a critical review of modern life

kategoria

10
ISSUE
WINTER 1998

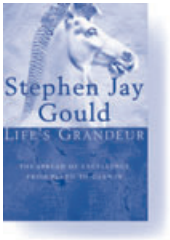
Solemn, dull, suspicious – the Puritans?

THE BIG BANG AND GOD

Does science know something we don't?

LIFE'S GRANDEUR

But what about life's meaning?



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kategoria is a quarterly journal published by the Matthias Centre for the Study of Modern Beliefs, a non-profit body established to research and critique the modern intellectual estate from a Christian perspective.

Subscription information can be found on page 75.

Articles are welcome which critique some aspect of modern life or belief. Articles are to be around 5000 words length, footnoted according to the style demonstrated in this journal. Reviews of recent books or intellectual events are also welcome. Please contact the editor before sending a review.

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Page layout by Matthias Media.
Cover design and typesetting by Joy Lankshear Design P/L.

ISSN 1326-3802
Produced by St Matthias Press Ltd A.C.N. 067 558 365

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editorial

I wonder how the CEOs of tobacco companies are feeling these days? Perhaps worried—with the revelations being made about their internal research and marketing practices over the years. With thousands of industry documents from tobacco companies recently released in America—and posted on the Internet—it is now blatantly clear that major companies knew years ago that cigarettes were addictive, yet denied that knowledge and continued to market cigarettes to children in particular. There are even indications that tobacco companies sponsored outside research into tobacco and manipulated the findings—suppressing certain studies, only allowing the publication of research which was positive to their cause. Apparently, they also sponsored research into other causes of lung disease—such as the effects of working in office buildings with air-conditioning—in order to divert attention from the effects of tobacco.[1]

I enjoy the X-files conspiracy theories; I thought the movie was great. It's not what I want to see in reality, however. This may not be the X-Files Syndicate spreading a virus that makes people hosts for alien bodies, but it is still rather chilling. One wonders how the directors justified their actions to themselves; did they just bury it all under figures and statistics? Did they really not care? Were they just obeying orders?

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1 See http://www.house.gov/commerce/TobaccoDocs/documents.html

It just demonstrates that in this fallen world, people will do appalling things in the name of profit. It's not the first time it's happened: for instance, the tobacco scandal is reminiscent of the battles over motorcar safety earlier this century, as documented in the BBC's *Crash* series. Ford apparently tried to introduce a car with safety features in the fifties, but were stopped by General Motors who did not want the public to be reminded of the deadly potential of cars—it might hurt sales. This was the situation until documents were found in which General Motors accountants pointed out that compensation paid to families of accident victims would cost less than redesigning cars to make them safer—in other words, it was cheaper to let people die. Once this reasoning was made public, legal action was taken to enforce higher safety standards. At least that issue was eventually resolved, so cars today do generally have basic safety features. Now we can genuinely blame road fatalities on our own foolish driving habits.

One last observation in the tobacco case—it has also been claimed that tobacco companies had on their payroll a member of the editorial board of the journal *Lancet*, a prestigious international medical journal. Top journals are meant to be so because of their high standards and reliability. This is where the best medical research is meant to be published—the place where we can go for the most reliable information. Its results filter down through doctors, hospitals, medical schools to the population. It matters that the results are as reliable as possible—what are the effects if one of the editors is secretly being funded by a very much interested company? There is already increasing unrest about the issue of disclosure in research, as its funding is increasingly from commercial sources. Of course, we could insist that scientific research is unaffected by where the money comes from—human nature being so pure.

The tobacco issue is a very important one, but strangely enough a more dangerous drug seems to escape the headlines. A French government study has recently con-

cluded that alcohol is among the most dangerous of potentially addictive drugs, up there with heroine and cocaine—and worse than tobacco. Once again we must shake our heads over our society. It is bad enough that tobacco has been marketed for so long, in the knowledge that it is addictive and can be deadly. But alcohol, even more dangerous (which means, also more costly to the public health bill) is promoted as happy, friendly, and the drink of the fun people. Maybe the temperance societies, despite their 'kill-joy' image, actually knew the way to have fun after all.

An earlier group of Christians also thought to be out-of-touch kill-joys were the Puritans. Both fiction (movies and novels) and supposedly factual history represent the Puritans as fanatical, obsessive, punishing themselves and those under their power for any deviation from their oppressive rules, and standing against any natural expression of human joy. Arthur Miller's *The Crucible,* whether or not it was written for this purpose, nevertheless unfortunately reinforces such images—the movie starring Daniel Day Lewis and Winona Ryder even more so.

How far from the truth this is. This bad reputation is so extremely different from the reality. Fortunately historian Jean Williams has provided us with the information—and the references—to counter this view and present the Puritans as they were, delighting in their God and enjoying his creation. The reality is there for anyone who cares to do the research.

Professor Peter Singer, ethicist at Monash University in Melbourne, has accepted an appointment at Princeton University in the Centre for Human Values. While this may seem to some of us a strange place for a man whose idea of the value of humans includes the viability of killing babies, it should be interesting to see how his views fare in a country with much stronger and more deeply entrenched principles of morality than Australia's general population has.

However we might disagree with Singer's views on human ethics, he has nonetheless produced some remarkable insights in his arguments against the Marxist view of human nature. In a recent article, he discusses the great dream of the Left of the perfectibility of man; that somehow, someday it will be possible to build the perfect society that will cure human evils. By revolution, by education, by social structures, the hope of the Left has always been to improve man's lot by providing the environment in which he can express the good of human nature, currently twisted by deprived or unjust circumstances. "For as long as the Left has existed, it has sought a society in which all human beings live harmoniously and co-operatively with each other in peace and freedom".[2]

Singer, despite his own considerable contributions to Left politics, can see that humankind is not perfectible and that efforts to create a new and better society have often had terrible results. Indeed, it appears to be his own 'downgrading' of human value, based on his strictly naturalistic presuppositions, that allows him to see past the 'ideological blinkers' which he admits are hard to shed. He points out that certain aspects of human behaviour remain fairly constant across the range of human cultures, including rules of sexual morality. Also virtually universal are infidelity and sexual jealousy. Our social nature, and xenophobia and racism, are characteristic of almost all human cultures. Other characteristics which he considers universal are readiness to form co-operative relationships and to recognize reciprocal obligations, the existence of a hierarchy or system of rank and gender roles.

Singer's claim is not that these things ought to be so, but that to deny them as a basic part of human nature is "to risk disaster". Social reformers, then, should work with human nature and modify their ideologies to suit it. For instance, they should not expect to end all conflict and strife, or assume that all inequalities are due to discrimination,

2 Peter Singer, 'New ideas for the evolutionary left', *The Australian*, Wednesday 17 June 1998, p. 48.

prejudice or oppression.

Singer's ethics, which lead to some very un-Christian and rather horrible conclusions about human life, are not to be recommended. But since his ideology is also very different from Marxism, he can see through the empty claims for the basic goodness of human beings. Whether he realizes or not, his discoveries about humans intersect with the Bible's claims about human nature.

Finally, a reminder to me that my article on astrology last year is just one tiny drop battling against a tidal wave: today I received in the mail a leaflet encouraging me to buy a particular brand of mobile phone. One of the listed advantages, along with low cost, call switching and so on, was 'receive a daily horoscope on the screen of your phone'. Just what I wanted.

Kirsten Birkett
Editor

GRACE AND peace from God. &c.

Suche hath alwayes (deare brethren) bene the corrupt nature of the wicked and vngodlye of thys world/that as yet they could neuer away with suche / as would either but simply tell them of/ or frankly and freely reproue them for/theyr manifest synnes and vngodlinesse. *1. Abner could not abide to heare Isboseth tell him / of his going into Rizpah his father Saules concubine. *2. Ahab hateth Michaiah the sonne of Imlah/ for not prophesying (as he sayth) good vnto him. *3. The people cried out in Esayas time to ẏ seers and Prophets/speake flattering things to vs. And the priestes & people of Anathoth (which was a town about a thre myles distant from Ierusalem/ *4. and belōged to the sonnes of Aaron) wil Iere-miah for the sauegard *5 of his life not to prophecy vnto them in the name of the Lorde. *6. Micha telleth vs that the people of his time/liked well such Prophets/as would prophecy vnto them of wine and strong drink. And notable is that saying of Amos. *7. They haue hated him that rebuked in the gate: and they abhorre him ẏ speaketh vp-rightly. And what other cause there shuld be why those two treatises/that were lately written & im-printed/in ẏ last Parliament tyme/iustly crauing a redresse and Reformation of many abuses and corruptions/yet in the english church remayning/ shuld of so many be misliked/and ẏ authors therof so cruelly entreted/& straightly imprisoned as they are/cannot of great nōters be gathered /vnlesse it be/for ẏ they so flatly & plainly (as *8 gods worde hath taught thē) say the fault where the fault is/& so vnreuerently hādle our most reuerent fathers. But I pray you tell me. Is plaine speache and

*.1. vehement

1 2 Sam. 3. 8
2 1 Reg. 22. 8
3 Esa. 30. 10
4 Ios. 11. 18.
5 Iere. 11. 21
6 Micha. 2. 5. 11.
7 Amos 5. 10
8 1. sam. 11. 7 1 reg. 18. 18 Mat. 14. 4

The Tracts from Brit. Mus. 3932. a. 48

From '*An Admonition to the Parliment*', 1572

kategoria 1998 *number 10* pp. 11-35

Puritanism: a piety of joy

Jean Williams

> We do all for joy. All that we do is that we may joy at length. It is the centre of the soul. As rest is to motion, so the desire of all is to joy, to rest in joy. So that heaven itself is termed by the name of joy, happiness itself…What is our life without joy? Without joy we can do nothing…A Christian, which way soever he look, hath matter of joy…; the state of a Christian is a state of joy.[1]

There have been few movements as frequently misunderstood and misinterpreted as that of Puritanism. Which words spring to mind when you think of Puritanism? Most audiences answer this question with terms such as 'straight-laced', 'gloomy', 'repressive', 'rationalistic', 'spoil-sport', and, of course, 'puritanical'. Unfortunately, much Puritan scholarship has confirmed this negative stereotype. The respected sociologist Weber made the sweeping claim that Puritans were opposed to the "joy of living".[2] Van Beek's analysis of

1 All references to Sibbes' works are from R. Sibbes, *Works of Richard Sibbes*, Vol. 1-7, A. B. Grosart (ed), London, Banner of Truth Trust, 1973; this reference is to '2 Corinthians chapter 1', *Works*, III, pp. 206, 223, 507-8.
2 M. Weber, *The Protestant Ethic and the Spirit of Capitalism*, London, Unwin University Books, 1930, p. 41.

Puritan vocabulary included only one paragraph on "ravishing" enjoyment of God, amidst whole chapters on sin and self-examination.[3] By the early years of this century, a scholarly stereotype of Puritanism clearly opposed to enjoyment of God was well-established.[4] The Puritan was a sombre, guilt-ridden figure, who imposed on himself unremitting activity and an ascetic devotion in order to satisfy himself that he had been predestined to salvation by a distant and arbitrary deity. But the writings of the Puritans actually express immense enjoyment of God and pleasure in this world. Indeed, so great is the enjoyment of God described in Puritan works, that it is sometimes even ecstatic in nature. This article cannot do more than highlight a few aspects of seventeenth century English Puritan piety, but perhaps it will invite the reader into further study of the neglected writings of the Puritans.[5] And even a brief glimpse at a few themes will demonstrate that Puritan piety was indeed a devotion of joy.

How has the negative stereotype of Puritan piety come about? In their distaste for certain aspects of Puritan theology, scholars have sometimes paid more attention to their own negative impressions than to Puritans' own descriptions of how they felt about their God. The most maligned or misunderstood Puritan doctrines are those relating to God's predestination of individuals to salvation, universal depravity and, more surprisingly, justification and the mediation of Christ. The deservedly respected historian William Haller characterized predestination as of "extreme inhumanity", undermining appreciation for divine and human love.[6] Weber's argument was typical: predestination inevitably caused fear and anxiety about one's standing with God, so that individuals des-

3 M. Van Beek, *An Enquiry into Puritan Vocabulary*, Groningen, Wolters-Noordhoff, 1969, p. 66.

4 This is not the place to go into the many debates over the definition of 'Puritanism'; I discuss the issue in my PhD thesis, *The Puritan Quest for Enjoyment of God: An Analysis of the Theological and Devotional Writings of Puritans in Seventeenth Century England*, University of Melbourne, 1997, pp. 19-21.

5 The main sources for this article will be the writings of Richard Sibbes and John Owen; other Puritan writings will be introduced as necessary.

6 See W. Haller, *The Rise of Puritanism*, New York, Harper and Brothers, 1957, ch.5, pp. 193-4.

perately tried to prove their salvation through self-examination and a relentless activism.[7] Because all humans were deeply sinful, and relationship with God was always mediated through Christ, the Spirit and the Word, some historians have concluded that the Puritan God was aloof and unapproachable.[8] The doctrine of justification caused the influential American scholar Perry Miller to characterise Puritan piety as "federal" rather than relational. Union with God was not an inner experience of God's love, but a "definite legal status" provable through certain signs and conditions.[9] Such assumptions about Puritan theology have led to a distorted view of Puritan piety, as concerned with active obedience rather than the devotional life.[10] Puritan prayer and meditation have been perceived as dominated by self-examination for sin and the signs of election, rather than the joys of heaven or the mysteries of the Godhead.[11] Puritan piety has often been characterized as stern rather than joyous, rational rather than emotional, a

7 Weber, *op. cit.*, pp. 104-128; this common stereotype of predestination, as inevitably leading to fear and doubt, may also be observed, for example, in D. E. Stannard, *The Puritan Way of Death: A Study in Religion, Culture and Social Change*, New York, Oxford University Press, 1977, pp. 87-93; and P. Collinson, *The Birthpangs of Protestant England: Religious and Cultural Change in the Sixteenth and Seventeenth Centuries*, London, Macmillan, 1988, p. 76.

8 H. Davies, *Worship and Theology in England: From Cranmer to Hooker, 1534-1603*, Vol. 1, Princeton, Princeton University Press, 1970, pp. 424-6; and his *Worship and Theology in England: From Andrewes to Baxter and Fox, 1603-90*, Vol. 2, Princeton, Princeton University Press, 1975, pp. 125-6, 130; also Haller, *op. cit.*, pp. 193ff.

9 P. Miller, *The New England Mind: The Seventeenth Century*, 2nd. ed., Cambridge, Harvard University Press, 1954, pp. 8-10, 376-398, 428.

10 For example, see *ibid.*, pp. 16, 48; S. Bercovitch, *The Puritan Origins of the American Self*, New Haven, Yale University Press, 1975, p. 13; Weber, *op. cit.*, pp. 112, 158-9; Davies, *op. cit.*, vol. 1, pp. 423-4.

11 See, for example, M. M. Knappen, *Tudor Puritanism: A Chapter of the History of Idealism*, Gloucester, Peter Smith, 1963, pp. 342-3, 396-9; Miller, *op. cit*, pp. 49ff. L. L. Martz, *The Poetry of Meditation: A Study in English Religious Literature of the Seventeenth Century*, New Haven, Yale University Press, 1954, pp. 156ff. H. C. White, *English Devotional Literature (Prose) 1600-1640*, Madison, University of Wisconsin Studies, 1931, p. 16; P. S. Seaver, *Wallington's World: A Puritan Artisan in Seventeenth-Century London*, Stanford, Stanford University Press, 1985, ch.1, p. 20.

religion of the letter rather than the life within.

During the last fifty years, some scholars have come to recognize the joyous communion with God experienced by Puritans. Many historians now view Puritanism as a pioneering movement in the development of a Protestant practical and experiential devotion.[12] Scholars agree that the movement was characterized at the very least by an intense and affectionate spirituality, and at most by a mystical piety which drew on medieval and Catholic models of devotion.[13] Yet some persist in viewing these aspects of Puritan piety as

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12 D. D. Wallace, *The Spirituality of the Later English Puritans: An Anthology*, Macon, Mercer University Press, 1987, p. xii; J. I. Packer, *A Quest for Godliness*, Wheaton, Crossway Books, 1990, p. 12; C. E. Hambrick-Stowe, *The Practice of Piety: Puritan Devotional Disciplines in Seventeenth Century New England*, Chapel Hill, University of North Carolina Press, 1982, p. 25.

13 On the former point, see, for example, Wallace, *op. cit.*, pp. xvii-xviii, xxvi; L. Bouyer, *Orthodox Spirituality and Protestant and Anglican Spirituality*, London, Burns and Oates, 1969, p. 134; F. E. Stoeffler, *The Rise of Evangelical Pietism*, Leiden, E.J.Brill, 1965, pp. 78-93; E. G. Hinson, 'Puritan Spirituality' in F. C. Senn (ed.) *Protestant Spiritual Traditions*, New York, Paulist Press, 1986, p. 165.

On the issue of Puritan mysticsm, see G. F. Nuttall, 'Puritan and Quaker Mysticism', *Theology*, 1975, *78*, pp. 520-1; W. S. Hudson, 'Mystical Religion in the Puritan Commonwealth', *Journal of Religion*, 1948, pp. 51-6; J. C. Brauer, 'Puritan Mysticism and the Development of Liberalism', *Church History*, 1950, *19*, 151-69 and 'Types of Puritan Piety', *Church History*, 1987, *56*, 39-58; J. F. Maclear, 'The Heart of New England Rent': The Mystical Element in Early Puritan History', *Mississippi Valley Historical Review*, 1955-6, *42*, pp. 621-652; G. S. Wakefield, 'Mysticism and its Puritan Types', *London Quarterly and Holborn Review*, 1966, *191*, pp. 34-45; G. Rupp, 'A Devotion of Rapture in English Puritanism' in R. B. Knox (ed.), *Reformation , Conformity, and Dissent: Essays in Honour of G. Nuttall*, London, Epworth Press, 1977, pp. 115-131. On the mysticism of individual Puritans, see, for example, chapter 14 on Rous, Vane and Sterry in R. M. Jones, *Spiritual Reformers in the Sixteenth and Seventeenth Centuries*, London, Macmillan, p. 191; A R. Ladell, *Richard Baxter: Puritan and Mystic*, London, MacMillan, 1925, ch.4; chapter 4 of Martz, *op. cit.*, on Richard Baxter; chapter 4 of E. I. Watkin, *Poets and Mystics*, London, Sheed and Ward, 1953, on Goodwin's piety of the sacred heart. Sections on this issue in larger works include G. S. Wakefield, *Puritan Devotion: Its Place in the Development of Christian Piety*, London, Epworth Press, 1957, ch.6, especially pp. 101-8; G. F. Nuttall, *The Holy Spirit in Puritan Faith and Experience*, Oxford, Basil Blackwell, 1947, ch.9, especially pp. 146-8.

atypical of the movement as a whole.[14] Oddly, historians often assume that the Puritans' enjoyment of God did not flow from their theology, but existed despite their restrictive doctrines, breaking the bounds of their rational control. After all, how could an intensely emotional spirituality come from a body of doctrine which by its very nature inhibited communion with God?[15] The more joyous elements of Puritan piety are sometimes viewed as an importation of Catholic devotion into an alien Reformed framework.[16] It is true that, since the Puritans were amongst the first Protestants to develop an extensive body of devotional and practical handbooks, their only earlier models were often patristic or medieval works.[17] Puritanism did not exist in a vacuum: it was one of a number of contemporary movements in England and on the Continent, both Catholic and Reformed,

14 See, for example, C. L. Cohen, *God's Caress: The Psychology of Puritan Religious Experience*, Oxford, Oxford University Press, 1986, pp. 209, 228; N. Pettit, *The Heart Prepared: Grace and Conversion in Puritan Spiritual Life*, New Haven, Yale University Press, 1966, p. 15.

15 See White, *op, cit*., pp. 113, 179, 186, 194, 200, 234, 244; and M. M. Knappen (ed.), *Two Elizabethan Puritan Diaries by Richard Rogers and Samuel Ward*, Chicago, American Society of Church History, 1933, pp. 10-15; W. F. Mitchell, *English Pulpit Oratory from Andrewes to Tillotson: A Study of its Literary Aspects*, London, Macmillan, 1932, p. 261; Nuttall, 'Puritan and Quaker Mysticism', *op. cit*., pp. 520-1; Hambrick-Stowe, *op. cit*., p. 286 fn.14.

16 Bouyer declared that when 'Puritans were dealing with spirituality they expressed a faith whose substance had become Catholic again'; *Orthodox Spirituality*, *op. cit*., p. 143, and see p. 155. See also Hinson, *op. cit*., p. 179; Watkin, *op. cit*., p. 57; G. G. Coulton, *Medieval Studies,* 2nd ed., London, Simpkin, Marshall, Hamilton, Kent & Co, 1915, p. 45.

17 Puritans were influenced by writers such as Bernard of Clairvaux and Ignatius of Loyola, although they read them in the light of Reformed doctrine. For the access of seventeenth century English readers to these works, see White, *op, cit*., chs.3-6; Davies, *op. cit*., pp. 79-92; H. S. Bennett, *English Books and Readers 1475 to 1557: Being a Study in the History of the Book Trade from Caxton to the Incorporation of the Stationers' Company*, 2nd ed., Cambridge, Cambridge University Press, 1969, ch. 7, and *English Books and Readers 1558 to 1603: Being a Study in the History of the Book Trade in the Reign of Elizabeth I,* Cambridge, Cambridge University Press, 1965, ch.4; J. G. Collins, *Christian Mysticism in the Elizabethan Age with its Background in Mystical Methodology*, New York, Octagon Books, 1971, part 4.

which encouraged lay piety and practical devotion.[18] But the Puritan experience of enjoyment of God was no aberration, nor was it a foreign importation: it was broadly characteristic of the Puritan movement, and had its roots firmly placed in the rich soil of Reformed theology. Indeed, it was Reformed theology, as it was shaped in the English pastoral context, which gave the Puritan experience of enjoying God its distinctive shape.

For the Puritan minister, theology was never an end in itself. Puritan doctrine was not dry and dusty theology, but a way of living well, a means by which godly living and spiritual experience were encoded and encouraged. John Owen, an important Puritan statesman and preacher, declared of the knowledge of God that "the end of all its notions and doctrines consists in *practice*".[19] But while Puritan piety ended in practice, it began with the understanding. Even Owen's most practical treatises began with the study of complex ideas.[20] Similarly, the famous London preacher Richard Sibbes declared that spiritual experience was "nothing but *doctrine* sweetly digested and applied to the affections".[21] The Puritans placed the will and affections under the rule of the mind, illuminated by the Spirit and informed by Scripture.[22] Preachers

18 See, for example, Stoeffler, *op. cit*; J. Bossy, *The English Catholic Community 1510-1850*, London, Darton, Longman & Todd, 1975.

19 My emphasis. All citations from Owen are taken from J. Owen, *The Works of John Owen*, 2nd ed., Vol. 1-23, W. H. Goold (ed.), London, Banner of Truth, 1965. This reference is to Owen, 'Psalm CXXX', *Works*, VI, p. 325.

20 See, for example, Owen's *Of Communion with God* (1657), *Works*, II, pp. 1-274, and his *A Practical Exposition upon Psalm CXXX* (1669), *Works*, VI, pp. 323-648.

21 My emphasis. Sibbes, '2 Corinthians chapter 1', *Works*, III, p. 513. The 'affections' were not merely emotions; Packer gives a good definition of the affections as 'set inclinations of heart with a feeling-tone' in *Quest for Godliness*, *op. cit.*, p. 66.

22 See, for example, Sibbes, 'Angel's acclamation', *Works*, VI, p. 334; 'Last two sermons', *Works*, VII, p. 341; also Owen, 'Holy Spirit', *Works*, III, pp. 250, 252, 330; 'Indwelling Sin', *Works*, VI, 216. This view of the human faculties was widely accepted at the time; see J. K. La Shell, 'Imagination and Idol: A Puritan Tension', *Westminster Theological Journal*, 1987, *49*, pp. 305-7; also book III on anthropology in Miller, *op. cit*.

openly demanded that even their most uneducated listeners grapple with difficult theological concepts, because these were the windows into God's dealings with humanity.[23] Only by informing the mind would lives be changed, the experience of God deepened and spiritual joy attained. Puritan teaching attempted to arouse the affections and move the will through the careful presentation of doctrine, practically and passionately applied to the lives and hearts of its hearers.

Puritan theology was not only a "practical divinity" but also an "experiential divinity", founded on the spiritual experience of its teachers as well as on rational consideration of Scripture. Indeed, experience was such an important guide to the truth that Owen called it one of the "twin sole rules of judgment" with Scripture, although it was always "to be regulated" by the Bible.[24] Human reason had to be illuminated by the Spirit if it was ever to grasp divine realities; but even illuminated reason failed to comprehend the infinite mysteries of God and had humbly to submit itself, in faith, to revealed truth.[25] Owen declared that "a man preacheth that sermon only well unto others which preacheth itself in his own soul...If the word do not dwell with power *in* us, it will not pass with power *from* us."[26] Puritan theology had its roots deep in the spiritual experience of its teachers and practitioners, as well as in the painstaking study of God's word.

The Puritan God was infinitely majestic in his holiness, deserving adoration and worship; but he was also the Lover of the soul, who regarded his people with a passionate and joyous affection. One of the greatest losses of this informal age, when God is so often reduced to a friend or boyfriend, is this immense view of God, combining infinity

23 Owen, 'Holy Spirit', *Works*, III, p. 230; 'Reason of Faith', *Works*, IV, pp. 200-1; and compare the well-known passage in Richard Baxter's *The Poor Man's Family Book*, London, 1697, pp. 213-4.
24 Owen, 'Spirit in prayer', *Works*, IV, pp. 237-8; 'Causes, Ways, and Means', *Works*, IV, p. 150.
25 Owen, 'Trinity', *Works*, II, p. 412; 'Holy Spirit', *Works*, III, pp. 3, 105, 117, 259; 'Mortification', *Works*, VI, p. 69.
26 Owen, 'True Nature', *Works*, XVI, p. 76.

with immediacy, fear with delight, judgement with grace, and stern demands with tender love.[27] The Puritan God has often been perceived as remote and severe.[28] Certainly, Puritan preachers did not shy away from portraying God's holiness and transcendence, his self-sufficiency and sovereignty, his anger at sin and terrible judgement. Yet such doctrines led not only to fear, but also to wondering adoration, and gratitude for God's unexpected mercy. It is a paradox, often unappreciated by scholars, that at the moment when believers were on their knees bewailing their sin and overawed by God's majesty, they were rejoicing in God's grace and love most highly. The very lowliness of the soul increased its wonder at God's undeserved mercy and tender affection.[29] Predestination itself could be a source of great joy in the Father's particular love and of immense comfort to those who knew their eternal security depended on God's sovereign choice rather than on their ability to persevere.[30] Puritan divines painted a remarkable and moving portrait of a God who had no need of human regard, who was infinitely satisfied in the relationships within the Trinity, yet who freely and graciously offered his love, passionately yearned for the love of his people, and whose heart overflowed with delight and exultation in their love.[31] Only such a God, infinite in his glory and warmly affectionate in his love, could truly satisfy the longings of the human heart.

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27 We may be called God's friends in the Bible, but is God ever called our friend? He is our God, Lord, Master, even our Lover; but he is never our friend or boyfriend, as implied in so many choruses and children's talks.

28 See statements from Weber and Haller above.

29 See, for example, J. Barrett, *The Remains of Mr. Joseph Barett*, London, 1700, pp. 130-1; R. Baxter, *The Christians Converse with God*, London, 1693, p. 137; J. Howe, *A Treatise of Delighting in God*, London, 1674, pp. 351-2; E. Pearse, *The Best Match*, London, 1673, p. 259.

30 Owen, 'Of Communion', *Works*, II, p. 33; 'Psalm CXXX', *Works*, VI, pp. 338, 341; Sibbes, 'Salvation applied', *Works*, V, p. 387.

31 Owen, 'Of Communion', *Works*, II, pp. 25, 44, 118; 'Person of Christ', *Works*, I, p. 155; 'Holy Spirit', *Works*, III, p. 119. C.f. Sibbes, 'Bruised reed', *Works*, I, p. 71; 'Returning backslider', *Works*, II, pp. 330, 350, 365; '2 Corinthians chapter 1', *Works*, III, p. 444.

The ultimate goal of Puritan piety was enjoyment of God. The first question of *The Westminster Confession of Faith* stated that the "chief end of man" was "to glorify God, and to enjoy him forever."[32] These two aims were inseparable. It was a glorious paradox, that as believers sought God's glory, their truest longings were satisfied; and as they sought their happiness in God, they glorified him by their delight. Sibbes declared:

> A Christian begins with loving God for himself; but he ends in loving himself in and for God: and so his end, and God's end, and the end of all things else, concentre and agree in one...Our happiness is more in him, than in ourselves. We seek ourselves most when we deny ourselves most.[33]

Puritan piety never found its ultimate end in salvation from judgement, but in enjoyment of the God whom believers loved and adored for his own sake.[34] There was no true happiness to be found outside union with God, because nothing else could satisfy the desires of the human soul. The Puritans often echoed the famous phrase from Augustine, "You have made us for yourself, and our hearts are restless until they find rest in you".[35] The soul distractedly wandered between one pleasure and another until it found its true resting-place in God. Sibbes described the soul as a

32 From the original version of *The Westminster Shorter Catechism*; see S. W. Carruthers, *Three Centuries of the Westminster Shorter Catechism with a Fascimile Reproduction of the Original Manuscript Presented to Parliament 25th November 1647,* University of New Brunswick, 1957, p. xiii. The confession and catechisms of the Westminster Assembly were drawn up in Westminster, England, by an assembly of divines convened by the Long Parliament, which met from July 1, 1643 to February 22, 1648. The majority of the assembly were Presbyterians, but it included five prominent Independents and two Erastians.

33 Sibbes, 'Soul's conflict', *Works*, I, p. 247.

34 Sibbes, 'Soul's conflict', *Works*, I, pp. 286-7; 'Christian's Portion', *Works*, IV, p. 29.

35 Augustine, *The Confessions of St. Augustine*, R.Warner (trans.), London, Penguin Books, 1963, p. 17; I have slightly altered the quotation to the classical format. It is cited, for example, in Sibbes, 'Soul's conflict', *Works*, I, p. 214.

stream constantly in motion, until it emptied itself into the "boundless and bottomless ocean of endless pleasure".[36] Like birds in the air, or fish in the sea, God was the natural element of the soul, where it thrived and was happy.[37] Heaven was the believers' home, the end of their pilgrimage, their own country: "Let a bird be far from the nest, and it grows towards night, she will home even upon the wings of the wind".[38] Humans were constantly and restlessly in motion, unsuccessfully searching for joy in earthly delights, until they came to rest in God. In union with God, the desires of the soul were completely satisfied, because the soul was made for communion with him.

It should already be apparent that union with God was far from a "hard and mathematically calculable test".[39] Conversion was not only the establishment of a legal standing before God, but also a deeply personal and joyous experience, in which believers were joined to Christ in an intimate union like that of marriage. Certainly, union with God was based on the legal transaction of justification, the exchange of our sins for Christ's righteousness. Owen clearly described justification as 'forensic', "denoting an act of jurisdiction".[40] But to characterize the moment when an individual first received God's forgiveness as a cold and calculating legal transaction, is to fail to appreciate the intense relief and joy felt by those released from the burden of God's judgement and their delight in God's astonishing grace.[41] For those who had truly realized their desert of punishment, God's forgiveness came as an astounding mercy: it "ravisheth the hearts and satiates the soul of them that believe".[42] And the joy of

36 Sibbes, 'Bridgroom's promises', *Works*, VI, pp. 543-4.
37 Sibbes, 'Marriage feast', *Works*, II, p. 516.
38 Sibbes, 'Vanity of the creature', *Works*, VII, p. 40.
39 Miller, *op. cit.*, p. 389.
40 Owen, 'Justification', *Works*, V, pp. 124-6.
41 The Puritans outlined several stages preparatory to conversion, which included the conviction of sin gained through the law; see, for example, W. Perkins, 'The Whole Treatise of Cases of Conscience' in T. F. Merrill (ed.) *William Perkins 1558-1602 English Puritanist*, Nieuwkoop, B. De Graaf, 1966, pp. 102-3.
42 Owen, 'Glory of Christ', *Works*, I, p. 359.

conversion stemmed not only from relief at forgiveness, but delight in the formation of an intimate oneness with God. Union with God was not only judicial, but also personal and relational, for it included the reality of 'mystical' oneness with Christ.[43] 'Mystical' should be taken in the sense of spiritual or mysterious, rather than in the classic mystical sense: there was no absorption of the human personality into the Divine, nor was union with God an ecstatic experience gained after conversion through devotional disciplines.[44] Union was an immediate and personal link with Christ, established once for all at conversion, consisting in the fact that believers shared the same Spirit with him.[45] The union between God and believers was less like a legal contract, than like the intimate and loving oneness of marriage, when husband and wife were bonded together in a unity which human reason could not comprehend, as if they shared one soul in two bodies.[46] Just as human marriage was the day of "most *unmixed* delight" in earthly experience, so conversion, the day of spiritual marriage, was one of great jubilation for Christ and the soul.[47]

Assurance of salvation was a vitally important goal for the Puritans. Only the assured believer could obey God cheerfully, rest in the certainty of God's love and die in the

43 *Ibid.*, pp. 355-9.

44 The latter misrepresentation of the Puritan concept of union is present in Hambrick-Stowe, *Practice of Piety*. Only extremely rarely was the phrase 'union with God' used by the Puritans in this way; exceptions may be found in Francis Rous' description of ecstatic experiences as 'communicative and fruitive unions' in his 'The Mystical Marriage, or, Experimentall discoveries of the holy marriage between a soul and her Saviour' in *Treatises and Meditations*, London, 1657, pp. 735-6; a similar description of 'an amorous union' with Christ is made in John Rowe's biography, cited in Wallace, *op. cit.*, p. xvii.

45 Owen, 'Glory of Christ', *Works*, I, p. 365; 'Person of Christ', *Works*, I, pp. 70, 146; 'Of Communion', *Works*, II, p. 148; 'Holy Spirit', *Works*, III, pp. 366-7, 516-9.

46 Owen, 'Person of Christ' *Works*, I, p. 70; 'Holy Spirit', *Works*, III, pp. 159, 311, 367, 478, 519; 'Justification', *Works*, V, pp. 178-9.

47 Owen, 'Of Communion', *Works*, II, p. 118; Sibbes, 'Marriage feast', *Works*, II, p. 448.

hope of heaven.[48] Because of the pastoral problems they faced in their ministry, Puritan divines explored assurance with a complexity, practicality and sensitivity which surpassed anything found in the writings of the Continental Reformers.[49] They taught that assurance stemmed from three main sources: faith in the objective promises of the Word; self-examination of one's obedience and graces; and the internal testimony of the Spirit to God's love.[50] Puritan writers described the signs of salvation in detail, in order to guide believers' self-examination. Most interpreted the testimony or "seal" of the Spirit as an intense experience subsequent to conversion, in which the Spirit gave the soul an overwhelming sense of God's love.[51]

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48 Sibbes, 'Church's Riches', *Works*, IV, p. 518.

49 Guides to assurance by Puritans include W. Perkins, *A Treatise Tending vnto a Declaration, whether a Man be in the Estate of Damnation or in the Estate of Grace*, 1589; T. Brooks, *Heaven on Earth. Or A serious discourse touching a well-grounded assurance,* 1660; N. Byfield, *The Signes or An essay concerning the assurance of Gods love, and mans saluation; gathered out of the holy Scriptures*, 1614; P. Baynes, *The Trial of a Christians Estate: Or A discoverie of the cavses, degrees, signes and differences of the apostasee both of true Christians and false*, 1618; W. Burton, *Dauids Evidenece [sic.] or The assurance of Gods love*, 1592; F. Roberts, *Believers Evidences for Eternall Life*, 1649; and Owen's *A Practical Exposition upon Psalm CXXX*, 1669 (*Works*, VI, pp. 323-648).

50 Owen, 'Psalm CXXX', *Works*, VI, pp. 545-6; Sibbes, '2 Corinthians chapter 1', *Works*, III, p. 464; 'Fountain sealed', *Works*, V, pp. 437, 440.

51 Puritans disagreed about whether the 'seal' of the Spirit (Romans 8:16) referred to an objective reality or a subjective experience. Sibbes kept the two in balance; see '2 Corinthians chapter 1', *Works*, III, pp. 455-8; 'Yea and Amen', *Works*, IV, pp. 133-40; 'Fountain sealed', *Works*, V, pp. 434-7; 'Fruitful labour', *Works*, VI, pp. 376-7. Owen changed his views from the subjective to the objective with time; compare 'Of Communion', *Works*, II, pp. 242-3 and 'Saint's Perseverance', *Works*, XI, pp. 323-4 with 'Comforter', *Works*, IV, pp. 400-12. A helpful discussion of Owen's changing views may be found in S. B. Ferguson, *John Owen on the Christian Life*, Edinburgh, The Banner of Truth Trust, 1987, pp. 116-24. Most Puritan writers defined the 'seal' as the Spirit's communication of God's love to the inner sense of the believer; e.g. J. Preston, *The Golden Sceptre held forth to the Humble,* 1638, pp. 10-11; Brooks, *op. cit.*, p. 514; J. Flavel, *Sacramental Meditations*, London, 1679, p. 61; Byfield, *op. cit.*, p. 64; J. Downame, *The Christian Warfare Against the Deuill World and Flesh,* London, 1634, p. 115.

While the Puritan teaching on assurance carefully balanced faith, obedience and experience, this emphasis on self-examination and inner sensations could lead to anxiety and introspection amongst believers with a tender conscience. Many scholars have suggested that Puritan piety was dominated by the desperate search for assurance, through obsessive self-examination for the signs of salvation.[52] But Puritan preachers were wellaware of this danger. They directed troubled believers away from their internal states and encouraged them to depend on faith rather than feeling. In the final analysis, self-examination and inner experience were only intended to provide supporting evidence for faith in God's promises.[53] Accounts of Puritan lives make it clear that, while some struggled for assurance all their lives, most gained a settled sense of peace with God.[54] But scholars must be careful not to rehabilitate the Puritans to such an extent that they do not recognize the problems with their view of assurance.[55] The Puritan teaching on assurance may not have disturbed more optimistic spirits, but it required a positive self-examination and an emotional certainty which proved unsustainable for some, who were unable to discern the signs of salvation, or who lacked an inner sense of God's

52 Bercovitch saw anxiety about election as mandatory amongst New English Puritans, giving rise to breakdowns and suicides, *op. cit.*, p. 23; and see Weber, *op. cit.*, pp. 104-128; Knappen, *Tudor Puritanism*, *op. cit.*, pp. 342-3, 396-9; Miller, *op. cit.*, pp. 49ff. Martz, *op. cit.*, pp. 156-63; White, *op. cit.*, pp. 16, 207-10; O. C.Watkins, *The Puritan Experience: Studies in Spiritual Autobiography*, New York, Schocken Books, 1972, ch.1.

53 Sibbes, 'Bruised reed', *Works*, I, p. 58; 'Salvation applied', *Works*, V, p. 406; 'Witness of salvation', *Works*, VII, p. 382. Owen, 'Person of Christ', *Works*, I, p. 115; 'Psalm CXXX', *Works*, VI, pp. 548, 551, 561-3.

54 See chapter 4 of my thesis for evidence supporting this claim.

55 This seems to be a problem, for example, with J. R. Beeke's otherwise excellent article, 'Personal Assurance of Faith: The Puritans and Chapter 18.2 of the *Westminster Confession*', *Westminster Theological Journal*, 1993, *55*, pp. 1-30; and also, possibly, with Packer's *Quest for Godliness*, pp. 179-89.

love.[56] Puritan ministers were right to direct troubled believers from their inner states to Christ, from feeling to faith; however, their emphasis on the signs and spiritual experience which provided evidence for salvation proved damaging to the assurance of many believers.

Yet assurance was never intended to be an abiding obsession, for it was no more than a stage on the road towards the higher goal of communion with God, with the enjoyment of God which was its high-point and reward. Owen cautioned his readers not to spend their whole lives concerned with the issue of salvation, but to press on to "a full enjoyment of the precious things of the gospel".[57] Believers were to earnestly seek communion with God, the mutual exchange of love and delight between God and the believer. In his treatise *Of Communion with God* (1657), which deserves to be more widely read, Owen defined communion in this way:

> Now, communion is the mutual communication of such good things as wherein the persons holding that communion are delighted, bottomed upon some union between them...Our communion, then, with God consisteth in his *communication of himself unto us, with our returnal unto him* of that which he requireth and accepteth, flowing from that *union* which in Jesus Christ we have with him.[58]

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56 The clearest example is that of the 'melancholic' or depressive James Fraser, who, while he attempted to depend on faith rather than feeling, continued to struggle throughout his whole life for the signs and inner emotional experience which would confirm his assurance. See J. Fraser, *Memoirs of the Life of the Very Reverend Mr. James Fraser,* Glasgow, 1798. Thomas Goodwin's experience was more typical: 'In my younger Years...I was diverted from Christ for several Years, to search only into the Signs of Grace in me: It was almost seven Years e'er I was taken off to live by Faith on Christ, and God's free love'; from account of Goodwin's life in T. Goodwin, *The Works of Thomas Goodwin,* Vol.5, London, 1704, p. xv. Cf. R. Baxter, *Reliquiæ Baxterianæ: or, Mr. Richard Baxters narrative of the most memorable passages of his life and times,* London, 1696, p. 6.

57 Owen, 'Spiritually minded', *Works*, VII, p. 450.

58 Owen, 'Of Communion', *Works*, II, pp. 8-9; Sibbes offers a similar definition in 'Spouse', *Works*, II, p. 201.

The foundation of communion was union, the mechanism of communion was the two-way communication of blessings and obedience, and the result was mutual joy. Communion with God was experienced through love, desire and delight. Love gave rise to desire for union and communion with the beloved, and found delight in enjoyment of that which it cherished. Delight was the high-point of communion with God, the fulfilment of love's desires.[59] As believers grew in their faith, communion with God grew more intense, joyous and intimate.[60] The delights of communion with God were often described using the language of the Song of Songs, which was read by the vast majority of Puritan writers as an extended allegory of the union and communion between Christ and the soul. The Song's rich and sensual imagery entered the common vocabulary of ordinary believers and became a natural means of expression for enjoyment of God.[61] In his sermons on the Song, the Presbyterian John Collinges asked his congregation whether their delight in Christ matched the rapture of the two lovers:

> Is Jesus Christ precious to thee? Is his name to thy soule like an ointment powred forth? Is thy whole heart filled with the sweet smell of Jesus Christ? Art thou ravished with his love…?…Doth the very thinking of Christ ravish thy heart? Doth the naming of him carry thy soule almost above it selfe in an extasie of love? Is he like an Apple to thy tast, that thy mouth is filled with the sweetnesse of his juice?…Art thou melted with his love?[62]

59 Sibbes, 'Breathing', *Works*, II, pp. 218, 227, 243; 'Glance of Heaven', *Works*, IV, pp. 182, 185-6; Owen, 'Person of Christ', *Works*, I, pp. 152-5; 'Of Communion', *Works*, II, p. 200.

60 Owen, 'Spiritually minded', *Works*, VII, p. 448.

61 The Puritan use of the Song of Songs is discussed in chapter 2 of my thesis.

62 J. Collinges, *Five Lessons for a Christian to Learne*, London, 1650, sermon 1, p. 49. Similar passages may be found in Pearse, *op. cit.*, pp. 136-40; B. King, *The Marriage of the Lambe*, London, 1640, pp. 17-8, 31-4; Rous, 'Mystical Marriage', *op. cit.*, pp. 692-4, 735-6. See also Owen's exploration of the 'conjugal affections' between Christ and believers in 'Of Communion', *Works*, II, part 2, chs 3-5.

These are hardly the words of a sober and gloomy religion. Indeed, so great was the enjoyment which followed from communion with God, that Sibbes described the Christian life as one of "perpetual rejoicing".[63]

Enjoyment of God reached its high point in moments when the soul was "ravished" or "love-sick" with "joy unspeakable and full of glory".[64] John Owen was very careful to distinguish the Puritan version of rapturous enjoyment of God from the "ecstasies" of classic mysticism.[65] True enjoyment of God did not suppress or bypass the mind and affections, nor was it completely ineffable and incommunicable, for it was worked through the natural faculties, filling them with impressions of God's love.[66] Nonetheless, spiritual joy could be of such intensity that the soul was "raised and ravished", the mind "brought into an utter loss", and the affections "swallowed up" in an "unspeakable" delight.[67] Sibbes described the experience in this way, using the language of "love-sickness":

> If our love be in such a degree as it makes us sick of it, it makes us not to hear what we hear, not to see what we see, not to regard what is present. The soul is in a kind of ecstasy; it is carried so strongly, and taken up with things of heaven.[68]

While the Puritan experience of ecstasy did not attempt to bypass the mind, God's infinite wonders could overwhelm the faculties until the believer lost self-awareness, and was overcome with an almost painful intensity of feeling. Certainly, Puritan piety was never irrationalistic. Owen com-

63 Sibbes, 'Soul's conflict', *Works*, I, p. 142.

64 Quoting Song of Songs 4:9 (the word 'stolen' in the NIV was commonly translated by the Puritans as 'ravished') and 2:5, also 1 Peter 1:8.

65 Owen discusses this issue at length in a section on mental prayer which may be found in 'Spirit in prayer', *Works*, IV, pp. 328-38.

66 Owen, 'Glory of Christ', *Works*, I, p. 403; 'Holy Spirit', *Works*, III, pp. 131, 144, 225, 318-9, 385, 620; 'Ebenezer', *Works*, VIII, p. 79; Sibbes, 'Bruised reed', *Works*, I, pp. 39, 81-2, 79-80, 87.

67 Owen, 'Spirit in prayer', *Works*, IV, pp. 329-30.

68 Sibbes, 'Bowels Opened', *Works*, II, pp. 126-9.

plained that mystical contemplation, practised "without any actings of the mind or understanding", resulted in a worship which was "brutish or irrational" when it ought to be our "'reasonable service'".[69]

The Puritan practice of discoursive meditation is largely a lost art today, and deserves closer attention. Meditation was an important part of the daily devotional practices of the Puritans, who followed a demanding devotional system, a monasticism of the ordinary life.[70] The Puritan practice of meditation has often been misrepresented as gloomy and introspective, dominated by sin and self-examination.[71] But Puritan writers were wary of the potential for sombre topics to dominate meditation. The famous preacher Richard Baxter encouraged Christians to "study the excellencies and goodness of the Lord, as frequently as thy own necessities and vileness".[72] The best source for appreciating the Puritan teaching on meditation is Baxter's well-loved *The Saint's Everlasting Rest* (1650), one of the few Puritan works which is still widely available today. Baxter encouraged believers to meditate frequently on the joys of heaven, and provided a carefully thought-out method for meditation. The Puritan practice of meditation began with rational reflection on a doctrine or Biblical passage, when believers carefully considered a topic from every aspect.[73] But the most important

69 Owen, 'Spirit in prayer', *Works*, IV, p. 329.

70 Packer observes helpfully that the Puritans espoused 'a reformed monasticism', practising 'as rhythmical a routine for daily life as any monastic rule had ever required'; *Quest for Godliness*, p. 331.

71 See, for example, Knappen's comment that when the Puritan meditated, 'he contemplated not the Heavenly City or the Blessed Virgin, but himself and his own conduct'; *Tudor Puritanism*, *op. cit.*, pp. 342-3.

72 Baxter, *Saint's Everlasting Rest*, *op. cit.*, part 4, pp. 139-41; see also Owen, 'Glory of Christ', *Works*, I, pp. 312, 337-8; 'Person of Christ', *Works*, I, p. 164; and Sibbes, 'Bowels opened', *Works*, II, pp. 147-9, 178; 'Excellency of the Gospel', *Works*, IV, p. 269.

73 See Baxter, *Saint's Everlasting Rest*, *op. cit.*, part 4, pp. 150, 178-81, 186-208, 211-3; also E. Calamy, *The Art of Divine Meditation...In several sermons on Gen. 24. 63,* London, 1680, pp. 176-7, 190; J. Downame, *A Gvide to Godlynesse or a Treatise of a Christian Life,* London, 1622, pp. 574-81.

part of meditation was the second stage, when believers worked the theme under consideration into their affections, not ceasing until their hearts were filled with intense emotion.[74] The main technique used to arouse the affections was *soliloquy,* a dialogue or argument with the soul, in which believers beseeched, challenged, remonstrated and reasoned with themselves.[75] Baxter advised his readers to enter "into a serious debate" with the heart, to "plead with it in the most moving and affecting language: Urge it with the most weighty and powerful *Arguments*".[76] And not only rational consideration and reasoned argument were used to awaken the affections, but also the imagination and senses.[77] Baxter advised his readers to create a vivid portrait of heaven in the mind's eye:

> Suppose thou were now beholding this City of God…Draw as strong suppositions as may be from thy sense for the helping of thy affections: It is lawfull to suppose we did see for the present, that…which we must really see in more unspeakable brightnesse before long…And…get the liveliest Picture of them in thy mind that possibly thou canst; meditate of them, as if thou were all the while beholding them…; till thou canst say, Methinks I see a glympse of the Glory! methinks I hear the shouts of Joy and Praise![78]

Biblical images were reconstructed visually in the mind's eye as vividly as possible, until it seemed that the soul could see, hear, taste and touch heaven's glories. The Puritans helpfully

74 Baxter, *Saint's Everlasting Rest*, *op. cit.*, part 4, p. 151; Calamy, *op. cit.*, p. 189.

75 *Ibid.*, pp. 150, 178-81, 186-208, 210-3; Calamy, *op. cit.*, pp. 176-7, 190; Downame, *Gvide to Godlynesse*, *op. cit.*, pp. 574-81; Sibbes, 'Self-humbling', *Works*, VI, p. 50.

76 Baxter, *Saints Everlasting Rest*, *op. cit.*, part 4, pp. 196, 208-10.

77 See the extended discussions about the use of the imagination and senses in meditation in Sibbes, 'Soul's Conflict', *Works*, I, pp. 184-5; Baxter, *Saint's Everlasting Rest*, *op. cit.*, part 4, pp. 219-30.

78 Baxter, *Saint's Everlasting Rest*, *op. cit.*, part 4, pp. 220-1.

encouraged believers to set aside time regularly to reflect on themes such as God's excellencies or heaven's joys, to use all the powers of the mind and imagination to better comprehend and appreciate the truths of Scripture, to argue their sluggish affections into a state of adoration and delight.[79]

The Puritans not only had a theology of enjoyment of God, but also immense appreciation for delight in this world. Yet Puritanism is commonly seen as opposed to earthly pleasure.[80] Certainly, Puritan writers placed careful limitations on recreation, outlawing such activities as gambling and cruel sports, and limiting the time allowed for recreation to what would refresh the body for work and prayer.[81] Perhaps this moderation would seem less draconian if our age did not value pleasure so highly. Yet there was also a quality of unbridled joy in many Puritans' appreciation of the world. Sibbes not only regarded earthly things as necessary to meet bodily needs, but also as a lavish gift of God for our delight:

> *Joy we may and we ought;* for God…hath given us… abundance of comforts of all sorts for all our senses…The eye, besides ordinary colours, hath delightful colours to behold; and so the ear, besides ordinary noise and sounds, it hath music to delight it; the smell, besides ordinary savours, it hath sweet flowers to refresh it; and so every part of the body, besides that which is ordinary, it hath somewhat to

79 J. I. Packer, who is clearly familiar with the Puritan teaching on meditation, encourages this kind of meditation in *Knowing God*, London, Hodder and Stoughton, p. 20.

80 See, for example, Weber, *op. cit.*, pp. 118-9, 166-7; Bouyer, *op. cit.*, 134; Coulton, *op. cit.*, pp. 38-9.

81 While Richard Rogers argued that recreation was only to be taken in order to better fulfil 'the duties of our calling', Perkins allowed two ends for recreation: necessity and delight. R. Rogers, *Seven Treatises,* 1603, pp. 373-4; cf. Perkins, 'Whole Treatise of Cases', p. 217; and see Sibbes, 'Bowels Opened', *Works*, II, p. 54; Downame, *Gvide to Godlynesse*, *op. cit.*, pp. 262-8.

> comfort it.[82]

And earthly pleasures had a higher end than simple delight, for as believers enjoyed God's world, they came to appreciate his goodness, mirrored in creation. Sibbes described the creation as "*Deus explicatus*, God unfolded to our senses" so that we "taste and feel his goodness" in earthly joys.[83] As believers saw, heard, tasted, touched and smelt the world, they perceived God himself through their physical senses, for creation embodied his wonders. Earthly joys could be deliberately used to raise one's thoughts and affections to God, a process which the Puritans called "creaturely meditation". The Puritan divine Matthew Barker suggested that earthly delights be perceived as images of Christ's loveliness, whose beauty was scattered throughout the creation:

> Every *Flower* in the Garden, *tree* in the Orchard, those several *beauties* wherewith thou seest the Earth *bedecked*, may represent this *wonderful one* Jesus Christ in a delightfull *appearance* to thee: who is the *sweetness* of all things *beautiful*: the *glory* of all things *glorious*…And therefore, seeing *Jesus Christ* hath as it were multiplyed himself into such *various* beauties, forms, and images, let us *by these* rise up *above* these, unto himself who is *all*, and *infinitely* more than *all these*…ascending from the *finite* to the *infinite*, from the *visible* to the *invisible*, from the *corruptible* to that which is *eternal*.[84]

Christ's glory was reflected in creation, as if he had multiplied himself into an array of images of his loveliness. To see the beauty of creation was to see a small part of God

82 Sibbes, 'Spiritual Man's Aim', *Works*, IV, p. 48, and '2 Corinthians chapter 1', *Works*, III, p. 44, also p. 49. Cf. R. Baxter, *A Christian Directory: or, a summary of practical theologie, and cases of conscience*, London, 1673, p. 165.

83 Sibbes, 'Glance of Heaven', *Works*, IV, p. 196; cf. Baxter, *Saint's Everlasting Rest*, *op. cit.*, part 4, p. 136.

84 Barker, *op. cit.*, p. 34.

himself. As believers delighted in earthly things, they were invited to rejoice in God's loveliness, which shone forth in created things. Puritan writers encouraged believers to enjoy earthly pleasures as God's good gift, and to use the world's delights to draw their thoughts and affections up to God, whose loveliness was mirrored in his creation.

A wonderful example of this uninhibited joy in creation, and the way in which it was used to draw one's thoughts and affections to God, is that of marriage. Puritan divines wrote a large number of popular marriage manuals, which provided thorough and practical advice for nearly every aspect of marriage.[85] Puritan marriages were characterized by intense affection: couples spoke openly of their tender mutual love, many husbands could not bear long absence from their wives, and believers grieved passionately after the death of a spouse.[86] Certainly, Puritan writers placed careful limitations on human love, which was never to outstrip love for God.[87] Yet they also took the themes of

85 The Puritan marriage manuals include W. Perkins, *Christian Oeconomie*, (trans. 1618); H. Smith, *A Preparative to Mariage* (1591); R. Cawdrey, *A Godlie Forme of Hovsehold Government* (1598); T. Gataker, *Marriage Duties Briefely Covched Togither* (1620); *A Good Wife Gods Gift: and, A wife indeed* (1623) and *A Mariage Praier* (1623/4); W. Gouge, *Of Domesticall Dvties* (1622); T. Taylor, A *Good Husband and a Good Wife* (1625); D. Rogers, *Matrimoniall Honour* (1642); D. Cawdrey, *Family Reformation Promoted* (1656, a simplified version of his father's *Godlie Forme*); E. Reyner, *Considerations Concerning Marriage* (1657); W. Thomas, *Christian and Conjugal Counsell* (1661); R. Baxter, *Mr. Baxters Rules & Directions for Family Duties* (1681).

86 See, for example, G. Disney, *Some Remarkable Passages in the Holy Life and Death of Gervase Disney, Esq; to which are added several letters and poems,* London, 1692, p. 168; J. Alleine, *The Life and Death of that Excellent Minister of Christ Mr. Joseph Alleine*, London, 1672, pp. 98-9; part 2, pp. 8-9, 135; E. Bury, W. Tong and J. Watts, *An Account of the Life and Death of Mrs. Elizabeth Bury,* Bristol, 1720, letter to the reader, also p. 26; Fraser, *op. cit.*, p. 11; R. Baxter., *A Breviate of the Life of Margaret, the...wife of Richard Baxter,* London, 1681, letter to the reader, and p. 47.

87 Sibbes, 'Spiritual Man's Aim', *Works*, IV, p. 47; Rogers, *Matrimoniall Honour*, *op. cit.*, p. 21.

romantic attraction, enamoured affection and sexual pleasure further than any previous writers.[88] The Puritan divine William Gouge contradicted his own warning that married love should not exceed "the bonds of Christian modesty and decency" when he declared that "if a Man exceedeth not the bounds of civility and sobriety, his affection towards his Wife cannot be too great".[89] Drawing on the Song of Songs and Proverbs 5:18-19, he argued that the husband was to be almost foolishly and irrationally devoted to his wife, even if others thought his love was immoderate and obsessive:[90]

> Now it is noted of the *Hart* and *Roe-bucke,* that of all other beasts they are most inamored…with their mates, and euen mad...in their heat and desire after them…;…further amplified by the *hyperbole* vsed in this phrase, *bee thou ravisht with her loue*, word for word, *erre thou in her loue*…[T]he holy Ghost did allow some such priuate daliance & behauiour to married persons between themselves as to others might seeme dotage…Read the Song of Songs, and in it you shall obserue such affection manifested by Christ to his Spouse, as would make one thinke hee did (with reuerence in an holy manner to vse the phrase) euen erre in his loue, and doat on her. A good paterne and president for Husbands. For nothing is more louely than a good wife.[91]

88 There has been much scholarly debate over whether the ideal of the companionate marriage originated with the Puritans; references are given and discussed in my thesis, pp.161-4.

89 Gouge, *Domesticall Dvties*, *op. cit.*, pp. 150, 162, 208-9, 223.

90 Proverbs 5:18-19 reads in the Genevan version: 'Rejoyce in the wife of thy youth: Let her be unto thee as the loving Hind, and the pleasant Roe: Let her breasts satisfie thee at all times: and be thou ravisht always with her love'; the last part was often rendered more literally as '*err thou in her love*'. Another passage often used in this connection was Genesis 26:8, which describes Isaac and Rebecca 'sporting together', or 'caressing' and 'rejoicing' one another.

91 Gouge, *Domesticall Dvties*, *op. cit.*, pp. 208-9.

If there was an element unique to the Puritan teaching on marriage, it was this striking emphasis on the enamoured and whimsical love-play between husband and wife. Puritan writers frequently applied the enraptured love of the "hart and roe-buck" to marital sexuality, which was to be distinguished by an ardent and playful delight.[92] The Puritan view of sexuality has often been characterized by scholars as austere and utilitarian, or occasionally as revolutionary and unrepressive. But the truth lies somewhere between these two extremes, for Puritan marriage manuals advised both moderation and abundant pleasure in sexuality.[93] The Puritans placed a unique emphasis on the enravished love and delight which should characterize married love and sexuality, borrowing from the rapturous and playful affection they observed in the pages of Scripture. This tender affection and delight was reflected in the "mystical" marriage between God and believers, which was to be characterized by passionate desire and overflowing joy.

Puritanism can no longer be stereotyped as a gloomy and rationalistic piety. On the contrary, the Puritans had a strong theology of enjoyment of God and this world. It is ironic that we can learn from the Puritans the very lesson which we probably thought such a sober people could never

92 Perkins, *Christian Oeconomie*, *op. cit.*, p. 691; Smith, *op. cit.*, pp. 12, 33; R. Cawdrey, *op. cit.*, pp. 179-80; D. Cawdrey, *op. cit.*, p. 114; Reyner, *op. cit.*, pp. 13, 41; Baxter, *Christian Directory*, *op. cit.*, p. 522; Rogers, *Matrimoniall Honour*, *op. cit.*, p. 245. For general comments on delight in sexuality, see R.Cawdrey, *op. cit.*, p. 180; T. Gouge, *Christian Directions, shewing how to walk with God all the day long,* London, 1674, pp. 127, 130.

93 See, for example, M. Stone, *The Family, Sex and Marriage in England, 1500-1800*, New York, Harper & Row, 1977, pp. 523, 527, 644; R. L. Greaves, *Society and Religion in Elizabethan England*, Minneapolis, University of Minnesota Press, 1981, pp. 203, 225-8. Compare with A. Fletcher's claim that Puritan teaching was a 'radical departure' from prior views of sexuality; 'The Protestant idea of marriage in early modern England' in *Religion, Culture and Society in Early Modern Britain: Essays in honour of Patrick Collinson*, A. Fletcher and P. Roberts (eds), Cambridge, Cambridge University Press, 1994, pp. 172-7.

teach us: the discipline of enjoyment of God. Many Puritans even attracted the charge of "enthusiasm" and "mysticism" from their contemporaries because of their intense spiritual experiences. Nonetheless these charges were inaccurate, as Owen declared:

> There are those by whom all these things are derided as distempered fancies and imaginations…And hereby all real intercourse between the person of Christ and the souls of them that do believe is utterly overthrown…According unto the sentiments of these profane scoffers, there is no such thing as the *shedding abroad of the love of God in our hearts* by the Holy Ghost, nor as the *witnessing of the Spirit of God with our spirits* that we are the children of God…; —no such thing as rejoicing upon 'believing, with joy unspeakable and full of glory;' —no such thing as Christ's showing and manifesting himself unto us…;…— all those ravishing joys and exultations of spirit…[are] fancies and imaginations. But it is the height of impudence in these profane scoffers, that they proclaim their own ignorance of those things which are the real powers of our religion.[94]

It is telling that Owen did not defend himself against the charge of "enthusiasm" by disassociating himself from emotional experience. Instead, he made it clear that a sense of God's love, the inner witness of the Spirit, spiritual joys and exultations, were "the real powers of our religion" which enabled "real intercourse" with God. But emotional experience was never an end in itself for the Puritans, nor did it ever become loosened from its moorings in doctrine. The Puritan teaching on enjoyment of God was firmly undergirded by the Bible, Reformed doctrine and practical wisdom, yet it sparkled with the uninhibited joy of people who themselves experienced immense delight in God. Puritan

94 Owen, 'Glory of Christ', *Works*, I, pp. 398-9, and see p. 447; 'Person of Christ', *Works*, I, p. 167; 'Holy Spirit', *Works*, III, pp. 120-1, 234-5.

piety was a quest for enjoyment of God: its goal was that believers "be infinitely and for euer merry, and sweetly glad at the very heart roote".[95]

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95 R. Bolton, *Some Generall Directions for a Comfortable Walking with God*, London, 1626, p. 358.

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kategoria 1998 *number 10* pp. 37-57

God and cosmology

Kirsten Birkett

The beginning, always a very good place to start, is complicated. For years now scientists have claimed to be very close to the beginning; that they can tell what happened a postulated fifteen billion (give or take a few) years ago. This is one edge of science about which there is much hopeful speculation. Almost any popular science series or documentary will mention at some point the beginning of the universe, as a part of accepted dogma of what we should know about our world. It's taken for granted in many books that the world did begin some fifteen billion years ago, and that the currently accepted theories in cosmology are the way it began. Very often, comments follow about how this demonstrates, the necessity, or alternatively the non-existence, of God.

This essay takes a brief look at some of the theories about the beginning of the universe, and why people believe them. First of all, it has the simple aim of containing some of the popular excesses about cosmological theories. Far from knowing how the universe started, cosmologists can present some bits of evidence which fit reasonably well with a postulated theory. It is not true that 'science' can explain

the universe, if that is meant to include a definite and experimentally confirmed theory of how the universe began. What 'science' has is a theory which a lot of cosmologists accept, but not all, and which is consistent with some pieces of observed data.

More than that, however, it is interesting to see what people think the beginning of the universe says about God. This is one of the big areas in which arguments about God abound. Does a theory such as the Big Bang prove that there need be no God, or is it, on the contrary, evidence that there must be a God? If the universe could be shown to be a self-enclosed loop of space time, would we then do away with the need for God? Is it possible to have a theory so complete that, in Carl Sagan's words, there is "nothing left for a creator to do?" Viewpoints on this matter tend to be very dogmatic, and it is not at all unusual for scientists—particularly atheists—to admire a particular theory of the beginning of the universe precisely because they think it does away with the need for God. There is much more than a study of data going on here. The beginning of the universe, perhaps more than any other area of science, is heavy with ideological loading.

This article is not a comprehensive look at cosmology, nor a catalogue of all arguments for and against God. The point of interest is not really what theories scientists might end up with, but why they choose the theories they do. Why do people think there was—or was not—a big bang, and why does God keep entering the discussions of the matter, both from theists and atheists? Is this proof for the existence of God, or isn't it? If the matter is so obvious, as many claim, why are opinions still so divided?

The state of cosmology

One delightful quotation, from an author I have been unable to track down, is that cosmology "suffers from a scarcity of observational evidence and a super-abundance of theories". There are many theories about how the universe might have started, and just a few of them will be surveyed below. What would constitute 'proof' of such a theory is hard to imagine. Certain chemical and physical

processes which are postulated to have happened can be reproduced under laboratory conditions; certain observations can be made of the sky which are taken to be the remnants of what happened long ago. It is very difficult to draw conclusions from something that is assumed to have happened some fifteen billion years ago. Nonetheless, for some years now most cosmologists have settled on the Big Bang—that the universe began, from nothing, in an explosive expanding event—as a dominant theory, and defend it with three main types of evidence.

The first is the results of research by the astronomer Edwin Hubble, early this century, supported by subsequent dates. Studying the light of distant stars, Hubble discovered that certain stars tended to the red end of the spectrum,[1] which suggests that they are moving away from the observer. Moreover, the further away the stars were, the more red their spectra were. This suggests that the stars are accelerating away from each other; or in other words, that the universe is expanding (as was predicted by relativity theory). This is now taken as evidence for the Big Bang; if the universe is expanding, the argument goes, then some time in the past it must have started from something very small.[2]

The second has to do with cosmic background radiation. On 23 December 1993, the Cosmic Background Explorer (COBE) satellite finished a four-year mission of recording data about cosmic radiation. These data led to a more precise measurement of the spectrum of the cosmic microwave background radiation—microwaves that are assumed to have been released from the after-effects of the Big Bang. The radiation was found to be 2.276 degrees Kelvin. The significance of these findings was that the Big Bang theory had predicted this temperature within 0.03%. What is more, no other theory of the origin of the universe even came close to predicting this particular spectrum. Also, the Big Bang theory had predicted

1 The range of frequencies in light, which we see as different colours.

2 For Hubble's own description of his research, see Edwin Hubble, *The Realm of the Nebulae*, Dover Publications Inc., New York, 1958 (Yale University Press, 1936).

certain patterns of variation in the radiation, and the COBE satellite measured such patterns.[3]

The third type of evidence used to support the Big Bang theory is that there is a high abundance of helium in the universe. For various reasons, this is difficult to explain unless there was some Big Bang initially. There is not enough of it produced in stars (as the other elements are) to account for its abundance. For these reasons, the evidence for the Big Bang—an initial, explosive beginning to the universe—is taken to be strong. What is not agreed upon is the (exact) how and (especially) the why.

The Big Bang and God

Now what are the theological implications of a Big Bang? Many theologians suggest that this is proof of, or strong evidence for, or at least compatible with, God as creator. Indeed, some scientists agree and for that very reason dislike the theory enough to come up with another. Quite apart from the debate over whether or not the Big Bang is true, there is a whole other level of debate over what it would demonstrate about God anyway.

As an example, we can take the arguments used by avid atheist Quentin Smith in his debate with Catholic philosopher William Lane Craig.[4] These two, both philosophically sophisticated men, came to very definite opposing conclusions, although based on precisely the same evidence. Amongst several other arguments, a key part of the debate was the issue of whether something can be causeless or not. It seems intuitively ridiculous that an event like the universe can just spontaneously happen, with no cause. As Craig said:

3 See G. F. Smoot *et al*, 'Structure in the *COBE* differential microwave radiometer first-year maps', *The Astrophysical Journal*, 1992, *396*, pp. L1-L5. For the earlier predictions and measurements of cosmic background radiation, see R. H. Dicke, P. J. E. Peebles, P. G. Roll and D. T. Wilkinson, 'Cosmic black-body radiation', *The Astrophysical Journal*, 1965, *142*, pp. 414-419, and in the same volume A. A. Penzias and R. W. Wilson, 'A measurement of excess antenna temperature at 4080 Mc/s', pp. 419-421.

4 William Lane Craig and Quentin Smith, *Theism, Atheism, and Big Bang Cosmology*, Clarendon Press, Oxford, 1993.

> The principle ex nihilo nihil fit [nothing comes from nothing] seems to me to be a sort of metaphysical first principle, one of the most obvious truths we intuit when we reflect seriously. If the denial of this principle is the alternative to a theistic metaphysic, then let those who decry the irrationality of theism be henceforth forever silent![5]

Smith replied that causality only applies within the universe, and can't be applied to a singularity when all laws break down. But here we see the impasse: Craig responded that since physical causes can't apply, there must be a non-physical cause, that is, God. Smith's conclusion, on the other hand, was no, it means that there is no cause.

But was there really no cause? Relying on the standard Big Bang theory, Smith contended that the universe happened by one quantum particle tunnelling to actuality out of nothing. But as Craig pointed out, this presupposes quantum laws, a space time vacuum, virtual particles and tunnelling. Smith denied that these things are assumed, except for the quantum laws; in this one case something happened purely out of nothing. However as a later critic pointed out, he does not explain how laws can exist and act in nothingness, nor why it is legitimate in this one case to dismiss causal conditions that exist in every other case.[6]

There are other aspects to this debate. Smith has more recently put together an innovative argument to demonstrate, not only that the Big Bang does not prove there is a God, but that if there was a Big Bang, then there is *not* a God. This starts from the idea of a singularity at the beginning of the universe. Now, a singularity is a point at which all physics breaks down. There is no predicting what will come of it. All possible combinations of particles are equally possible from a singularity.[7]

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5 *Ibid.*, pp. 156-7.

6 R. B. Edwards, review of *Theism, Atheism and Big Bang Cosmology*, *International Journal for Philosophy of Religion,* 1995, *37*, pp. 123-5.

7 Smith cites Stephen Hawking, 'Breakdown of predictability in gravitational collapse', *Physical Review*, 1976, *D14*, p. 2460.

So, Smith argues, if the universe began with a singularity, there can be no reason that it will support intelligent life. All outcomes are equally possible and random. However, if God wanted intelligent life, he would have created an initial state which certainly or probably evolves in a lawlike manner to produce intelligent life. Therefore, the Big Bang disconfirms God. Moreover, Smith goes on, to claim that God could have intervened later to make it likely that life would arise is an implausible suggestion. It would be a very irrational way to create a universe, and so could not be what God reasonably would have done.[8]

Apart from the problem of telling God what he must, or could, do, critics have pointed out that we are not in a position to know whether a Big Bang would be a rational or irrational way to create a universe.[9] So Smith has most recently presented a different kind of argument altogether. This is based on something called the Law of the Simplest Beginning.[10]

It is a law of nature, he contends, that the simplest possible thing comes into existence in the simplest possible way. Otherwise it would not be the simplest possible thing. Now what qualifies as the simplest possible thing? Temporally and spatially thinking, the simplest possible thing has zero duration and zero dimensions, and materially has zero matter. It must also have the fewest possible properties. In fact, a singularity must be the simplest possible thing. The simplest way for something to come into existence is to have no grounds for coming into existence; to have come from nothing, by nothing, and for nothing. Therefore, it cannot have been done by God.

But is this law of the Simplest Beginning true? Yes, says Smith, for it predicts a Big Bang singularity—and there was

8 See Quentin Smith, 'Simplicity and why the universe exists', *Philosophy*, 1997, *72*, pp. 125-132; also 'Stephen Hawking's cosmology and theism', *Analysis*, 1994, *54*, pp. 236-43.

9 Daniel Lorca, *Philosophy,* 1995, *70*, pp. 39-51.

10 Smith, 'Simplicity and why the universe exists', *op. cit.*

one. If there were not such a law, there would be no Big Bang. If this sounds circular, Smith elaborates: he can accept that it is logically possible for the simplest possible thing in the universe to have been caused by God. However, there is more confirming evidence that the Law is true rather than God existing. For if the law is true, there is a high probability that there is a Big Bang. However the hypothesis that God exists does not lead us to expect a singularity; it is just one of an infinite number of possibilities. Therefore it is more likely that the Law led to the Big Bang rather than God.[11]

One might feel we are a very long way from real information about God—or even a Big Bang. However these arguments do demonstrate that what Big Bang cosmology might or might not say about God is in itself a very contentious issue.

Alternatives to the Big Bang

Fred Hoyle and the Steady-State Universe

Of course, another way of doing away with the possibility that the Big Bang supports theism is to deny that the theory is true at all. Not all cosmologists were impressed by the Big Bang theory when it was first developed, and a few still remain unconvinced. One such vocal critic is British cosmologist Fred Hoyle. From the early days of Big Bang theory, he found the theory highly unsatisfactory. In the fifties, he complained that there was no evidence whatsoever in our galaxy that such an explosion had ever occurred. Even now, he is sceptical of the strength of the evidence.

> Almost every week nowadays one reads that the Universe originated in a Big Bang, not *might* have originated that way, but *did* originate that way, undoubtedly. A detailed picture is developed of how all the matter in the Universe was compressed essentially into a point source that exploded at some definite moment in the past. The truth is that we have

11 See William B. Drees, 'Quantum cosmologies and the "beginning"', *Zygon*, 1991, *26*, pp. 373-96 for discussion of Hawking and other models for the universe, and how they are affected by metaphysical biases.

> no such knowledge. All one can properly say is that, if there was a Big Bang of a certain kind, then there would be consequences which happen to match one particular observed aspect of the world relating to the abundances of the so-called light elements—which it is also possible to explain otherwise.[12]

Hoyle even describes Big Bang believers as creationists, which is not a compliment from him. He ascribes belief in the Big Bang to the same kind of (what he sees as) irrational faith as shown by Christian groups of whom he is highly contemptuous. Indeed, it seems he thinks Big Bang cosmologists are even worse that Christian creationists, for they're not even consistent.

> The odd thing about modern scientific dogma is that to be respectable you must be a half-believer in creationism. You must believe matter to have arisen in a Big-Bang Universe by special creation, but you must not believe that biological species arose by special creation. Those who believe both are considered beyond the pale, as are those—like ourselves—who believe neither.[13]

In opposition to this, Hoyle and a few colleagues developed the 'Steady-State' theory, which he still promotes with some adjustments.[14] This involves the continuous creation of matter. His original theory postulated that new galaxies condense out of the background material at just the rate necessary to compensate for those which are 'lost' because they pass beyond our observable Universe. That is, all galaxies are accelerating away from each other, but this does not

12 Fred Hoyle and Chandra Wickramasinghe, *Our Place in the Cosmos*, J M Dent, London, 1993, p. 10. For Hoyle's earlier reaction to the Big Bang theory, see *The Nature of the Universe,* Basil Blackwell, Oxford, 1953, p. 94.
13 *Our Place in the Cosmos*, *op. cit.*, p. 13.
14 For a recent version, see F. Hoyle, G. Burbidge and J. V. Narlikar, 'A quasi-steady state cosmological model with creation of matter', *The Astrophysical Journal*, 1993, *410*, pp. 437-457.

imply a single beginning in the past. Rather, galaxies continue to be created and continue to expand away from each other. The matter that fuels these galaxies is perpetually being created from nothing. This creation of material is also what drives the outward expansion; its creation produces an outward pressure that makes the universe expand. The universe thus goes on forever, as it always has.[15] There is no need for a creator God, because there was no beginning.

Hoyle's theological (anti-Christian) prejudices are well known, and there is little doubt that they were a strong element in his dislike of the Big Bang. Scientifically, he has been very persistent in presenting evidence for his alternative theory, but it has gained little acceptance amongst cosmologists. He remains rather a maverick in the scientific community.[16] Nonetheless in the fierce partisanship of his theory—and his derision of the Big Bang—Hoyle continues undaunted.

The bouncing universe

Perhaps the universe is eternal, but not in such a continuous sense. A theory commonly described in popular summaries of cosmology postulates that although our universe began with the Big Bang, that is not the end (or the beginning) of the story. Rather, there is an eternal chain of universes, beginning with Big Bangs, ending with Big Crunches (the opposite of a Big Bang), then starting all over again.[17] If this were the case, then the universe just cycles, over and over,

15 See *The Nature of the Universe, op. cit.*, especially chapter VI.

16 Although Hoyle is strongly against theism, science writer Paul Davies has recently ascribed to Hoyle some rather odd views about the universe—that superbeings who will evolve far in the future send back psychic messages to the scientists of today, which is the experience of scientific 'inspiration' that occurs to scientists sometimes. Paul Davies, *The Mind of God: Science and the Search for Ultimate Meaning*, Penguin Books, London, 1992.

17 For instance, see *ibid.*, pp. 50-55. Davies also discusses the postulation of multiple universes, pp. 215-221.

forming, expanding and collapsing, and forming again.

This model is, in fact, one of the possible solutions to Einstein's equations in his general theory of relativity.[18] However, as a realistic model for the universe it has severe problems. For one, the 'bounce' from Big Crunch out to Big Bang again requires some force that would reverse the force of gravity; something that would make the crunch 'turn around' and begin expanding. It cannot really be a 'bounce', of course; there is nothing to 'bounce' from. No such reverse force is known. Moreover, the same law which means our universe will eventually end—the second law of thermodynamics—still applies. Physical processes still 'use up' energy, or create entropy, and so you cannot have a series of universes that keep cycling steadily forever.

For many people, nonetheless, the idea of a chain of universes is a more satisfactory explanation than that there might be a God. Universes just eternally form and are destroyed, over and over. As the director of Britain's Royal Greenwich Observatory, Dr Jasper Wall, commented recently, "A lot of people are comfortable with a cycling process. It stops you asking the question what came before the Big Bang."[19] Despite the lack of evidence, this idea survives with a great deal of tenacity—it makes people feel more comfortable. After all, if universes just come and go in an infinite chain, there is no need for a creator God.

However, as the Oxford philosopher of religion, Richard Swinburne, has pointed out in his book *The Existence of God*, this reasoning is faulty. Even if the universe is of infinite age, in whatever form, it still requires explanation. Why is it there? Why is this series of bouncing universes happening? If the only causes of any *particular* state of the universe are prior states, the *set* of past states as a whole will have no cause and so no explanation. It is true that, in this case, every particular state has an explanation (whereas with a

18 As discovered by mathematician Alexander Friedmann.

19 Quoted in 'The big bang or the big crunch?' *Sydney Morning Herald*, 27th June 1998.

Big Bang, the first state does not) but there will still be no explanation for the series as a whole. In that case the existence of the universe over infinite time will be an inexplicable fact.[20] Even if universes stretch back to eternity, people have not rid themselves of the question 'why?'—they have just moved it up one level.

Furthermore, the universe will have during its infinite history certain features, even though certain other features would have been equally compatible. For instance, why is there a certain amount of matter in the universe and not a different amount? A law of conservation of matter would explain why, given a certain amount, it remains, but not why that certain amount is there at all.

So even if each state of the universe at each instant of time has a complete, scientific explanation, the *existence* of the universe at each instant of time, and its having certain features, have no explanation at all. By definition, a scientific explanation cannot explain these things because it can only explain in terms of a previously existing state. The existence over time of a complex physical universe cannot have a scientific explanation. If you are committed to materialism, then it occurs unexplained.

Why not just accept it? This is a common materialist objection to debates about the existence of God. After all, theists do not try to explain God; they say, he was always there, and is the end of all explanation. So, the materialist asks, why not stop at the unexplained existence of the universe? If you have to stop somewhere, why not there? The answer is, God is a much simpler explanation. As Swinburne says, "There is a complexity, particularity, and finitude about the universe which cries out for explanation, which God does not have."[21] Existence at all seems vastly improbable; and the existence of the universe has a vast complexity compared with the existence of God. As

20 Richard Swinburne, *The Existence of God*, Oxford University Press, Oxford, 1979, p. 124.
21 *Ibid.*, p. 130.

Swinburne concludes:

> The existence of the universe is strange and puzzling. It can be made comprehensible if we suppose that it is brought about by God. This supposition postulates a simpler beginning of explanation than does the supposition of the existence of an uncaused universe, and that is grounds for believing the former supposition to be true.[22]

Stephen Hawking and imaginary time

We move now to a more esoteric alternative to the Big Bang, but one with a very influential name behind it. Stephen Hawking, who with Roger Penrose first demonstrated that the universe must have singularities, has since then been trying to get rid of them. His attempt to be rid of the Big Bang singularity is through a new theory which introduces imaginary time. Mathematically, this results in the universe having no singularities, in the same way a sphere has no edge. Hawking hopes that eventually a theory of quantum gravity, unifying quantum and relativity theory, will vindicate his ideas.[23]

This is almost impossible to imagine in everyday terms, but it can perhaps be imagined in mathematical ones. The expanding universe is represented in imaginary time by concentric circles growing outward from a point of space-time, reaching a maximum size and then contracting again to a point. At the points there are no edges or singularities; it is like a sphere. In such a theory there is no Big Bang singularity. The universe has zero size at both points, but is unbounded and has no beginning or end in time.

Hawking likes this theory because it means the laws of physics apply everywhere, even at the very initial point of the universe. Otherwise, the standard Big Bang theory

22 *Ibid.*, p. 132.

23 This theory is elaborated in Stephen Hawking, *A Brief History of Time: From the Big Bang to Black Holes*, Bantam Books, London, 1988.

requires that the laws of physics break down at the singularity. Hawking acknowledges that these are aesthetic preferences, rather than scientific ones.[24] He also admits this is just a suggestion and unprovable, but if it were true, this theory means God isn't necessary. Others have gone further; such as Carl Sagan in his introduction to Hawking's book. With this theory, Sagan states, there is "nothing for a creator to do"[25]—evidence of his own theological prejudices rather than any scientific conclusion. It is an old argument, and as we have seen above, it is easily refutable—the existence of the universe at all is still without explanation, and one answer is God. Nonetheless, Hawking's theory still continues to be popular with commentators precisely because it appears to be an alternative to the idea of God.

Fine tuning

Many people are fascinated by the beginning of the universe not just because it happened, but because it happened in such a remarkable way. There are many features of the universe, discovered by science and (on their own) relatively unproblematic, which make us wonder why they are there; because if they were slightly different, the universe may not have survived very long. These are features particularly relevant to us as humans, as they impinge upon whether we could exist in this universe at all. They are referred to as the 'fine-tuning' of the universe. This is a matter of drawing attention to the fact that certain variables about our universe are not only just right for human life, but if they were the slightest bit different, humans could not exist. It is not as if out of a vast range of possible values for these variables, our universe has just one of the many 'livable' configurations. Research has shown that there are not many 'livable' configurations; it would only take a tiny difference for us not to be here at all. That is a strange fact about our universe.

We will look at just some of the features that are 'fine-

24 *Ibid.*, p. 144.
25 Carl Sagan, in *ibid.*, p. xi.

tuned'.[26] First of all, certain laws about the ways in which fundamental particles and forces interact have to be very particular for the matter of the universe to be built up. The understood picture of the most fundamental particles of nature is that there are photons, leptons (including electrons), mesons, and baryons (including protons and neutrons). We get atoms when these particles bind together, to make nuclei with electrons arranged in 'shells' around them (not orbiting like a mini-solar system, as high-school models often have it). Atoms interact with each other, and the electrons of different atoms form bonds with each other, and so molecules are formed. To make the abundance of different substances we have in our universe, these atoms need to be large structures (on their scale), with plenty of empty space between nuclei and electrons.

This is where fine-tuning comes in. Two crucial ratios need to be very small (known as the fine structure constant and the electron-to-proton mass ratio). Their small value makes long chains of molecules possible (such as DNA, which is crucial to life). If they were much larger, these long chains of molecules could not be built; but if they were too small, the atoms would not be stable. Another crucial constant is part of the nuclear force, which binds particles within the nucleus together. This constant is such that only a neutron and a proton can be bound together. If this constant were 3.4% greater, two protons could be bound together, which would have meant that all the hydrogen would have been burned to helium in the Big Bang and so no stable stars could have formed. On the other hand, if the constant were decreased by 9%, protons and neutrons would not bind and so there could be no elements heavier than hydrogen. Either way, carbon could not exist, and so we (as well as most of the rest of the objects in the universe) could not be. A slight increase in the electro-magnetic force

26 For a more thorough account see John D. Barrow and Frank J. Tipler *The Anthropic Cosmological Principle*, Oxford University Press, Oxford, 1986.

would have the same effect.

As well as this, the initial conditions of the universe have to be very precise to allow the formation of the universe. Even with the right laws, the universe had to start off with precisely the right configuration and ratios of initial particles for intelligent life to form—indeed, for the Big Bang to be a success at all. It is not enough for the laws to be right; the conditions they have to work within have to be just right, too. So, for instance, the initial rate of expansion is critical. If the initial velocity of expansion were slightly greater, stars and the heavier elements would not have formed. Everything would have kept on shooting outwards, without coalescing into stars. If the expansion rate had been smaller, the universe would have just collapsed back in upon itself again. How much greater or smaller? This is a matter of a difference of one million millionth. Certain other initial conditions also had to apply. The distribution of radiation had to be slightly uneven, so galaxies and stars could be produced, but too much would have meant that black holes would form before stars could. There had to be slightly more baryons than anti-baryons, so the excess could become radiation; if there had been fewer baryons, there would not be enough matter for galaxies or stars to form. The list goes on for much longer than this, and the information is easily available, but enough has been said to make the point; we are in a very delicately balanced universe. Out of all the possibilities, some tens of variables had to be exactly right, within a very fine range, for the universe to work. Yet we find ourselves with this very unlikely universe.

There are various strategies used to explain this surprising fact about the universe. One is through the postulation that there is an infinite number of universes. It follows that, by the laws of probability, our universe with its particular arrangement of parameters would have to exist. After all, in an infinite number of universes, every possible configuration must exist somewhere.

It is true that this answers the problem. It is also true that this is one of the interpretations of quantum theory; that at every quantum instant the universe splits into mul-

tiple realities or parallel worlds. It is an idea that a lot of people consider very useful. The trouble is, there is absolutely no evidence, nor any way of gaining evidence, for such a theory. It is, as such, unfalsifiable. Another standard objection is that this is hardly an elegant theory; to explain one universe, you have to postulate an infinite number of others! Nonetheless, it remains popular because it 'explains' the universe with no recourse to God. This is even stated quite blatantly at times. One *New Scientist* article has recently argued: "But the main reason for believing in an ensemble of universes is that it could explain why the laws governing our universe appear to be so finely tuned for our existence…This fine-tuning has two possible explanations. Either the universe was designed specifically for us by a creator or there is a multitude of universes—a 'multiverse'".[27] Given the two options, the unstated and unchallenged assumption insists that obviously the one without a creator has to be more likely.

The alternative answer that can be given is that the incredible fine-tuning of the universe points to intelligent design. This is a version of the anthropic principle, which in general uses the existence of human beings as central to the explanation of the universe. In this case, the argument is that for God to create a universe in which intelligent life could exist, the parameters had to be very finely adjusted, against all odds. The very tenuousness of our existence is evidence for an intelligent designer God. This is the argument of Richard Swinburne from Oxford, and John Polkinghorne, an ex-Cambridge physicist.[28] Others discuss the same idea, but in less Christian terms; for instance, John D. Barrow and Frank J. Tipler in their book *The Anthropic Cosmological Principle*. Perhaps the most famous current author in this vein is Paul Davies, who does not believe in a personal

27 Marcus Chown, 'Anything goes', *New Scientist*, 6th June 1998, pp. 26-30, p. 28.

28 See most recently John Polkinghorne, *Belief in God in an Age of Science*, Yale University Press, New Haven and London, 1998.

God but nevertheless finds the existence and nature of the universe more than strict materialism can explain.[29]

Some people try to do away with the problem completely, by stating simply that if the universe were not right for life, there would not be life, so we would not be here to ask the question. This objection misses the point; rather, it just highlights the dilemma. Our universe is just right for living beings. Why? The fact that we are here to observe is the very thing that makes us ask the question. We want to know, out of all the possible universes that are not right for life, why do we have the astounding coincidence that the one which exists *is* just right for life?

The evolving universe

As with other aspects of cosmology we have discussed, there are always ways of avoiding theistic consequences. Physicist Lee Smolin has recently published a book in which he explains his own personal dream of a theory of the origin of the universe.[30] He is not satisfied with the 'multiple universes' argument, nor the anthropic argument. So Smolin has gone about resolving the problem a different way. Instead of asking how the universe developed such useful parameters once it was created, he suggests that this universe is actually the descendent of a long line of universes, which have been selected for their advantageous qualities in a Darwinian sense.

Basically, Smolin's theory is that universes are created out of black holes. He postulates that in every black hole, time does not actually stop (as Einstein's theory of general relativity says) but continues on; the difference is that the matter and energy unable to escape the black hole in our universe, explodes in a Big Bang to form a new universe. Like Hawking, Smolin uses a theory of quantum gravity to

29 From Davies' many books, *The Life of God*, *op. cit.*, provides a general discussion of his ideas; or see his first book, *God and the New Physics*, Penguin Books, London, 1983.

30 Lee Smolin, *The Life of the Cosmos*, Weidenfeld and Nicolson, London, 1997.

get away from the awkward unpredictability of singularities, but he has a different approach. Instead of trying to do away with singularities, as Hawking does, Smolin embraces them as a key part of his explanation of the origin and development of the universe.

At the moment, Big Bang cosmology leaves us with a singularity in which, apparently, time started, but which in itself is inexplicable. What could this mean? As Smolin sees it, there are three possibilities: that there is still a first moment of time even when quantum mechanics is taken into consideration; second, that the singularity is eliminated by some quantum mechanical effect, and time continues indefinitely backwards; or third, that something new and strange happens to time.

Hawking's imaginary time, Smolin says, falls within the third category. But what of the other types of solutions? If it turns out that the first category is true, then we have the problem of fine-tuning which still needs explaining. The parameters of the universe would have to have been set exactly in a short amount of time, which is highly improbable. However if somehow the singularity could be eliminated in the second category of explanations, then time does not begin at the Big Bang; indeed, it could stretch back indefinitely. In this case, we have to ask what happened before the Big Bang to set the parameters. This is the avenue that Smolin explores.

The general theory of relativity predicts that time slows down inside black holes, but what if, Smolin asks, it doesn't? If time goes on, then what happens? Maybe all the matter crunched up there is like the beginning of our universe; that each black hole is the beginning of a new universe. So maybe our universe came from a black hole in another one, which in turn came from another one, which gives us lots of time to play with to set the parameters. To prove Smolin's theory that our universe came from a black hole in another universe would require details of a quantum theory of gravity, which we don't have yet; but Smolin claims that it is plausible, and consistent with certain observations we can make about black holes in our universe. It also overcomes

the problems of the fine-tuning of parameters; they only appear to be fine-tuned, because they have had who knows how many lives of universes to develop. Eventually, in a Darwinian-like evolution of universes, we reached our universe which was also able to evolve intelligent life.

The details of the theory need not concern us here, as Smolin openly acknowledges that his theory is without basis in fact, and is highly speculative. He even introduces his book as being not "strictly speaking" a work of science.

> Instead, what this book does do is to attempt to sketch out a vision that has been taking shape in my mind during the almost twenty years that I have been studying and working on the problem of the unification of quantum mechanics and relativity theory.…thus what I am presenting in this book is a frank speculation, if you will, a fantasy.[31]

Nonetheless what makes his theory so interesting for the purposes of this article is Smolin's avowed motivation for developing it. He dislikes other explanations for the fine-tuning of the universe, such as the anthropic principle (which he describes as "mysticism") and the theory of multiple universes (which he considers "is not to reason, it is simply to give up looking for a rational explanation"). Moreover, Smolin even dislikes the purely materialistic search for a single unique mathematically consistent theory of the universe. This, too, he considers a kind of mysticism. "If in the end mathematics alone wins us our one chance in 10^{229} we would have little choice but to become mystics" (p. 45). The kind of scientific explanation which accepts that the laws of physics just are as they are, with no further explanation necessary, is tantamount to religious belief.

> Indeed, as we saw in earlier chapters, to choose the laws of physics so that such a variety of phenomena results, let alone so that the universe is not simply a gas

31 *Ibid.*, p. 6.

> in equilibrium, requires that many parameters be finely tuned, some to as many as sixty decimal places…if we believe in the picture of a universe made by the providential choice of an eternal and fundamental theory, must we not also believe in God?[32]

In other words, Smolin thinks that even if we found the ultimate theory which 'sets' the parameters for the universe, it would still hardly be a good explanation for the universe. In fact, that such a thing could just happen by chance is so unlikely, that we may as well believe in God. This is rather ironic, considering that for years those materialists who believed we would eventually find this ultimate theory have used it to dismiss God as unnecessary. Now this very concept is accused—by a materialist—of being unsatisfactory because it *requires* belief in God. Smolin is able to do this now because he has a materialist alternative. His theory is one with no evidence and a great deal of speculation, which supplies no more explanatory power than the idea that God deliberately created the universe. Nonetheless, he prefers his theory because it is naturalistic. What is more, Smolin is happy to acknowledge openly and unashamedly that it is this metaphysical bias that drives his theory—despite the fact that he condemns metaphysics (which he uses as synonymous to 'mysticism') in any other approach.

Conclusion

Despite all the discussion on science and religion, God, theology and atheism that surrounds the issues of the beginning of the universe, this is really a very poor field for insights about God. It is clear that presuppositions play a far stronger part than argument or evidence. Those who do not want to accept a theistic view can either deny that the Big Bang is true and develop an alternative theory of the beginning of the universe—and several are on offer—or else simply deny that the Big Bang supports theism. Those who already believe in God may be able to accept Big Bang cos-

32 *Ibid.*, p. 176.

mology as compatible with their view, but fail to convince those opposed that it is any kind of good evidence. What is more, no matter what theory of the universe is accepted, all can be demonstrated to have no conflict with theism, but all are also used by someone to argue for atheism.

If this demonstrates anything, at least it shows that those genuinely interested in discovering whether there is a God should look somewhere more fruitful. For instance, the New Testament documents which claim to be testimony that not only is there a God, but that he came to earth as a physical human being and was witnessed and recorded. This is a much better basis on which to have a discussion of God—for at least we know what we are discussing. The theoretical God who may or may not have created the universe, in ways yet undetermined, has very few obvious characteristics from which we could make predictions or discuss their likelihood. The God who came to earth is a particular person whose documentary evidence can be examined as any other event in history.

Perhaps the most interesting insight we gain from this discussion is the efforts to which people will go to avoid God. For some it is enough to believe something on no basis at all—as the bouncing universe, or multiple universe believers do. For others they will go to extreme, speculative lengths to avoid a theory which appears to favour God. This is not science; or at least, it is not empirical, observation-driven science. It is an ideological battle, which leaves us thinking that the accusation that Christians will believe anything, no matter how improbable, is aimed at the wrong target. This is one area where decisions are very obviously *not* made on the available evidence.

BOOKS & IDEAS

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Is this who we are?

Shane Ahyong

Life's Grandeur: the spread of excellence from Plato to Darwin
Stephen Jay Gould, Jonathan Cape, London, 1996.

Identity can be a vexing issue. It deals with basic questions of human existence. Are we important, or great, and on what criteria? Regardless of the criteria used, arrogance usually follows greatness (or at least the perception of greatness)—consider King Nebuchadnezzar of Babylon, or not a few sporting stars.

Are humans great? Even before Darwin published *The Origin of Species* in 1859, the human species, *Homo sapiens*, was popularly portrayed as the pinnacle of life. *Homo sapiens*, therefore, was great—not because God had declared it so, but because biology had produced a truly complex, intelligent, self-conscious being, a being who could be rightly arrogant before all other creatures. In *Life's Grandeur*, Stephen Jay Gould again considers evolution and in particular the removal of human arrogance from an evolutionary throne.

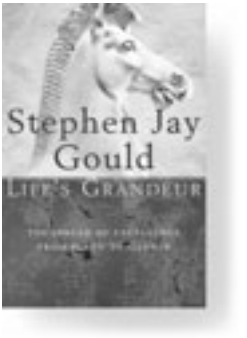
Gould offers some major correctives to popular ideas of evolution. In particular, he attacks 'ladder thinking', the belief that evolution is teleological (directed towards some end) and so necessarily involving a concept of progress. 'Ladder thinking' predated Darwin, but whether or not Darwin himself promoted or rejected the idea of progress in evolution is less clear.[1]

1 See R. J. Richards, *The Meaning of Evolution: the Morphological Construction and Ideological Reconstruction of Darwin's Theory*, University of Chicago Press, Chicago, 1992; P. J. Bowler, 'The changing meaning of 'evolution'', *Journal of the History of Ideas*, 1975, *36*, pp. 95-114 and *Life's Splendid Drama: Evolutionary Biology and the Reconstruction of Life's Ancestry, 1860-1940*, University of Chicago Press, Chicago, 1996, for differing accounts.

'Ladder thinking' sees the history of life as a linear progression from simple to complex. Through a linear series of steps, beginning with the simple, organisms evolved towards increasing complexity, through the invertebrates, then vertebrates, up to us. Seen in this way, evolution is like a ladder with humans at the top.

To many people, this image of evolution gives humans purpose by projecting them as the inevitable end point of the process. It is not restricted to the popular media (although it is seen mostly in the popular domain)—the examples of evolution of horses in many school textbooks fall into this very trap. The horse example typically shows a linear and progressive increase in body size, decreasing numbers of toes and increasing height of teeth. The actual picture presented by scientists from comparative biology and the fossil record is far more complicated, Gould says. The lineage of horses represented in this example is only a small part of the whole family tree of horses, which overall shows much more variation in size and the other parameters than implied by a linear progressive model. The fossil record suggests that horse evolution is not like a ladder, but like a continuously branching tree.

Likewise, the history of life, according to Gould, is more accurately represented as a continuously branching tree



or bush. If we are to understand evolutionary theory properly, we must not fall prey to popular misconceptions. 'Ladder thinking', Gould insists, must be replaced by 'tree thinking'. In evolutionary terms, *Homo sapiens* is not at the top of the ladder, but at the end of a branch of a very large tree. Therefore, for humans to see themselves as preeminent *because* of being the natural endpoint of evolutionary process is unjustified—and parochialism, or anthropocentrism, is largely to blame.

No less central to Gould's thesis is an attack on the popular misconception that "progress characterizes the history of life as a whole or even represents an orienting force" (p. 3). This "bias of progress expresses itself in various ways, from naive versions of pop culture to sophisticated accounts in the most technical publications" (p. 21). Beginning with simple, single-celled organisms, evolution has moved towards the more and more complex, this miscon-

ception goes. Also, because more complex organisms arose progressively and more recently, then evolution is moving towards increased complexity overall. Evolution drives towards increasing complexity and *Homo sapiens* is the inevitable outcome of these basic laws of nature. This popular view of the history of life, with increasing overall complexity, is flawed, Gould says, since overall complexity has not changed. Humans are complex, it is true; but considering all life forms on earth, the simple ones actually dominate.

Gould illustrated his point with several bell curves. The tail of the curve can expand or contract, without affecting the mode (the data point with the highest frequency). The data points on the extremes of the curve are rare, and never representative of the whole. When the curve is taken to represent all living things, then the more complicated organisms, like humans, represent extremes on the tail. In relation to all other life, however, complex beings are rare, and can neither claim to be 'typical', nor dominant representatives of all living things. Considering the whole curve shows no total increase in complexity. In fact, both in numbers of species, numbers of individuals, and biomass, the simple bacteria are still the dominant organisms on the Earth. "Life has always been dominated by its bacterial mode" (p. 4) and should the world continue as it has for several more million years, bacteria will probably still be here after we've all gone. That is, Gould insists that there is no story of triumphal progress to be told in evolution. It is not a process leading up to man. It just is.

As usual, Gould's style is easy and conversational. He does elaborate on various ways of analysing statistical trends, as important underpinnings for his discussion. These are explained very simply with examples as diverse as cancer statistics and baseball batting scores. Those unfamiliar with basic maths and biology may have to work a bit harder than usual, but the effort is nonetheless worthwhile. Regardless of whether one accepts or rejects evolution, Gould's insights and correctives of some major misconceptions are important if one is to interact with up-to-date evolutionary theory.

So far so good, and Gould's discussion is loaded with other insights into biology, palaeontology and numerous snippets from mathematics and history. However, whereas in other books Gould often makes considerable social comment 'along the away', *Life's Grandeur* is more focused on getting the message across about right and wrong views of evolutionary progress. Finally, having spent the first fourteen chapters debunking the idea of linear-

ity and progress in evolution (and pruning human pride, as he sees it, gently down to size), the final chapter briefly examines the inevitability of progress in human culture.

The calibre of the final chapter is not commensurate with the preceding fourteen. I had the distinct impression that this final chapter was a kind of concession for us (now) deflated humans. In essence, Gould explains that unlike (statistically) random indirect natural processes as assumed by evolutionary theory, human cultural change can be directed. Directional change moves far more quickly than indirect Darwinian processes because we consciously participate. Therefore, the potential for progress in fields of human endeavour is enormous—consider how technology has advanced in the last two centuries. This, not evolutionary position, is where human significance lies. After all, we are not at the top of the ladder according to Gould, but on the side of a tree. If we attempt to claim significance and identity because of our position in nature, we must first compete with the sheer weight of the world's bugs. By implication, then, since we have such potential to make great strides with cultural change, we are encouraged to find significance in our achievements in the arts and sciences.

This concession is quite bemusing since we must return to our anthropocentric parochialism (for which we were chided earlier on) for this reassurance to hit the mark. We have to assume that human achievements are so much better than any other species' contribution to the planet. Moreover, after spending so much time explicating 'life's grandeur' in all its forms and variation, why include this token piece of reassurance anyway? Perhaps because Gould recognizes that we like to take identity and significance from qualities we consider intrinsic to ourselves—something we can boast about and claim to be truly our own. If we can't claim evolution's crown, at least we can bask in our achievements.

What a let down in the light of life's two certainties! Enough great literature has been written to demonstrate that our material achievements are fleeting and do not satisfy the human search for meaning. It seems as if Gould has pulled away any sense of pride from the human race without offering a suitable alternative—although he wants to. This search for significance seems rather hopeless.

Gould has pointed out admirably the problem of trying to build society, and understanding what it is to be human, on the basis of an evolutionary world-view alone. It leaves us without meaning, with only our meagre achievements to lean on. What this

view does not recognize is that significance is imputed, not intrinsic—we matter because God thinks we matter, regardless of whether we happen to be on top of a ladder or on a branch of tree. At least Gould has taken away one false standard for valuing humans—unfortunately he doesn't have the answer.

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Lancelot Edward Threlkeld: A missionary for Aborigines

Richard Morrison

In 1997, the bicentennial year for Newcastle, NSW, Richard Morrison initiated the publication of an old translation of Luke's Gospel into the aboriginal language Awabakal. This publication, a gesture in recognition of the reconciliation movement, placed a large part of the recorded language of the Awabakal people (last published over 100 years ago) back into the public domain.

The translation was done by Lancelot Threlkeld, a missionary to the aboriginal people around Newcastle. Here Richard presents us with excerpts from Threlkeld's journal which provide an insight into his work, and his startling understanding of and sympathy for aboriginal culture in a time when European science and custom condemned Aborigines to sub-human status.

> During my residence in New South Wales I have sustained a threefold office, arising out of my employment as a Missionary in which I have endeavoured to act conscientiously and justly towards my own countrymen, as well as to the Aborigines whenever I have been thereto called by Duty—
>
> 1st As Protector, to which circumstances called me ever since 1825.
>
> 2dly As Interpreter, In many cases which unhappily occurred at the Supreme Court.
>
> 3dly As 'Evangelist', In making known the Gospel to the Aborigines in their own tongue.[1]

1 Niel Gunson (ed.), *Australian Reminiscences and Papers of L. E. Threlkeld: Missionary to the Aborigines, 1824-1859*, Australian Institute of Aboriginal Studies, Canberra, ACT, 1974, *1*, p. 140.

In this way Lancelot Edward Threlkeld summarized his missionary work among the Awabakal people of Lake Macquarie near Newcastle. This little-known figure of Australian church history spoke and worked passionately for the welfare of Aboriginal people in the early days of the colony.

Considered by many to be an irascible, obstinate, eccentric figure, Threlkeld nevertheless showed great concern for the people to whom he ministered, even against the conventional wisdom of his time. In a context which often equated Christianity with European civilization, he understood the importance of indigenous language and strove to work with indigenous lifestyle rather than suppress it.

Threlkeld arrived in the colony in 1824 after pastoring a Protestant congregation in Rio de Janeiro and working as a missionary in Tahiti. He intended to return to England where he hoped to marry, after the death (in Tahiti) of his first wife, with whom he had four surviving children. He was detained in Sydney, however, by local evangelicals, including Thomas Arndell, surgeon to the First Fleet. Within a year Threlkeld had married Arndell's fourth daughter, Sarah, and had committed himself to the task of establishing a mission to the Aborigines under the London Missionary Society.

After an initial suggestion that the mission be established at Morton Bay (Brisbane), Lake Macquarie (just south of Newcastle) was chosen for the site. 10 000 acres near the entrance of the lake was reserved by Governor Sir Thomas Brisbane in trust for the Aborigines, although never granted. A deputation from the London Missionary Society pledged to take financial responsibility for Threlkeld's mission and on Sunday, 8 May 1825, Threlkeld arrived in Newcastle.

From the beginning Threlkeld showed a highly independent, compassionate and in many ways progressive approach to mission. As soon as he arrived in Newcastle he began to associate with 'the blacks'. Threlkeld's journal records[2] that within the first two weeks of arriving in Newcastle he was visiting their camps, attending their dances, offering medical assistance, and engaging in conversation about God with a few who spoke broken English.

It was not long before Threlkeld found himself confronted with the demands of justice in the society into which he had come to minister. His journal speaks eloquently:

> *Monday 12 December 1825*
> A shout amongst the Aborigines attracted my attention, on look-

2 *Ibid.*, *1*, pp. 88-89.

ing I saw an Englishman beating the Blacks. They called out to me and I ran and demanded the reason of his thus acting. He replied that the Blacks insulted him, but I found that a little girl about 10 years of age had hid herself in the water from his violence and that it was the father of the girl the man was beating because he would not consent to his little daughter being taken away by the fellow. The father's head was cut and the blood flowed plentifully from another wound in his back. I told the Englishman that I should have him to the Police Office for his offence, as no one should wantonly insult the Blacks, with my knowledge with impunity. It is not at all surprising that men are murdered in the Interior, when even in the vicinity of a town they are grossly maltreated by the prisoners on account of the Black women.

Tuesday 13 December 1825
Lodged the complaint against the Overseer of the road gang for assaulting the Blacks. I argued with bench of three Magistrates, two were against me, and one viewed the matter as I did: At length they agreed to my request, viz: That the Overseer should be reproved and informed that Aborigines are under British protection, and cannot be assaulted with impunity; The man was ordered to appear the following day.

Wednesday 14 December 1825
The Overseer of the road gang appeared at court to answer the charge of assault and after a reprimand was discharged. I mentioned several cases of assault and violence towards the Blacks to shew the necessity of my interference.[3]

It is unfortunate that subsequent Australian history has degraded Threlkeld's use of the term 'Protector' with reference to Aborigines. Throughout his ministry many Aboriginal people did look to Threlkeld for protection. In addition to defending numerous Aborigines in court, Threlkeld also documented atrocities, wrote reports, submissions and appeals,[4] and actively campaigned for the right of Aborigines to appear as witnesses in court.[5] It was testimony to Threlkeld's commitment that an Act to allow the Aborigines of

3 *Ibid.*, *1*, p. 91.
4 Henry Reynolds, *This Whispering in our Hearts*, Allen and Unwin, 1998, p. 64.
5 Gunson, *op. cit.*, *1*, p. 158.

New South Wales to be received as competent witnesses was ever sent for Royal approval. That it was returned from England without such approval was a profound disappointment.[6]

Attitudes in the colony towards Aborigines varied from the kind but pessimistic view of Samuel Marsden:

> With respect to the civilisation of the Blacks, it appears to me an almost hopeless task,…they have no wants…their only desires are for spirits and tobacco…they appear to have no reflection, no forethought, they never provide for tomorrow…they appear never to form any real attachment to any European, however kind they may be to them…they have no regular government, no Chiefs, no subordination, every man does what is right in his own eyes.[7]

to the obnoxious general view, which Threlkeld reported as one commonly held in the early colony:

> [they are] a species of the baboon, that might be shot down with impunity, like an Ourang Outang.[8]

Such attitudes not only served the purposes of those who abused the Aborigines but were given a kind of scientific credibility by the (now discredited) practice of phrenology, which claimed to measure intelligence and personality by the shape of the skull. Threlkeld's friend and supporter, the Attorney General Saxe Bannister, wrote to Threlkeld of one 'scientific' opinion:

> The French medical gentleman has confirmed his opinion of the innate deficiency of these poor people by a careful examination of many heads.[9]

Threlkeld's response to such attitudes was scathing.

> Perhaps the Aborigines think that there is an innate deficiency in the bulk of white men's skulls, which prevent their attainment of the native language. I feel exceedingly happy that the French examination ended in the head, for my business lies wholly with an organ that has escaped their notice,

6 *Ibid.*, *1*, p. 166.

7 Rev. Samuel Marsden's Report to Archdeacon Scott on the Aborigines of NSW (2nd December 1826), quoted in Gunson, *op. cit.*, *2*, p. 347.

8 Threlkeld, *Reminiscences*, in Gunson, *1*, p. 69.

9 *Ibid*, *2*, p. 186 footnote; letter 15 September 1825.

> namely: The Heart; but, had they even searched, and found an innate deficiency in that organ, I would then have smiled and retorted, my trust is in him who has said: "A new heart will I create within them".[10]

For his part, Threlkeld was convinced of the intelligence of the natives, especially Biraban, his language teacher. He applied himself to the task of learning the language of the local Awabakal Aborigines. His journal records:

> Went out with a party of natives who were going a hunting of the Bandicoot; by this means an opportunity is afforded of hearing them converse and thus a knowledge of their language may be obtained. Intercourse is the principal means of learning it on any correct principle.[11]

He reported to Saxe Bannister:

> With respect to seeing my system, it can be seen and known in two minutes, namely, first obtain the language, then preach the Gospel, then urge them from Gospel motives to be industrious at the same time becoming a servant to them to win them to that which is right. This is the sum and substance of our practice. We persuade Men. My present employment is, going with the natives in their hunting excursions with a book and pencil collecting words and phrases, which the natives shew the greatest readiness in pronouncing again and again not without laughing at my stupidity in not understanding quickly.[12]

Under the excellent tuition of his companion and language informant Biraban (also known as McGill), Threlkeld quickly learnt the language of the Awabakal people. He published notes on the language in 1827 and a grammar in 1834. Luke's Gospel was completed in 1830, and from there Threlkeld went on to translate the Gospel of Mark, a selection of stories from Genesis and some prayers for public worship.[13] It was a cause of grief to Threlkeld that "the unexpected great decrease of the Blacks"[14] prevented him from publishing the Gospel translations, or advancing very far in teach-

10 *Ibid.*, *1*, p. 91.
11 *Ibid.*, *1*, p. 90.
12 *Ibid.*, *2*, p. 187.
13 John Harris, *One Blood: 200 Years of Aboriginal Encounter with Christianity: A Story of Hope*, Albatross, 1994, pp. 56-57.
14 Gunson, *op. cit.*, *1*, p. 134.

ing those few with whom he had contact to read it. Threlkeld attributed this "unexpected great decrease" to a variety of causes, including chiefly European diseases, loss of lands, white violence and alcohol.[15]

Threlkeld's purpose in learning the language had never been either the anthropological task of recording of Awabakal for posterity, nor acting as court interpreter, but:

> acquiring a knowledge of the native language preparatory to the instruction of the Aborigines in the Gospel of God our Saviour, in the hope of their becoming Christians.[16]

Journal entries show that from his first weeks in Newcastle Threlkeld had begun to engage in dialogue with the Aborigines on specifically Christian themes.

> *Sunday 15 May 1825*
> Had some conversation with 4 or 5 natives who could speak a little broken English, questioned them concerning who made the Sun, moon, stars &c. One of them replied that long while ago one Black fellow threw the vermin from his head into the fire and they jumped up (or became) these things. When they were informed God made them, Me dont see was the reply for I do not know. Endeavoured to make them understand the object of my mission. They appeared pleased and asked where we should reside in the interior.[17]

At first it was Threlkeld's hope that once a mission station was established, a stable population of Aborigines at the station would be able to be educated and evangelized in their own tongue. However this stable population never eventuated. In response, Threlkeld attempted an itinerant ministry as illustrated by the journal of Sir Edward Parry:

> *11 July 1833*
> We assembled about fifty blacks at Tahlee, & Mr Threlkeld spoke to them for half an hour in their own language, endeavouring to lead their minds to a knowledge of a few of the leading points of religion. They were attentive and seemed much interested.[18]

Later still, Threlkeld formulated yet

15 *Ibid.*, *1*, pp. 136-7.
16 *Ibid.*, *1*, p. 119.
17 *Ibid.*, *1*, p. 88.
18 Quoted in *ibid.*, *1*, p. 117.

another plan to extend the areas of influence of Christian teaching:

> A few individuals may yet be benefited, and an important use might be made of this isolated situation remote from stock-stations, namely, by procuring some few couple of young Blacks from the interior, in the hostile parts, protecting and supporting them in his place, communicating to them religious and civil instruction; and whenever they express a wish to return, permit them, that they may communicate their new ideas to their own people, and thus they would become mediums of intercourse for the Protectors and others with the tribes of the interior, in the same manner as M'gill and other Blacks are to me in these districts.[19]

Finally Threlkeld realized that the place for his mission must be made to suit the Aboriginal culture, not the other way around.

> Many years have now elapsed in endeavouring to congregate the aborigines at this Lake without success; and as it appears that at Newcastle they not only assemble, but remain at that place, the distance of which prevents my frequent communication with them, it will be more advantageous to the residue of the tribes, who look up to me in every circumstance in which they feel themselves aggrieved, and convenient for myself to reside there, if our efforts for their becoming Christians are to be continued with any prospect of success, before the tribes become utterly extinct.[20]

This formed the basis for a proposal to the Government that such a move should be supported as a way of carrying out the "benevolent intentions of Her Majesty". He also recommended that a suitable building for Christian instruction of Aborigines be erected in Newcastle, that provision be made for their habitation, and that boats be provided for fishing which might enable them not only to feed themselves but also to engage in commerce. This, Threlkeld maintained, was only what the Aborigines had frequently asked of him. Submitting these projects to the Colonial Secretary, Deas Thomson, in his report for 1840, Threlkeld also proposed a system for maintaining these

19 *Ibid.*, *1*, p. 147.

20 *Ibid.*, *1*, p. 167.

facilities without heavy annual expense to Government. Nonetheless, in May 1841 Threlkeld was informed that

> The Governor cannot accede to the proposal made by you…[21]

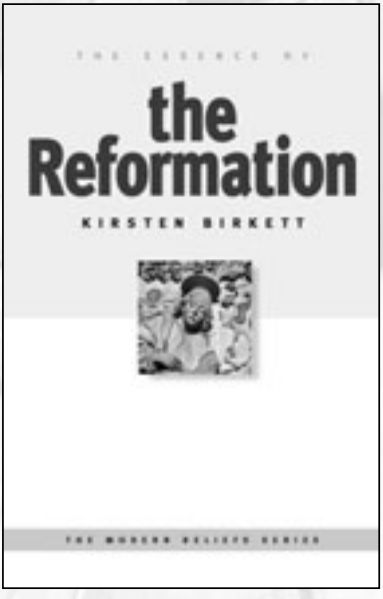
Threlkeld's ideas for Aboriginal ministry were remarkable for his time. Against a background of almost universal white ignorance of Aboriginal culture, his plans were particularly sensitive to the the Aboriginal connection with place. He sought to work with the fact that although there were well developed Aboriginal trade routes across the country, Aboriginal people preferred not to remain absent from their tribal lands for extended periods of time.

In 1842, Threlkeld returned to Sydney where he pastored a congregational church and engaged in mission to seamen. He maintained an active interest in the welfare of Aboriginal people until his death in 1859.

Threlkeld's seventeen years among the Awabakal people of Lake Macquarie did not establish any viable Aboriginal church, and certainly cost him dearly. As a protector, interpreter and evangelist, however, he was a clear example of commitment to Christ expressed in service to Aboriginal people.

Richard Morrison is pastor of Hamilton Baptist Church in Newcastle.

21 *Ibid.*, *1*, p. 168.



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