soul is not to be treated as a metaphysical novelty.⁷²

The question of the survival of the soul can be handled in a similar fashion. If the soul is an entity dependent upon but separate from the body it might seem that the dissolution of the body, and in particular of the nervous system, would necessarily lead to the decay of the 'soul-field'. That is, brain death means death *simpliciter*. Earlier in this paper I referred to the theological conviction that the survival of death is a miracle, I now wish to fill out this view. It does not seem implausible to suppose that at the point of brain death, the point at which the soul faces non-existence, God exerts an effect identical to that normally produced by the nervous system. That is, one survives physical death because the ongoing generation of the 'soul-field' is now to be attributed to God rather than to the body. The appeal here is to an omnipotent love; there is no logical contradiction in the position above so God has the power to sustain the soul, and the unmerited love of God for his creatures ensures that such power will in fact be used.⁷³ I consider it to be one of the strongest points of this new form of generationism that it provides a central place for the power and grace of God at all stages of the soul's existence.

Conclusion

The course of this paper has been broken down into two parts. In the first part I reviewed the traditional doctrines of traducianism and creationism in their attempts to explain the origin of the soul. Materialist traducianism cannot be considered seriously because it mixes up the categories of the mental and the material in a way which is in conflict with all other serious thinking on this subject. Spiritualist traducianism or generationism was also found to be deficient, not because the notion of the transmission of the soul as such is incoherent, but because the properties attributed to the soul by traditional generationists are incompatible with transmission. Creationism, by far the most influential theory, is the logical outworking of a dualist anthropology. If this sort of anthropology is rejected the necessity of accepting creationism immediately vanishes. Additionally a very major metaphysical problem faces creationism

⁷² Cf. Donceel, *Philosophical Anthropology*, 441-442; E. Klinger, 'Soul' in *Sacramentum Mundi*, (K. Rahner [ed.], London, Burns and Oates, vol. 6, 1970), 138-141.

⁷³ For the implications of this view upon other aspects of Christian eschatology see my 'Disembodied Existence in an Objective World', *Religious Studies* (forthcoming).

because it seems to violate all that we know about God's normal way of working in the natural order. After raising certain other objections to creationism I concluded that neither on philosophical nor on theological grounds could any traditional doctrine of the origin of the soul be accepted.

The second major part of the paper consisted essentially of an introduction to the concept of emergence and a review of the work of certain major emergentist philosophers of mind. However scanty this review may have been it pointed the way to breaking the deadlock between materialism and radical dualism which has plagued older discussions on the origin of the soul. The concept of emergence raises the possibility that material forces are able under certain specific conditions to transcend themselves. This is a possibility which has only been seriously entertained since the development of sophisticated models of the evolution of the physical and biological universe.

I developed my own refinement of generationism in the light of these new ideas. It seeks to break the hiatus between the old materialist traducianism and the radical dualism of creationism by postulating a soul which is different from the body yet absolutely dependent upon it for existence. In this way I have sought to retain the respective strengths of the older views whilst discarding their weaknesses. I have deliberately avoided speculating about the precise nature of the 'soul-field'. One of the reasons for this is that the traditional language used in this area is so heavily infected with negative associations as to have largely lost its utility. Additionally, in the age of quantum physics who can be sure what the old terms like 'matter' and 'spirit' should be taken to mean? Notwithstanding these shortcomings I commend 'minimal emergentist dualism' to Christian theology for criticism, not because I believe it to be the final word on the subject of the origin of the soul but under the strong conviction that the traditional views are manifestly inadequate.