Christian Perspectives on Pain

J. Warwick Montgomery, A. Morinan, R. Trycross and A. Goodhead.
FAITH and THOUGHT
Faith and Thought is the operating name of
The Victoria Institute or Philosophical Society of Great Britain
established in 1865, charity No. 285871

OFFICERS AND COUNCIL

PRESIDENT
Sir John Houghton, CBE, FRS

VICE-PRESIDENTS
Professor D.J. Wiseman, OBE, MA, D.Litt, FBA, FSA, FKc.
Professor Malcolm A. Jeeves, CBE, MA, Ph.D (Cantab), Hon DSc (Edin),
Hon D.Uni (Stir), Hon DSc. (St. Andrews)
FBPs, FMedSc, PPRSE, FRSE.

Professor K.A. Kitchen, PhD.
Professor A.R. Millard, MA, MPhil.
Professor D.C. Lainé, Ph.D, D.Sc, CEng, FIIEEE, CPhys, FInstP
Professor J.W. Montgomery, Ph.D, DThéol, LLD

COUNCIL (in order of election)
Rev. Michael J. Collis, BA, BSc, MTh, PhD.
Terence C. Mitchell, MA, (Chairman).
A.B. Robins, BSc, PhD. (Editorial Consultant)
Rev. R.H. Allaway, BSc, MA, PhD
Professor C.J. Humphreys, CBE, BSc, MA, Ph.D
Professor D.W. Vere, MD, FRCP, FFPM.
Rev. J.D. Buxton, MA (Honorary Treasurer)
Rev. Rodney Holder MA, D.Phil, FRAS, FIMA
Rev. Nick Mercer BA, MA, M.Phil, PGCE
Reg Luhman, BD (Hons), MA

EDITORIAL ADDRESS
Reg Luhman, BD (Hons), MA,
110 Flemming Avenue, Leigh-on-Sea, Essex. SS9 3AX

ADMINISTRATION ADDRESS
Rev. J.D. Buxton, MA, 15 The Drive, Harlow, Essex. CM20 3QD.
E-mail: j.buxton@virgin.net

HONORARY SECRETARY
Brian H.T. Weller, 41 Marne Avenue, Welling, Kent. DA16 2EY.

BANKERS
Barclays Bank plc, Westminster Branch, 2 Victoria St., SW1H 0ND.
Editorial

This edition of the journal is devoted entirely to the publication of papers read at the symposium, Christian Perspectives on Pain. As a consequence details of the AGM, which would normally feature, will be reported in the April 2008 edition as will a number of book reviews. An appreciation of the life and work of Gordon Barnes, who died on May 30th and was for many years chairman of the council of the Victoria Institute and a regular and valued contributor to the journal, will also appear in a future edition.

Pain in Theological Perspective

John Warwick Montgomery
Ph.D. (Chicago), D.Théol. (Strasbourg), LL.D. (Cardiff)
Professor Emeritus of Law and Humanities, University of Luton
Vice-President, Victoria Institute

I. The Issue

Though our subject is far from humorous, we begin with a quotation from Matthijs van Boxsel’s The Encyclopaedia of Stupidity—a passage in which he commences his discussion of “No Pleasure Without Pain” with Menander and relies, at the end, on Slavoj Zizek’s Le plus sublime des hystériques (Paris, 1988):

I learned my greatest lessons
from the distress of others.
Menander, Sententiae . . .

All of us dwell in the confused realm of beneficial blunders, of actions that succeed because of their failure. We operate in the area that lies between wise intention and mere fluke. And that lends an unintentionally comic aspect to all our actions. Every action that crosses the threshold of possibility and is realised in the full sense of that word, contains at bottom an element of idiocy.¹

Van Boxsel, whether he understands it or not, is here accurately describing one of the numerous manifestations of life in a fallen world. But our concern in this paper is not with pain as a positive phenomenon, or even with pain per se, but with seemingly irrational pain. Neither theologically nor in other respects does the kind of pain which warns of danger or which is a necessary concomitant of healing create difficulty.
“Senseless” suffering, such as we see when innocent children are destroyed or mutilated in war, sickness, plague or famine, makes our anger and impatience rise. . . . When senseless pain is apparently not merely adventitious, but designed, the average honest-thinking person tends to lose restraint in considering it.

A good example of this arises in considering, as did C. S. Lewis, the deafness of a musical genius such as Beethoven. An absolute master of the art and science of sound struck down with stone deafness! Could a greater refinement of apparent sadism be conceived? Hence the impatience of many when they merely begin to consider the problem of suffering.

In the face of such apparently irrational or designed miseries, four major approaches have been taken: (1) Evil is not ontologically real—it only seems to be such. (2) There is no God. (3) There is a God, but he is indifferent to such pain and/or lacks the moral quality to eliminate it. (4) There is a God, but he lacks omnipotence and is thus unable to prevent pain of this nature. (5) There is a God who is both infinitely powerful and infinitely good, and such miseries are in fact logically compatible with his existence.

The view that evil is not in fact real but only appears to be such is doubtless the least attractive of these options, since it flies in the face of universal human experience. One thinks of the Christian Scientist who declared, after being stuck with pin: “The illusion of pain was as bad as the pain would have been.” If one must predicate of an illusion all the qualities of reality, there is little point in treating it as illusory.

In spite of the fact that unbelievers such as John Mortimer invariably fall back on the “problem of evil” as their major justification for denying God’s existence, the atheistic answer faces overwhelming difficulties. Philosophically, a contingent universe by definition requires an explanation outside of it—that is to say, a transcendent explanation. Scientific illustrations abound: Olbers’ paradox; the Second Law of Thermodynamics; the impossibility of accounting for mind by the characteristics of the human brain. The case for “intelligent design” is so powerful that even lifelong atheist Anthony Flew has moved to a Deistic worldview.

One of the most serious practical problems with the secularist approach to pain is that since nothing (including pain) has inherent moral value in an atheistic universe, suicide and assisted suicide are legitimate responses to excessive suffering. The loss of respect for human life is a natural consequence of such a worldview. Thus it was not in the least strange for Deistic sceptic David Hume, the 18th-century critic of biblical miracles, to assert in his essay Of Suicide that “the life of a man is of no greater importance to the universe than that of an oyster.”

As between (3) and (4)—an immoral God or a finite God—it is hard to decide which is less satisfactory. An Aristotelian Deity, indifferent to the plight of his creatures, is hardly an attractive option. Even less attractive is the God of personalist philosopher Edgar Sheffield Brightman or process philosopher Charles Hartshorne—a God who is
doing the best he can in the face of cosmic misery and would appreciate all the help we
can give him. In point of fact, any rational choice between these two highly questionable
alternatives would be impossible unless God revealed his true nature to finite beings
obviously incapable of arriving at independent, transcendent knowledge of him.

This brings us to the classic Christian position, namely, that the existence of apparently
irrational and certainly genuine evil in the world is logically reconcilable with the existence
of the God of the Bible, who is there presented as both omnipotent and perfectly good.

II. The Christian Response

Two major approaches to resolving the problem of evil have been employed in the
history of Christian theology. The first is that of the sovereignty of God; the second
locates the cause of evil in the freedom of the creature to act against divine standards.
These two approaches are not incompatible and, as we shall see, both have a part to
play in aiding our understanding of this acute issue of theodicy.

Because arguments based on God’s sovereignty can seem to exclude the moral dimension,
modern apologists for the faith have generally relied more on the creature’s misuse of
freewill to explain how the evil in the world could come about and persist even when
that world is in the hands of a loving, all-powerful God.

C. S. Lewis’ little book, The Problem of Pain, is perhaps the best known and most
attractive contemporary example.

More recent endeavours along the same line include Richard Swinburne’s claim that
evil plays an essential role in creating a context for moral and spiritual development,
and the revival of the “greater good”/“fortunate fall” argument.

Because of the critical importance of this issue not only for the case for the existence of
the Christian God but also for the validity of the biblical Heilsgeschichte, we are taking
the liberty of reproducing here the detailed argument contained in our Tractatus Logico-
Theologicus. At very least, this should stimulate the reader to examine the problem in
depth and to appreciate how effectively Christian revelation deals with it.

4.8 Over against the biblical worldview - indeed, contra the very existence of
the God of the bible - looms the Problem of Evil: how can there be a God
who is both perfectly good (and therefore opposed to evil) and all-powerful
(and therefore capable of eradicating evil), when the world displays the
presence of evil on so many levels?

4.801 As we shall soon see, and as Wittgenstein himself emphasised, absolute
moral judgments can only be justified transcendentally; it follows that the
atheist, having by definition no such absolute source of morality, is in a
particularly disadvantageous position logically to offer ethical criticism of
the actions of Deity.
4.802 We have already noted the inadequacy of trying to handle this issue by maintaining that God lacks omnipotence (Brightman): such a finite god is not the God of Scripture or the Father of our Lord Jesus Christ; and he does not in any event constitute an attractive object of worship.

4.81 The earliest chapters of the Bible inform us that evil in the human sphere originated because the first humans chose to violate God's express will, and that, in consequence, they and their descendants suffered pain and death, and the natural world itself lost its perfection (Genesis 3:15-19).

4.811 The tempter in that scenario is identified elsewhere in Scripture as the devil, a former angel who himself fell as a result of a similar insistence on following his own way rather than acknowledging the sovereign will of God (Isaiah 14:12-15; Revelation 12:9, 20:2).

4.82 It follows that evil was not created by God but came about as the result of God's creatures' misuse of their freewill.

4.821 Evil is neither a mere "absence of good" (Augustine) nor a substance: it refers to a broken relationship between the creature and the Creator; from that broken relationship follow concrete evils (plural) - sickness, death, crime, environmental catastrophe, etc.

4.822 Evil is not something God created; it is a perversion of the right relationship with him, for which the creature is responsible.

4.83 Natural evils can follow from perverse human decisions, just as physical illnesses are often produced psychosomatically by wrong psychological attitudes.

4.831 Many so-called "natural catastrophes" today (such as African famines) are in fact the product of human neglect of the environment or bad use of natural resources.

4.84 When the Bible asserts that the sin of Adam passed to his descendants, so that the entire human race is corrupted and needs salvation (Romans 5:12), it speaks both biologically and sociologically: every human generation is born into the sinful context created by past generations, is impacted by them, and adds to the burden for the future.

4.841 The Hebrew word Adam, like the Greek anthropos and the Latin homo, means "mankind"; in that sense, the first man was a representative of the entire race - a kind of perfect statistical sampling of mankind in general.

4.8411 Thus the truth of the old school-book doggerel: "In Adam's fall, we fell all!: had you or I been in the Garden, we would have done the same as Adam and Eve did, so we are in no position to blame anyone else for our condition.
Moreover, if we are honest with ourselves, we know that we have, by our own personal, conscious decisions, gone against the best dictates of our own conscience - to say nothing of divine standards.

The key to understanding why the continuing presence of evil in the world is not a bar to the existence of the God of the Bible is, then, the reality of freewill.

Even if one operates with a Calvinist understanding of God as the predestinarian Sovereign, the Problem of Evil is not insoluble, since God (not man) sets the standards of cosmic morality (Plantinga).

"C’est le Père Noël qui fait la classe aux lutins. Quelquefois, il perd patience et les menace d’appeler le directeur, mais les lutins savent bien que c’est pour rire; c’est lui, le directeur" (G. Solotareff, Dictionnaire du Père Noël).

Scripture, as a matter of fact, presents the interrelationship of predestination and freewill as a mystery: man’s freewill is genuine and one must believe in order to be saved (John 3:16; Acts 16:30-31), yet salvation is God’s work alone - even faith being the gift of God (John 1:12-13; Ephesians 2:8-9).

As Luther put it, fallen humanity has all the freewill needed to choose a preferred path to hell - but not the capacity to climb to heaven - since salvation is a matter of God’s grace alone.

“Double” predestination (God’s choosing not only the saved but also the damned) is an obnoxious and unbiblical doctrine; and so is the Arminian teaching that we have the capacity to assist in our salvation by contributing our faith (or our “predisposition toward faith”) to the salvatory process.

The revelatory facts take precedence over the logical difficulty; as already noted, when fact and logic conflict, facts win.

God is love (1 John 4:8, etc.), and love entails freewill (John 7:17): the biblical God is not a puppet master, pulling strings so as to force his creation to do what he wishes (C.S. Lewis).

Enforced love would not be love at all; it is rape - metaphysically even if not physically.

Every lover (and parent) knows this, or should know it: you want your intended or your child to love you in return, and to do what is best, but to force this upon the object of your love is to destroy the possibility of a genuine, reciprocal love-relationship.

Freewill means the possibility of rejecting love as well as of accepting it - with all the negative consequences which flow from such rejection.

If the rejection is everlasting, the negative consequences will likewise be
eternal and everlasting; such a choice cuts one off from all goodness and love, and leaves one with only one object of worship: the egocentric self which has been the source of the problem from the outset.

But does not determinism - biological or otherwise - prevent our recourse to freewill as an explanation for the Problem of Evil? Certainly not; for:

Determinism contradicts human experience (even the determinist functions as if he were making free decisions); and

Determinism is self-defeating (were it universally true, then the determinist philosophy itself would have been predetermined and could not claim to be objectively true); and

So-called “chaotic dynamics” shows that we are operating in an open universe: though God has set out a pattern of general cosmic laws, he has indeed “left himself and us room to manoeuvre” (Polkinghorne),

Did not God foresee the negative effects of sin, and, if so, why - among the infinite possible worlds he could have created - did he not create one where Adam would not have fallen?

To eliminate all possible fallen worlds in favour of one that would not fall must be seen as the functional equivalent of eliminating freewill from the creation in the first place.

If freewill is essential to love, would this not mean that in eternity there would always have to be the possibility of new falls into sin - contrary to the assurances of a perfect “new heaven and new earth” given, for example, in the Book of Revelation?

As Augustine argued, the redemption of the world in Christ moves the relationship between creature and Creator to a new level - that of non posse peccari.

“We love because he first loved us” (1 John 4:19), so the likelihood of a repeat of the fall drops to zero as a limit in the face of an undeserved redemption of infinite consequence.

Even granting the essential tie between love and freewill, could - and, therefore, should - God not have limited the effects of man’s sin?

But if the consequences of moral acts are removed, their moral character disappears: the language game changes from ethics to play or to strategy: in our own interests, we will try more and more clever ways to circumvent the law, knowing that a term in gaol is no longer in the offing.

Why do not the consequences of sin fall only on the wicked? Why does not God preserve the innocent from sin’s miseries? Why does the godfather die
comfortably at an advance age while the good citizen is struck down by the early onset of cancer?

4.8821 Unfortunately, since “all have sinned and come short of the glory of God” (Rom. 3:23; cf Psalm 53:3; Isaiah 53:6; 1 John 1:8), there are no innocents.

4.88211 As John Donne put it, the human race is inseparably interconnected: “Never send to know for whom the bell tolls: it tolls for thee.”

4.8822 Sin, by its very nature, is irrational, and its consequences likewise.

4.88221 Sinful consequences in a broken world are like the effects of a terrorist’s bomb, striking anyone within range, not necessarily specific political opponents (cf. 11 September 2001).

4.8823 Even genuine Christian believers are not exempted from the effects of a fallen world - the promise to them is, not that they will never suffer but that “all things work together for good to them that love God” (Romans 8:28).

4.883 But God could certainly have diminished the consequences of sin without removing them entirely? Scripture teaches us that:

4.8831 He has already done so, since if he had removed his hand from the world after the fall, all would have returned to its original state of chaos (Colossians 1:16-17); and

4.8832 In spite of our killing his prophets and even his own Son, he has provided the only way of salvation out of the misery we have created for ourselves (Matthew 21; Mark 12; Luke 20; Romans 5:8); and

4.8833 He promises an ultimate restoration of all things (Revelation 21-22); and

4.8834 Those who have created the mess are in a particularly poor position to criticise the only One who is doing anything cosmically about it - simply because he is not working on their schedule; and

4.8835 Oddly enough, God, not ourselves, remains the sovereign in these matters (Job 38-42).

4.89 Granted, the evils of this world are evident on every hand; but the issue is: does their existence negate the clear evidence of God’s love for us in coming to earth in Jesus Christ to deal with this very problem?

4.891 One must not regard this matter as a question of weighing quantities (deaths in Holocaust, for example, against the single death of Christ): if the case for Incarnation is a good one (and we have seen just how excellent it is), that case stands regardless of the existence of human misery, whatever its degree.

4.892 Indeed, the greater the misery, the greater should be our gratitude to the One who loves us and gave himself for us.
“Scarcely for a righteous man will one die; yet perhaps for a good man some would even dare to die” - one thinks of Sidney Carton in Dickens’ Tale of Two Cities - “but God commends his love towards us, in that, while we were yet sinners, Christ died for us” (Romans 5).

III. Conclusion

To be sure, the argument as just presented is a biblical argument, and, as such, requires justification for the revelatory character of Holy Scripture. That case is made elsewhere in the Tractatus Logico-Theologicus, and space forbids our presenting it here. In broad sweep, we maintain that the soundness of the historical records and eyewitness testimony concerning Jesus Christ leads to the conclusion that he was in fact what he claimed to be: God incarnate, come to earth to die for the sins of the world and to offer eternal life to a fallen race. Since Jesus’ view of Scripture (the existing Old Testament, together with the forthcoming New Testament as the product of the Holy-Spirit-led Apostolic company) was that it represented the very word of God, and since Jesus was himself God incarnate, the revelatory value of the Bible and its teachings follows inexorably.

Among those central biblical teachings is that of God’s goodness towards a creation whose miseries came about—and continue to plague a fallen race—through selfishness and the disregard of the will of its loving Creator. But the final chapter to the story is still to be written. As Sonia declares in the last act of “Uncle Vania”—it serves as the conclusion of Samuel Benchetrit’s Moins 2, starring Jean-Louis Trintignant:

Nous nous reposeron! Nous entendrons les anges, nous verrons tout le mal terrestre, toutes nos souffrances noyées dans la miséricorde qui va emplir l’univers tout entier, et la vie deviendra douce, tendre, bonne, comme une caresse. J’y crois, j’y crois... Tu n’as pas connu de joies dans ta vie, oncle Vania, mais patiente un peu, patiente... Nous nous reposeron... Nous nous reposeron... Nous nous reposeron...  

References


3 See John Mortimer’s interviews with clerics such as Archbishop Runcie (In Character [Harmondsworth, Middlesex: Penguin Books, 1984], pp. 27 ff.).

4 On all of the above, see Montgomery, Tractatus Logico-Theologicus (3d ed.; Bonn: Verlag fuer Kultur und Wissenschaft, 2004), proposition 3.8.

5 Of Suicide is included in Hume’s Essays Moral, Political and Literary (London: Oxford University Press, 1963), pp. 585-96. See Montgomery, “Whose Life Anyway? A Re-
Examination of Suicide and Assisted Suicide,” in his Christ Our Advocate (Bonn: Verlag fuer Kultur und Wissenschaft, 2002), pp. 169-195.


8 C. S. Lewis, The Problem of Pain (London: Geoffrey Bles, 1940), and frequently reprinted. It is worthwhile emphasising (contra the theatrical and cinematographic pictures of Lewis presented in recent years) that Lewis’ later book, A Grief Observed, though written from the standpoint of the personal tragedy he experienced on the death of his wife, does not alter his fundamental argument: it simply refines and personalises it.


12 Ibid., propositions 3 and 4.

13 L’Avant-Scène Théâtre, No. 1188 (1 septembre 2005), p. 66. The play was first performed at the Hébertot theatre, Paris, on 26 August 2005.
Understanding Pain and Analgesia: an integrated molecular, cellular and systems physiological approach

Alun Morinan PhD
(Addiction Science, Institute of Psychiatry, King’s College, University of London and South London & Maudsley NHS Trust)

“...and people brought to him...those suffering with severe pain,...and he healed them.” Matthew 4: 24 (NIV)

“...There will be no more death or mourning or crying or pain for the old order of things has passed away.” Revelation 21:4 (NIV)

Introduction
There are 21 references to pain(s) and painful in the Bible, ten in the Old Testament and eleven in the New.¹ Pain enters the world as a result of the Fall (Gen 3:16-17) and will only disappear completely following the second creation (Rev 21:4), although in between these times we have been given glimpses of the New Kingdom in the life and ministry of Jesus (Matt 4:24).

In the Preface to their popular book, The Challenge of Pain, Professors Ronald Melzack and Patrick Wall write:

Pain is one of the most challenging problems in medicine and biology. It is a challenge to the sufferer who must often learn to live with pain for which no therapy has been found. It is also a challenge to the physician or other health professional who seeks every possible means to help the suffering patient. It is a challenge to the scientist who tries to understand the biological mechanisms that can cause such terrible suffering. It is also a challenge to society, which must find the medical, scientific and financial resources to relieve or prevent pain and suffering as much as possible (p. ix).²

As a biologist who has been involved in some preclinical research³ and written reviews⁴ for health care professionals in addition to teaching medical, nursing, physiotherapy and science undergraduates at three different institutions, I have had a long standing interest in pain pathophysiology and pharmacological interventions.

What is Pain?
Pain is defined by the International Association for the Study of Pain⁵ as: An unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. Pain is always subjective and can be modified by prior experience and sociocultural factors and despite the IASP definition, pain in the absence of any discernable physical pathology (e.g. migraine) and psychological and spiritual pain, must be recognised and treatment offered. In the case of acute pain
there is a biological (survival) value in preventing further (and potentially much more serious) damage through activation of avoidance mechanisms (e.g. children learning not to touch very hot objects) and promoting rest to aid recovery from an injury. As evidence of this, there are a number of rare congenital conditions where individuals lack the sensory experience\(^6\) (Hereditary Sensory and Autonomic Neuropathies, HSAN I – V of which Riley-Syndrome, type III, is the most common) or the emotional response (Congenital Analgesia) and inflict cumulative damage to their bodies that means they rarely survive beyond their late twenties. Also we can think of the damage done to the extremities of the limbs of leprosy sufferers infected by *Mycobacterium leprae*, a micro-organism that destroys the peripheral nerves transmitting ‘pain messages’. Medically, pain is a useful diagnostic tool and as such should not be relieved uncritically. The real biological puzzle and greatest medical challenge however, is what is the value of chronic pain, the ‘pain syndrome’?

**Pain Pathways**

The origins of the modern scientific study of pain lie in the early nineteenth century but it was not until 40 years ago that the foundations for the currently accepted ‘gate control’ theory of how pain is detected and transmitted by the peripheral nervous system, then modulated and interpreted within the central nervous system, was put forward by Melzack and Wall.\(^2\) When, for example, a painful stimulus is applied to the surface of the skin, nociceptors (pain receptors) are activated. There are two main types of these sensory receptors, polymodal nociceptors that respond to chemical, mechanical and thermal stimuli and thermomechanonociceptors that respond to the second and third of these stimuli. These receptors transduce any of these stimuli into a bioelectrical signal (in a similar way that a microphone would convert a mechanical signal – sound – into an electrical one) that is then propagated as an action potential (nerve impulse) along the axon of a sensory afferent neurone towards the dorsal horn (DH) of the spinal cord (Figure 1). The more abundant C neurones are slow conducting and are involved in the dull, diffuse and longer lasting component of pain while the faster conducting A\(\alpha\) neurones mediate the sharp, easily located and acute sensation. From the DH, neurones located principally within the lateral spinothalamic tract (LSTT), ascend to the thalamus in the brain from where thalamocortical neurones relay the ‘pain message’ to its final destination in the cerebral cortex (Figure 1).

The activity of pain neuronal pathways is modulated by inhibitory neurones within the spinal cord whose terminals (nerve endings) are located mainly in the uppermost laminae (layers) of the DH, the substantia gelatinosa (SG), the locus of the ‘gate control’. When the ‘gate’ is closed, the activity in large diameter fast conducting A\(\alpha\) neurones originating from low threshold mechanoreceptors is greater than that in the A\(\beta\) and C neurones coming from nociceptors. The terminals of the A\(\alpha\) neurones synapse\(^7\) (‘interface’) with interneurones that on stimulation (+ in Figure 2) inhibit (-) the release of neurotransmitters from the A\(\alpha\) and C neurones and no pain is felt
The ‘gate’ is opened when the activity in the neurones coming from the nociceptors is more than that in the A\(<;;1 \) neurones. As a result, neurones of the LSTT are activated and nerve impulses travel to the thalamus and from there, other neurones pass to the cerebral cortex where pain is registered (Figures 1 and 2). In addition to the local modulation of pain perception within the SG, inhibitory (-) descending neurones from two brain stem nuclei, the locus coeruleus and the nucleus raphé magnus (NRM, activated by neurones from the midbrain periaqueductal grey, PAG) can close the ‘gate’ (Figure 2).

To summarise, pain perception depends upon the relative balance between excitatory (+) and inhibitory (-) activity in the SG so therefore increasing inhibition will result in analgesia while increasing excitation will produce pain. The application of a mechanical stimulus (through vigorous rubbing or massage) to the site of an injury, placement of acupuncture needles and TENS (transcutaneous electrical nerve stimulation) will all stimulate A\(<;;1 \) neuronal activity and produce pain relief. More complex non-pharmacological procedures include SPA (stimulus produced analgesia via the activation of descending brain inhibitory pathways) and neurosurgery (e.g. cordotomy; severing the LSTT). However, the most common method of providing pain relief is through the use of analgesic drugs.

**Analgesic Drugs**
Analgesics are drugs that are self administered or prescribed to prevent, control or relieve pain associated with musculo-skeletal and joint disorders (e.g coxibs in rheumatoid arthritis), cancer (opioids), neuropathies (e.g. carbamazepine in trigeminal neuralgia) and migraine (triptans). Analgesic drugs may work by either mimicking or stimulating the activity of endogenous antinociceptive chemicals (neurotransmitters or local hormones) or blocking the activity of nociceptive chemicals. An agonist is a drug that mimics the activity of a neurotransmitter by binding to its receptor on the neuronal cell membrane while an antagonist blocks its effect by occupying the receptor so that the neurotransmitter cannot bind to it. Drugs may also be analgesic by inhibiting the biosynthesis of nociceptive chemicals or the inactivation of antinociceptive chemicals. The two most widely used groups of drugs the non-steroidal anti-inflammatory drugs (NSAIDs) and the opioids, work by inhibiting the biosynthesis of prostanoids and mimicking the actions of opioid peptides, respectively.

**NSAIDs**
The prostanoids are a group of lipid local hormones of which prostaglandin E\(_2\) (PGE\(_2\)) is the most significant mediator of pain associated with inflammatory conditions. PGE\(_2\) released after injury and acting through EP receptor subtypes sensitises polymodal nociceptors on C neurones to the effects of pro-inflammatory chemicals like the peptide bradykinin and the monoamine histamine, resulting in hyperalgesia. PGE\(_2\) is synthesised from the precursor lipid arachidonic acid, by the cyclo-oxygenase (COX) isoenzymes COX-1 and COX-2. Aspirin (acetylsalicylic acid) and many other NSAIDs inhibit both isoenzymes leading to a reduction in PGE\(_2\) production and therefore pain, inflammation
and pyresis (elevated body temperature as in fever) but with a risk of stomach bleeds and ulceration as PGF\textsubscript{2} has a gastroprotective role. However as it is COX-2 that is induced during the inflammatory process, selective inhibition of this isoenzyme would be expected to have all the clinical benefits but none of the adverse effects of the non-selective inhibitors. In May 1999, the first of these drugs, rofecoxib was approved by the US Food & Drug Administration\textsuperscript{8} but then suddenly withdrawn from use in September 2004 because of the serious risk of thrombotic events leading to myocardial infarction or cerebrovascular accident (stroke). The continued use of the remaining COX-2 inhibitors, celecoxib and etoricoxib, and other NSAID in the UK is currently under review by the CHM (Commission for Human Medicines, formerly the Committee on Safety of Medicines, CSM).

**Opioids**

The discovery of the first of the endogenous opioid peptide neurotransmitters in the mid-1970s revolutionised our understanding of pain control.\textsuperscript{9} There are five families of opioid peptides ranging in size from the endomorphins and enkephalins (four and five amino acids respectively) to the 31-amino acid, $\beta$-endorphin. Physiological and pharmacological opioids interact with one or more of four opioid and opioid-like receptors, $\delta$, $\kappa$, $\mu$ and NOP\textsuperscript{10} located on neurones in both the peripheral and central nervous systems and in particular, the SG and PAG (Figure 2). Opioid peptides released from the terminals of SG interneurones and descending neurones from the NRM reduce electrical activity in the LSTT through either presynaptic inhibition of the release of the excitatory neurotransmitters, substance P (SP) and glutamate (GLU), from the A$\delta$ and C sensory afferents or direct postsynaptic inhibition of the LSTT neurones (Figure 2). In addition, opioid receptors located on the cell bodies of serotonergic neurones in the PAG stimulate the release of the neurotransmitter 5-HT (5-hydroxytryptamine or serotonin) that in turn activates the descending opioid peptidergic neurones from the NRM (Figure 2). The antinociceptive effects of the monoamines 5-HT and noradrenaline (NA) is likely to underlie the benefits of amitriptyline, an inhibitor of the inactivation of these two neurotransmitters, used in the management of certain types of neuropathic pains (e.g. in diabetes mellitus). By another mechanism involving 5-HT, the 5-HT\textsubscript{1B/1D} receptor agonists (triptans) like sumatriptan reduce the neurogenic inflammation and cerebral vasodilation associated with an acute migraine attack.

Opioid analgesics like morphine cause a number of adverse drug reactions including respiratory depression, nausea and emesis, constipation and sedation so it would be advantageous to have safer drugs for the treatment and control of moderate to severe pain. A number of stable analogues (i.e. not inactivated by enzymes in the body) of the smaller endogenous opioids have been chemically synthesised and shown to be highly potent (up to 3000 times more than morphine) and selective $\delta$ receptor agonists with little evidence of producing respiratory depression and tolerance and dependence.\textsuperscript{11}
An alternative approach has been the development of non-peptide selective receptor agonists however, while comparing favourably with the current opioids, there is concern about their potential psychotomimetic side effects.\(^{12}\)

**Non-Opioid Novel Analgesics**

Away from the opioid peptides, other analgesic drug developments are focussing on blocking the nociceptive neurotransmitters glutamate (GLU) and substance P. GLU is thought to be involved in the phenomenon of ‘wind-up’ pain resulting from the continuous stimulation of C afferent neurones that results in the development of supersensitive GLU NMDA (N-methyl-D-aspartate) receptors. As this is difficult to treat, some clinicians have suggested the use of prophylactic analgesics to prevent its development. The discovery of a physiological inhibitor of GLU release, N-acetylaspartylglutamate (N-AAG), in the brain has resulted in the proposal that increasing the level of N-AAG by inhibiting its breakdown by the enzyme GLU carboxypeptidase II would be of benefit in reducing the nociceptive effects of GLU.\(^{13}\) Reducing the effects of substance P by blocking the NK\(_1\) (neurokinin) receptor would be predicted to be analgesic but so far the only NK\(_1\) antagonist currently available, aprepitant, is only prescribed for its anti-emetic effect.\(^{14}\) The same is true for the CB\(_1\) receptor (cannabinoid) agonist, nabilone.\(^{14}\) Cannabis has long since been self-medicated for a variety of clinical conditions and it has been shown experimentally that the endocannabinoid, anadamide has antinociceptive properties.\(^{15}\)

**SNPs**

Finally, pharmacogenomics that looks at the relationship between a patient’s genetic make-up (genotype) and clinical response to a particular drug (phenotype) has enormous potential for the future.\(^{16}\) Just one nucleotide base change (a single nucleotide polymorphism, SNP) in the DNA coding for a drug receptor protein can account for a significant variation in the effective dose for the treatment of two patients. For example, a SNP where the guanine (G\(^{118}\)) is substituted by adenine (A\(^{118}\)) in the MOR-1 gene, changes the 40\(^{th}\) amino acid from aspartic acid to asparagine in the \(\alpha\) opioid receptor protein and as a result the average daily therapeutic dose of morphine has to be increased from the normal 97 mg, to 225 mg.\(^{17}\) The detailed mapping of SNPs may lead to the eventual end of a ‘one dose fits all’ approach to drug prescribing and therefore an improvement in the pain relief provided by the currently available analgesics.

**Conclusion**

Pain in all its forms has been with us since sin entered the world and will not end until the creation of the new order following the return of Jesus Christ. As Paul writes: “We know that the whole creation has been groaning as in the pains of childbirth right up to the present time” (Rom 8: 22) and this remains true today. However as Christians we know that within the teachings, life and acts of Jesus we have been given signs of a glorious future and as his disciples we should be immersed in the struggle to follow
after him. Jesus healed those with pain in ways we cannot fully understand far less do but through God-given developments in the biosciences and their application in medicine we have been given a means of healing that has made, and will continue to make, a difference to the suffering of humanity.

References

7. Neurones (nerve cells) do not form a continuous network but are separated from each other by a tiny (c.20 nanometre) gap, the synaptic cleft, bridged by chemicals (neurotransmitters) released from the presynaptic neuronal terminal. The synapse comprises the presynaptic cell membrane, the cleft and the postsynaptic membrane on which the neurotransmitter receptor proteins are located.
Christian Perspectives on Pain  
October 2006  

Human Suffering at the End of Life:  
a view from the bedside  

Robert Twycross DM, FRCP  
Emeritus Clinical Reader in Palliative Medicine  
Oxford University  

About 5 years after I qualified in Medicine at Oxford University, I was appointed Research Fellow in Therapeutics at St Christopher's Hospice. After a further 5 years, I returned to my Alma Mater where I spent the rest of my clinical career in 'hospice medicine', or palliative care as it subsequently became known. Thus, the following reflections stem from 30 years working as a hospice doctor.  

What is 'hospice'?  
Cicely Saunders is universally regarded as the founder of the 'Hospice Movement' of the latter part of the 20th Century. She began her professional life as a nurse at St Thomas's Hospital, London. Subsequently, she trained as a medical social worker, also at St Thomas's Hospital. Through her work there, she came to recognise that, if terminally ill patients were to receive adequate care, the negative attitudes of most doctors in relation to such patients needed to be changed. In contrast to the chilling phrase, 'There's nothing more that I can do for you', she became convinced that there was always something that could be done to ease a patient's pain and other discomforts, and sense of social isolation.  

However, she was told that she would not be able change medical attitudes unless she herself was a doctor. So, in due course, she completed her medical training, qualifying in 1957 at the age of 39. A year later, she began to work with the Irish Sisters of Charity at St Joseph's Hospice in east London where she emphasised the need for the regular prophylactic use of analgesics and other symptom-relief drugs. More specifically, she described how to use diamorphine (a semi-synthetic derivative of morphine) by mouth correctly and safely, and how to counter its adverse effects. At the same time, she began to make plans to build her own home for the dying. And so, in 1967, St Christopher's Hospice welcomed its first patients.  

Although 'hospice' then meant almost entirely inpatient, cancer, and terminal, now it is best thought of as a concept of care for people in the end-stages of progressive disease of any kind (Box A). Thus, hospice care or, more commonly nowadays, palliative care can be defined as the active total care of patients with life-limiting progressive disease, and their families, by a multi-professional team when the disease is no longer responsive to curative or life-prolonging treatments. (Twycross 2003a)
Box A: Characteristics of palliative care

- Whole-person (holistic) care: physical, psychological, social, spiritual
- Patient-centred, not disease-focused
- Partnership with and empowerment of the patient and family
- Openness and honesty in communication
- Death accepting, but also life enhancing
- Improving the quality of life, not quantity
- Concerned with healing, not curing
- Multi-professional teamwork

Since 1967 there has been a massive development of palliative care services in the United Kingdom (Table 1). The emphasis now is very much on care in the community, and on supporting the patient and family in their own home. Most services also offer bereavement support. Many have an education and training programme, and some undertake research. In 1987, palliative medicine became a recognised medical specialty, and now has its own specific training programme and specialist certification. Several universities have professors of palliative medicine and/or of palliative care.

Table 1 Specialist palliative care in 2006 in the UK

<table>
<thead>
<tr>
<th>Adult inpatient hospices</th>
<th>221</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Health Service</td>
<td>63</td>
</tr>
<tr>
<td>Total adult beds</td>
<td>3180</td>
</tr>
<tr>
<td>Mean number of beds</td>
<td>14 (2-48)</td>
</tr>
<tr>
<td>Exclusive for AIDS</td>
<td>3 units (50 beds)</td>
</tr>
<tr>
<td>Day care</td>
<td>257</td>
</tr>
<tr>
<td>Home Care services²</td>
<td>356</td>
</tr>
<tr>
<td>Extended nursing care ‘hospice at home’</td>
<td>114</td>
</tr>
<tr>
<td>Hospital support teams</td>
<td>305</td>
</tr>
<tr>
<td>Hospital support nurses</td>
<td>47</td>
</tr>
<tr>
<td>Children’s hospices</td>
<td>34</td>
</tr>
<tr>
<td>Total children’s beds</td>
<td>242</td>
</tr>
</tbody>
</table>

1. Data supplied by the Hospice Information Service.
Over the last 25 years, palliative care has taken root in many other countries. First, in the USA and the white Commonwealth countries, then in Western Europe and increasingly elsewhere. However, despite the tremendous amount that has been achieved by many people in disparate cultures and in diverse ways, much remains to be done globally to establish palliative care 'across the board', particularly in economically poorer countries.

**Paradox**

Those visiting a hospice for the first time often comment that it is not the depressing place they had imagined it would be. Instead they find a place permeated by life, and even joy. A strange discovery, but it is perhaps in this paradox that the 'secret' of palliative care resides. Life and joy in the midst of death and distress can result from relatively ordinary professional activities — like nursing care, pain and symptom management, and psychological and spiritual support — when motivated by *practical human compassion*. This, in turn, is the outworking of an attitude of respect for the patient and of corporate activity in which individualism is balanced by teamwork and vice versa. The 'House of Hospice' model is a good way of expressing this (Figure 1), with its foundation stones of *acceptance* (‘Whatever happens, we will not abandon you’) and *affirmation* (‘You may be dying but you are important to us’). The cement which binds the various components together comprises hope and honesty.

![Figure 1 House of Hospice](image-url)
Caring for the dying is not easy. One physician described it as ‘extremely harrowing but very rewarding.’ It is difficult but, again paradoxically, it generally has a positive dimension. (Byock 1996) Thus, a patient dying of motor neurone disease (amyotrophic lateral sclerosis, ‘creeping paralysis’) spoke of terminal illness as coming together illness. After many weeks as an inpatient at St. Christopher’s Hospice, he said, ‘I’ve seen it time and time again. Patient and family; patient and patient; patient and staff – coming together illness.’ This positive aspect is well illustrated by the following case history.

Case History I

Chip was 30 when he had surgery for testicular cancer. Unfortunately, despite post-operative chemotherapy, over the ensuing months the disease progressed. A world-class athlete in the Canadian national ski team, Chip had always been a winner. He was engaged to be married, but now he was dying. All involved were devastated. Just days before the end, he married his fiancée and said good-bye to each of us. In a conversation with the palliative care physician, he commented, ‘You know, this last year has been the best year of my life.’ He confided that the source of this sense of quality time had been a journey inward which was characterised by peace and a sense of growth he had not previously known. Physical magnificence had given way to devastating weakness and cachexia, yet suffering had been transcended. (Mount 2003)

Suffering

A state of severe distress caused by events which threaten the intactness (or integrity) of a person. (Cassell 1983; Cassell 1991)

Benjamin Franklin is reputed to have said ‘In this world, nothing can be said to be certain except taxes and death.’ However, he was wrong; suffering and change are also inevitable, integral and inescapable parts of life. Even in sudden unexpected death – a cardiac arrest or major accident – there is still suffering for those who are left behind.

Relief of pain and other distressing symptoms is rightly seen as the primary goal of palliative care. Where palliative care is available, competent symptom management means that patients can generally expect to be almost free of pain. (WHO 1990) A high measure of relief can also be expected with many other symptoms. No longer distracted and exhausted by unrelieved pain, patients may become distressed emotionally and spiritually as they contemplate their approaching death. Few do this with equilibrium. Most defend themselves psychologically in various ways, but some are overwhelmed with anguish, rage, or fear about what is happening to them. In consequence, it has been suggested that hospice should be thought of as a safe place to suffer, a place where people can come to terms with their own death as easily, fully, and constructively as they have it in them to do. (Stedeford 1987)

The ‘language’ of suffering is revealing; in one study, terminally ill patients commonly expressed their suffering in terms of:
It is important to remember that, although suffering and physical pain are not synonymous, pain is always 'somato-psychic'. In other words, although pain is normally associated with a physical hurt, the perception of the discomfort is always modified by the person's cognitive and emotional reaction. (Twycross 2003a) Thus, what an observer thinks must be a major cause of suffering for a person may in fact not be so. It is important not to make unwarranted assumptions. Patients need to be asked what causes them the most suffering. (Cassell 1991) People in pain commonly report suffering from pain when they feel out of control, when it is persistent, when it is overwhelming, when its source is unknown, or when its meaning is dire. (Cassell 1983) Sometimes, because of non-physical factors, pain remains uncontrolled and a patient dies in great distress, or heavily sedated. (Rousseau 2002) The following case history vividly exemplifies this.

**Case History 2**

Mrs C, born in Eastern Europe, was a widow in her seventies with advanced breast cancer. She was admitted to the Palliative Care Unit in the Royal Victoria Hospital, Montreal, for control of pain. Despite the situation appearing to be straightforward, all interventions failed. Alienated from her only daughter, Mrs C looked anguished. ‘When were you last well’, the physician asked. ‘Do you mean physically?’ she replied. ‘No’, he responded, ‘I mean in yourself.’ Without hesitation she erupted, ‘Doctor, I have never been well a day in my life.’ ‘Really?! Well, if we are body, mind and spirit, where do you think the problem has been?’ With great feeling she answered, ‘I have been sick in mind and spirit every day of my life.’ She then recounted her tale, a life filled with dead ends and broken dreams. Her anguish persisted until death, a by-product perhaps of a well-established ‘life script’ as much as the cancer. (Mount 2003)

On the other hand, other people work through great psycho-spiritual distress, and achieve a remarkable measure of acceptance and peace. (Byock 1994) The following case history illustrates this.

**Case History 3**

Mrs W, aged 34, was admitted to the hospice suffering from cancer of the breast with widespread metastases. She had lost two children at term and now had a much treasured 3-year-old son. While relatively well she had dealt with her situation intellectually, making all the necessary arrangements for her approaching death. As she weakened it was clear that she had not come to terms with her illness emotionally. Now she was asking, “Why all this? Why me?” She grieved over the losses she had already sustained; she wanted to be able to
meet her young son at the playschool when he was ready to come home, and to
cuddle him, but could no longer do so. She missed her home, but because of her
condition could make only brief visits. She lamented her increasing dependence
and showed overwhelming despair at the impairments yet to come, fearing
especially loss of control over physical functions. Her grief was manifested in
crushing, intractable pain. She said, “I am resigned to the fact that this is my lot.
It is the pain I cannot accept. Dying is all right, but there is no reason for this
pain, no purpose in it. I am no longer angry with God for my fate, but why this
pain?”

Oral morphine in doses of up to 300mg every 4 hours was ineffective. Complaints
of shattering pain continued and she was miserable and often withdrawn. The
slightest movement caused her to cringe in pain. Care to pressure areas was no
longer permitted. For relief, large and frequent doses of intravenous diazepam
were required. Epidural morphine was commenced at this stage and was continued
over a 5-week period.

Gradually she came to terms with her situation. As this occurred, her need for
analgesia became less and eventually she was kept pain-free on a dose of 10mg
of oral morphine every 4 hours. She improved to the point where she was able to
be wheeled down the road on an ambulance trolley to buy an Easter egg for her
son, and to visit the local art gallery the day before she died (Lichter 1991).

Truth may hurt but deceit hurts more
This is the title of a paper published a few years ago. (Fallowfield et al 2002) In it,
examples and consequences of deliberate attempts to withhold the truth from patients
are given, together with cases of unintentional deception or misunderstandings created
by the use of ambiguous language. The evidence all points to the conclusion that,
although truth may hurt, deceit hurts more. ((Kubler-Ross 1969; Tolstoy 1989; de
Hennezel 1997;)

In my view, the biggest ethical challenge facing doctors in relation to palliative care is
the question of truthfulness with patients. It is often said that telling patients that they
are terminally ill destroys hope and leads to irreversible despair and depression.
However, in reality, the opposite is more often the case – lying and evasion isolate
patients behind either a wall of words or a wall of silence that prevents them from
sharing their fears and anxieties. An American surgeon has written:

‘A promise we can keep and a hope we can give is the certainty that no man or
woman will be left to die alone. Of the many ways to die alone, the most
comfortless and solitary must surely take place when the knowledge of death’s
certainty is withheld... Unless we are aware that we are dying, we cannot share
any sort of final consummation with those who love us. Without this
consummation, no matter their presence at the hour of passing, we will remain
unattended and isolated [italics added]. For it is the promise of spiritual
companionship near the end that gives us hope, much more than does the mere offsetting of the fear of being physically without anyone.' (Nuland 1997)

He goes on to recount what happened when his aunt was dying. He and his brother were very close to her; she was like a mother to them and they shared her home:

'Without perhaps even realizing it, we had committed one of the worst of the errors that can be made during terminal illness – all of us, [Aunt] Rose included, had decided incorrectly and in opposition to every principle of our lives together that it was more important to protect one another from the open admission of a painful truth than it was to achieve a final sharing that might have snatched an enduring comfort and even some dignity from the anguishing fact of death.

Although there was no doubt that Rose knew she was dying of cancer, we never spoke of it to her, nor did she bring it up. She worried about us and we worried about her, each side certain it would be too much for the other to bear. We knew the outlook and so did she; we convinced ourselves she didn’t know, though we sensed that she did, as she must have convinced herself we didn’t know, though she must have known we did. So it was like the old scenario that so often throws a shadow over the last days of people with cancer: we knew – she knew – we knew she knew – she knew we knew – and none of us would talk about it when we were all together. We kept up the charade to the end. Aunt Rose was deprived and so were we of the coming together that should have been, when we might finally tell her what her life had given us. In this sense, my Aunt Rose died alone.’ (Nuland 1997)

It is ethically incumbent on palliative care clinicians to develop first-rate communication skills in order to become ‘psycho-physicians’ and ‘psycho-nurses’, etc. (Twycross 2003a) There is need to learn how to get behind the smiling façade, and thus facilitate the expression of negative feelings, and of anxieties and fears. Good communication is the key to good palliative care.

Death-bed theology

Serenity at the end of life is often hard won; ‘and the price is the process by which we reach that point.’ (Nuland 1997) Further, the death-bed is not a place for dogma or for preaching; instead, it is a place for stressing:

- the unconditional love of God for each and every individual; ‘God loves you as if you were the only person in the world’
- the forgiveness of God for past wrongs and shortcomings
- the promise of God that the best is still to come, in that death is the gateway to fullness of life in Eternity.

Perhaps more than anywhere else, in the Valley of the Shadow of Death it is necessary to acknowledge that ‘a reaching out to what is beyond’ is an expression of true faith and hope, and reflects a genuine turning towards and response to God (Box B).
A girl of 17 was dying of cancer, a cancer in one shoulder which was like a rugby ball. She had a bad family background: mother and father were at loggerheads with each other, her boyfriend had walked out on her, she was alone, she felt abandoned. She said she had prayed and prayed, but she felt that God did not listen to her. So I said to her, ‘Well say it then; tell him he has abandoned you.’ Eventually she did. Then I said to her, ‘Now you are with Christ on the cross; that’s what he said’, and she suddenly got the message. She got it a bit queerly and I am not sure whether the theologians would agree with her final summation which was, ‘I see what I must do now; forget God and stay with Christ.’ But it was not the time for theological disputation; the idea was there and the completeness of the situation was there. She changed from that time.

Facilitating the expression of anger towards God can be an important part of the care of people who are suffering. It is God’s Universe, and ultimately the buck stops with him. The poem in Box C is another example of being ‘honest to God’ and finding healing as a result.

### Box C Forgivenesss (Dawson 1990)

God, you need to ask my forgiveness,
Your world is full of mistakes.
Some cells, like weeds in the garden
Are growing in the wrong place.
And we your children
Have polluted our environment.
Why did you let it happen God?
We prayed with faith, hope, love,
We perceived no change in our bodies or environment,
We are made sick by your world.
God you need to ask my forgiveness.
Was this why you sent your Son?
Healing

‘You can’t die cured but you can die healed’. (Frimmer 2000)

The essence of palliative care is healing. A journalist wrote shortly after his wife’s death:

‘Of course terminal cancer is unspeakably awful. That aspect needs no emphasis. More difficult to imagine is the blessedness which is the corollary of the awfulness … I think my wife learnt more of our love during those dreadful months than she did at any other time, and we of hers … The suffering of a long and terminal illness is not all waste. Nothing that creates such tenderness can be all waste. As a destroyer, cancer is second to none. But it is also a healer, or an agent of healing.’[italics added]

The aim of healing is not to be cured, the aim of healing is not to survive, the aim of healing is to become whole. Thus, healing is about achieving and maintaining right relationships with self, others, environment and God. To die healed includes being able to say or convey the following linked messages:

I love you.
Forgive me.
I forgive you.
Thank you.
Good-bye.

A former ‘jet set’ businessman, when dying from AIDS, wrote a letter to his mother to be given to her after his death. In it, he indicated the healing impact on him of his fatal disease:

This last part of my life could have been very unpleasant, but it wasn’t. In many ways, it has been the best part of my life. I’ve had the opportunity to get to know my family again, a chance that few people have… I probably never would have slowed up enough to appreciate all of you if it hadn’t been for my illness. That’s the silver lining to this very dark cloud… I’ll miss you. I’m so glad we made good use of this time to get to know each other again.

The effect on the carers

I worked at Sir Michael Sobell House for over 25 years. You cannot work in the Valley of the Shadow of Death for most of your professional life and accompany several thousand people in their Gethsemane without it having a profound effect on you. (Twycross 2003b) For me, it led to a deep sense of humility. I now know for certain that the certainties of youth are an illusion, and that faith and doubt are inseparable. I continue to wonder why the Early Church Fathers omitted a vital phrase from the Creeds, namely, ‘We believe life is unfair’.

In a hospice, one is forced to face the facts of life as they are, not as we might wish them to be. All around, everyday, there are endless examples of arbitrary suffering.
One poignant example was that of a 68 year-old man dying of lung cancer. He had four children, three girls and one boy. All the girls suffered from an inherited disease which led to liver failure. One died as a teenager; the second survived to marry but died in her mid 20s; the third had a liver transplant and is still alive. The son was not affected. Then, 2-3 months after the father was diagnosed as having terminal cancer, the son was killed in an accident. And so I am forced to share the despairing cry of those who suffer:

Why God? Why? Why, when our need is desperate, when all other help is vain, do you turn away from us?

Why? Why, when the darkness is deepest and our midnight is starless, do you hide yourself from us?

Why, in times of grief and distress, when there is no light in the window, do we find a door slammed in our face, and a sound of bolting and double bolting on the inside?

Why forsake us when we need you most? Why are you present when the skies are clear, our help in days of prosperity, but so absent in our time of trouble?

We know that faith does not exempt us from sorrow or shield us from evil - we know that; we know too, that the earth is wet with the blood of the innocent - but why this? Why now? Why?

Know this, God, know this: if faith were dependent on feelings, if our trust in you were no more than a matter of the mind, we would have done with you, done with you now, done with you for ever. (Falla 1981)

To accompany someone who is dying means staying with them in their experience of forsakenness and despair. It is important not try to hurry them through the complex journey of adjustment and acceptance. Fortunately, in this task I am sustained by a deeply held belief that there is more to the story:

God of Christ,
God who raised him from the dead,
God with whom life can begin again,
come to us now, hold us, help us, heal us,
for you and you alone are our salvation. (Falla 1981)

Even so, being ‘honest to God’ and being angry with him was a necessity for me when working as a hospice doctor. Without this avenue of release, I could not have continued in my work. I needed to be angry; and I thank God that, in his infinite capacity to love, he is able to absorb all my anger, and still more.

Recognising paradox both in life and belief is essential. Thus, cross and resurrection, suffering and joy, trouble and peace, doubt and certainty. I now see that belief and doubt are not opposites, but that doubt is the middle ground between belief and rejection. As someone said, ‘Doubt is faith in evolution’ and ‘Where there is doubt, there is hope’.

Another paradox: the end is always a new beginning. This is both liberating and threatening because I find that I am constantly being called into the unknown by God who is all-knowing. Cardinal Newman once said, ‘To grow is to change, and to be perfect is to have changed often’.

For me as a hospice doctor, a God who suffers is an essential belief. What is God like? *God is like Jesus*. Christianity is not about an empty cross and an empty tomb. It is about – simultaneously – a crucified Christ and a risen Lord. The two must be held in conjunction if we are to be true to the insights of the New Testament, in which Jesus is described as ‘The Lamb slain since the foundation of the world’ (Revelation 13.8 REB). Others have repeated this theme:

‘The cross is eternal. There was a cross in the heart of God before there was one planted outside Jerusalem’ (Lev Gillet).

‘My only real God is the suffering Father revealed in the sorrow of Christ’ (Studdart Kennedy).

**Palliative care cannot ‘sanitize’ all deaths**

* A realistic goal in palliative care is not to eliminate suffering but rather to alleviate it. (Daneault et al 2004)

Palliative care professionals also have to cope with the fact that it is *not* always possible to achieve ‘a good death’ for our patients. Consider the patient with an eroded malodorous face or perineum, or the patient with end-stage dementia. Particularly in these and similar terrible circumstances, we cry inwardly in anguish as we witness the distress of our patients and their families (Box D).
Where was God when Brian shat from his mouth?  
Where was God when Elsie’s belly eroded?  
And liquid faeces rolled over her loins, soiled her sacred pubis  
And soaked the sheets of her bed?  
Where was God when spinster Jill couldn’t fart or crap,  
Blew up like the expectant mum we believe she never was  
And cursed us all, supposedly behind our backs,  
Hurling insults and expletives through the side-room door  
On our departures, destroyed our All  
And filling other patients with fear?  
I simply don’t know where God was.  
All I know is that God was there.

Yes, there are times when people’s distress, people’s suffering, seems unbearable. Indeed, I would suggest that a doctor who has never been tempted to deliberately kill a distressed dying patient probably has had limited clinical experience or is not able to empathise with those who suffer. But equally, I would suggest that a doctor who leaves a patient to suffer intolerably is morally more reprehensible than the doctor who performs euthanasia.

That is not to say that euthanasia – intentional drug-induced death – should be a legally enshrined ‘human right’ for dying patients. (Twycross 1990) But it does mean that we must heed the Emancipation Principle of Palliative Care, namely that no efforts should be spared to free dying persons from unbearable suffering which invades and dominates their consciousness, and leaves no space for other things. (Roy 1990) And, in practice, this means that, from time to time, it will be necessary deliberately to dull a person’s level of consciousness, even to the point of drug-induced coma, as the only available way of easing the person’s intractable and overwhelming distress. (Fainsinger et al 2000; Rousseau 2002; Muller-Busch et al 2003; Dean et al in press)

At the end of the day
Palliative care developed as a reaction to the attitude, spoken or unspoken, that ‘There’s nothing more that we can do for you’, with the inevitable consequence for the patient and family of a sense of abandonment, hopelessness and despair. It was stressed that this was never true – there is always something that can be done. Even so, there are times when the doctor or nurse feels that he/she has nothing to offer. In this circumstance one is thrown back on who one is as an individual:
Slowly, I learn about the importance of powerlessness. 
I experience it in my own life and I live with it in my work. 
The secret is not to be afraid of it — not to run away. 
The dying know we are not God. 
All they ask is that we do not desert them. (Cassidy 1988)

When there is nothing to offer except ourselves, a belief that life has meaning and purpose helps to sustain the carer. However, to speak glibly of this to a patient who is in despair is cruel. At such times, actions speak louder than words. The essential message is conveyed by the words of Cicely Saunders:

You matter because you are you. 
You matter to the last moment of your life, 
and we will do all we can 
not only to help you die peacefully, 
but to live until you die.

References


It is no exaggeration that Christians do not do pain well. Particularly pain, which is borne of physical, rather than situational cause. I mean by that simply this: for too long pulpits have resounded to the voice of pastor, minister or priest who has exhorted the believer to see in all things of life the hand of God – and yet for some reason never to have taken that analogy of God in human existence and human situation to the place of pain.

Pain, Christianly speaking, is that which Christ ascended the cross to conquer, along with sin, and by death and ultimately resurrection, the Christian can be born into everlasting life. Therefore, human pain was somehow taken by Christ, nailed to a cross and has not recently figured highly in the average Sunday sermon.

But humans do feel and experience pain. Some of that is physical, some psychological, some social, and certainly to a larger than admitted extent spiritual too. We have listened today to papers that have assessed and covered aspects of pain from a physical perspective, a theological perspective and a clinical perspective. Here then, left for the ordained minister, is pain from a spiritual perspective.

I am able though, to say that in every sense, a doctor has beaten me to the mark. I Cicely Saunders captured pain from a spiritual perspective as an element of a package of total pain, felt by a patient undergoing palliative or end of life care, and recognised that by taking religious or spiritual needs seriously, some of the other pain symptoms of a patient could be partially alleviated, and the quality of life improved.

Writing in The Journal of Palliative Care in 1988, Dr Saunders wrote these words after outlining other aspects of pain,

What are the inner concerns and values, what has deepest meaning, where is the spirit of this person focussed? If someone is able to lay down life with some degree of peace and satisfaction, if it is all to make some sense to him (whether or not he thinks it is the final end) where does he have to look? Is this indeed what we may call the spiritual dimension? And from that, define spiritual pain?

In that single paragraph, the place of pain beyond that which might otherwise be considered as ‘genuine pain’ is encapsulated. This definition, if it might be called that, seeks to reach into those aspects of the human spirit that cannot easily be accessed in order to bring peace, healing, reconciliation, and ease to the whole package that is an individual’s pain.
David Clark, writing in *American Pain Society Bulletin* stated that Cicely’s ability to recognise and respond to total pain emerged from Cicely Saunders’ unique experience as a nurse, social worker and physician – the remarkable multidisciplinary platform from which she launched the hospice movement.²

It is true that Cicely undoubtedly had a unique insight into more disciplines concerning the sick than most.

In part, her subsequent mission in life, to care for and improve the quality of care of those facing the end of life grew from her Christian commitment, made during a holiday at Trevone in Cornwall in 1945. Through that commitment, Cicely saw her work not just as a career, but clearly as a calling, and in her subsequent training at medical school, was aware that if change was to be made to end of life care, she had to be a pro-active part of that change.

The modern hospice movement, beginning at St Christopher’s was, and remains, focussed on the individual. In her article in the *Nursing Times* on euthanasia in 1976, Dr Saunders wrote,

> You matter because you are you. You matter to the last moment of your life, and we will do all we can to help you not only to die peacefully, but also to live until you die.³

If then the individual is that important in the terminal care ‘process’, it means that there really is more to do than look medically at managing pain. To simply see a patient as an issue of pain or symptom control denies that that individual ‘matters’ enough to be cared for holistically. The multi disciplinary team is an antidote (for want of a better word) to the model of care, which is medical alone, in which the doctor assesses need, and if he or she thinks appropriate then a call is made to another discipline.

Included within that package is the Chaplain, or Spiritual Care Lead, whose responsibility as a member of the multi disciplinary team is to offer a perspective on pain, and issues surrounding the end of life, from a stance in which it is the patient’s (and families) existential or issues of meaning and loss, which may or may not be easily articulated, but are present.

It is always to be hoped that as the provision of spiritual care, unlike medicine, nursing, social work or physiotherapy is open to all professions, in their interventions with patients and families, spirituality will be assessed and perhaps met by other disciplines. Because of that the role of the Spiritual Care Lead is enhanced as one who offers advice to other professionals, and can assist a multi professional approach to the care of the patient, so that a doctor sitting by the bedside, or a Clinical Nurse Specialist, making a home visit, is able to discuss, sit with and respond to issues of spiritual pain.
In my first few months at St Christopher’s, I took a shift on each of the wards to see just what it is that nurses ‘do’ during the course of their working day. On a morning shift, from 7am, I was present with a staff nurse as the process of washing patients began.

With one particular patient, who was bed bound, I was asked to assist with his washing. We’ll call the patient ‘John’. As John was washed and turned and shaved (by me, badly) the conversation around the bed changed from the superficiality of the dawning morning to a deeply attentive listening and responding as John talked about his life. Originally from the Caribbean, he mentioned his coming to the UK, his family, his desire to see his ‘home’ again, and his feelings around his illness.

Skilfully, the nurse listened as she worked, and John more or less poured out the thoughts that were pressing in his mind. None of them related to physical pain; all of them related to matters of meaning. In that nursing intervention, John’s spiritual or existential issues were not only heard, but carefully listened to, and actively responded to.

I was present, not as Spiritual Care Lead, but as a Health Care Assistant, and it was in that role that John talked with me and the staff nurse.

In the same way, a Clinical Nurse Specialist, who is skilled sufficiently to delve beyond the obvious questions of pain, symptoms and medication is able to discover so much more about a patient’s needs and past, which may inform some of the social, psychological and spiritual issues that need to be addressed, even if not wholly met.

Being willing to sit with a patient, or family member when the boundary of medical assessment has been crossed is hard, skilled and may throw up issues that have lain dormant for many years.

I can think of a patient, ‘Mary’ who, with her family, was a committed Christian. She was a young woman in her late 20’s, and her final admission to the hospice was unusually long. Her major problem was intractable pain. So severe was it that the decision was finally made, after conversation with her, and full explanation of the possibilities, to give her sufficient medication to allow her to be pain free, and by default, comatose.

Her background was that of evangelical Christianity, and she already felt the weight of many people’s desire for healing, and also the need to be seen as bearing her pain bravely – neither of which she felt she wanted, or was able to do. Only with her husband and the ward staff were some of these big pain and faith issues seriously talked through.

For Mary, the physical pain she felt was not really met in her faith. She knew the reality of the accounts of crucifixion and pain all too well, she knew the reality of the resurrection and eternal life, yet going through what can only be described for her as a crucifixion experience – she had only faith to rely on the resurrection.
My conversations with Mary, her parents and her church minister centred on the separation of physical pain and spirituality, that is, that maybe as a coping strategy the physical reality of intractable pain that could be medicated, had been separated from the idea that pain could be borne, and somehow offered to God – Mary did come to recognise that her felt pain and her spiritual pain were bound up. Existential questions, ‘why me?’ ‘What have I done to deserve this?’ ‘Where is God in this now?’ were important expressions of spiritual pain, borne out of the limiting physical pain she felt constantly.

Patients who are referred to the hospice will have undergone numerous physical and medical assessments by the time a nurse or doctor makes a St Christopher’s assessment. In all of those medical histories that have been taken, how many stepped beyond the boundary of a medical examination, a discussion of symptoms and treatment to ask ‘but what helps you cope?’

Again, Dr Saunders helps in this discussion,

Palliative care stems from the recognition of the potential at the end of life for discovering and for giving, a recognition that an important dimension of being human is the lasting dignity and growth that can continue through weakness and loss.4

This is spiritual care, held as important by Dr Saunders in her vision of palliative and end of life care, and delivered (if I can use that word) not simply by the Spiritual Care Lead, but by all those engaged in the care of the patient.

The response of those team members to the expressions of meaning and existential questions asked by patients can help the patient to grow as a human being, and even discover new things about themselves as they die.

I think here of a patient with Motor Neurone Disease. We’ll call him ‘Jim’. Jim has been a weekly attendee at the Day Unit, and had some limited contact with one of the Spiritual Care Team members. He has more recently been a respite patient on several occasions, and has, in my view grown as a person as he has become less physically able. Jim in my knowledge of him has always been confined to a wheelchair, but he had limb mobility. That is now leaving him, and he is more reliant on oxygen. Yet still, when he is an inpatient, Jim comes to chapel, receives the elements and warms to conversation and company. He has grown to be able to discuss with members of my team (and with other professionals) issues that trouble him, and matters that continue to give him pleasure.

For myself, in the midst of decreasing physical function, Jim has begun to express so much of himself that was previously unspoken and unexpressed. He is able to discuss openly his feelings around the early death of a grandchild, his loss of sexual function, his fears of dying by asphyxiation, and also his rediscovery of a faith that he had left behind. The pain he expresses are losses in the here and now, more than a physical
pain that can be identified, yet still that for me is his pain – only he can feel, identify
and express it, and only he can seek to reduce that pain through his spiritual outlook.
The spiritual or existential life that Jim had previously been unable or unwilling to
discuss, now gives focus and meaning to his life.
All of this of course is a preamble to spiritual care today. In the early years of the 21st
century, society’s and the individual’s understanding of spirituality has changed
beyond all recognition from the day in July 1967 when the first patient came into St
Christopher’s.
In 1967, the chaplain’s role was easily defined. He was invariably an Anglican priest,
whose main responsibility was to be a provider of religious as much as spiritual care.
So the distribution of sacraments, anointing, commendatory prayers and post death
prayers, had as much significance amongst the hospice community as his
pastoral visiting. Within that role, the chaplain had a responsibility to Christianly talk about
pain and its effects on the human soul. And I venture to say that was possible because
there was a common language which an individual could use in talking to a chaplain.
Whether we can describe this is a residue of pre-war religious observance is hard to
say.
My experience of Spiritual Care is that the sacramental and religious role, whilst retaining
its place for those who practise an organised Christian faith remains, it is the existential;
meaning and spiritual issues that have priority for the majority of patients who wish to
see a member of my team. But, in talking with me there is no common language to talk
about pain, whether physical or spiritual. How does a man or woman, whose contact
with spirituality is self defined and self prescribed deduce or create a theology of pain,
or death?
Can reflexology, a short(ish) period of therapy in which personal attention is paid by
the therapist to the individual by massage of the feet to alleviate other physical issues,
possibly deal with the great meta narratives of human existence, including pain, when
there is no mechanism in place for that?
For patients of other faiths the provision of spiritual care is frequently taken care of by
family members and friends. The other faith communities that St Christopher’s serves
beyond Christianity have no understanding of a faith leader as pastor or spiritual
carer; those roles are assumed to belong to the community. It is only the Christians
who have professionalised (whilst retaining the idea of ministry as a calling) the pastoral
carers role into the ordained, stipendiary (and increasingly non stipendiary) ministry.
But, those other faith groups often have a common understanding of pains reason,
and the purpose of suffering. Although a Muslim suffering from the terminal stages of
cancer, may feel as much pain as any other person, his community of faith tells him that
Allah wills this in his life, and there is a meta narrative in operation which can enable a resignation in faith to the present and future.

However, bearing that digression in mind, the patients of no faith, but some spiritual or existential worldview who do meet with us, at home or on the inpatient unit, often struggle to express their spirituality verbally, and it can be a slow process of encouraging a patient that one is actively listening that assists the telling of the story. Moving those individuals from being story tellers to engaging in reflecting upon and somehow understanding how their world view has influenced the way in which they have responded to pain is a different matter.

The revolution in spirituality that has taken place over the past 40 years has been studied by Paul Heelas and Linda Woodhead, both from the University of Lancaster. In The Spiritual Revolution, Kendall is the focus of research looking at the level of church attendance, and church type some 40 years prior to the census of 2001. The discovery was unsurprising, a mix of denominations with a reasonably good Sunday attendance. By contrast in the first period of study (around 1961) they could find only one historical example of anything that approached alternative spirituality, through a small centre run by one man.

By 2001, the landscape of church attendance v spirituality was markedly different. Churches had closed and attendance had declined. Only those churches that offered highly prescriptive teaching and worldview had survived reasonably intact. Those churches offering a broader, less rigorous approach to faith and life had declined.

In contrast now, spirituality, and alternative beliefs were much more prevalent. The single individual had been joined in a ‘healing centre’ by practitioners offering a variety of alternative therapies and spiritual practices; yoga, reikei, crystal healing, spiritual healing, aromatherapy, reflexology to name a few.

However seriously that piece of research is taken, the fundamental points that can be drawn are that organised religion does not work well, unless it is prescriptive, and that alternative spiritualities are burgeoning as men and women, predominately over 45, and possibly in a position of reviewing life, if the research is believed are seeking out ways of finding personal meaning and worth, usually in a solo context, rarely in a group, and possibly through more than one alternative.

I hope this academic example has highlighted just how much more complex and diverse an individual’s understanding of what constitutes a spirituality or worldview is, and therefore how much more difficult it is not only to relate to, but enable expression of spirituality within the hospice environs.

I hope also it has illustrated the difficult task that faces chaplaincy and spiritual care workers in addressing pain. Leaving aside that many patients no longer have a background in the Christian faith, and have lost the common language that existed 40
years ago, spiritualities and worldviews that are self-referencing, or self-created, which
deal with ‘now’ rather than ‘tomorrow’ do not, and maybe cannot easily have a
perspective on pain from an existential position.

What language, imagery, presence can and should a spiritual carer try to bring into an
intervention with a person whose sole understanding of their worldview beyond
themselves is through yoga or reiki? Is there an impenetrable barrier between a spiritual
carer who holds a Christian worldview, and an individual who holds a quasi-eastern
mystical worldview? These are questions that I, and chaplains across the UK are
increasingly facing. The need to access a person’s spirituality and through that assess
whether there is any spiritual pain is complex, and may thwart the best efforts of any
multi-disciplinary team.

Finally, one other important point also deserves note, perhaps it is one aspect of this
address that needs addressing to ensure that palliative care and end of life spirituality
are seen properly in the context of dying.

How do those working in spiritual care address death with patients? Bearing in mind
that modern spiritualities are focussed on self-improvement and well-being in the here
and now, a patient suddenly confronted with impending death may have few tools
with which to come to terms with that.

The sense of anticipatory grief and the feelings of loss, even the sense of having been
‘robbed of life’ can cause anger, hurt and a sense of betrayal in that the ‘folk deity’ who
had made life good, and fulfilling was no longer working in the individual’s favour. For
those working in spiritual care, it is important to simply sit with those expressed
emotions, acknowledge their expression and somehow enable the patient to reconcile
themselves to a resolution that means that death is in some way a healing, despite the
grief that has been and will be experienced, by patient’s and their families and carers.
Here it is emotional pain rather than physical pain which I am focussing on.

In the 1970’s M. Scott Peck, wrote the first self-help book, which spawned an industry
that perhaps reflects the cultural change in worldview from a western Judaeo-Christian
view to something much more amorphous, and less definable. Peck however, offered
the reader of The Road Less Travelled, a rear glancing picture of death’s place in life,
lifting his self-help above those writers who followed him, even if only because he
attempted to put death into a context of life. He wrote,

Death is our constant companion, travelling on our ‘left shoulder’ … the constant
awareness of the limit of our time to live and love, we can always be guided to
make the best use of our time and live life to the fullest. But if we are unwilling to
fully face the fearsome presence of death on our left shoulder, we deprive
ourselves of its counsel and cannot possibly live or love with clarity. When we
shy away from death, the ever-changing nature of things, we inevitably shy
away from life.6
The most complex aspect of providing good spiritual care in the context of a multi-disciplinary team is for those who are involved in providing such care, to recognise their own mortality and, as Peck indicates, acknowledge that death is a companion through life. In that way, the varying and sometimes quite insular and peculiar (by which I mean unique to the individual) spiritualities that are expressed are heard and responded to openly, honestly and with due regard for what might be possible to facilitate expression of particular need. A multi-disciplinary team, in which each team member recognises and acknowledges that which brings him or her to feel emotional pain in the milieu of their worldview and death lessens the teams singular and corporate inability to respond appropriately to pain that may not have physical cause.

In the space of a generation the provision of spiritual and religious care has changed in response to a rapidly changing social, spiritual and cultural milieu. In this address, I have sought to show how the original model of total pain, espoused by Cicely Saunders has had to respond to a radically different structure of faith and religion, from that which she envisaged. However, in the current climate of spirituality beyond Judaeo-Christian worldviews, the challenge is to respond appropriately to highly personalised understandings of spirituality, and in doing so assist in the alleviation of pain as a problem within a patients palliative care journey.

If hospice care still believes that every patient matters not because of what illness they have, or social problems they have, or psychological issues they have, or spiritual issues they have, but simply to use Cicely’s words ‘you matter because you are you. You matter to the last moment of your life’, and that patient is perceived as mattering per se, then the multi-disciplinary approach to recognising, responding to and meeting spiritual pain remains not the ideal, but the reality for those employed in patient care of the dying.

References

3 Saunders C.M.S., *Care of the Dying – 1 The problem of Euthanasia* in *Nursing Times* July 1, 1976 pp1003-1005
FAITH & THOUGHT - APPLICATION FOR ENROLMENT

Title and Surname....................................................................................................................

First Names..............................................................................................................................

Address.....................................................................................................................................

Profession and Qualifications..............................................................................................

Area of Study or Interest........................................................................................................

Please enrol me as a **Member under** *Option 1 / *Option 1E / *Option 2
*Option 2E (Not suitable for members of CIS) / *Option 3 (See concessionary terms below)

If you are resident outside Europe kindly indicate whether you wish to pay the optional
airmail supplement *YES / NO

I enclose a remittance for £ being the current year’s subscription payable on 1st January and consent to my particulars being included in the record of members.

Please let me have a *Banker’s Standing Order form/Gift Aid Declaration

Signature .................................................................................................................................

Date ..........................................................................................................................................

CONCESSIONARY TERMS: Option 3 offers a concessionary rate of subscription
for first degree and full time theological students and requires completion of the
following additional questions:

College ......................................................................................................................................

Course ....................................................................................................................................... 

Expected completion date....................................................................................................... 

Private/vacation address .........................................................................................................

*Please delete as appropriate

Mail to the Administration address:

Rev. J. D. Buxton, 15 The Drive, Harlow, Essex. CM20 3QD.
PAST PRESIDENTS

1865 - 1885  The Right Hon. The Earl of Shaftesbury KG.
1886 - 1903  Sir George Gabriel Stokes, Bart., DCL, FRS.
1903 - 1921  The Right Hon. The Earl of Halsbury, PC, FRS.
1921 - 1923  The Very Revd. H. Wace, MA, DD, Dean of Canterbury.
1927 - 1941  Sir Ambrose Fleming, MA, DSc, FRS.
1941 - 1946  Sir Charles Marston, FSA
1946 - 1952  Sir Frederic Kenyon, GBE, KCB, D.Litt, LLD, FBA.
1952 - 1965  Professor F.F. Bruce, MA, DD, FBA.
1966 - 1976  Professor Sir Robert Boyd, CBE, DSc, FRS.
1977 - 1985  Professor Sir Norman Anderson, OBE, QC, MA, LLD, DD, FBA.
1985 - 2001  Prof. D.J.E. Ingram, CBE, DL, MA, D.Phil, DSc. (Oxon),
              C.Phys, F. Inst.P.

PUBLICATIONS

Volumes Concluded

Journal of the Transactions of The Victoria Institute 1-89 1957
Faith & Thought 90 - 114 1988
*Science & Christian Belief First Volume in 1989

*Published jointly by The Paternoster Press (Send the Light Ltd.) for Christians in
Science & The Victoria Institute.

SUBSCRIPTIONS

Options

1. Faith & Thought alone
   United Kingdom £9.00
   Europe & Overseas £9.80
1E. Faith & Thought with electronic Science & Christian Belief £18.00
   United Kingdom £19.30
2. Faith & Thought with printed Science & Christian Belief £18.00
   United Kingdom £19.30
2E. Faith & Thought with both printed and electronic versions of
    Science & Christian Belief £20.00
   United Kingdom £21.30
3. As 2 above for first degree and theological students £12.00
   United Kingdom £13.30

Optional Airmail Supplement

<table>
<thead>
<tr>
<th>World Zone 1</th>
<th>World Zone 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1</td>
<td>£0.80</td>
</tr>
<tr>
<td>Options 2 &amp; 3</td>
<td>£2.20</td>
</tr>
</tbody>
</table>

* Please enquire if guidance is needed about the Royal Mail Classification of countries into its two world zones.
The Faith & Thought Bulletin first appeared in 1985 under the title Faith & Thought Newsletter. That new title reflected a wider coverage, since it contained some short articles, notes and book reviews, in addition to the news items, which previously would not have fallen within the purview of the Journal. From the April 2005 issue it became known as Faith & Thought.

Faith & Thought is published by The Victoria Institute and mailed free to all Institute members, along with Science & Christian Belief.

The Journal Science & Christian Belief is published jointly for VI and CIS. It replaced the CIS (previously RSCF) Newsletter and the VI journal Faith & Thought, the final number of which was volume 114 No.2 - October 1988.

Editorial Address:
R S Luhman, BD (Hons), MA,
110 Flemming Avenue,
Leigh-on-Sea,
Essex.
SS9 3AX
Tel: 01702 475110
E-mail: reg.luhman@talktalk.net

Administration Address:
Rev. J. D. Buxton,
15 The Drive,
Harlow,
Essex.
CM20 3QD.
Tel: 01279 422661
E-mail: j.buxton@virgin.net

ISSN 0955-2790