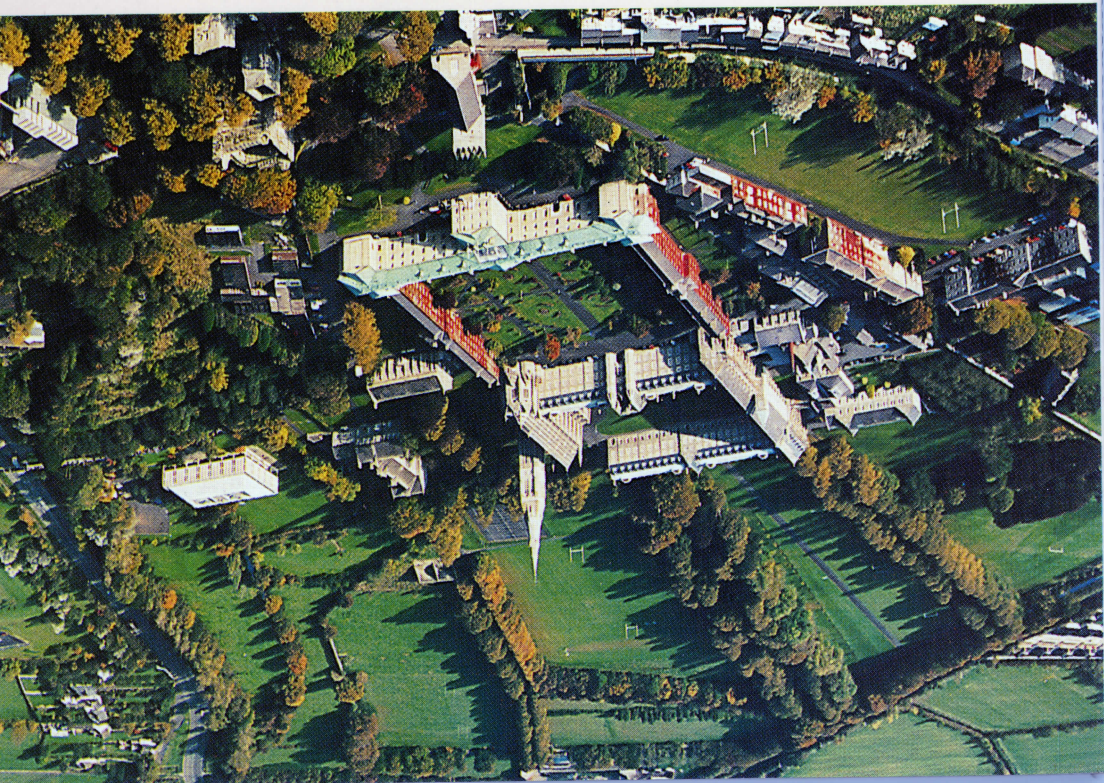


Beyond the library walls

John Paul II annual lectures



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BEYOND THE LIBRARY WALLS

JOHN PAUL II ANNUAL LECTURES

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Lectori Salutem

“Good wine needs no bush” – but a wine label may still be helpful. *Beyond the Library Walls: John Paul II Annual Lectures* is a collection of lectures delivered annually between 1984 and 1995 to celebrate the opening of the John Paul II Library. The lectures, taking place in the Arts Block, were literally beyond the perimeters of our library building which, incidentally, won a design award in 1988.

All contributors have a position in Maynooth College, except Professor Fáj who visited it in 1988. The first lecture coincided with the official opening in 1984, the most recent one with the bicentenary celebrations of the College in 1995. Although every lecture was either based on or was connected with an academic paper and had necessitated dedicated research, not every one of the twelve lent itself readily to publication or republication. So for the present collection seven lectures were selected and arranged in reverse order of the chronology of their original, verbal presentation. In this way we could start with Msgr. Patrick J. Corish’s contribution on the succession of libraries this College has had, to the one it has now, in other words, with a paper whose topic is the very walls of the library.

From the rest of the papers two have already appeared in print: “Science and Religion”, by Professor Thomas Corbett appeared in the *Irish Theological Quarterly* (1993, no.1. pp102-113) while “Voicing the Text” by Professor Brian Cosgrove appeared as the **John Paul II Annual Lecture Series**, no.1., (1994).

There is a progression marked here: what started as a “library lunch-time lecture” was increasingly becoming the institution of an Annual Lecture, which – as we have no inaugural lecture as such – provides a platform for recently appointed professors. The present collection is a further tangible milestone – *verba volant scripta manet.* – since through the medium of the portable printed volume, the lectures/studies/essays may now reach a wider audience not just beyond the library but outside the College walls as well.

When reading this book it must be remembered that, in every case, an expert addresses his chosen subject to a general audience. For this reason the academic special language is reduced to a minimum, general readability is enhanced, and the papers reach across subject frontiers or arts/science divides. Looking for a good read which, at the same time, widens his or her horizons, the reader will handle this little volume with joy.

THOMAS KABDEBO

THE LIBRARIES OF MAYNOOTH COLLEGE

Patrick J. Corish

A library has always been regarded as a necessary part of an educational establishment, and it was an early concern of the trustees of Maynooth, even though the College was founded in difficult times. In a very real sense undergraduate teaching rests on the text book, broadly defined. The teacher will hope that his students will possess this, and in every sense make it their own. He hopes too that they will read more widely, and this means they must have access to a library.

When Maynooth opened in 1795 the principal subject on its curriculum was inevitably theology. Theological teaching had for a long time been committed to the “manual tradition”, the manual being designed to give the student everything he needed to know. The French Revolution, which had closed the Irish continental seminaries and in consequence led to the foundation of Maynooth, had started a long war that came to an end only in 1815. One result of this was that theological manuals were hard to get; it certainly was difficult for students to acquire a personal copy. The library of Maynooth College had its humble beginnings in the resolution of the trustees in May 1800 ordering that “one of the large halls” (in the newly completed Long Corridor building) should be fitted out as a library. They appointed their secretary, Andrew Dunne, as librarian with authority to appoint a “deputy” at £20 a year. The College statutes, promulgated that same year, directed that the library be open for four hours on every class day, and that the “prefect” (presumably the deputy) be in attendance.

The stock of the library must have been humble indeed. Edmund Burke had presented some of the classical works belonging to his dead son Richard, but in the beginning there were few such gifts. It might be expected that sights would be set low, for the country was very short of priests. The theology course ran to three years, which was common enough at the time, but some bishops had to ordain their students before completing it. Yet very soon steps were being taken towards establishing some kind of postgraduate course. It was a brave decision, indeed to some extent a rash one, because there were only two professors of theology, and each was a busy man. A

few years later the College got the windfall of the Dunboyne legacy. It was an equally brave decision to set all this aside for the postgraduates. A separate building was put up for them, which is still known as Dunboyne House today. The lower two floors were to be residential, and the library was to be moved to the top floor. The building was ready for the academic year 1815/16, and the library moved in, boosted by the sum of £1,000 voted by the trustees for book purchase, with the hope — to be repeated many times — that it might now be properly catalogued. It took quite a while for a postgraduate course to develop a capacity to use library resources. While there were only two professors, each with a full undergraduate course, there was little for the postgraduates to do except revise the manual courses they had already covered. A further appointment was made in 1823 with the title of "Prefect of the Senior Scholars and Librarian". He continued to have sole responsibility for postgraduate studies until 1896. In retrospect, it would not appear to have been the best way of using resources. The title survived until 1939, as did his responsibility for the library.

By 1823, however, there had been the great disappointment in 1820 of Rome's refusal to give Maynooth authority to grant degrees in theology, for reasons which, at this distance, seem slender enough, but which reflect continuing suspicion of "French ideas", referred to indiscriminately as "Gallicanism" or "Jansenism". This refusal was a serious obstacle to the development of a real course of postgraduate studies. In an account of Dublin and its environs published in 1818 it was stated that the library contained 5,000 volumes, mostly theology (in 1826 the librarian, in a full account given to the Commissioners of Irish Education, claimed they numbered 10,000). It was open four hours a day for students of four years standing, in practice students of theology. It was closed on Sundays and Wednesdays (already, it seems, the weekly half-day). These hours applied also to vacation time, when most students remained in the College, and indeed may have found vacation to be the only time they had leisure to go to the library. The exclusion of pre-theology students was probably no great hardship, as they would have found little there to interest them. In 1826 the visiting Commission was told that the students of Natural Philosophy, the senior pre-theology year, had a small library of their own, and when the Junior House took definitive shape with the building of Rhetoric and Logic Houses at the beginning of the 1830s, the trustees in 1834 voted the modest sum of £40 to inaugurate library facilities there. Modest as these must have been,

they disappeared altogether in the years immediately after 1845, because the greatly increased grant then given made it possible to accept more students, and until Pugin's buildings were ready in the 1850s library space in the Junior House had to become dormitory space.

Pugin's buildings were certified as completed in June 1850, but this only meant that the shell was completed. With little or no money available, moving in was a gradual process, and the occupation of the great new library could not get high priority, even though the old library in Dunboyne House was bursting at the seams, with books overflowing into two storerooms, so the Royal Commission of 1853 was told. The book-purchase fund was small and seemingly intermittent. The library grew mostly from the libraries of deceased clergy, members of the staff and others, sometimes by bequest, sometimes by purchase. Edmund Burke, as already noted, was an early benefactor. The theological core of the library came from the books of Andrew Dunne, the first librarian (d. 1823), and there had been substantial additions from Christopher Boylan (d. 1833), a past professor, and Bishop Bartholomew Crotty of Cloyne (d. 1846), a past president. In 1848 the brothers of Bishop John Murphy of Cork (d. 1846) presented his great collection of Irish manuscripts. These have since been supplemented by the Irish volumes in the collection of Laurence Renehan (d. 1857) and by the O'Curry manuscripts, which came from the Catholic University in 1900.

The way in which the theology holdings of the library were built up led to much duplication and a number of gaps. A very good picture of the old library emerges from a long letter written on 21 January 1840 by the librarian, Charles McNally, to Paul Cullen, rector of the Irish College, Rome. He asked his help and advice in securing theological works, for which, he said, he had £150 to spend, residue of a legacy from Professor François Anglade, who had died in 1834. What he wanted, he said, were:

books strictly theological, in which I regret to say our library has been hitherto lamentably defective. In the other departments of ecclesiastical literature, the H. Fathers of various editions, commentaries on the S. Scriptures, Ecclesiastical History, Canon Law etc. the library is comparatively well furnished. We have, to be sure, a good supply of the French compilers, but of the works of St Thomas, Bellarmin, Suarez, etc. only parts or odd volumes, and for many of the standard divines no part at all. Of all of these I wish to have the works complete and of the best editions, and indeed of all the

theologians of repute or merit, as far as our means will go.

There is a detailed description of the old library, written by Sir Francis Head, who visited the College in August 1852. He had been a colonial administrator, where he had clearly learned attention to detail. He toured the buildings with notebook in hand and with a truly photographic eye:

We next proceeded to the library, a low solid-looking room, 115 feet long, divided by short walls into a suite of eleven recesses, on the right and left as one walks up it, lettered successively from A to K. In walking up the aisle or middle of the room, I observed in these several recesses, seated at a single table, more or less loaded with books, a young student in his black gown and black stock edged with white, intently reading — indeed they were apparently so completely engrossed with their respective studies, that not above one or two of them even raised their eyes as we passed. On reaching the fireplace at the end of the room, I observed on it a statue of King George III, the founder of the institution; and the compartments A on either side of it, to my surprise I found completely filled with bibles of every description. “Well”, said I to myself, as I looked at them and then the royal statue, “here’s certainly Church and State!” In this compartment there was standing a young student, of about 21 years of age, who had apparently charge of it; and as he saw that the vice-President and I were conversing, and were evidently interested in the subject, he handed me down, with great alacrity, bibles in a variety of languages, English, French, Spanish, Latin, Greek, Hebrew, Syriac, Arabic; then one huge polyglot volume of pages divided into three compartments, in which was the Bible in the Syriac, Hebrew, Greek, Latin, German, Bohemian, Italian, Spanish, French, English, Danish, Polish languages. “And yet”, said I to the President, “you have no bible in *Irish*.” I moreover observed in this compartment A, Calvinus in Epistolas; Roberti Stephani MDLVI; Beza in Evangelicum, Biblia Sacra Beza; Biblia Hebraica Hennicotii (from the Clarendon Press, Oxford, date 1780). There were numerous commentaries on the Septuagint, commentators of all classes and creeds, Grotius and Calmet included. Among the earliest editions, I observed Rider’s Family Bible, Haydock’s Holy Bible, Douay Bible, King Henry VIII’s Bible, lastly, a very old one in black letters, with Apocrypha and all complete, excepting the title-page, which was missing. On retracing my steps along the aisle or

centre of this library, I observed, hanging on one of the two walls which formed the recesses, a notice, of which the following is a copy:—

“Whoever takes a book out of this library incurs excommunication ipso facto.”

Meanwhile the great new library still stood empty: it was here that Cardinal Wiseman addressed the assembled community when he visited the College in 1858. By now there was a new president, Charles W. Russell. Some time earlier a scheme for the book stacks had been drawn up by J.J. McCarthy, professor of architecture at the Catholic University and later the architect of the College Chapel. The work was carried out between February 1862 and January 1863 and the books were moved over the academic year 1863/64, again with what proved no more than a pious hope that they might be adequately catalogued in the process. But Russell was one of the great presidents, and if he failed to get the books catalogued he did much for the library. He acquired Migne’s *Patrology* and other publications; he used his influence with the Public Record Office in London to secure the HMSO publications; as a member of the Historical Manuscripts Commission he did the same here. He appealed to Napoleon III in France and to Tsar Alexander II of Russia, from whom he received the St Petersburg edition of the Codex Sinaiticus; and, on a much humbler level, in 1860 he began the restoration of some library facilities in the Junior House.

But the main source of library growth continued as before, namely by purchase or donation of clerical libraries. It has been recorded that Professor Patrick Murray (d. 1882) had been a generous benefactor even during his lifetime. When John O’Hanlon died in 1871 after long years as Prefect of the Dunboyne his extensive theological library was purchased. After Russell’s death in 1880 his books came to the College — there was a small payment to his family, who were badly off. Exceptionally, his books were kept in a special collection under his name, and a portrait of him commissioned to hang there. The collection is shown in a photograph in Healy’s *Centenary History*. It has since been broken up, and all collections, before and after, have gone into the general catalogue, duplicates being disposed of with a measure of ruthlessness. This must surely be a matter of some regret, in that though the library may have gained something in efficiency, it has surely lost in character.

There was, of course, not much money. The library continued to be run by the Prefect of the Dunboyne with help from some of his students. Though

gas lighting came in 1864 and electricity in 1902, there was no artificial lighting in the library until the 1960s. This meant that for much of the year it could not be used after four or even three o'clock in the afternoon. Working libraries were established in the various divisions of the College. As noted above, Russell began building a library in the Junior House in 1860. Though the division of the Senior House into St Mary's and St Joseph's came to an end fairly soon, the name "Joseph's Library" clung to one of the halls in Long Corridor and in St Mary's there were two divisional libraries, one theological, the other general. Walter McDonald, who entered as a student in 1870 and died in 1920 after long years as Prefect of the Dunboyne and Librarian, did not think very highly of them: "of some use for purposes of Ecclesiastical History; of very little use for theology; and of none, practically, for general reading". He added that "few students ever entered the main College library" and all in all this seems to have been substantially the case.

When the episcopal trustees secured exclusive control of the College after the Irish Church Act of 1869 they introduced a number of changes. A very beneficial change was the introduction of internal college councils: rather strangely, up to this none had existed. To begin with there were two councils. Their names, the Scholastic Council and the Administrative Council, are self-explanatory. In due course the Finance Committee (later the Finance Council) split off from the Administrative Council, and the Library Committee from the Scholastic Council. The Library Committee seems to have been designed to give the teaching staff a greater input into library affairs, but given the financial stringencies this could not amount to much. There was again talk of the need for cataloguing, though in fact nothing was done in the main collection. This had to wait for the 1930s. However, Russell's books were catalogued after his death by Paul Grogan, librarian in the Chapel Street Public library from 1884 until his death in 1915.

The opportunity to carry out a general cataloguing came with the Loftus bequest. Michael Loftus (1845-1929) was a native of Dublin. He became a civil servant and transferred to England during his career. On retirement he settled at Bournemouth. He had no apparent connection with Maynooth, but in his will he left what turned out to be just over £20,000 to the College, with the sole proviso that the income for the first three years be devoted to improving the library and having it professionally catalogued. There was a problem — the library was so packed that there simply was no elbow-room for cataloguing. The solution that suggested itself was to incorporate the

large rooms on the ground floor into the library. This would involve the building of new theology class halls, for these rooms had so functioned since the 1850s, though they were gloomy and not well suited for the purpose. The 1920s and 1930s were years of relatively easy finances, and in fact the class halls were built out of the surplus in current revenue. The library was catalogued between 1936 and 1940 by the late Dr Thomas Wall, a gentle bibliophile who arranged it according to the teaching programme in the College. It had a logic that continues to endear it to those who grew up with it. It was helped by the fact that most of the sections were small, all of them indeed except for the two traditional interests of the Irish clergy, History and Theology. Dr Wall took care to put the rare books and other treasures — small in bulk but real in quality — into special locked bookcases.

The office of "Prefect of Dunboyne" had become more and more of an anachronism since a Pontifical University with power to grant degrees had been established in 1896. In 1939 Dr William Moran resigned the post and also resigned as librarian. For a short while the office was entrusted to a junior professor on a part-time basis, but then, as college finances seemed so much improved because of the extraordinarily generous response to the trustees' appeal for funds in 1950, the first full-time librarian, Fr Seán Corkery, was appointed in 1951. Apart from this, however, there was no strengthening of staff. The new librarian had to do a great deal that should have been the work of support staff, but he did not have any. (At the time other prestigious institutions were grossly understaffed: the Public Record Office of Ireland was a particularly bad example.) But Seán Corkery had to grapple with inadequate staffing and inadequate funding. There were benefactors — the embassies of Germany and France in particular were generous in their supply of periodicals. He organised the sale of the many duplicates that had accumulated in the library, though quite a few of these went as gifts to building up the war-ravaged library of Louvain. He travelled to Salamanca to oversee the closing of the Irish College there, and returned with valuable antiquarian books and extensive archives, only to grapple with the problem of how to provide accommodation for them from his meagre resources.

When in 1966 it was decided to admit students other than resident seminarians, it is an understatement to say there were many problems which had not been anticipated. This was very true in library matters. Opening hours were extended, which at least brought electric light to the main reading

room, but numbers pressed hard on resources. Unexpected difficulties arose, such as the realisation that an ecclesiastical excommunication was no longer an effective protection for the library's books and that, as well as electronic devices, additional staff must include people concerned with security. Additional staff came slowly. The first full-time "assistant and secretary" was appointed in April 1968. When the staff grew they had to be scattered over a number of offices. When Seán Corkery retired in 1973 the duty of librarian had developed into something he could in no way have anticipated when he was appointed in 1951.

When the new Arts Building opened in 1977 it contained some library space, 250 readers' places and shelving for 27,000 volumes, a margin of relief but very temporary as student numbers grew inexorably. Securing public finance for the Arts Building had been a hard battle, so hard that the prospect of such finance for a library seemed very remote. Much thought was given to possible alternatives to a new building, for the need was becoming desperate. Two ideas in particular emerged. One, the more expansive, emerged from the fact that it was long past the time when Pugin's kitchen complex needed radical refurbishing. Why not, it was suggested, incorporate this, with the great refectory, into one central library complex and let kitchen and refectory migrate to a completely new site? It was a very radical proposal and it was probably just as well it was not taken up. The second proposal was to extend the existing library to the south, either by permanent structures or by what was inelegantly described as "two-storey prefabs". Surviving drawings for the permanent buildings suggest that they might have done almost equal violence to Pugin's great south facade, already violated a number of times by insensitive development.

In September 1977 there was a new President. He put forward the bold suggestion of an entirely new library, to be built by public subscription, organised by professional fund raising. It was only to be expected that there would be hesitations, for it was a very heavy commitment, but the project went ahead. When Pope John Paul II visited the College in October 1979 he blessed the foundation stone of the building that was to bear his name, and the main contract was signed on 30 November 1981, it being judged that the fund raising had been successful to the point where it was prudent to begin.

The site selected was in the "Long Meadow", beside the Lyreen River. It had some disadvantages. There would have to be expensive piling of the

foundations, and there could be no basement. That it was a totally detached building raised other problems, but at least the problem of getting from one point to another without going out in the rain was not exactly new to Maynooth. The logical solution would perhaps have been to keep the old library for the seminarians and Pontifical University, and put up the new one to serve the National University College. What ruled this out was the continuing desire to see theology established as a faculty in the National University.

A more serious problem arose, however, from what developed into a financial crisis. Precisely during the years the library was being built there was a massive surge in inflation, running to 20 per cent a year or more. The result was that what had seemed feasible if tight financing began to develop into a financial nightmare. The cloud had appeared on the horizon when the foundation stone was laid by the President of Ireland, Patrick Hillery, on 18 April 1982, and though the building work had gone smoothly and according to plan it had become very threatening indeed when the President performed the formal opening on 7 October 1984. The building was blessed by Cardinal William Baum, Prefect of the Roman Congregation for Catholic Education. The burden of debt, with the crippling levels of interest, made the opening to some extent a muted affair. Very serious problems faced another new President, appointed in January 1985. The library debt was a big one, but by no means the only one. It took skill and energy to reach the situation where it could be absorbed by the general funding programme, but it was done.

The new library is a pleasant modern building, the predominant colour inside being a muted green, with much elm panelling which was a bonus from the Dutch elm disease at the time. In the foyer is the foundation stone and a bronze bust of Pope John Paul II, executed by Marjorie Fitzgibbon, the gift of Colm Barnes. The large bronze group facing the main entrance, showing the Pope with Irish youth, is by Imogen Stuart.

The books had been transferred during the summer of 1984. A new cataloguing on the Dewey system was begun, and computerisation began in 1991. Anyone who grew up on Dr Tom Wall's system will inevitably from time to time recall stories such as those told when the Public Record Office moved to new premises at Kew, stories of venerable scholars weeping as they faced the computer terminal which separated them from the documents they sought, but they appear to have adjusted. The card index is

still king in the old library, now named the Russell Library in commemoration of the great President who opened it. It is now a research library, refreshingly calm. In 1987, the "Newman bookcases", brought from the Catholic University, were taken from St Mary's theology library and re-erected as a freestanding cube. Their baroque gleam and Pugin's hammer-beam roof seem to enhance one another. There is plenty of reader space here, but the shelves are full. Shelves and seats are full in the new library. It may even be that developments like CD-room and Internet are beginning to pose library problems in new and different ways.

CHAOS

Daniel M. Heffernan

"The classification of the constituents of chaos, nothing less is here essayed."

—Herman Melville, Moby Dick, 1851.

χάος

According to the Encyclopaedia Britannica the word *chaos* is derived from the Greek "χάος" and originally meant the infinite empty space which existed before all things. The later Roman conception interpreted chaos as the original crude shapeless mass into which the architect of the world introduces order and harmony. This will serve as working definition for the moment: *something which is random and without form.*

In science, as in other disciplines and in life, chaos was until recently thought of as something to be avoided. It was believed by the great natural philosophers of classical science that underlying all science is order, and disorder was a symptom of our ignorance of the basic science. This view was prevalent especially after the publication of Philosophiae Naturalis Principia Mathematica by Newton in 1668. The motion of the heavenly bodies was shown to be regular and predictable. The motions of bodies, such as the earth and the moon for example, could be explained and predicted with great accuracy by the equations mechanics. The progress of science in the last three hundred years reinforced this belief. Even as late at the 1960's most scientists believed that given a big enough computer, with the equations of science we could predict the evolution of any system, no matter how complex, once given the state of the system at some point in time. This belief was expressed eloquently by the philosopher and scientist Pierre Simon de Laplace in his Philosophical Essays on Probabilities (1721):

"An intellect which at any given moment knew all the forces that animate Nature and the mutual positions of the beings that comprise it, if this intellect were vast enough to submit its data to analysis, could condense into a single formula the movement of the greatest bodies of the universe and that of the lightest atom: for such an intellect nothing could be uncertain; and the future just like the past would be present before its eyes."

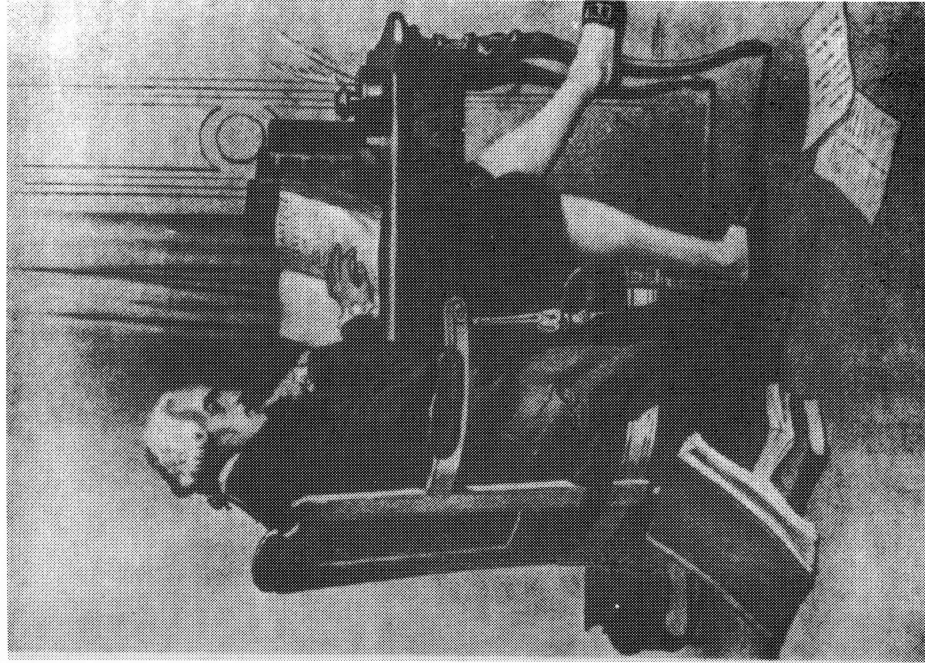


Fig. 1. 18th century lithograph of Laplace

We will now show that within the classical world of Newton and Laplace such a dream could not be realized. The realization among the scientific community that this could not be so took over three hundred years and the advent of the modern computer. We will also see that the paradigm of chaos is truly universal and fundamental to all branches of science and engineering. The study of chaos can be divided into two distinct categories:

1. The route to chaos, and
2. The chaos.

1. THE ROUTE TO CHAOS

A fool sees not the same tree that a wise man sees.

—William Blake, Proverbs of Hell.

We will now examine how a system goes from being regular to being random and without form. When studying something which is complex one chooses the simplest possible model which contains the behaviour to be studied. We will study a model from population dynamics. Consider an isolated island on which there is a species of insect which hatches in the spring, lives, breeds and lays its eggs during the summer, dies in the autumn and the cycle repeats itself the following spring. The insect population in the summer of the j^{th} year is specified by X_j . The population from year to year is given by,

$$X_{j+1} = rX_j - sX_j^2$$

where r is the natural growth rate of the population and the second term represent the reduction to this natural growth caused by overcrowding, or other mechanisms which reduce the population. The equation can be made even simpler by rescaling. If we let $x_j = \frac{1}{r} X_j$ equation (1) becomes,

$$x_{j+1} = rx_j(1 - x_j)$$

The population is normalized to the maximum population so that all population values lie in the interval $0 \leq x_j \leq 1$. This equation is known as the logistic map or Feigenbaum equation. Note that the equation is nonlinear and dissipative. This type of equation also arises in epidemiological studies of the spread of diseases such as chicken pox or AIDS, economics and in many other fields of science and engineering.

For a given growth rate r , one solves the above equation to obtain the

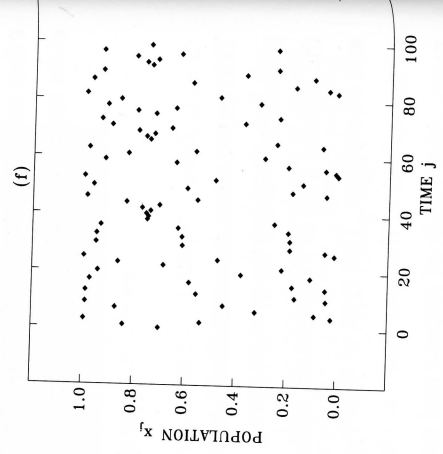
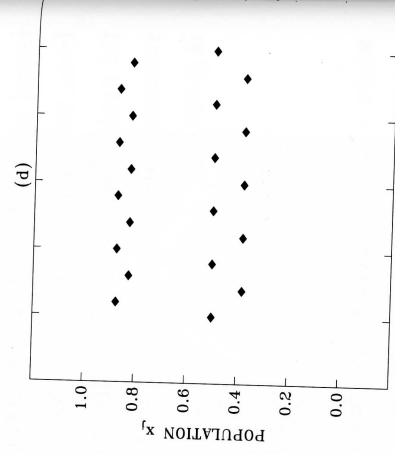
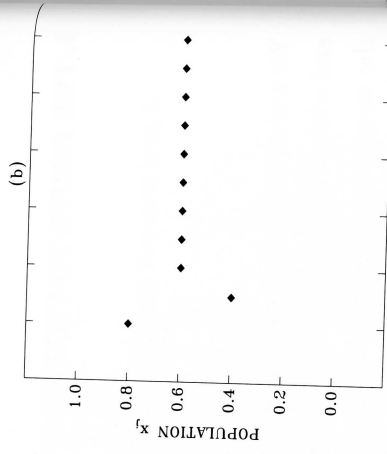
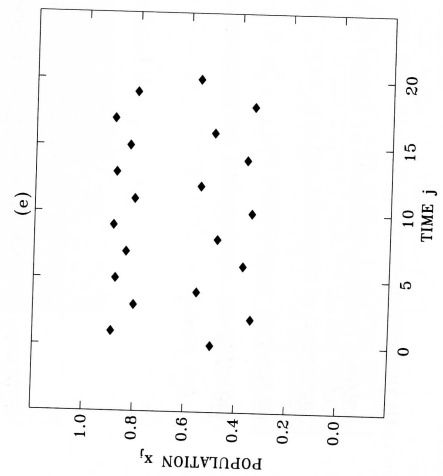
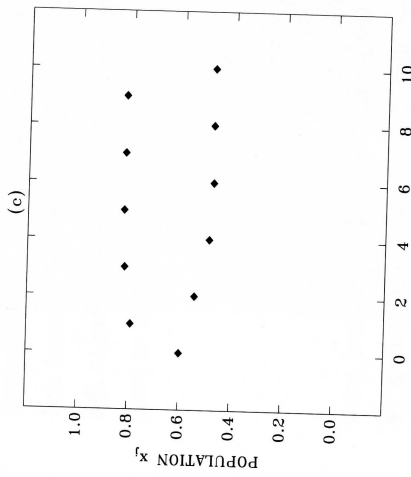
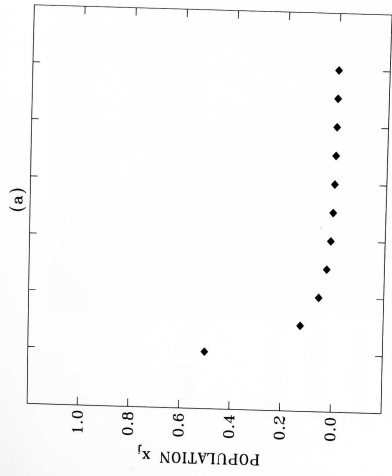


Fig. 2. Multiple periodic motion, (a)-(e), & chaos, (f).

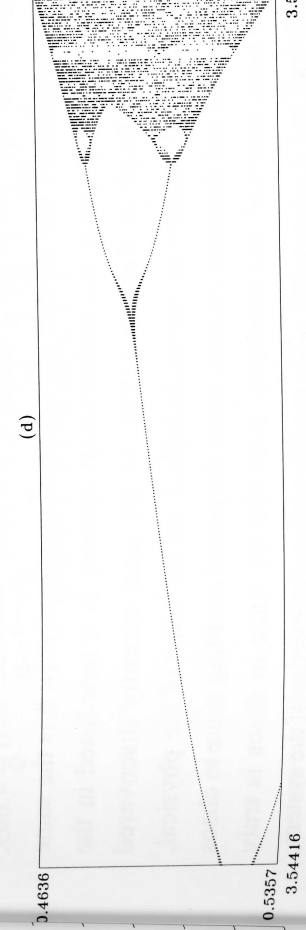
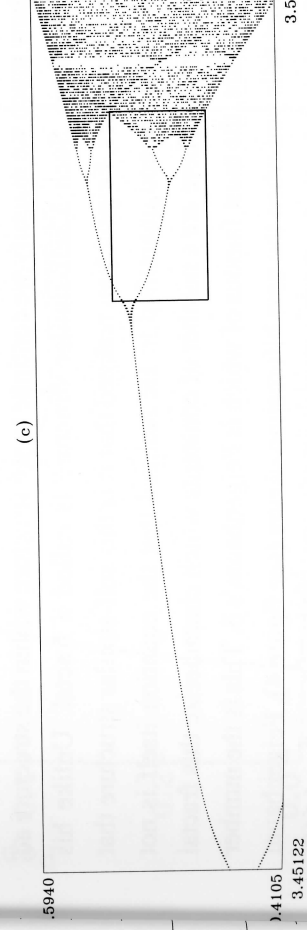
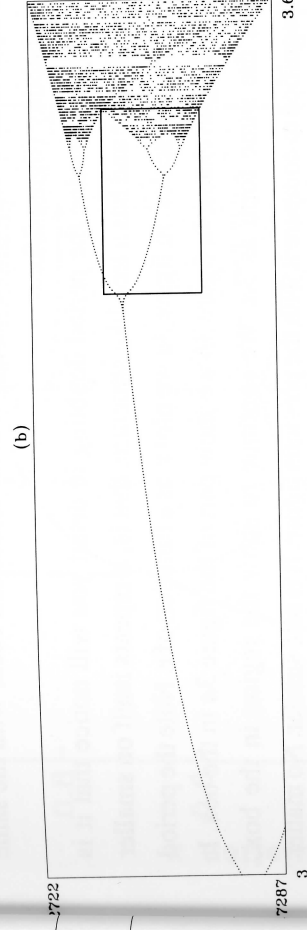
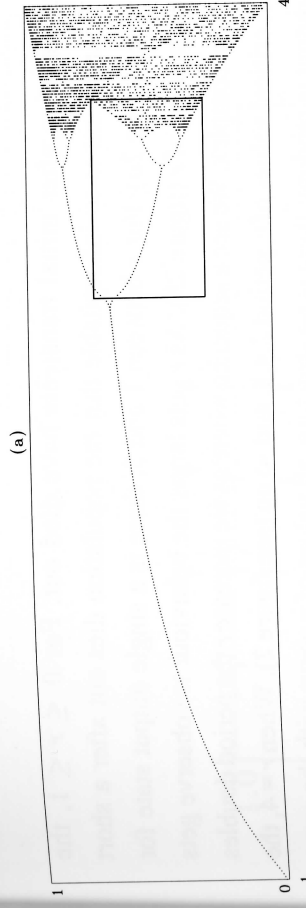


Fig. 3. Self similar Feigenbaum tree.

population after initial transients have died out. For $0 \leq r \leq 1$, the environment is so inhospitable that the population dies out after a short time (figure 2a). For r between 1 and 3, there is a single output state for each value of r (figure 2b). As r gets larger the behaviour we observe gets more complex. We see a sequence where as we increase r the period doubles at critical values of r , period 2, 4, 8, and so on (see figure 2). When $r = 4$, the output is random: there is no structure, all values of x occur with the same probability (figure 2f).

If you examine the period doubling in detail you will notice that it is self-similar and has a tree-like structure, that is, it repeats itself on smaller and smaller scales. In figure 3a we plot x_n as a function of r . Note the period doubling to chaos. In figure 3b we show part of the figure 3a in the box. It has the same form as 3a. We continue to show the region in the box, magnified to compare it with the previous figure. It is self-similar. No matter how much we magnify we continue to see structure within the structure ad infinitum. Such a self-similar structure is called a fractal. Unlike his predecessors, Feigenbaum realized that it is this self-similar structure that is important and quantified it. He realized that the equation itself is not important. There are a number of constants which characterize this fractal structure, the most famous of which is Feigenbaum's δ . This is the number that tells you when the next bifurcation occurs (see figure 4). Feigenbaum found that the limit of the sequence of the ratio $\frac{r_{n+1} - r_n}{r_n - r_{n-1}} \rightarrow \delta = 4.669$ Furthermore this number is a universal number, that is, it is the same for different physical and mathematical systems. It is now listed in the Guinness Book of Records (1994) as the most recently discovered fundamental constant of nature. In table 1 we list some of the physical, biological and chemical systems where the period doubling route to chaos has been observed and measured. Note that the route to chaos is truly universal and is independent of the specific physical properties of the system, be it the weather, an epileptic fit, a cardiac arrhythmia, the spread of diseases such as AIDS or the collapse of share prices on the stock market.

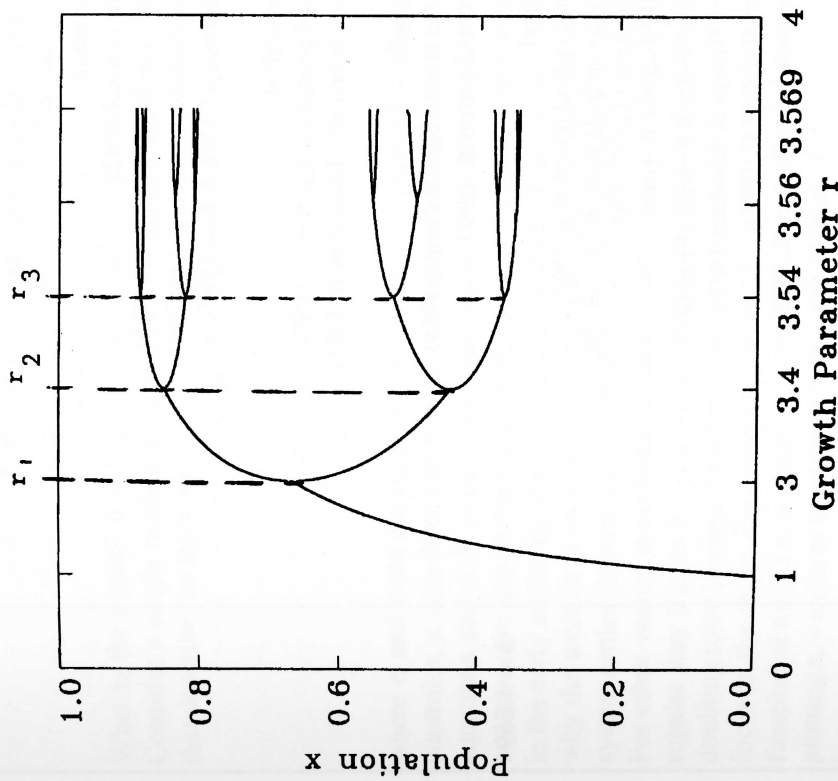


Fig. 4. Feigenbaum's δ .

Experiments where period doubling has been observed

<p>Hydrodynamic water (Gollub & Bension 1980) helium (Libchaber & Maurer 1981) mercury (Libchaber et al. 1985)</p> <p>Electronic diode (Linsay 1982) diode (Van Buskirk & Jeffries 1985) semiconductor (Arrechi & Lesi 1982) Josephson jct. (Yeh & Kao 1982)</p> <p>Mechanical forced pendulum (Koch et al. 1983) forced pendulum (Backert et al. 1985)</p> <p>Acoustic helium (Lauterborn & Cramer 1981) helium (Smith et al. 1982)</p> <p>Optical hybrid optical (Hopf et al. 1981) acousto-optical (Valee & Delisle 1985) laser (Arrechi et al. 1982) laser (Weiss et al. 1983) laser (Otsuka & Kawaguchi 1984) laser (Giongga & Abraham 1983) laser (Hoffer et al. 1985) solid-state laser (Brun et al. 1985)</p> <p>Chemical <i>B - ZH</i> reaction (Simoyi et al. 1982)</p> <p>Heart Cardiac Arrhythmias (Guevara et al. 1981; Glass et al. 1987)</p> <p>Brain Neuronal network (Ditto et al. 1990) Epileptic Seizure (Schiff et al. 1994)</p>	$\delta = 4.669$
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Table 1. Universality of the period doubling route to chaos.

2. THE CHAOS

*Let chaos storm!
Let cloud shapes swarm!
I wait for form.*

—Robert Frost, *Pertinax*.

What is the chaos? It is time that we defined what we mean by chaos. Consider a single mode homogeneously broadened laser! The equations that describe the laser are:

$$\frac{dx}{dt} = -\sigma(x - y)$$

$$\frac{dy}{dt} = y - xz + rx$$

$$\frac{dz}{dt} = xy - bz$$

where σ and b are constants and r is a variable parameter which we can control. x , y , z are three variables which vary in time and are coupled by the equations above. It is not important exactly what they represent. These equations are also an over-simplified model for the weather and were studied in the early sixties by the meteorologist Lorenz in an effort to understand why the weather is so variable. For certain values of the parameter r , the system settles down to a fixed point, that is it is steady in time (figure 5a). For other values, it oscillates in time — the output oscillates in time in a regular way (figure 5c). As we increase r , the system exhibits the period doubling route to chaos as the parameter r is varied. However, we will now focus on the chaos. For a range of values of r , x , y and z vary randomly as a function of time, i.e. is chaotic (figure 5b). Lorenz noted that if instead of plotting x , y and z as functions of time, one plotted x vs. y , or x vs. z , or y vs. z , known as phase plots, one observes a structure in the “phase space” when the system is chaotic. This structure is strange for a number of reasons. If the system was random in the statistical sense, one would expect the points to fill the whole of phase space and not just occupy a fraction of the phase space. If one measures the dimension of the object one expects, from our knowledge of Euclidean geometry, the dimension to be an integer. For example, a set of points have zero dimension. A line dimension 1. A plane surface dimension 2 and an extended object dimension 3. This object is fractal and has a non integer dimension. The points on the attractor diverge

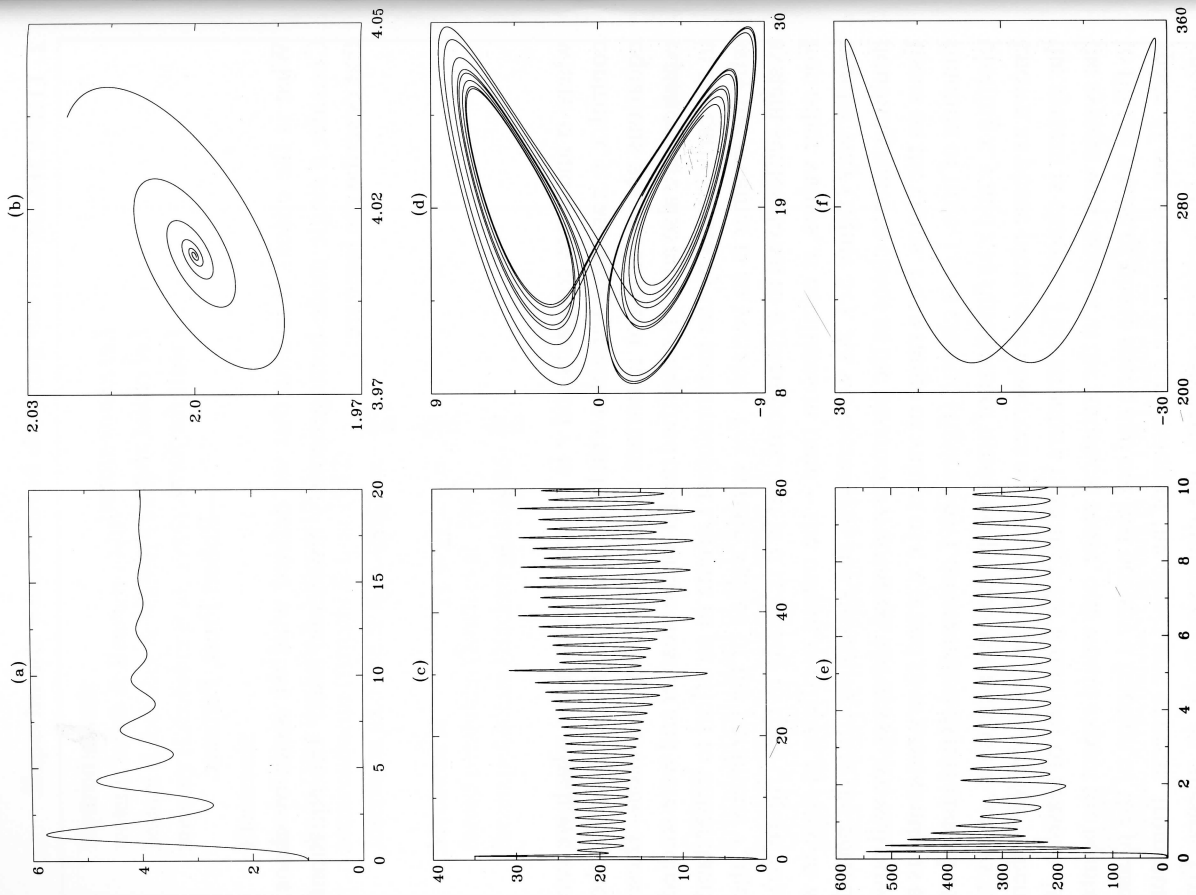


Fig. 5. (a) & (b) steady state, (c) & (d) chaotic and (e) & (f) periodic motion.

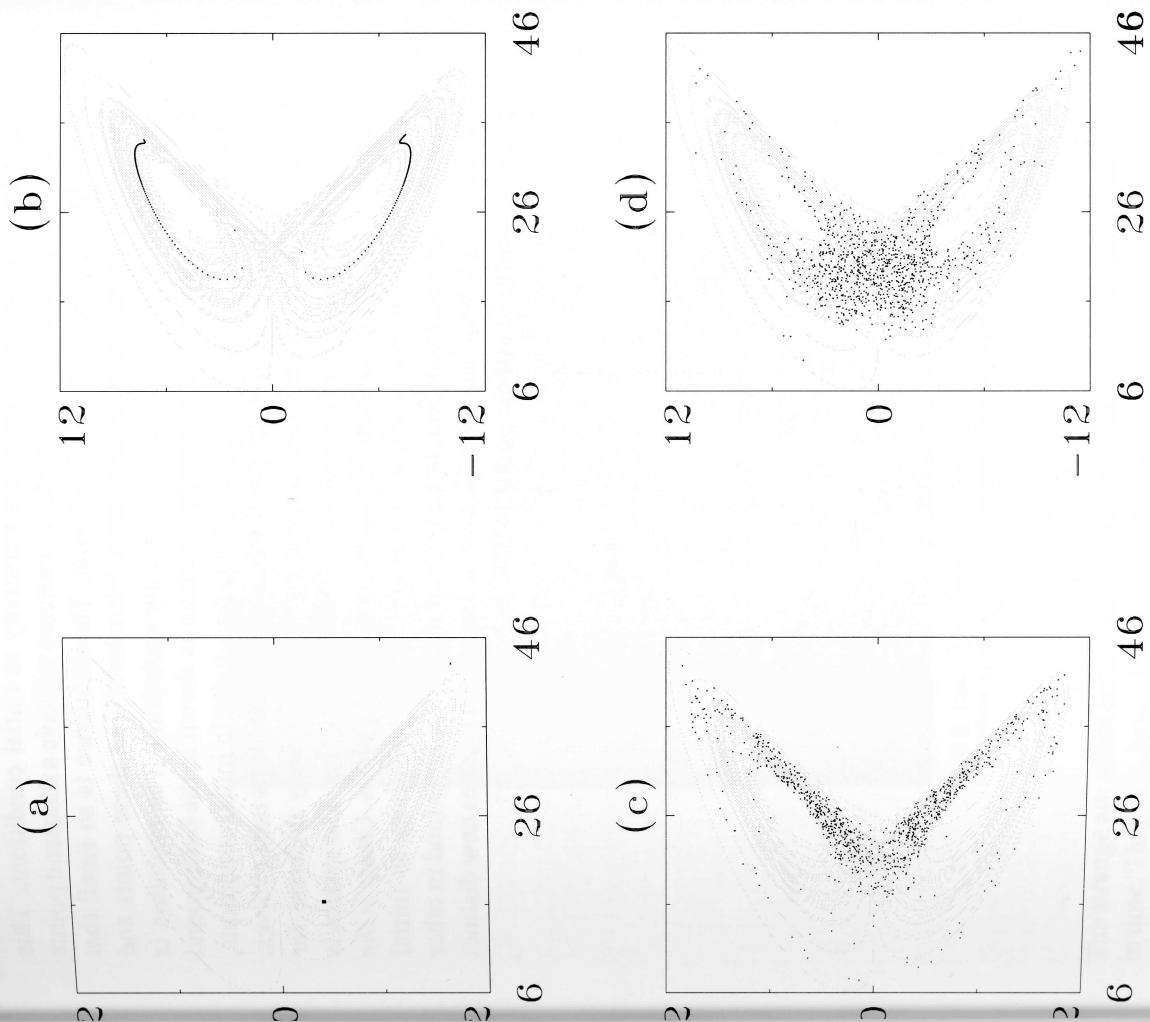


Fig. 6. Sensitivity to initial conditions.

exponentially from each other and consequently are sensitive to initial conditions. Chaos arises from this sensitivity to initial conditions. This sensitivity is illustrated in Figure 6. At time zero we have a thousand points which differ by their 10th decimal point. The difference is so small that they appear as one point on the graph. We take one of these points and follow its orbit in time. We do the same for each point. The evolution is shown in the figure 6. The "strange" attractor is shown in the background for comparison. For a system without this sensitivity to initial conditions, the points remain close together and are indistinguishable as time evolves. However for the Lorenz attractor, the evolution is widely different for each initial condition and leads to quite different outcomes. The system is behaving in a random fashion. This is the origin of the chaos. *Chaos is the exponential sensitivity to initial conditions.* [This sensitivity to initial conditions, or butterfly effect, is also fundamental in biology (and in other sciences) as it is believed to be the mechanism which enables new distinct species to evolve at critical points in time.]

FRACTALS – The structure of chaos

*So, Nat'ralists observe, a flea
Hath smaller fleas that on him prey,
And these have smaller fleas to bite 'em
And so proceed ad infinitum.*
—Jonathan Swift.

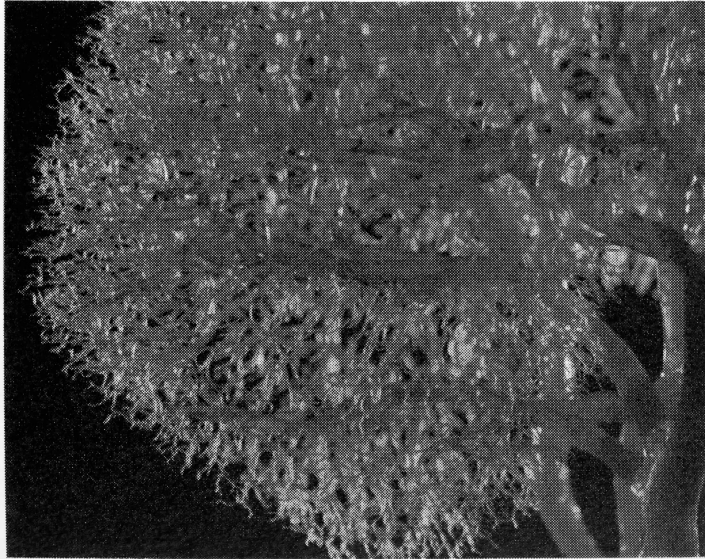
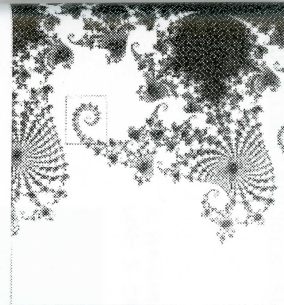
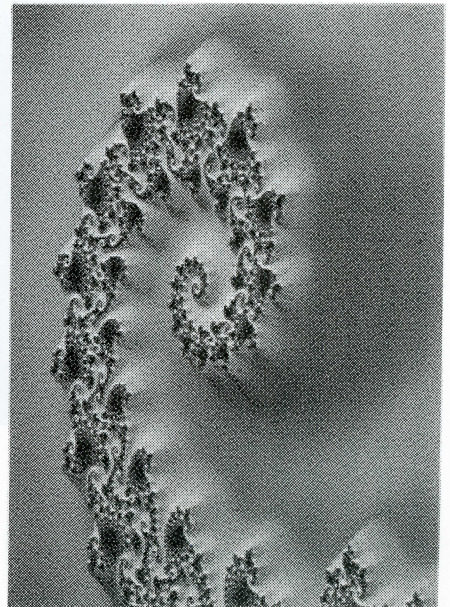
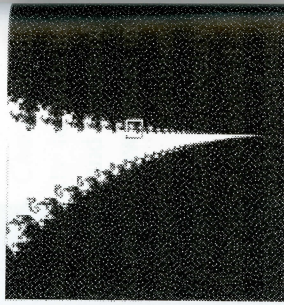
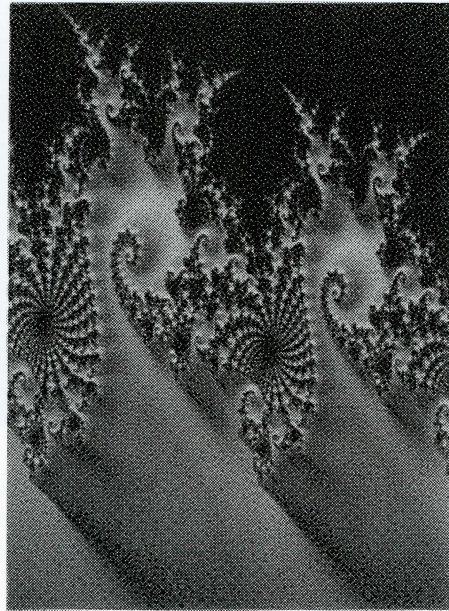
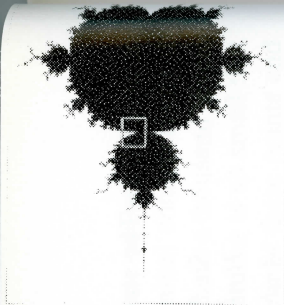
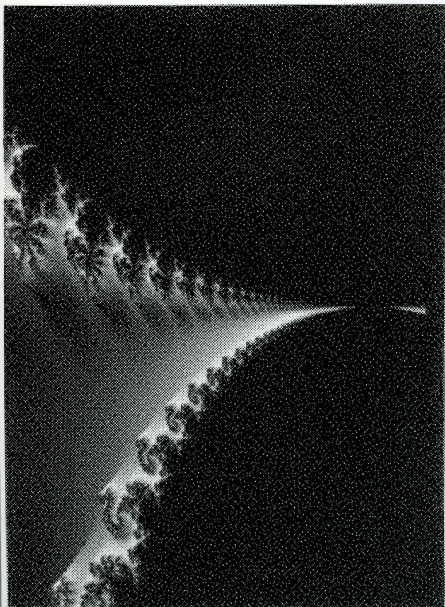


Plate 2: Cast of a child's kidney, venous and arterial system.
© Manfred Kage, Institut für wissenschaftliche Fotografie.

Fig. 7. An example of a fractal.

The strange attractors are the blueprint for the deterministic chaotic motion in time. They, too, have a fractal structure and one of the main aims of chaos theory is to characterize that structure as it enables one to make statistical predictions about the evolution of the system. The mathematics of fractals has evolved substantially in the last twenty years and is now a major field of



study. Fractals are commonplace in nature, for example a snowflake or the venous and arterial system of a kidney, the distribution of stars in the universe or the coastline of a country are fractal. Figure 7 shows a cast of the venous and arterial system of a child's kidney. Note the fractal structure. In figure 8 we show the famous Mandelbrot set as we zoom in on finer and finer detail. (It is obtained from the complex number version of the simple equation $x_{j+1} = x_j^2 + C$). It has structure within structure and so on *ad infinitum*.

In conclusion, chaos is universal and the scientist is learning to quantify and to manage chaos. It is truly amazing that very complex behaviour in time (and in nature) can be described by very simple mathematical equations.

Acknowledgement

I wish to thank Mark Daly for his help in preparing the figures for publication and typesetting the talk.

The figures 7 & 8 are reproduced from *Chaos & Fractals*, H.-O. Peitgen, H. Jürgens & D. Saupe. (Springer-Verlag, New York, 1992).

Plate 31: 3D-zoom sequence details of the Mandelbrot set. Height corresponds to distance. The black-and-white images indicate the location of the close

Fig. 8. The fractal structure of the Mandelbrot set.

VOICING THE TEXT: Authors/Auditors, Writers/Readers

Brian Cosgrove

My concern here, in the first instance, is with a major trend in literary criticism established over the last two or three decades: that is, the prioritisation of writing over orality, of text over voice. In addition, however, I want to look at the reasons for, and the consequences of, such a well-established trend: an investigation which will lead us, I hope, into waters somewhat less well-charted.

The rise and of textuality, of the prestige of the text, is already well-documented: and the central figure is Jacques Derrida. In the summary provided by M.H. Abrams, "Derrida's initial and decisive strategy is to disestablish the priority, in traditional views of language, of speech over writing" ("Deconstructive Angel", 428). We speak of this as Derrida's attack on *phonocentrism*, and acknowledge, as corollary, the desire to replace that with a *graphocentric* model of language. This is a proposition we have lived with for some time: yet we still need to recognise to the full the profoundly radical and subversive – indeed shocking – nature of Derrida's argument. It is certainly the case, as Derrida contends by way of accusation, that in the western tradition speech has consistently been privileged over writing. The *locus classicus* is to be found in Plato's *Phaedrus*, when Socrates (in a passage with which Derrida subsequently takes issue) introduces what he claims to be an ancient tale about the invention of writing. The father of writing, we are told, is Theuth (or Thoth), an inferior deity: he exhibits his invention to the king, Thamus (or Ammon), extolling the virtues of writing over other means of communication. Thamus, however, rejects the arguments in favour of writing, on the grounds that it encourages intellectual laziness (because of its ready availability) and merely superficial knowledge. This leads Socrates to urge the preferability of "another kind of communication", that delivered immediately in the voice of the speaker: and what Socrates endorses, in the words of his interlocutor Phaedrus, is "the living and animate speech of a man with knowledge, of which written speech might fairly be called a shadow" (*Phaedrus*, 96-98).

The rootedness of this kind of emphasis in western tradition is further

evidenced by a passage in Thomas Aquinas' *Summa Theologiae*. In the third part, one of the questions posed (Question 42, Article 4) is *utrum Christus debuerit doctrinam suam scripto tradere?* (whether Christ ought to have conveyed His teaching in writing?). The answer Aquinas gives is unequivocal: it was fitting, he says, "for Christ *not* to put his teaching into writing" (italics added). Christ, "as the most excellent of teachers", rightly adopted that oral manner of teaching "which would impress his teaching upon the hearts of his hearers". Similarly, Aquinas adds, glancing back at the ancient world, both Socrates and Pythagoras, who were most excellent teachers, "chose to write nothing" (*Summa*, LIII, 100-03).

(Later, when John Henry Newman is considering the nature of religious teaching, he finds it entirely appropriate to repeat, in his own inimitably eloquent fashion, the Platonic-Thomistic argument. "Oral Tradition", or, in more immediate terms, "the personal presence of the teacher", is central to the transmission of religious experience, as, indeed, for Newman it is central to university education as a whole: "It is the living voice, the breathing form, the expressive countenance, which preaches, which catechises": "What is a University?", in *Idea*, ed. O'Connell, 471).

It is only against this background, this recognition of the pervasiveness of the phonocentric tradition, that we can truly measure the richly subversive (or outrageous) nature of Derrida's counter-claim. In Derrida's view, writing is by no means, as the formula in *Phaedrus* would have it, "a kind of shadow" (that is, a secondary or belated manifestation) of animate speech: writing is instead prioritised over speech, because, Derrida argues, "writing" subsumes the concept of language in its entirety. So it is that in *Of Grammatology* (one of Derrida's best-known works) we are told that "the concept of writing exceeds and comprehends that of language". Speech, then, does not have linguistic priority over writing, since speech is a subset of the category "language" that writing dominates: and Derrida reinforces his claim by insisting that "there is no linguistic sign before writing" (*Of Grammatology*, 8, 14). The only substantial reality we are left with, therefore, is textuality, written text: in Derrida's oft-quoted summary, "un texte déjà écrit, noir sur blanc" ("a text given as written, black on white": *La Dissemination*, 203).

Now it is fair to say that, for many of those engaged in the attempt to interpret imaginative literature or *poiesis*, the prospect that Derrida holds out is a dismaying one. One may readily sympathise with a somewhat

exasperated Beckett who, in that early commentary on *Finnegans Wake*, refused to be bounded by what he dismissively termed the “polite contortions of 20th century printer’s ink” (*Our Exagmination*, 15-16). Derrida’s written (or, more precisely, typographic) “text” might provoke a similar exasperation, a sense that certain reductions have occurred, and certain dimensions been ignored.

If, then, we seek a persuasive counter-argument, we can find that in a work by John M. Ellis, the very title of which declares its entire opposition to the Derridean enterprise: *Against Deconstruction* (1989). Ellis has a number of charges to level against Derrida in what amounts to a sustained exposé, but the aspect of the argument that most concerns us here is Ellis’ response to what he calls “the impossible claim that writing is prior to speech” (Ellis, 28). There are two major thrusts to Ellis’ argument in this regard: and for the sake of convenience and clarity I take the second of these first. Ellis holds that Derrida is guilty of a basic “logical mistake” or sleight-of-hand (Ellis, 24). Derrida, he says, begins with three terms — language, speech and writing — in which the first term (language) rightly contains or subsumes the other two. But, Ellis adds, when attempting to prove that writing has priority over speech, Derrida switches the terms, substituting a second triad for the first. The word “language”, the dominant term in the first triad, is now replaced by the word “writing” (which of course assumes the dominant position of its predecessor): speech is replaced by the term “phonic”, and writing by the word “graphic”. In sum, the term “writing” is, as it were, smuggled in and allowed to usurp the dominant position held (and rightly held) by the term “language”: and subsequently both spoken word (the phonic) and written word (the graphic) are held be subsets of the dominant category “writing”. As Ellis, however, with a stubborn and wholly admirable naïveté protests, language “does not mean writing, and if we use ‘writing’ to substitute for ‘language’ we have misspoken” (I take “misspoken” here to mean, as in Book IV of *Gulliver’s Travels*, “said the thing which is not”).

The other main thrust of Ellis’ argument against Derrida’s privileging of text over speech is likewise engagingly simple in the objections it raises. Consciously rejecting any false sophistication in order to avail of the obvious, Ellis proceeds to make the following self-evident points:

Speech quite clearly existed long before the *invention* of writing.¹

1. And even longer, we might add, before the invention of printing.

There still exist in the world languages that are spoken but not written, but none that are written without being spoken... There are many different forms of writing, but linguists of all persuasions agree that *no* form of writing in general use is adequate to record all that there is in language; [such as] intonation, stress, pitch... All writing systems are *in principle* only attempts to represent languages [and they] *must* in varying degrees be incomplete. (Ellis, 21)

II

At this point, however, I move on to a more general question which, in his own terms, Ellis also articulates. If such obvious and logically compelling objections (whether finally accepted or not) can be raised to Derrida’s reversal of the priorities of speech and writing, why is it that such a reversal won such widespread and (as it might now appear) uncritical acceptance? What was it — apart from the notorious opposition among literary theorists to anything as banal as “commonsense” — that made the potential flaws in Derrida’s argument so undetectable, and contributed to the popularity of what it might now seem fair to call his perverse inversion?

One suspects, to begin with, that the itch for novelty (always with us) played its part. Here was a radically new approach, a *nouvelle critique*, which pointed towards whole tracts of unclaimed possibility. We all seem to be frequently subject to what Newman calls “a demand for a reckless originality of thought, and a sparkling plausibility of argument”: the recurrent “repetition of the ‘Quid novi?’ of the Areopagus...” (*Idea*, ed. Ker, 14). More specifically, the dominance of print technology has conditioned us to regard not just texts, but words, as substantive realities: as Walter J. Ong has remarked with reference to “the evolution of typography”, the “use of printing moved the word away from its original association with sound and treated it more and more as a ‘thing’ in space” (cited in McLuhan, 175). Such a reification of the word makes it easier to occlude voice by text.

We require, though, a larger and more inclusive explanation than either of these: and I would suggest that such a larger explanation will be found under the general rubric of “The Politics of Reading”. It is instructive at this point to recall that when, in the essay entitled “Plato’s Pharmacy”, Derrida takes issue with the passage on the invention of writing in *Phaedrus*, his discourse implicates the broad question of political power in his

treatment of the king (father, god) and his authoritarian rejection of writing. It is, says Derrida, "with severity" that the king, "the father of speech", asserts his authority "over the god of writing" (Kamuf, 129). And Derrida proposes as a general truth that the "father is always suspicious and watchful towards writing" (Kamuf, 117): that is to say, the devaluation of writing is to be interpreted as a political act of suppression. John Ellis comments on the references in Derrida to the "repression" of writing, and to the "feared and subversive" nature of writing (Ellis, 26): but instead of seeing such terms, as Ellis does, as "oddly moralistic", we should call them by their proper name, viz. "political".

What further contributes to this political turn is the enlistment of Michel Foucault alongside Derrida. Foucault thus appeals to the influential British critic Catherine Belsey in that, going "beyond Derridean scepticism", he properly "identifies the relationship between meaning... and power" (Lodge, 403). The "suspicious" and "repressive" father of whom Derrida speaks is now seen, with the help of Foucault, to be recurrently and insidiously active in discourse which, for all its apparent neutrality or "innocence", is in fact ideologically biased in an anti-libertarian way. Hence the deconstruction or demystification of the text, which is undertaken to expose what George Steiner in a convenient summary calls metaphysical, political, social "interests and concealments..." (*Real Presences*, 117).

One other major factor in the liberation of the text for precisely this kind of deconstructionist scrutiny is a well-known one: Roland Barthes' announcement of "The Death of the Author". One should, again, note how politically loaded Barthes' terminology is: the idea of literature, we are told, is "tyrannically centred on the author" (*Image, Music, Text*, 143: italics added). With the death of the author (*auctor*) there coincides the demise of authoritative control (*auctoritas*) over the text: for the text, now seen as "a multi-dimensional space in which a variety of writings...blend and clash", is quite definitely "not a line of words releasing a single 'theological' meaning (the 'message' of the Author-God)..." (*Image, Music, Text*, 146). The Author and his Authority are removed, to be replaced by the merely functional "scriptor" or writer: once this has been effected, the writing is no longer "closed" by the controlling "presence" of the (proprietary) author, but is "opened up" and in fact made available for free appropriation by the reader. Hence that famous final sentence in Barthes' essay: "the birth of

the reader must be at the cost of the death of the Author" (*Image, Music, Text*, 148).

I refer here to the appropriation of the text by the reader: as the term suggests, it is a crucial move in what must now be seen as a power-struggle. Once the traditional "controlling frames" of the text have been removed (and these, as we know, include *mimesis* as well as Author), the reader (or more properly the *critic*) now has the opportunity to exploit or manipulate the malleable textuality thus made available. This, I believe, brings us to the heart of the matter. The reader/critic can bring his or her own ideology to bear on the text, pushing and prodding that textuality, shaping it with a certain plastic freedom – using the text, in fact, to endorse or support a particular political point of view, and, if need be, subjecting it to the impress of her or his own ideology. For the truth is that Barthes' apparently neutral "reader", who is brought to birth at the expense of the author, is not just a reader, nor even just an analytical critic, but, *au fond*, an impassioned, and now empowered, ideologue. Not surprisingly, Umberto Eco has remarked in recent critical studies "a general tendency" to legitimise a "free reading" which cedes the initiative to "the will of the interpreters" (Eco, 42). In the words of Richard Rorty, this type of critic, offering a "strong misreading" (Harold Bloom's phrase), "asks neither the author nor the text about their intentions, but simply beats the text into a shape which will serve his own purpose" (*Consequences of Pragmatism*, 151).

In a number of recent British critics, what is extraordinary is the blatancy with which they claim the right to impose their readings on the text in just such a way. So Catherine Belsey (whom I have already cited) advocates a critical stance which "is explicitly partial, from a position and on behalf of a position", or a "reading practice" which can "produce" the kind of text it requires. In this way the literary text is "put to work for substantial political ends which replace the mysterious objective of aesthetic satisfaction and moral enrichment" (Lodge, 405, 407, 409). Or again, in a study of Shakespeare published a few years ago, Terence Hawkes advocates that we make free use of the plays of Shakespeare "to generate meaning". Like it or not, he claims – in a language of unqualified assertion – "*all we can ever do* is use Shakespeare as a powerful element in specific ideological strategies" (italics added: *Meaning by Shakespeare*, 3). This kind of attitude usually achieves its most subtle manifestation in those critics who subscribe to cultural materialism (an alternative version of the New

Historicism). So Jonathan Dollimore and Alan Sinfield are still doggedly fighting the good fight when they declare that "cultural materialism does not pretend to political neutrality... On the contrary, it registers its commitment to the transformation of a social order that exploits people on grounds of race, gender, sexuality and class" (in Barrell, *Poetry, Language and Politics*, viii).

III

The consequences of this ideological appropriation of the text by the "reader" are many. First of all, not only has the author been disempowered, but the text itself is denied any real control over a range of proliferating meanings. This means, to borrow the terms used by Umberto Eco, that the "strong" reader does not any longer "interpret" the text, but seeks to "use" it. "To critically interpret a text means to read it in order to discover... something about its nature. To use a text means to start from it in order to get something else, even accepting the risk of misinterpreting from the semantic point of view" (Eco, 57). The ideologues I have referred to deflect us from proper interpretative engagement.

The second consequence is related to this first. As is suggested by the recurrent reference to the idea of "using" the text, the dominant critical attitude becomes a frankly utilitarian one. The traditionally accepted "aesthetic" properties of the text cease to matter (and earlier I noted Catherine Belsey's readiness to dispense with "the mysterious objective of aesthetic satisfaction"). The text is to be used as a means to an end: it becomes entirely transitive, a way through to cultural and political revelations, ultimately a means to the end of social and political change. This seems to me to constitute, *de facto*, a simplistic, reductive impoverishment of the text's elusive multi-dimensionality. It is for this reason that, whatever one's reservations about the reinstatement of formalism, one may welcome as a necessary corrective Denis Donoghue's insistence on the "internal" relations of the poem's "forms and ceremonies", and the intransitive nature of imaginative literature: "Above every poem or novel there should be a motto: 'This road does not go through to action'. A poem is not a tract, an editorial, or a sermon" (*Warrenpoint*, 168).

But it is a third consequence, growing out of the other two, that may prove to be the most significant. What above all the critical practice

unreservedly endorses is, to take our cue from Paul Ricoeur, a hermeneutics of "suspicion".² In a curious kind of left-wing totalitarianism, all texts are treated like poor K. in Kafka's *The Trial*: they are guilty until proved innocent, except, alas, that they never can be proved innocent (it being axiomatic that there is no such thing as an "innocent" text). The implied reader is, in this scheme of things, ruthlessly investigative: the critic is always an Argus, earnest, active, hyperalert, possibly even a little paranoid. This is the critic as vigilante, as ever-vigilant: not only must the eyes never close, they may not even blink, lest an ideological opportunity is missed.

It follows, naturally, that this ever-watchful critic will not be seduced by the rhetorical blandishments of the text. The dance of the multiple aesthetic veils must not distract our critical practitioner from the naked reality, which is not, be it noted (sadly or otherwise), Salome, but the power-play between Herod, Herodias and John the Baptist. The naked truth — rest assured — is not seductive. In this kind of critical practice there is a deliberate self-withholding: and Denis Donoghue, dealing with the critic as graphreader (i.e., one who is more interested in text than in voice), suggests that for the graphreader the "best sense is visual rather than auditory", because with the sense of sight "you keep the object at a distance, and determine the best distance at which you keep it". Print, or typography, he additionally notes, lends itself to this kind of distancing all the more readily inasmuch as print "is cool, unsentimental, unyearning" (*Ferocious Alphabets*, 199).

This kind of "arm's length" reading arises from the critic's conscious resolution not to be, as we say, "taken in" (where the phrase "taken in" might almost, in addition, be seen to connote an irrational fear of being *englouti*, "swallowed up", by the text). In a contest or power-play between text and critic, the critic is determined to get the text before the text gets (or gets to) her/him. But this macho undertaking to get the text usually ends up, not in *getting* the text but, rather, in *gutting* it. In order really to "get" the text — i.e., understand, apprehend, assimilate it — we need to decide precisely *not* to read in the hawk-eyed ideological manner we have been considering. What is required, in fact, is that we should move from a visual *targeting* of the text to an auditory *receptivity*: and for us, the "best sense"

2. See, e.g., the section entitled "Interpretation as Exercise of Suspicion" in Book I, section 2, *Freud and Philosophy*, 32-36. Speaking of Freud's "reality principle" (and "its equivalents in Nietzsche and Marx"), Ricoeur concludes: "Over against illusion and the fable-making function, demystifying hermeneutics sets up the rude discipline of necessity" (35).

(to return to Donoghue's formula) should be the auditory rather than the visual. Hence the title of this paper: for what I am proposing is a shift from "reader" to "auditor".

Since listening means listening to a voice, and since a voice entails a human origin, it would be logical to extend the argument further and thereby embrace the other terms in the title. Instead of reading the text of a writer, we might learn (or re-learn) to attend auditively to the voice of an author. If, however, at this late date, the author is so dead as to be beyond resuscitation, then that need not affect the main thrust of the argument: we should still listen as well as read, and, with or without benefit of the presence of the author, attempt to reconstitute the text in terms of oral immediacy. Oral immediacy is, of course, more readily applicable to poetry and drama than to fiction: but even in the case of fiction, Mikhail Bakhtin has alerted us to the polyphony of the text, i.e., the novel as a manifold of voices.³ We can, therefore, hear what the text is saying only if, in George Steiner's finely-honed phrase, we bring to bear upon it a habit of "accurate audition" (*Real Presences*, 156). There is, in this connection, a strong and perhaps sentimental appeal in the Wordsworthian ideal (though not by Wordsworth applied to the act of reading) of "wise passiveness": but we need not think of the reader as listening in a state of pure passivity. The alert will of the reader is by the reader's own free choice temporarily suspended, not abolished: and attentive quiescence need not mean acquiescence. In any case, the penetrative, aggressive, analytical gaze directed at the text by the ideologue/critic is countered by the receptive ear, open to the voice or voices mediated by the text. This, certainly, is the model which some of the poets themselves have traditionally preferred. So Wordsworth insists (in a letter in 1807) that "the voice which is the voice of my Poetry without Imagination cannot be heard" (italics added: *Letters, II: The Middle Years, Part I*, 146). What imagination-in-the-reader entails is further spelled out by Wordsworth a few years later in the second of the *Essays upon Epitaphs*. There is, he states, a kind of poetic composition which speaks out of certain "primary sensations": and "unless correspondent [sensations] listen promptly and submissively in the inner cell of the mind to whom it is addressed, the

3. In a recent study, Don H. Bialostosky emphasises generally Bakhtin's "auditory language", and notes at one point how deconstruction "differs from Bakhtin's theories, by positing writing rather than speech as its paradigm..." (*Wordsworth, Dialogics and the Practice of Criticism*, 56, 77).

voice cannot be heard: its highest powers are wasted" (*Prose Works*, II, 70).

It is perhaps only within a centre of auditory stillness that, much of the time, the voice of *poiesis* or imaginative literature can be heard at all: where the act of listening implies a stance of welcoming receptivity. This is what George Steiner is getting at when he recommends that the reader extend a "courtesy" towards the "meaningful form" of literature, acting in a spirit of "perceptive trust" and with a degree of "tact". This use of the word "tact" may owe something to Hans-Georg Gadamer's response to the use of the same word in Hermann Helmholtz. Meditating on the meaning of *Bildung* (culture), and on tact as an index of the cultured sensibility, Gadamer defines tact as "a particular sensitivity and sensitiveness to situations": tact includes *Bildung*, and specifically entails "a trained sensitivity towards the 'otherness' of the work of art or of the past". This advocacy of tolerance and openness, the readiness, as Gadamer has it, "to keep oneself open to what is other", is surely a core value in the whole educative enterprise with which none of us need quarrel (see Gadamer, *Truth and Method*, 16-17).

The final word here may be left to Umberto Eco, who likewise would replace "power-reading" with a proper sensitivity towards the text. In a world dominated, as he feels, by "Übermensch-Readers", he suggests we should "first rank with the Slave". This, he claims, is the way whereby we might become, not "the Masters", but "the respectfully free Servants of Semiosis". This gets the balance right: "free" or autonomous as interpreters, we are still to act "respectfully": for as Eco in the same context asserts, the "something to be interpreted" is also something to be "respected" (Eco, 7)⁴.

IV

At this stage, however, I am uneasily aware that I may have failed to do justice to the political or ideological case. It might be validly argued, for example, that in certain instances there is a real justification (and an attendant urgency) for, say, feminist or counter-colonialist reappropriations of the text. In such instances there is a positive obligation to extract the political

4. Hermeneutics, says Ricoeur, "seems to me to be animated by this double motivation: willingness to suspect, willingness to listen; vow of rigor, vow of obedience" (*Freud and Philosophy*, 27). In the interests of redressing the balance, the present argument calls for a greater willingness to "listen".

from what may seem to be the merely mystificatory processes of aesthetic procedure. Let me end, therefore, by attempting to adjudicate between the rival claims of what we might call politics and aesthetics, or ideological alertness and reverential audition.

And first: let us agree, if we can, that while many or perhaps all texts can be construed as ideology, they still constitute, in their totality, something more than ideology. They are, we might say, ideology plus X. What one would wish to preserve is a generous recognition and accommodation of the X-factor, however we define that: as the aesthetic, or just the Horatian *dulce*; as literariness; or more riskily (as in Steiner) the transcendent (Ricoeur is perhaps moving in the same direction when, opposing to interpretation as exercise of suspicion "Interpretation as Recollection of Meaning", he "bluntly" declares that the contrary of suspicion is "faith": *Freud and Philosophy*, 28). If the notion of the transcendent is for this belated age too much to take on board, then we might still allow Steiner to deflect us from habits of reductive reading, as when he asserts that our experience of *poiesis* is "beyond paraphrase", or directs our attention to that which is "incommensurable or irreducible" in the text. Best of all, perhaps, is his sense that literature is, in a memorable phrase, an attempt to convey "the grammar of the overwhelming" (*Real Presences*, 187, 86, 190).

The word "grammar" here points towards the structure of language: we need, it seems, a post-Derridean linguistic orientation. I can only offer here, not a *theory* of language, but (tentatively, as my phrasing shows) a *sense* of language that owes something to Heidegger. Just as, for Heidegger, Being erupts out of Nothing, so by analogy it might be held that language—especially vatic or dramatic utterance—is born out of silence. Language, we might add, continues to bear with it—at least, under certain circumstances—a nostalgia for the lost origin, an origin that antedates language itself. "I cannot say what cannot be said", R.D. Laing once observed, "but sounds can make us listen to the silence" (*The Politics of Experience*, 35). The language of *poiesis*, it may be, is complicated to an unanalysable degree by its rootedness in the inarticulate.

I began this section with a first attempt to render more justice to the ideological position. My second attempt to restore that balance derives from an uneasy conscience with regard, in particular, to the feminist case, which still possesses in our age a *prima facie* validity and a genuinely practical applicability. I conclude, therefore—and I hope this will not be

taken as mere sleight-of-hand or glibness—by citing two women writers on the act of reading, both of whom seem to be generally in agreement with the kind of argument proposed in this paper. One is a significant contemporary critic, the other a major author who at the very least must be described as a proto-feminist.

The major author is Virginia Woolf: the work in question is *To the Lighthouse*. At the end of the first section, husband and wife, Mr. and Mrs. Ramsay, though reading separately, enjoy a shared portion of the *vita contemplativa* as they read. For it is in those or similar terms that Woolf envisages the act of reading: it is not an alert "critical practice", but a surrender to the text, a lapsing into the imaginative depths, an immersion in a dimension that is richly other. Prior to reading, Mrs. Ramsay sinks deep into herself, until a line of poetry "began washing from side to side of her mind rhythmically, and ... words, like little shaded lights, one red, one blue, one yellow, lit up in the dark of her mind..." When she actually begins to read, this journey into a sensuous and deeply quiet interior in the self is prolonged: she immerses herself in the sonnet she is reading to the extent that she is "like a person in a light sleep" (*To the Lighthouse*, 160, 163). Clearly, this is at the opposite extreme from the wary alertness of those who subscribe to the "hermeneutics of suspicion": and it may be that it is extreme enough to require correction. We would be justified here in feeling that there is a little too much emphasis on the pleasure-principle and the facility with which it attains its gratification: we would prefer a stronger sense that the text should be, not just richly and pleasurably other, but challengingly and perhaps disturbingly so. Nonetheless, Mrs. Ramsay's openness to that otherness, her deep receptivity, satisfies at least some of the prerequisites for sensitive response. We may think of this as *naïve* (or merely naïve) reading: but the question is whether such naïve reading is not, in fact, an indispensable preliminary to any more elaborate or sophisticated engagement with the text. Upon what, after all, can our interpretation rest, if not on repeated experience of the text, *including* such (inerasable) initial and naïve responses?

The whole matter of the reader's openness and receptivity was approached from a different angle by the significant contemporary critic I referred to: Isobel Armstrong, whom I was privileged to hear lecturing at the second ESSE (European Society for the Study of English) conference in Bordeaux in 1993. Her lecture was not just about reading, but close

reading: and one of her aims was to restore a sense of intimacy between reader and text. Part of her initial concern was the tendency, already evident earlier in this century in I. A. Richards and William Empson, to expel the affective, to hold at arm's-length the seductive appeal of the text, to refuse the engagement with feeling. A similar refusal, she suggested, is also present in a more recent critical master, Paul de Man. The crucial point, indeed, is that these critics, in their determination not to be overpowered, seek to master seduction rather than be mastered by it. (That was also the point in my own earlier suggestion that the macho critic/ideologue operates in terms of pre-emptive strike: "Get the text before the text gets you"). Armstrong will have nothing to do with such strong-arm tactics, and her conclusion is that the text is something that acts upon us, not something we control.

In both Woolf and Armstrong, the reader is expected to be disarmed and vulnerable: vulnerable not just to unforeseen pleasure as in Woolf, but, as Armstrong rightly adds as an important supplementary, open also to disturbance, and the excess – the unsettling excess – of poetic language. Arguing on behalf of genuinely close reading, and against the "distance" reading of a critic like de Man, Armstrong's climactic affirmation is that reading is at its most important when it is "too close for comfort".

The text, then, is not locked into the ciphers of the printed page, offering itself as an immobilised target for the insistent and aggressive analytical gaze. If we insist on delimiting the text in this way, we fail to recognise its disturbing potency. One way of acknowledging that potency is to permit the text to "speak" to us: and in order to do that, we must be auditively attuned to hear that which exceeds the mere visual immediacy of "noir sur blanc".

WORKS CITED

- Abrams, M.H. "The Deconstructive Angel", in *Critical Inquiry*, 3 (1977-78): 425-38.
 Aquinas, Thomas. *Summa Theologiae*. 61 vols. Blackfriars/London/New York, 1964-81.
 Barrell, John. *Poetry, Language and Politics*. Manchester, 1988.
 Barthes, Roland. "The Death of the Author", in *Image, Music, Text*. Essays selected and transl. by Stephen Heath. London, 1984: 142-48.
 Beckett, Samuel. "Dante...Joyce", in *Our Examination round His Facification for Incamination of Work in Progress*. By Beckett and others. 1929; London, 1972: 3-22.
 Belsey, Catherine. "Literature, History, Politics", in David Lodge, ed., *Modern Criticism and Theory: A Reader*. London and New York, 1988: 400-10.

- Bialostosky, Don H. *Wordsworth, Dialogics, and the Practice of Criticism*. Cambridge, etc., 1992.
 Derrida, Jacques. "La double séance", in *La Dissémination*. Paris, 1972.
 —. *Of Grammatology*. Transl. Gayatri Chakravorty Spivak. Baltimore, 1976.
 Dollimore, Jonathan and Alan Sinfield. "Cultural Politics", in John Barrell, *Poetry, Language and Politics*. Manchester, 1988: vii-viii.
 Donoghue, Denis. *Ferocious Alphabets*. London and Boston, 1981.
 —. *Warrenpoint*. London, 1991.
 Eco, Umberto. *The Limits of Interpretation*. Baltimore and Indianapolis, 1990.
 Ellis, John M. *Against Deconstruction*. Princeton, 1989.
 Gadamer, Hans-Georg. *Truth and Method*. Translation ed. Garrett Barden and John Cumming. London, 1975.
 Hawkes, Terence. *Meaning by Shakespeare*. London, 1992.
 Kamuf, Peggy. *A Derrida Reader: Between the Blinds*. Hemel Hempstead, 1991.
 Laing, R.D. *The Politics of Experience and The Bird of Paradise*. Harmondsworth, 1967.
 Lodge, David, ed. *Modern Criticism and Theory: A Reader*. London and New York, 1988.
 McLuhan, Marshall. *The Gutenberg Galaxy: The Making of Typographic Man*. Toronto, 1962.
 Newman, John Henry. *The Idea of a University: Defined and Illustrated*. Ed. with introd. and notes by I.T. Ker. Oxford, 1976.
 —. *The Idea of a University: Defined and Illustrated*. Ed. Daniel M. O'Connell. 1927; repr. Chicago, 1987.
 Plato. *Phaedrus and Letters VII and VIII*. Transl. with introd. by Walter Hamilton. London, 1973.
 Ricoeur, Paul. *Freud and Philosophy: An Essay on Interpretation*. Transl. Denis Savage. New Haven and London, 1970.
 Rorty, Richard. "Nineteenth-Century Idealism and Twentieth-Century Textualism", in *Consequences of Pragmatism*. Brighton, 1982: 139-59.
 Woolf, Virginia. *To the Lighthouse*. Ed. with introd. by Margaret Drabble. Oxford, 1992.
 Wordsworth, William. *The Prose Works of William Wordsworth*. Ed. W.J.B. Owen and Jane Smyser. 3 vols. Oxford, 1974.
 — and Dorothy Wordsworth. *The Letters of William and Dorothy Wordsworth. II. The Middle Years*, Part 1. 2nd ed., revd. Mary Moorman. Oxford, 1969.

SCIENCE AND RELIGION

Rev. Thomas Corbett

Introduction

Science and religion are the two strongest forces (apart from the impulses of the senses in various forms) which influence men.

These words of Alfred North Whitehead still ring true today, for we live in a culture dominated in many ways by the marvels, methods and horrors of science; while at the same time we see people struggling in different ways to preserve and promote religious forms of life and thought. The successes of science have given it a very high profile in recent centuries, but already in our century the threat of technological takeover, the dilemmas of genetic engineering, the nuclear terror and planetary destruction have conspired to make human beings take another and different look at their world and the meaning to be found in it or given to it. In this great quest both the scientific and religious communities are seen to have a vital role to play and hence the title of this lecture here today is science and religion. For both science and religion are not just methods of study and research with defined objects and objectives; they are also to be thought of as generators of myths, symbols, perspectives and perceptions of reality and value, which play important roles above and beyond the individual findings of scientists and theologians. But more narrowly defined, the title of this talk will focus on science (mathematics, physics, chemistry, biology), its methods and conclusions, and on theology, particularly Christian theology, which in the phrase of St. Anselm is "faith seeking understanding". Or, indeed more fully, theology can be described as "that study, which through participation in and reflection on a religious faith, seeks to express the content of that faith in the clearest and most coherent language available".¹ I shall try to speak at greater length on the meanings of science and theology later.

However it must be noted that the science/theology relationship, which has been understood as unfriendly in recent centuries, is but the modern version of an age-old question — that of faith and reason, which has existed right from the beginnings of Christianity (and of course much further back). What is the relationship of the community of thought which lives the revelation of a freely loving and saving God and the community of the

human mind which seeks clarity, coherence and understanding. What has Athens to do with Jerusalem? This tension has often driven faith and reason centrifugally apart, as either felt it was being swallowed up by the other (modern times), or drawn them centripetally together as each recognised the richness of the other (as in the great medieval synthesis).

It is for the nostalgic to imagine what our world would be like if the conflicts of recent centuries had not taken place, but it remains sadly clear that whereas faith and reason, science and theology had been able to dialogue and enrich each other in achievements like that of St. Thomas, faith and theologians in modern times often developed what Whitehead called "a garrison" and defensive mentality. Reason, free from the dogmatism of religion and theology, seemed to achieve endless success with its deterministic, mathematical and experimental modes of thought and research. Fathered by men like Newton, Galileo, Laplace (who all believed in God), the world of mathematics and science became the source of enlightenment and hope, while the world of religion seemed tied to a past, obscure and highly irrelevant in the utopia promised by science. Well could Alexander Pope pen the lines: "Nature and nature's law hid in night, God said 'Let Newton be' and there was light". And somewhat later a colleague of Darwin could write: "Extinguished theologians lie about the cradle of very new science". God was no longer useful even as a hypothesis and believing Christians could find no place for religion in searching for and finding scientific truth.

Origin of science in Christian thought

The conflicts of Galileo with the Church and the wrongness of his treatment are well known; the horror inspired by Darwin in Christian and European hearts is clearly remembered. But the antipathies of modern times conceal what one might call a previous family relationship. Is it by accident that science and the scientific enterprise as we knew it grew up in Christian Europe? Whitehead in his book *Science and the Modern World* argues persuasively for the medieval Christian parentage of the scientific intuitions of order and experiment. The central convictions of science that the world has an order that can be discovered by experiment can be related to the Christian doctrine of creation: (1) that the God of order and meaning has endowed the universe which depends completely on him with order and meaning and (2) that he has done so freely. The universe is not necessary

but a contingent reality, "which depends entirely and at every moment upon the free decision of an infinitely intelligent God...." There is an order, but "there is nothing that must be as it is, everything must be otherwise, and so the intelligibilities of nature cannot be deduced in advance. They have to be discovered. Presently the founders of modern science set out to discover them".² And, sadly, parent and child becomes estranged in the seventeenth century. This momentous change has been described as the scientific revolution, which, as Herbert Butterfield said, "reduces the renaissance and reformation to the rank of mere episodes, mere internal displacements within the system of medieval Christendom".³

A symbol of the estrangement remains the case of Galileo, where the new and old worlds collide. At a deeper level than the interpretation of some words of the Bible, Galileo represents the world of determined necessary order. He claimed, not only that the world revolves around the sun but that it does so necessarily; the new determined world of modern science, going from observation to unbreakable laws, is underway. And Whitehead shows how times have changes since Galileo – for the new insights of relativity have "relativised" both Galileo and his opposition: "At the date of Galileo's controversy with the Inquisition, Galileo's way of stating the facts was, beyond question, the fruitful procedure for the sake of scientific research. But of itself it was no more true than the formulation of the Inquisition. But at that time the modern concepts of relative motion were in nobody's mind; so that statements were made in ignorance of the qualifications required for their more perfect truth".⁴

What is Science?

It is to this changed world of science and scientists that I now wish to turn to examine how in more recent years science and theology have related to each other. But what is science? When one tries to come to terms with it on faces a frightening array of '-ologies' of all kinds, with their related techniques and technologies. One is confronted with disciplines so vast and so demanding that one suspects that the word "scientist" means someone who is hard to keep up with his or her own area of research even within a recognised discipline and does not have time to visit sister disciplines very often. Indeed Paul Davies in his book *God and the New Physics* even claims that different and important sciences like biology and physics are going in fundamentally different directions. He writes:

It is ironical that physics, which has led the way for all other sciences, is now moving towards a more accommodating view of mind, while life sciences, following the path of last century's physics, are trying to abolish mind altogether. The psychologist Harold Morowitz has remarked on this curious reversal. What has happened is that biologists, who once postulated a privileged role for the human mind in nature's hierarchy, have been moving relentlessly towards the hard core materialism that characterised nineteenth-century physics. At the same time, physicists, faced with compelling experimental evidence, have been moving away from strictly mechanical models of the universe to a view that sees the mind playing an integral role in all physical events. It is as if the two disciplines were on fast moving trains, going in opposite directions and not noticing what is happening across these tracks.⁵

And, by the way, he goes on to add that many people are convinced that advances in fundamental science are more likely to reveal the deeper meaning of existence than traditional religion. So religion can't afford to ignore these advances.

But science not only has trains going in different directions, it also has different kinds of trains. For sciences can be distinguished also in terms of three great traditions of investigation which date from Greek antiquity and which still survive. First, there is the Aristotelian tradition, which uses metaphysical language, in terms of cause, effect, substance, matter; in this tradition science was understood as seeking causal explanations. A second tradition, of which Platonism is a great example, sees science rather mathematically and seeks a priori conditions for relating realities. And a third tradition, the Archimedean, sees science as relating realities *a posteriori* through direct appeal to experience and experiment. So the scientific tradition as well as current practice alerts us to the variety and sometimes confusion within science itself about what it is. But one can speak of science indeed as an expression of a gradually growing understanding, a coming to a sense of what is true beyond the conclusions of empirical research – quantum theory and cosmological theories spring readily to mind.

What is Theology?

When we come to theology we find a similar variety of disciplines and

approaches. It is important to note that theology, which in the medieval vision saw all creation *sub specie aeternitatis* found itself, since the scientific revolution, more and more confined to the area of "religion" as a "facet" of human and earthly existence, rather than being concerned with the overarching principle of all reality. Theology, like religion, dealt more with the relationship between God and spirit, God being thought of either as the clockmaker or moral judge. The human spirit, with its freedom and creativity, was carefully distinguished from the material world of nature. The whole debate about *Natur* – and *Geisteswissenschaften*⁶ relates to this dualism, which infected the Protestant more than the Catholic tradition. But it left none untainted. The Catholic theologians held on more firmly to the conviction that God can be known from all created reality and it was to provide support and expression for this conviction in the scientific ethos of the nineteenth-century that neo-Thomism was initiated. At least it had a lot to say, clearly and concisely, about nature. However, it must sadly be acknowledged that both Protestant and Catholic traditions made little impact on the world of science, and found themselves excluded from the arena where science was operative. Catholicism appealed to a "supernature" which religion alone could know, and Protestants generally retreated to the area of "history", which at least was independent of the natural sciences.

As well as different approaches at the confessional level David Tracy in his book *Blessed Rage for Order*⁷ distinguishes five models (notice the scientific term) or approaches to theology in recent times. He relates them to what he calls a *subject referent*, i.e., the type of person at whom the theology is focused, and *object referent*, i.e., what the theologian takes as a primary focus, for investigation and discourse. Firstly, there is an *orthodox* model of theology; the *self* referent is a believe in a specific Church tradition; the object referent is a specific set of beliefs; secondly there is the *liberal* model of theology; the subject referent is the modern consciousness as committed to basic values such as critical investigation, power of rational thought, need for change; the object referent then is a reformulated Church tradition. For Tracy a very important critical moment in liberal theology is what he calls "*neo-orthodoxy*", the subject referent here is not just a "believer" but a believer seeking authentic Christian existence but with a consciousness of the broken world in which we live and of the failure and collapse of the nineteenth-century enlightenment. The object is the "wholly other" God, who in Jesus Christ saves us from the failures of human sin

and frailty. Tracy points out that liberal values (with a willing acceptance of the values of modernity) dominate much of modern theological thinking in both Catholic and Protestant traditions. Tracy has little time for his fourth model, which he describes as "*radical*" or "*death of God*" theology because a theology of a dead God is a dead theology. His own preferred model is his fifth which he names "*Revisionist*". This model undertakes the task of "the dramatic confrontation, the mutual illuminations and corrections, the possible basic reconciliation between the principal values, cognitive claims and existential faiths of both a reinterpreted post-modern consciousness and a reinterpreted Christianity",⁸ in other words establishing a mutual critical correlation between a purified modernity and a rethought Christian tradition. In this model the self referent is the person committed to the beliefs, values and faiths of an authentic secularity or worldly culture and to the possibility of reinterpreting the Christian "fact" to meet that world in critical dialogue; the object referent is the Christian "tradition" or "fact" interpreted in the light of modern philosophy, culture and science (as St. Thomas did in his time).

Four Forms of Relationship between Theology/Science

Faced with such a range of disciplines, variety of approaches, differing directions in both science and theology, and conscious of what Karl Rahner called their "mental concupiscence" (by which I think he meant our unwillingness or inability to take the global view) both theologian and scientist must be cautious about definitive judgements in the quantum worlds of science and theology. A certain humility *a la* Heisenberg is demanded. However, with these qualifications in mind it is possible to outline four forms of relationship between theology and science from what we have seen above:⁹

1. – Conflict
2. – Independence
3. – Dialogue
4. – Integration

1. Conflict

The conflict is historical but also present. Jacques Monod's book, *Chance and Necessity*, is an important example. "Pure chance, absolutely free, but blind, is at the very root of the stupendous edifice of evolution man at

last knows that he is alone in the unfeeling immensity out of which he emerged by chance". This, to put it mildly, is difficult to relate to a purposeful God of creation. In reply theology can point to the wonders of the order in a universe that can be so fruitfully investigated in terms of the Maxwell equation (electromagnetics) and the Schrödinger equation (quantum theory). Indeed the relationship between chance and determinism, chaos and order, is surprisingly subtle. Even science itself indicates that blind chance is a tricky concept and may not exclude a delicate relationship with ordered purpose.

2. Independence

Past conflicts have chastened theology, so a second form relationship today is one of independence. Science and theology ask and answer different questions. Science asks how the kettle boils and answers in terms of vapour pressures, molecular movements, etc. Theology asks why, and answers in terms of human meaning and relationships with ultimacy. Each functions best when it is faithful to its structure, methods, language, objects and purposes. There is no conflict and no dialogue because each inhabits a different world. This independence model is rooted quite deeply in the neo-orthodox approach to theology, with its critical and negative assessment of the enlightenment project, and it ultimately reduces theology to a non-participating role in the world of science, while it renders science unable to dialogue with theology. But as Ian Barbour writes: "We do not experience life divided with neat compartments; we experience it in wholeness and interconnectedness before we develop particular disciplines to study it".¹⁰ Today's ecological problems are demanding that theologians develop a theology of nature which they cannot adequately and realistically achieve within a dialogue with science. On the other hand the terrors and fears aroused by discoveries and techniques of science have confronted the scientific community with ethical and even religious questions — who I am and what is life ultimately about on a tiny planet on the rim of one of a thousand million galaxies?

3. Dialogue

This third model is now gaining ground, as evidenced indeed by the substantial tome published by the Vatican observatory in 1988 called *Physics, Philosophy and Theology: A Common Quest for Understanding*,

and the earlier conference of the World Council of the Churches at MIT in July 1979 called *Faith, Science and the Future*.¹¹ It must come as a surprise to holders of the "independence" view, that disciplines which indeed often function independently as science and theology, find themselves speaking the same language of complementarity, unity, interconnectedness. The methods of research, the attitudes of practitioners, which had once seemed so diverse, are at closer examination seen to contain much in common, and the limit questions of science, as David Tracy points out, disclose a certain "religious dimension" as we shall see later.

Factors favouring dialogue

What happened? A number of factors are very important and are well detailed in the *Irish Theological Quarterly*, 1986 1-2. Firstly, there was what Weber called the disenchantment with disenchantment which enabled symbolic, non-scientific discourse to gain a claim to truth again. Clear rationality took a beating in the competing drives of Freud and the ditches of World War I. Secondly, the scientific picture of the world was becoming far less mechanistic and determined and the amazing principle of Indeterminacy of Heisenberg laid the axe to the root of a world that could be accurately and completely measured and predicted. Related to this, I suppose, one must name what Whitehead called "the fallacy of misplaced concreteness",¹² by which he meant the tendency to substitute high level abstractions such as particles, substances, to describe a world much better described as the outcome of a complex network of internal and external relations. (One thinks of the debate of the meaning of the quantum theory!) Added to this there emerged a more "holistic" concept of nature than had been propounded by the "divide and rule" procedure of the earliest scientists. This is well expressed in the "implicate order" of David Bohm, which "contrasts with the explicit order now dominant in physics in which things are unfolded in the sense that each thing lies only in its own particular region of space and time and outside the regions belonging to other things".¹³

He describes an elusive but intelligible world, which is not completely understood (think of the not yet reconciled theories of quantum physics and general relativity) but is yet holistic, implicate, not primarily fragmented into different regions. Interconnectedness, unity, elusiveness — words which have a philosophical, religious ring — are the language of the implicate order.

Furthermore as well as the emergence of what one might call a new "ontology" there also emerged a revised "epistemology". The historian Dilthey made his famous distinction between explanation (which meant furthering an event under a general law) and understanding (which meant to seeing something as part of a greater whole). Explanation was the domain of natural science, understanding the domain of the human sciences, and theology. But the works of people like Stephen Toulmin, Michael Polanyi and especially the work of Thomas Kuhn, *The Structure of Scientific Revolutions* (1962) effectively historicised science by shifting the debate about conceptual change in science from the third world (of abstract concepts, entities and relationships) to the second world (of human activities, institutions and judgements). Polanyi emphasised the conversion experience involved in accepting a new model or paradigm, and science began to accept that imagination, will and feeling have a part to play in how it achieves its purpose. Indeed it is interesting to note what Hans Küng says about Einstein's resistance to quantum theory: "His famous statement that the 'old chap' does not play at dice, is not a joke but an expression of a definite religious conviction. Einstein believed to the end in the pantheistic, deterministic God of Spinoza".¹⁴ Regarding this new awareness of the second world quality of scientific activity Polkinghorne speaks of science being taken off the pedestal of rational invulnerability and placed in the arena of human discourse. And he adds that Gödel's theorem (about the improbability or otherwise of certain propositions in mathematics) "makes the consistency of mathematics an incalculable question. Even the exercise of mathematics involves an act of faith".¹⁵

This rapprochement of science and theology is very clearly described by establishing certain analogies between the methods and practices of science and theology (bearing in mind that Thomistic theology always regarded theology as a science). It can be shown that granted the differences of subject matter, history, etc., the theological community, like the scientific community, goes for certain established models of theological thinking, raises questions, solves puzzles, endures crises, suggests new models (liberation theology would come under this), attempts to establish them, refines them, tries to relate them to what is in place, etc. And of course it does this in libraries, class halls, conferences, using the tools of modern scholarship as everyone else does. As Polkinghorne again remarks: "Each is corrigible, having to relate theory to experience, and each is concerned

with entities whose unpicturable reality is more subtle than naive objectivity".¹⁶

Reductionist Science?

The marvels that physics unfolds as it imaginatively and mathematically unravels the universe have been described at a best-seller level by Stephen Hawking. The awe of Einstein or Hawking has something akin to the religious but the question must still be asked: does science ultimately discredit the "tedious Christian tales", as it has certainly modified traditional views of certain biblical narratives and eschatological hopes? The fear of reductionism has always tainted the relationship of faith and reason, and science, which may see itself as having freed humanity from the dogmatism of religion, could understandably, if erroneously, see itself as the ultimate discloser of truth. "All is physics". The question of Stephen Hawking: if the universe is completely self contained, having no boundary or edge, it would have neither a beginning or end: it would simply be. What place then for a creator?¹⁷ almost begs the answer — None! Does physics have the last word?

Remembering the complementarity of Niels Bohr and the implicate order of David Bohm should be the beginning of an argument against reductionism. There is a unity and wholeness to the universe, which can't be reduced to its component parts. The EPR experiments that show that even quantum particles can only be understood in function of the greater whole point in the same direction. The "I" story of each of us defiantly resists the temptation to see ourselves as simple "responders" to positive and negative feedback from the environment. Finally, it can be shown that the "reductionist" programme in the end subverts itself. "It also destroys rationality. Thought is replaced by electrochemical neural events. Two such events cannot confront each other in rational discourse. They are neither wrong nor right ... the very assertions of the reductionist are nothing but blimps in the neural network of his brain. The world of rational discourse dissolves into the absurd chatter of firing synapses".¹⁸

Science suggests a religious dimension

David Tracy argues that, far from gobbling up religion, the scientific enterprise critically discloses a religious dimension of itself. He uses the concept of limit to describe "the religious" and claims that religion and

religious language articulate or imply a limit experience, a limit language, a limit dimension. Our elemental experience of finitude, contingency, radical transience, as well as our fundamental trust in the worthwhileness of existence, our belief in value and order beyond immediate experience are limits — to that experience. These in turn disclose a horizon, a ground of such experiences and beliefs — a limit of our experience, which can be described as “religious”. The scientific questioner is impelled to go beyond the world of immediate experience to ask about meaning and impelled beyond meaning to the conditions of the possibility of knowledge and meaning. Self-transcendence is demanded by scientific authenticity and, as Tracy puts it, “One lives authentically only in so far as one continues to allow oneself an expanding horizon”.¹⁹ And unless he wishes to abandon the search for authentic self-transcendence the scientist cannot silence the question of the final horizon of scientific enquiry. He may attempt to articulate that ultimate in terms of myth, symbol or philosophy, but when the ultimate is experienced as beyond the limits, a limit-to enquiry and a limit-of enquiry, one can describe the scientific enterprise as suggesting a religious dimension. This dimension functions as the condition of possibility of the self transcending scientific quest for meaning, from which we get that ultimate trust in the rationality and intelligibility of existence. Tracy concludes: “So a careful application of the category limit-question to scientific enquiry can mediate a recognition of an authentically religious dimension to that most human of enterprises, contemporary science. Neither theology nor science has really anything to fear from a mutual collaboration which recognises the autonomy and mutual interrelatedness of these two sorely needed conversation partners for our critical present and future”.²⁰ The alternative is dehumanised science and “ghettoized” theology. And finally and briefly we come to a further development, as dialogue moves into integration.

4. Integration

This fourth and final form of relationship has two levels. At the first level it means that scientific theories may contribute to the reformulation of theological doctrine. An example here might be the use of the Anthropoc principle (which indicates that a universe capable of evolving systems as complicated as the human being must have a delicate balance in the structure of its fundamental focus, and perhaps special initial circumstances) to argue

for an intelligent designer of the universe. The first level of integration is again operative when theologians attempt to integrate the insights of evolution to explain the possibility of God's action in the world (as does Moltmann in *God in Creation*) and as a possible insight into what theologians call the problem of evil. The second level of integration happens when science and theology contribute to a coherent world view of “metaphysics”, as in process theology where Whitehead and others have used the general categories of scientifically based process philosophy and theology to provide a close-knit interpretation of our experience of our world. Theologians are generally cautious about this level of integration, and here we leave the last word to Stephen Toulmin, who warns “that it would be a dangerous path for theologians to seek the raw materials for new theological paradigms in the theories of late twentieth century natural science, hoping to use these bricks to construct new and more authoritative conceptions, both of humanity and humanity's place in the world”.²¹ He instances the failure of the “canonization” of Aristotle in the middle ages and the acceptance by Protestant scholars of the mechanistic ideas of Descartes and Newton. Theology was quite unprepared when these theories were radically questioned and so the most that theology should seek is a certain dialogue and consonance, or a certain compatibility of theology with science.²²

Conclusion

The thesis of this paper has been that science and theology are much nearer in mind and body than could have been imagined over fifty years ago. Science and technology have changed the religious situation, and challenged it to ponder more deeply the meaning of belief in God and his action in the world. On the other hand the development in our ways of relating to the world have increased considerably what we know and how we know.

Both science and religion are more aware of the cohesive and mysterious nature of the reality we experience which makes each less eager to throw rocks from its own steeple. The language of unity, interrelatedness, complementarity, even mystery, once at home in philosophy and theology, is now familiar in scientific circles. Faced with the challenge of our time then, science and theology are prepared to dialogue rather than fight.

To a large extent it has been established that religion/theology is not an

explanation of reality competing with the scientific explanation. The God of the gaps has gone underground. The Big Bang theory may or may not illumine the theology of creation; its truth, however, must be judged by scientists not theologians.

But it is recognised that science, successful as it has been, is a limited and limiting approach to the richness of reality in our varied world. Religion and theology can also lay claim to "discover" and "illuminate". Religion can bring into focus and express the ultimate ground of our secular faith in the order and intelligibility of the universe and in the worthwhileness of our existence. It can expand our worlds from being mere objects of scientific research and control to being the gift of the eternal Father given into our care. Science without religion can become demonic, religion without science moralising and irrelevant.

However, to say that the conflict of religion and science is totally dead may be too cheerful a statement. The ultimate focus of theology is the unique loving, creating and saving God, revealed in Jesus Christ and present through his Holy Spirit in creation. God is not just another object "being" of our universe, but the "creator, sustainer and goal" of everything. The theologian understands God as freely revealing himself; he is received as gift rather than raised as question; he saves the universe rather than explains it. The scientist, who can and must do fruitful work, without God as hypothesis, can, however, generate symbols, myths and perspectives that challenge and even distort what religion promotes. I leave you with the contrast between the galactic graveyard of our universe as depicted by physics and the new Jerusalem as presented by the Apocalypse with its transforming God. We are still in transit.

1. John MacQuarrie, *Principles of Christian Theology* (London: SCM Press, 1966) 1.
2. Charles C. Hefling, Jr., "Science and Religion" in *The New Dictionary of Theology*, edited by Joseph A. Komonchak, Mary Collins and Dermot Lane (Dublin: Gill and Macmillan, 1987) 938-945, 939.
3. Quoted *ibid.*, 939.
4. A.N. Whitehead, *Science and the Modern World* (Glasgow: Collins, 1975) 218.
5. Paul Davies, *God and the New Physics* (London: J.M. Dent and Sons, 1983) 8.
6. Wolfhart Pannenberg, *Theology and the Philosophy of Science* (London: Darton, Longman and Todd, 1976) especially chap. 2.
7. David Tracy, *Blessed Rage for Order: The New Pluralism in Theology* (New York: Seabury Press, 1979) 22-24.

8. *Ibid.*, 32.

9. What follows is particularly indebted to Ian G. Barbour, *Ways of Relating Science and Theology*, in Robert John Russell et alii, editors, *Physics, Philosophy and Theology* (Vatican City State: Vatican Observatory, 1988) 22-45. I am also indebted to John Polkinghorne, *Old World: The Interaction of Science and Theology* (London: SPCK 1986) and the issue of *The Irish Theological Quarterly* dealing with Theology Science and Imagination, *ITQ*, 52/1-2 (1986).

10. *Op. cit.*, 33.

11. *Faith Science and the Future*: Preparatory Readings for the 1979 Conference of the World Council of Churches (Geneva: World Council of Churches, 1978).

12. A.N. Whitehead, *op. cit.*, 68. See Dermot Lane, "Theology and Science in Dialogue", *ITQ*, 52 (1986) 31-53.

13. Lane, *ibid.*, 37.

14. Hans Küng and David Tracy, editors, *Paradigm Change in Theology* (Edinburgh: T. and T. Clark, 1989) 25.

15. *One World*, 25.

16. *Ibid.*, 64.

17. Stephen W. Hawking, *A Brief History of Time* (London: Bantam Press, 1988) 141.

18. J. Polkinghorne, *op. cit.*, 92-93.

19. *Blessed Rage for Order*, 96/

20. *Ibid.*, 99-100.

21. Stephen Toulmin, "The Historian of Natural Science" in Hans Küng and David Tracy, editors, *Paradigm Change in Theology*, 236.

22. *Ibid.*, 247, note 35.

CANON JOHN O'ROURKE

Historian of the Great Famine

R. V. Comerford

Throughout the worst years of the Great Famine – of which he was to be for so long the principal historian – John O'Rourke was a student in Maynooth. Ordained there in 1849 for the diocese of Dublin, he was subsequently a curate for twenty years, serving successively in Castledermot, Athy and Kingstown. In 1869 he became parish priest of Maynooth and he remained in that office until his death in 1887. In 1879 he had been made a canon of the Dublin diocesan chapter. In the newspapers the obituary tributes to his charity and piety were conventional, if nonetheless sincere. O'Rourke's had been an honourable if unspectacular clerical career. His headstone in Laraghbryan Cemetery is undistinguished and the wording of the inscription is uninspired, uninformative and trite. More successful as a memorial is the inscription underneath the first and second Stations of the Cross in Maynooth College Chapel: *Orate pro anima Joannis Canonici O'Rourke, V.F. olim hic apud Manutiam parochi, obiit die 16 Julii 1887.*

A book entitled *Holly and Ivy for the Christmas holidays*, published in Dublin in 1853 under the name Anthony Evergreen, is reliably attributed to O'Rourke. The atmosphere in which a priest would wish to use a pseudonym in publishing a work of fiction is evoked by the preface, a careful piece of apologia in which the author quotes and then proceeds to elucidate the following text from the address of the hierarchy assembled at the Synod of Thurles in 1850:

There is no medium for the diffusion of an irreligious spirit from the philosophical essay to the work of fiction on which the apostleship of infidelity has not drawn in order to extinguish the truth of Christianity. The thrust of the prelates' advice was that the faithful should be wary of modern literature, but O'Rourke gave their argument a twist to his own advantage:

It is with this truth before his mind, feeling its force intensely, and venerating the authority whence it comes that the author offers the following story to his fellow Catholics. Whilst it seeks to edify, it does not, he hopes, lack a portion of that amusing spirit which the

sowers of infidelity have so successfully infused into their own publications.

O'Rourke was asking in his own words why the devil should have all the good tunes.

The story is set in County Wicklow apparently in the period 1848-1850. It tells of distress, the imminence of dispossession, and ultimate rescue, in the life of a middling-class farming family affected by the economic problems of the famine period and persecuted by a dishonest land agent. *Holly and Ivy for the Christmas holidays* appears to have enjoyed reasonable success and to have been reprinted a number of times.

O'Rourke's second book appeared in 1862 under his own name and belongs to a quite different genre. It is entitled *The lamp of the soul: a complete manual of devotion and instruction compiled from the most approved sources*. This is an example of the better class of popular prayerbook. Pride of place goes to the ordinary of the Mass in Latin, with English translation. There follows a set of alternative prayers for private recitation during Mass. Prayers and litanies appropriate for every conceivable occasion are given. Detailed instructions are offered on how to prepare for the sacraments and on participation in a wide range of public and private devotions. O'Rourke was especially eager to have his readers fully informed about the indulgences to be gained by the faithful on various occasions, and the technical requirements for each.

As prayerbooks for the laity go – or went – *The Lamp of the Soul* is a work of distinction. The compiler's authenticity, and the integrity of his intentions are palpable throughout. Many such works give the impression of a lack of sympathy with the situation of the user. Having had a late vocation to the priesthood, O'Rourke had been a layman until his mid-thirties and so could put himself in the place of his intended reader. *The Lamp of the Soul* exudes a spirit of confident, untortured lay spirituality such as has rarely been given written expression in modern Irish Catholicism. The work has a sense of completeness and perfection not achieved in any other of O'Rourke's books. There was a second edition in 1868.

After fiction and piety O'Rourke turned next to history and to the writing of the book for which he is remembered, *The history of the great Irish famine of 1847 with notices of earlier Irish famines*, completed in 1874 and published in 1875. He also had another book published in 1875. This

was *The centenary life of O'Connell* and it appears to have been completed in something of a rush to catch the market created by the celebrations to mark the one hundredth anniversary of the Liberator's birth. Rushed or not, it was a great commercial success and went through a number of editions, some of them in a format designed for a mass-market.

W. E. Gladstone in November 1877 on his only extended visit to Ireland stayed for a few days with the Duke of Leinster at Carton House. He visited Maynooth College for some hours and apparently sought out the parish priest of Maynooth on two successive days. Undoubtedly Irish history was their main topic of conversation. Later editions of *The centenary life of O'Connell* carried as an appendix a letter of Gladstone's offering a personal reminiscence of a small episode in O'Connell's parliamentary career. The unimportance of the episode was a measure of Gladstone's lack of enthusiasm for O'Connell, just as the writing of the letter was a measure of his respect for O'Rourke.

O'Rourke's last and biggest book, published in 1887 (the year of his death), was *The battle of the faith in Ireland*. The battle in question began in O'Rourke's view with the appointment of George Browne as archbishop of Dublin by Henry VIII in 1536. In his preface O'Rourke acknowledged that he had not managed to isolate his chosen theme:

As the author proceeded with his work he sometimes found it difficult to settle how much of the general history ought to be introduced.

O'Rourke declared on page two that his topic was a struggle

carried on in a variety of ways and by widely different means which has now endured for three centuries and a half and is not yet ended; nor does he live who can forecast its termination.

The implicit promise here is of a narrative coming down to his own day. However, at the beginning of the twenty-fifth and last chapter he is no further on than the reign of Queen Anne. This means that for the nineteenth century he has space and time for little more than a few anecdotes. That is to be regretted because some of his first-hand observations on inter-communal relations in Kingstown (where he ministered for fifteen years) are interesting. On the other hand, the great bulk of the book, on which he clearly expended much labour, had nothing special to offer. O'Rourke was very well versed in the then published sources for Irish history of the

sixteenth and seventeenth centuries, but he appears not to have made any extensive use of unpublished manuscripts. (A coherent if inevitably hostile account of Protestant missionary endeavours in nineteenth century Ireland would have been invaluable. But there are only fragments).

One of the surprising features of the text, which in general is tediously predictable, is the author's evident fascination with Cromwell. His background is considered in detail and he is not depicted simply as a bogey man: the influence of Carlyle's hero-worship is at work here, at some remove.

The most interesting questions about O'Rourke's work concern his choice and treatment of the famine as a subject. It is worthwhile looking first at the fictional handling of the topic in *Holly and Ivy for the Christmas holidays*. This is in some respects an exercise in realism. The plight of a previously prosperous farmer of the middling type fallen on hard times is convincingly portrayed. Particularly well conveyed is the loss of caste within rural society associated with financial collapse. The point of the title is that the principal character is forced by poverty to become a hawker of holly and ivy in Dublin on Christmas eve. This is a cause of excruciating shame putting him as it does in the ranks of the socially inferior small farmers and mountaineer men who earned money in this lower-caste fashion every year as a matter of course.

The more dire forms of suffering associated with the famine period are not in evidence. There is hunger but a *deus ex machina* prevents starvation. Misery in the workhouse is depicted but it is ended when a crusading guardian exposes the speculation and corruption of the wicked master. There is no workhouse fever, and in or out of the workhouse there are no corpses. Another noteworthy feature of *Holly and Ivy* is the invocation of Christian resignation in the face of adversity. At mass the priest preaches on the need to overcome pride when one is faced with downward readjustment on the social scale. It is the religious argumentation of a pious daughter that eventually persuades the financially embarrassed farmer to swallow his pride and join the ranks of the hawkers.

In this tale the author displays a reticence about dealing with the famine in all its ugliness, an attitude widely shared by those who lived through the late 1840s. An obvious but probably unanswerable question is why O'Rourke went ahead to break the barrier of reticence and attempt a full scale history of the famine. *Holly and Ivy* is clearly set in the famine period

but it does not convey any concept of "the famine" as a distinctive episode on a national level. This was another mental barrier that O'Rourke was to cross.

It may be significant that O'Rourke cannot be said to have experienced the catastrophe himself in any true sense. Maynooth students were probably more insulated from the famine than from any other critical episode in national life from 1795 to the present. Thanks to the generous financial arrangements made by Sir Robert Peel they were effectively state pensioners from 1845 until Disestablishment in 1870. There are even suggestions of Maynooth students being in the position to use their stipends to help their families over the bad times. However, as a student O'Rourke was not confined to the College for twelve months of the year. He attended the momentous two-day meeting of the Repeal Association in Dublin in July 1846 and gives an eye-witness account of it in his *History of the great Irish famine*. But scarcely a line of that book is taken up with a personal recollection of the famine. When he comes to describe the onset of the potato blight in 1845 he calls on what he saw as a priest in south Kildare in 1850. Even if he never ventured beyond Dublin and Maynooth between 1845 and 1849 he might have witnessed at the very least unusual population movement on the streets of the capital. And youthful indifference will not do as an explanation since, as we have seen, he was already of mature years.

If he had no personal recollections to contribute to the history of the famine O'Rourke saw the potential value of drawing on the experiences of those who had seen things at first hand. He had been motivated to write the book, he said, by

the fact that testimony of the most valuable kind, namely contemporary testimony, was silently but rapidly passing away with the generation that had witnessed the scourge.

Accordingly, he began his work by sending query sheets to 'such persons as were supposed to be in possession of information on the subject'. In the preface he expressed his thanks to the 'numerous correspondents' who replied and claims that he cannot recall even one case in which this was not done. This one hundred per cent response rate makes him the envy of any modern social researcher.

However, there is comparatively little to show for all this in the book. The principal piece of reportage on the queries occupies less than half a

page and ought to be seen in full:

In answer to queries sent to a part of Roscommon, I received the following replies from a reliable source.

Query: What other relief was given during the government works by private charities, committees, etc.?

Answer: There was considerable relief given by charity committees.

Query: What did the wealthy resident landlords give?

Answer: Considerable.

Query: What did the wealthy non-resident landlords give?

Again, the answer was 'Considerable'.

But I am sorry to add that the two latter queries were almost uniformly answered from various parts of the country by the expressive words 'Nothing whatever'.

The same correspondent said, in reply to another query, that the aged and infirm did not live more than a day or two after being sent to hospital. They died of dysentery.

There is little else that is obviously the product of his survey. We do not have a list of the queries. We know next to nothing of their geographical distribution. We have no systematic breakdown of the returns.

O'Rourke does cite a number of named individuals who provided him with reminiscences. They include Dr. Donovan and Mr. McCarthy Downing from Skibbereen; one prominent churchman who served in Co. Galway during the famine years; Mr. Egan who was clerk of the poor law union in Westport. Four or five is a very small number of survivors to have drawn on for reminiscences a mere twenty to twenty-five years after the awful event. And, of course, they are all professional middle-class people. Why did he not report the experiences of farmers and labourers? Why did he not interview policemen or schoolteachers? Was it that too great a gulf existed between priest and people? Intriguingly, he does in his history of the famine record popular attitudes to the repeal campaign referring to things he had been told by 'many a fine stalwart peasant' during the era of O'Connell's monster meetings.

Why did he not record experiences of the same kind of people in

connection with the subject of his book? Was it that before ordination he had access to popular attitudes that were denied him as a priest? Almost certainly the explanation lies in the fact that, in the 1850s, 1860s and 1870s the famine was a taboo subject for many Irish people.

O'Rourke's attempts to recover the famine experience led him to visit such places as Westport, Co. Mayo, and south-west County Cork, both scenes of notorious suffering in 1847. In his preface he claimed that this gave him the opportunity of 'conversing with persons whose knowledge of that awful calamity made then valuable and interesting guides'. But these guides seem to have been largely the same handful of people that have already been listed above. He does record an instance in which he interviewed someone of more humble background — a resident of the Bridgetown suburb of Skibbereen who pointed out the location of pre-famine cabins and famine graves.

To find fault with O'Rourke for failing as an oral historian would be a gross anachronism. However, it is useful to be reminded that the experiences of the great bulk of famine survivors are not and never have been available for scholarly analysis. What survived for gleaning by the Irish Folklore Commission in the 1930s and 1940s constitutes but a very attenuated record.

O'Rourke found his source material for the history of the famine mainly in official publications, in newspapers and in the reports of relief organisations. Politics, and especially Westminster politics, provide the framework of his book. More than anything else what he has to offer is a political commentary. It is worthwhile to take a look at his views on the background of the famine, the handling of the crisis and the implications of the catastrophe for subsequent political policy.

Although he was later to write a big book on the subject, O'Rourke, down to 1874, was not very well versed in the history of Ireland before his own time. For example, he believed that the descendants of the Norman settlers all converted to the established church in the sixteenth century and never subsequently fraternised with the heirs of earlier inhabitants. His notions on land settlement were equally simplistic, as in the following passage where he confounds ownership and occupation:

The colonists held the rich lands; the bulk of the people, who formed the real nation, were in the bogs, the lonely glens and the sterile mountains where agriculture was all but impossible.

Coming from the pastor of Maynooth parish this is a striking example of the triumph of a *priori* formula over empirical observation.

O'Rourke does have a decided if not coherent view of the prehistory of the famine. It is best conveyed in his condemnation of the "culpable apathy" of statesmen and landed proprietors who "did nothing whatever to regulate the husbandry of the country" despite a century of evidence of the unreliability of the potato. This is in effect to complain that there had not been enough interference in Irish life by alien authority.

O'Rourke is sometimes depicted as one of those authors who — along with John Mitchel — inculcated the belief that the failure of the potato provided an ill-intentioned government with the opportunity of making a sacrifice of Irish lives. O'Rourke's analysis is in fact considerably more nuanced. O'Rourke was not a rigorous thinker and his verdict on government performance, while always to some extent critical, varies considerably throughout the book. (Incidentally, he minimises the differences between the policies of the two prime ministers concerned, Sir Robert Peel and Lord John Russell.) At one extreme O'Rourke virtually paraphrases Mitchel:

The want of prompt vigorous action on the part of the government, more especially at the early stage of the famine, has quite as much to do with that famine as the potato failure itself.

Elsewhere he is much less censorious, e.g.:

[Russell's] government has certainly a right to be credited with the praiseworthy attempt it made to turn the labour of the Irish people to profitable work, but it came too late for immediate practical purposes.

The following is probably his most considered statement on the matter:

To have met the potato famine with anything like complete success would have been a Herculean task for any government. The total failure of the food of a nation was... a fact new in history; such being the case, no machinery existed extensive enough to neutralize its effects. ... Great allowance must be therefore made for the shortcomings of the government, in a crisis so new and so terrible; but after making the most liberal concessions on this head, it must be admitted that Lord John Russell and his colleagues were painfully unequal to the situation. They either could not or would not use all the appliances within their reach, to save the Irish people.

While scholarship would now demand more precise terminology the overall balance of the verdict would probably command the agreement of a majority of present-day historians.

O'Rourke is never explicit about the implications of the famine for subsequent times. He never proposes or even implies that the famine experience is an argument for throwing off the British yoke. At one point where he is chiding Lord Russell for implying that Ireland does not belong fully to the family of the United Kingdom he rhetorically proposes Irish independence to the prime minister as the *reductio ad absurdum* of Russell's argument, as something that not he himself any more than Lord Russell would consider feasible.

The point is of considerable significance for the historiography of the famine. The mistaken notion has gone abroad, and may now be ineradicable, that the great famine produced in Ireland a nationalist backlash. The truth is that it produced a backlash against nationalism. (This loss of faith in independence did not, of course, imply an increase in *affection* for the Union.) In fact the famine terminated a vigorous popular nationalist movement and nothing like it was to recur for thirty years. There was, indeed, a narrowly-based revolutionary nationalist movement approximately ten to twenty years after the famine, that of the fenians, and it might seem reasonable to surmise that the fenians saw themselves as avengers of the famine. From 1863 to 1865 they published a weekly, the *Irish People*, the leading articles of which provide the pure milk of Irish republican doctrine. But in the pages of the *Irish People* one will find very little reference to the famine. There is no escaping the conclusion that the great famine demoralised Irish nationalism, and that by and large Irish people did not wish either to hear about the famine, or to talk about it, in the quarter century that followed.

The significance of *The great Irish famine* is that it appears to have contributed greatly to changing that situation. By the late 1870s, thanks partially to the appearance of O'Rourke's book, the famine was coming to be an acceptable topic in nationalist political discourse. It took its place as another *topos* in nationalist rhetoric, another grievance, and a very powerful one. Among the Irish in America the story may have been different, with the potato famine taking its place much earlier as the key to Irish-American self-understanding.

For O'Rourke the resolution does not lie in nationalism or any other

political formula but in religion, and specifically the resurrection of the body. This point is not laboured throughout the text but it is put with power and clarity just at the mid-point of the book. Describing his visit to the churchyard of Abbeystrowry near Skibbereen, the site of mass famine graves, the author concludes by turning from earthly gloom to heavenly hope:

Although thus cast down by earthly feelings, divine faith raises one up again. Divine faith! the noblest and brightest and holiest gift of God to man; always teaching us to look heavenward – *Excelsior* is its theme forever. And who can doubt but the God of all consolation and mercy received the souls of his famine-slain poor into that kingdom of glory where He dwells, and which he had purchased for them at so great a price. Even in their imperfections and sins, they were like to Him in many ways; they were poor, they were despised, they had not whereon to lay their head; they were long-suffering too; in the deepest pangs which they had suffered from hunger and burning thirst (the last and most terrible effect of hunger), they cursed not, they reviled not; they only yearned for the consolations of their holy religion, and looked hopefully to Him for a better world. It is one of the sweetest consolations taught us by holy faith that the bones now withered and nameless in those famine pits, where they are laid in their shroudless misery, shall one day, touched by His almighty power, be reunited to those happy souls, in a union that can know no end, and feel no sorrow.

The great Irish famine is incomplete in its coverage and gives an impression of some incoherence, but it is not without its own artistry, as witness the paragraph just quoted. Numerous aspects of the famine are touched upon in such a way as to make an impression on the reader without giving any further information. Thus, for example, cannibalism gets one mention in a footnote and the more generally brutalising consequences of hunger are similarly dealt with by brief reference. The prevalence of dishonesty on the public works is signalled without receiving detailed treatment.

Even some of the most important aspects of the famine such as emigration and the ejection of small holders are given surprisingly brief treatment. The same is true of the question of proselytism during the famine, on which O'Rourke might have been expected to expound at some length. In fact he does not tackle the topic until page 517: and just over two pages later he turns 'with pleasure from this uninviting and uncongenial subject.' Indeed,

for someone who was about to begin writing a history of Ireland in terms of the 'battle of the faith', O'Rourke in his famine book is very eirenic. Quite early on he declared that: 'The clergy of every denomination came forward with a zeal and charity worthy of their sacred calling.' Again, he does little to document this.

Unlike John Mitchel, the brilliant propagandist with whom he is sometimes linked, Canon O'Rourke is instinctively tolerant. He can criticise individuals without demonising them. In his concluding paragraph he cheerfully concedes that readers may have widely different views on the facts presented in his book, 'upon the conduct of the people, the action of the landlords, the measures of the government'. In this respect, at least, he deserves to be emulated by all historians of the great Irish famine.

Published works of Canon John O'Rourke (1809-1887)

- (1) *Holly and Ivy for the Christmas holidays* (under the pseudonym Anthony Evergreen; Dublin, G. Bellew, c. 1853; some later editions).
- (2) *The lamp of the soul: a complete manual of devotion and instructions, compiled from the most approved sources* (Dublin, James Duffy, 1862; 2nd edition, 1868).
- (3) *The history of the great Irish famine of 1847 with notices of earlier Irish famines* (Dublin, McGlashan and Gill, 1875; many later editions).
- (4) *The centenary life of O'Connell* (Dublin, James Duffy, 1875; many later editions).
- (5) *The battle of the faith in Ireland* (Dublin, James Duffy, 1887).

ARTHUR GRIFFITH'S "THE RESURRECTION OF HUNGARY" IN ULYSSES & FINNEGANS WAKE

Attila Fáj

Before presenting the marks left by Griffith's "Parallel for Ireland" in Joyce's *Ulysses*, I will briefly point to the role played by the pamphlet in Irish history.

At present a copy of *The Resurrection of Hungary* is to be found in The National Museum of Dublin in a place of honour, a glass cupboard in the middle of the room dedicated to the history of the Irish Wars of Independence. It is there with good reason, since the dominant theme of the pamphlet, "the Hungarian policy" was "certainly the largest idea contributed to Irish politics for a generation." The author of the booklet does not tell the chronicle of the Hungarian history of the last century, but takes out of it a paradigm he deems useful for the future Irish politics. "It would be a mistake to read *The Resurrection of Hungary* as a history" — writes Padraic Colum in his biography about Griffith. "It is a parable an arousing myth. The acceptance of the myth on which an Irish policy could mould itself entailed effort and discipline". What does this parable tell? What is its gist in a few words?

After the War of Independence and the subsequent years of bloody revenge and gloomy oppression the defeated Hungarians, through their passive resistance, succeeded in extorting a compromise from the Hapsburg dynasty in 1867, and thereby a kind of great independence similar to that recognized already in 1848 but repealed during the Hungarian War of Independence. In the same way Ireland could extort a compromise from the English government and reestablish an up-to-date form of the 1782 Constitution based on a dual monarchy. The way for his country's liberty was smoothed by an honest and wise Hungarian statesman, Ferenc Deák. An Irish Deák should suggest the same non-violent methods to regain his fatherland's independence; the passive resistance, the withdrawal of the Irish members of Parliament from Westminster, the boycott of English goods, the establishment of national, commercial relations abroad independently from Great Britain, etc. etc.

Now I don't want to discuss either the validity of that parallel or its well-known compelling force towards a national unity of action, especially when the advocated "Hungarian Policy" was launched with the name "Sinn Fein". Instead of the positive effect of *The Resurrection* I intend to point to its least known negative reception, since in *Ulysses* Griffith's proposal occurs in its double effect.

In substance Griffith's critics objected to his reasoning that by accepting the Constitution granted by England in 1782 he preferred the evolutionary method to the revolutionary one based on the Natural Law which prohibits the exercise of any authority over an individual without his consent and permits the resistance by any and every means of force whatsoever.

In *Ulysses*, Joyce reflects this refusal on two levels and to the extent the readers of the newspaper "United Irishmen" could be acquainted with Griffith's *Resurrection* till the 16th of June, 1904. We must not forget that the material of the pamphlet first had been published in a series of 27 articles from January 31st to July 2nd, 1904. Joyce shows the refusal of the *Parallel* first on the level of the Dublin intelligentsia chattering in the office of the newspaper, "The Freeman's Journal", and then on a lower level, as a gossip of the chauvinists in Kiernan's tavern, the Polyphemus-like Citizen's "cave". In spite of the different levels, the reasoning goes back to a certain kind of Natural Law philosophy.

This passive resistance, the non-violent Hungarian policy proclaimed by Griffith is not in conformity with the Irish nature either according to the Dublin intelligentsia, or according to the pub crawlers. It is understood that the participants of the newspaper office chattering have a dim recollection of an anecdotal episode about the Austrian Emperor, Franz Joseph and the Hungarian statesman, Deák they learned from Griffith's article. The monarch, grasping the importance and the utility of a treaty with the Hungarians, wanted to confer a decoration on Deák, artificer of the compromise of 1867, who, however, refused to accept it. Thus the only expression of the Emperor's gratitude was a handshake with the saviour of the Hungarian monarchy.

In the office of "The Freeman's Journal" it is the editor Myles Crawford who hints at this anecdote but the happy-end scene is overwhelmed by the recollection of another event taken from the history of the Hungarian's relationship with Franz Joseph. It is the attempt on his life, committed by a Hungarian journey man shoemaker in 1853 when the wounded emperor

was saved by an Irish-born officer, Maximilian Karl O'Donnel, graf von Tirconnel. This desperate act perpetuated in the long period of cruel repression after the War of Independence seems to the participants of the chattering more appropriate to the Irish nature than peaceful non-violence. At this point of the conversation Professor MacHugh matches the opportunity to explain his theory about the real Irish character which is always loyal to lost causes:

"— Ay, a grass one, Myles Crawford said, his eyes running down the typescript, Emperor's horses. Habsburg. An Irishman saved his life on the ramparts of Vienna. Don't you forget! Maximilian Karl O'Donnell, graf von Tirconnel in Ireland.... O yes, every time. Don't you forget that!

— The moot point is did he forget it? J.J. O'Molloy said quietly, turning a horseshoe paperweight. Saving princes is a thank you job. Professor MacHugh turned on him.

— And if not? he said.

— I'll tell you how it was, Myles Crawford began. A Hungarian it was one day....

— We were always loyal to lost causes, the professor said. Success for us is the death of the intellect and of the imagination. We were never loyal to the successful. We serve them. I teach the blatant Latin language. I speak the tongue of a race the acme of whose mentality is the maxim: time is money. Material domination, *Dominus!* Lord! Where is the spirituality? Lord Jesus! Lord Salisbury. A sofa in a westend club. But the Greek!"

It would be a grave mistake to deduce from the quoted passage that Joyce thinks of the real Irish nature as cruel and violent. We should not forget that Myles Crawford mentions with a bit of pride the Irish-born officer who promptly saved the life of the Emperor. On the other hand, in the tavern episode Joyce makes a laughing stock of the chauvinists who had sworn at Griffith's non-violent method, presuming that it was suggested to him by Leopold Bloom. In the tavern scene, Bloom is the spokesman of the tolerant Irish mentality and the preacher of universal love versus force, hatred and universal history, which do not care a rap for noble feelings.

"— So anyhow when I got back they were at it dingdong, John Wyse saying it was Bloom gave the idea for Sinn Fein to Griffith to put in his paper all kinds of jerrymandering, packed juries and swindling

the taxes off of the Government and appointing consuls all over the world to walk about selling Irish industries. Robbing Peter to pay Paul. Gob, that puts the bloody kybosh on it if old sloppy eyes is mucking up the show. Give us a bloody chance. God save Ireland from the likes of that bloody mouseabout.... He is a perverted jew, says Martin, from a place in Hungary and it was he drew up all the plans according to the Hungarian system. We know that in the castle.

- Isn't he a cousin of Bloom the dentist? says Jack Power.
- Not at all, says Martin. Only namesakes. His name was Virag. The father's name that poisoned himself. He changed it by deed poll, the father did.
- That's the new Messiah for Ireland! says the citizen. Island of saints and sages!
- Well, they're still waiting for their redeemer, says Martin, for that matter, so are we."

As we remember in the tavern episode, Bloom defends his ideas about non-violence without success and must eventually escape the tavern. His behaviour is in accordance with the Irish nature, with loyalty to the lost causes and non-loyalty to the successful, since success means the death of the intellect and of the imagination.

Was it really an Irish Jew of Hungarian origin who suggested the Hungarian policy to Griffith?

Most probably it wasn't. At least Griffith's biographers point to the fact that the Hungarian analogy had probably been noted much earlier by the Irish parliamentarians and in Patrick Ford's article published in the New York newspaper "Irish World" in 1876. I think one of the reasons that induced Joyce to make Bloom appear as a sort of ghost-writer or inspirer of Griffith's new political perspectives was his conviction that the home reality unfolds a wider perspective when it is observed with the eyes of a "native alien", e.g. a cosmopolitan Greek or Jew, instead of the eyes of a plain native.

The other reason for the fancy that Bloom's stream of consciousness penetrated up to the consciousness of the artificer of the Irish independence originates in Joyce's condition of self-exile.

An exile is a *destiempo*, a man who has been deprived of his own time. "That means deprived of the time which now passes in his own country. The time of his exile is different. Or rather, the exile lives in two different

times simultaneously; in the present and in the past. His life in the past is sometimes more intense than his life in the present and tyrannises his whole psychology...." How can a self-exiled writer not be a *destiempo* when he is working on themes of his native land?

On drafting *Ulysses* in Italy, Joyce overcomes this difficulty on the one hand by following the method of going back to the times when he lived in Dublin. He writes about the past instead of writing about the present. On the other hand he uses the second axiom of the *New Science* by Vico. This axiom states

that it is a fundamental characteristic of the human mind to consider and judge remote and unknown things through things that are known and present. For Joyce, remote and unknown was the person who could have inspired Griffith's *Resurrection*. The "things" known and present to him in his new surroundings and through which he considered and judged the distant Irish reality were the new Ulysseses he had met in Trieste. Indeed, it was in Trieste where the novelist got closely acquainted with a certain type of "native aliens": Italian Jews of Hungarian origin and with Austrian citizenship, and he thought it quite convenient to transfer this type to Dublin. So he "sent" to his fatherland the son of a Hungarian emigrant Jew to reflect from inside all the home reality, the political perspectives included.

The Joycean expedient was very effective. Had the exiled Ovid by the Black Sea got a similar brain-wave, he would have described the wanderings and meditations in Rome of a Greek merchant's son emigrated from Tomi to the capital. And his "native alien" would have been suspected to have inspired the ideology of the "pax augustea" into the emperor. Perhaps by such an expedient, Ovid would have written more mordent satires than Horace did.

Considering that Joyce was so keenly interested in Griffith's pamphlet, no wonder that the memory of the book and its author does not fade in *Finnegans Wake*. What is more, as Griffith was already dead and his life and work could be looked at from a certain historical distance, Joyce could give them a more general allegorical, emblematical and linguistic impress. That is what he really did. Let us look at some examples:

For every Joycean, the basic allegory concealed in the title of the novel is a common-place rebus. It hints first of all at Finnegan, the hodman's wake and awakening in the Irish ballad, and at the same time at legendary

Finn MacCumhal's, the ancient Irish prototype's grand dream of the Irish and the world history. What so far everybody failed to notice is the fact that that symbolical meaning of the ballad, the wake and the awakening of Ireland, implies also the parallel wake and resurrection of Hungary, a nation of Finno-Ugrian origin. In fact, in Griffith's pamphlet, the death-watch of Deák ad his friends by the seemingly dead Hungary, and their faith in the resurrection of the fatherland, is a recurrent allegory in Griffith's pamphlet. On reading this passage of the *Resurrection* the atmosphere of the allegory can be felt at once.

"They [Deak and his friends] had no passwords and no secrecy — they discoursed of Hungary's history, Hungary's literature, Hungary's industries, Hungary's economics and the Hungarian Constitution, which they obstinately declined to oblige the Austrians by believing to be dead. "It is not dead, but sleepeth — owing to the illegal administering of a drug."

Deak, who was a cheerful man, talked of the day when it would awaken and make jokes. Visitors to Pesth from the country districts came to visit Deak. They stopped the evening, smoked a pipe and drank a glass of wine with him and the others who gathered in his sitting-room, and as they talked the hopelessness fell from them. Deak's sanguine spirit crept into their hearts and they left convinced that Hungary was not dead. "Hungary shall arise", said the Magyars, "for the great Francis Deak — Deak the Unswerving, Deak the Farseeing, has told us so."

Griffith insists on this allegory till the end of his book. He finishes the pamphlet as follows:

"Even though the Hungarian policy comes to Ireland as something novel, none who thinks can doubt that, carried out with the same determination, the policy which resurrected Hungary from the tomb Austria built for her in 1849 at Vilagos can end the usurped authority of a foreign Senate to legislate for Ireland."

As for the other meaning of *Finnegans Wake*, i.e. Finn MacCumhal's dream of the world history, I have already demonstrated in my former researches and don't get tired of repeating it: Joyce borrowed this idea from an Hungarian dramatic poem, *The Tragedy of Man* by Imre Madách which he had read in the first Italian translation made in 1908 in Fiume. Madách's dramatic poem was published for the first time in Hungary in

1861 and it belongs to the classics of Hungarian literature. It runs almost constantly in Hungarian theatres, has been staged abroad several times and has appeared in 70 different translations. The protagonists of *The Tragedy* are, like H.C. Earwicker and Anna Livia Plurabelle, the first human couple, Adam and Eve. They dream the history of humanity searching for the meaning of human existence by identifying themselves with the great historical figures, the fighters for the most important individual and social ideas like the belief in glory, equality, fraternity, democracy, God, pleasure, science, freedom, capitalism, communism, space-flight, etc.

I have to remark that Griffith, though many times speaking in his study about the Hungarian poets and writers and their works — e.g. he dedicates a long appendix to the novels of Maurus Jokai — does not mention Madách's *Tragedy* perhaps because it seemed too pessimistic to him, though it is not at all so. For Joyce, on the contrary, *The Tragedy* was an extremely convenient literary model and documentation of the Hungarian and Irish double nature, what the novelist missed in Griffith's pamphlet.

In order to complete the Irish statesman's parallel for Ireland also in strict home relation Joyce avails himself of the criticism to which the idea of passive resistance was exposed by the real historical events. After all, this criticism justifies Joyce's former intuition about Ireland, which owes her freedom to the policy of non-violence as well as to the policy of force, and both policies are inherent properties of the Irish and human nature. In *Finnegans Wake* we find a lot of puns with the names, Dublin, Dubliners — which hint at this duality and many times also, Joyce coined words like "Cainandabler", "Burrus and Caseous" etc. It is worth while examining what kind of duality Joyce projects into Griffith's name and nature.

In *Finnegans Wake* we meet 25 times the name "Griffith" and its variants. As the analyses of all occurrences would be quite long, let us confine ourselves to what is to be found on page 358 where the deciphering of the meaning is made easy by the great deal of synonyms heaped up by the novelist. What is Griffith for Joyce? A strange being: *Meschiameschianah; gryffgryffgryffs; at Fenegans Wick, the Wildemanns; padar and madar, hal and sal; colombophile and corvinophobe alike.*

It is clear that the starting point is the legendary half eagle, half lion, the griffin the symbol of vigilance and of the Messiah in Dante (*Purgatorio* XXXII, 26). The connotation of the word "griffin" however, seems too narrow for Joyce to reflect the very essence of the statesman. In the author

of *The Resurrection* he sees not only a kind of combination of the sharp-eyes bird of prey – an eagle – and a warm-blooded generous and strong lion – a symbol of the Messiah – but also a cold-blooded quick fish, a tame dove of peace that fears the ravens and a feeble, poor, fallible Messiah, “Meschino” in Italian means “poor”, “miserable”, the narrow-minded prophet, Jonah sent by the Lord of Israel to Nineveh, the capital of the Jews’ mortal enemies, Jonah is the Hebrew for “dove”. The presence of the fish is revealed by the last three letters of the first word spinning-top: *gruffygruffygriffs* and in the phrase: *padar and madar, hal and sal*. Indeed, “padar” is both for father (Griffith the father of Sinn Fein) and “feather”; “madar” means in Hungarian “bird” and here it also stands for “mother”. The Hungarian “hal” means “fish”, and “sal” is for the Latin word “salt”, *Colombophile and corvinophobe alike* evidently hints at the love for doves and the fear of ravens.

In this way Joyce constructs a griffin different from the traditional figure but similar to the figures that occur in the Assyro-Babylonian myths and bass-reliefs: half piscine and half human beings, lions with the heads of Gods and the wings of a dove or an eagle, which live in the sea and come out of it to teach people about faith, morality and culture. The comparative history of religion considers these figures as the prototypes or pre-images of the prophet Jonah devoured by a big fish and on the third day spat out to the sea-shore, in the same way as Jonah was considered by Christ as the pre-image of his own death and resurrection.

Let us turn back to the first phrases I quoted:

Meschiameschianah: gryffygruffygriffs; at Fenegans Wick, the Wildemans. I think it is a reference to Griffith, the poor Jonah – during the Easter Week Rising, i.e. during the week of the Fenian gangs or wild men’s guns. Joyce is not the first who presents Griffith’s Jonah among the Fenian wild men during a great sea-storm, the Easter Week Rising. It is a remarkable fact that in 1921 the prolific English writer, Alan Patrick Herbert, published a short skit entitled *The Book of Jonah. As Almost Any Modern Irishman Would Have Written It. Light Articles Only* (London, 1921, pp81-89)

The scene of this extremely sarcastic one-act play is laid in an Irish village square, where a statue has been raised to the memory of Michael Flannigan Jonar, the prophet, because he gave his life for his fellow voyagers during a sea-storm by throwing himself into the water. His widow gets a pension for the heroic deed of her husband. But Joner, who is believed to

be dead, surprisingly crops up at home and tells the true story of his adventure. -He was not a hero. While he was voyaging on government business, a heavy storm was brought on the ship by the English government. The “heathen sailors” found him in the post office of the ship (reference to the General Post Office, a headquarters for the Irish Volunteers during the Easter Rising), and threw him into the sea, since they got bored with his prophesying the wrath of the Lord upon them. Jonah passes three days in the belly of the whale. This by way of reference to the fact that after suppression of the Easter Rising, Griffith was interned in Wales and then spat out near a deserted island, where he had to wait for the next ship passing by. Now the only problem for the resurrected from the dead is how to save his face and how to make money. The right solution is suggested by his friend Timothy James O’Leary. It will be enough to alter the epigraph on the statue writing there the story about the whale or any other fairy-story. Joner is not a ruined man either financially. He can pocket a lot of money if he makes up his mind to tell people, especially the credulous British in the music halls and in the theatres how he was smoking his pipe in the whale when the oil was running inside the sea-monster.

I must point out that in spite of the concordance there is a fundamental difference between Herbert’s Griffith-Joner and Joyces’ Griffith-Meschianah. In Herbert’s ironical short skit the disguised is not only a slightly fanatical but also quite an irresponsible prophet, as he is absolutely terrified by the consequences of his own prophecies. Therefore when he turns against his heathen fellows in the moment of crisis, they get rid of him. Moreover, Joner is venal and ready to make capital even out of his bad luck. On the contrary, for Joyce, Griffith-Jonah is never irresponsible or greedy. The worst he states on account of Griffith is that he was often awkward and unhandy and could not change his character even during his Jonah mission in 1921 in London-Nineveh, the capital of the oppressors of Ireland-Israel. Joyce’s opinion on Griffith’s life, character and last political action does not substantially differ from that of the modern Irish humorist; so writes Delaney and Feehan in *The Comic History of Ireland* about Griffith and the Irish-British treaty signed by him and Collins in 1921.:

“Mr Griffith was the father of Sinn Fein. He was a married man, and he was the greatest Irishman that ever lived. He knew a lot, especially about Hungary.” (P. 109).

“...then they brought him the Treaty and a lot of Irishman at home

said it was no good and they would not take it. Mr Griffith and Mr Collins was the two greatest Irishmen that ever lived and they said they would take the Treaty because it was a good one, they having signed it themselves. Nobody can yet say whether Mr Griffith and Mr Collins was right or wrong from their not being dead 100 years, and so nobody mentions it." (p.115).

TOWARDS THE BIBLIOGRAPHY OF ST. PETER'S

Thomas Kabdebo

It is now possible on the INTERNET to pay a whistle-stop visit to the city of Rome, reach St. Peter's Square and enter the basilica behind the camera that had made the moving picture which was part of the world wide web. This is the armchair voyage of the nineties, nearly as informative as the *St. Peter's Video* which was made in the eighties and sold in the Vatican shop adjacent to the post office. In fact, the video was almost as satisfactory as the sound guide of the seventies; you entered the basilica through the atrium, looked left to the statue of Constantine who built the old Cathedral Church, gazed up to see the Navicella of Giotto, glanced right to Manzu's bas-relief on the bronze door, surveyed the Porta Santa — which was left open for the jubilee pilgrims in 1975 — and then plugged in your "sound guide" and walked around the immensity of the interior in 45 minutes to cover each major monument in 3 minutes flat.

Previous to that, in the 1960s, the guide books of the Vatican and of St. Peter's began to carry strips of slides¹ also available separately and still available today — which depicted the main sites of the Church, inside and out, allowing for the pictorial study of the old statue of St. Peter, 12th century, — whose foot is worn away by kisses —, the confessional — right above the archaeological site where the Saint's bones were located in a box, now a centrepiece in the Grotta — and the pilaster, carrying the statue of St. Longinus, a masterpiece by Gianlorenzo Bernini. These dated aids, like the electronic paraphernalia of today had the distinct advantage of whetting your appetite for the real life in depth pilgrimage.

"With arms wide open to embrace

The entry of the human race"

wrote Browning, and indeed you do not have to be a Roman Catholic to appreciate that the microcosmos which is the basilica (symbolically attached to both the City of Rome through the Square and the Vatican through two doors) is an integral part of the macrocosmos, connected with it in ever pulsating and enlarging circles of: Church — Italian — European — World History. But how do we study such a many faceted phenomenon as the

principal basilica of the world, and how can we aid such a study by bibliography?

It is possible to focus on the physical entity alone, the body of the basilica itself. The fabric as we see it today is a renaissance-baroque church, shaped by Bramante, Michelangelo, Bernini, Fontana and Maderno – to mention the most influential architects. But even though they all started with the new departure, a foundation stone put in place by Julius II, they could not and would not create something entirely new. The Constantine basilica, its walls demolished, its courtyards dug up, lived on in the Grotta, and in the pictures, columns and monuments that were transported from the old into the new. A study of the evolution of the present building must, therefore, start with Archaeology and continue with Architectural History. The student of bibliography is well advised to concentrate first on one single aspect of the basilica and to then carry that study to its logical conclusion: from the roots to the branches, s/he should uncover – through (near total) documentation – as much about one particular period as it might yield. A first subject example for study could be the cupola; a second, the contribution of Michelangelo to the building of the church and its famous and most beautiful statue, the 1498 Pieta. (The great Toscan's reverence of antiquity was revealed by his creating a Pantheon-like cupola, falling short by just half a metre in diameter when compared to the ancient model).

But the writers of guide books, church and Vatican histories, art and architectural histories of all ages have been attempting to grasp the full significance of this basilica in the physical, symbolic and spiritual sense. Should the bibliographer shirk from this task of collecting all the books, periodical articles, older and newer media, which express, describe and detail every significant aspect of the basilica and its life? No. After the *pars pro toto* beginning s/he ought to proceed with "la sua vita per toto".

The life is very important. From Dante² onwards there were descriptions of processions leading on to the church; special prayers, particular liturgies, church services, councils and notable pilgrimages have been described throughout the ages and their audiences do not diminish today. Easter and Christmas masses were celebrated by practically all the popes from the 17th century onwards, their changing liturgies are integral parts of the life, but so is the collective activities of the "pietini", a dedicated and expert body of men employed in maintaining the "fabbrica", the fabric of the building.

The Fabbrica has its own offices and archives. The basilica has its own internal special archives inside the pilaster of St. Longinus and its own museum. The basilica itself is not only a place of worship but an art collection too and it is connected to another art museum which belongs to the Vatican. The whole of the Vatican (apart from everything else) is a vast art museum which is embedded into the City of Rome, the largest open air art museum of the world. When listing publications that describe objects of artistic value and of veneration in the basilica one is constantly reminded of the quasi-infinity of the inter-connections. The mosaic of The Transfiguration by Raphael is based on the painting of the maestro in the Vatican museum, the story of the painting reveals the nature of the patronage the artist enjoyed and displays his skill in coming to pictorial terms with the new style in setting a New Testament miracle. There can be little doubt that printed documentation of all the artists, architects, popes, cardinals, who either worked on the basilica or dealt with it, is extremely relevant. Their notebooks, diaries, account books, sketch-pads, – the bulls and breve of the popes, even regulations concerning alms or indulgences make up the days of "the life".

It is well known that indulgences promulgated by Leo X³ sparked Luther's anger in 1517, and that out of his wrath the Reformation sprang, then blossomed, and that soon afterwards the Counter Reformation bloomed, and to resolve the split, the ecumenical movement is now trying to heal the division. The sale of indulgences was to help finance the building of the basilica, the sale of guide books, statuettes, postcards, videos etc. in 1995 helps finance its upkeep. Guide books, le guide, were the oldest forms of tourist brochures and a study of them reveals much of the progress of Rome from medieval to modern times. The basilica has always had pride of place in "le guide", often shown through different perspectives in sundry illustrations – from early woodcuts to modern photographs. Many, though not all illustrations, were designed to have a double life: *Ichonographica Templi S. Petri in Vaticano* is a wall chart as well as a folding map in a book. *L'eglise de St. Pierre a Rome* (par Pierre Mortier) likewise; *Pianta delle grotte Vaticane* (si stampano per G.G. de Rossi, 1635) has no exact equivalent in any book I know.

It stands to reason that the guide book writer (often anonymous) and the historian may have come from any nation and their work written in any of many different languages. Still, guide books and general histories of the

basilica have a linguistically descending order: Italian (some Latin), English, French, Spanish, German and others. When it comes to artistic appreciations / art histories the order changes: some of the best studies were done by German scholars⁴. The bibliographer should have a working knowledge of these languages.

Today no bibliographical task should be undertaken without a search of databases, particularly those of the OCLC, the British Library and, in this case, the Vatican Library. The material yielded by electronic means on this topic is the equivalent of about a thousand entries that need classification and begs standardisation. The search is an excellent start which, however, should not lull the bibliographer into a false sense of security. The catalogues of these top libraries have very few analytical entries and are neither totally up to date nor entirely retrospective. The periodical article coverage of OCLC is good but only sporadically retrospective and very many items such as "ephemera" or "illustrative material" are either not described or are dealt with in a summary fashion. There are very few abstracts of any use for the student of the basilica, Even Historical Abstracts are a near-miss in this context. Whenever possible, the entries for the bibliography of St. Peter's should have a contents list as well as a summary. In other words, a critical bibliography should be the aim as all bibliography is ancilla scholasticae.

And one needs to go further afield. The National Library in Rome (now networked but its catalogue far from fully digitised) is strong on the link between the city and its churches, especially St. Peter's. The Casanatense Library holds unique old editions of relevant works, the German Institute in Rome has a superb collection of books and articles on the renaissance basilica in the making⁵. The National History of Art library has an incomparable collection of articles on the art and artifacts of St. Peter's. The catalogue is still on cards. Its English "counterpart", the library of the Victoria and Albert Museum has some relevant and possibly unique material.

As there is no full bibliography of St. Peter's and only incomplete attempts in collecting the documentation on certain aspects of the church, it is little wonder that the illustrative material is only incidentally itemised. Among the latest monographs the outstanding work is *La Fabbrica di San Pietro*⁶ which goes furthest to collect and present illustrations in one volume. Perhaps the most comprehensive yet scholarly book written on

the subject is Carlo Galassi Paluzzi's *San Pietro in Vaticano* (Roma, Marietti, 1963. 3 vols.), also good on illustrations.

In theory, one knows what should be done. Take the case of Michelangelo and the basilica. Initially, one needs to go to Florence and list all the relevant drawings found and catalogued in Casa Buonarroti. The same is true elsewhere for Bramante, Pirro Ligorio, Raphael, Sangallo, Vignola, Fontana, Bernini etc as architects, masters, coadjutants, soprastantes – or for any of the major artists who carved statues, constructed monuments in the church such as the Berninis, Thornwaldsen, Pollaiuolo, Manzu or Toth.

The new basilica took over a hundred and eighty years to build – the sacristy was added afterwards – and a further two hundred years to fit and furnish with the main monuments and grotta chapels as we see them today. But the work has been continuing. On the one hand, the archaeological investigations started by Pius XII in the 1940s reached the level of the burial chambers in Nero's time⁷, on the other hand, each pope of modern times had his own monument placed either in the church, or over his burial place in the vaults. Even recently chapels were being constructed in the vaults, such as the Magyar Kapolna in 1983.

A degree of difficulty is encountered when the bibliographer realises that the objects d'art belonging to the old basilica have mostly found their place in the new one, and are either in the Vatican, like the Pigna (the great pineapple) which once adorned the atrium of the Constantine Church, or have emigrated as far as the Lateran. The bibliographer has to account for dispersed or displaced objects too. This is the challenge of iconography.

An area curiously neglected by scholars (even architectural historians) is the origin, the quantity and quality of building materials such as travertine stones (the walls of St. Peter's), carraran marbles (monuments and statues, for example, the Pieta), or "Spanish Gold" that adorns the Chapel of the Holy Sacrament, and decorates so much else in the church. The account books of the suppliers should as much be accounted for as those of the purchasers.

Should the bibliographer limit him or herself to printed sources which by now would involve the majority of significant illustrations – or, should he or she be comprehensive and survey and list archival sources as well? Students of the basilica hardly ever restrict their research in this way. The more archival sources (archivists' diaries, correspondence between builders and patrons etc.) are explored, the richer and more original the study in

question will be. Thus almost all the significant monographs on the cathedral church mention, even list, their sources usually without categorising the printed versus the archival material. Today's bibliographer needs to develop a new category still, beyond the handling of the machines and using the mores of the rather cumbersome and old fashioned descriptive cataloguing of historical/descriptive bibliography. The picture should, when so needed, be described either individually, or as part of the book; and catalogued flexibly. When so needed, the text should be "recorded" as an appendage and not (or not necessarily) the other way round.

So, beyond the initial electronic search and investigation of the principal libraries, the bibliographer must collate the individual bibliographies / lists / references found in relevant printed volumes. One can, indeed one needs to go a step further. There are general histories of Rome, such as Gregorovius⁸ or Pastor⁹ which weave the story of St. Peter's into the text of the narrative, volume by volume. A search of the books and references in respect of textual points relating to St. Peter's is also a relevant exercise. Bibliography is (at best) not an end in itself. The bibliographer is to display the footprints of knowledge — these are the items, references, classified — in order to help the fellow scholar make the next step¹⁰ which is to expand the story with an analytical web into a narrative of increasing complexity. The path of scholarship is endless, the walk of the bibliographer is thankless: completeness is an unobtainable dream.

Nonetheless, one must keep on trying, unearthing and presenting the evidence. It was only in the late 1940s that the excavators commissioned by Pope Pius XII uncovered this inscription: "Petrus roga Christus Jesus pro sanctis hominibus Christianis ad corpus tuum". (Peter, pray Christ Jesus for the body of Christian men buried near your body). What is important is that nothing important should be missed by the bibliographer¹¹.

The Plan for St. Peter's Bibliography

1. Archaeology
 - 1.1 The Vatican Hill
 - 1.2 The Constantine Basilica
 - 1.3 The excavation concerning St. Peter's tomb
 - 1.4 The Grotte

2. History

- 2.1 The history of Rome under Constantine
- 2.2 The sacking of Rome in the Middle Ages
- 2.3 The history of Europe in the early 16th century
- 2.4 Counter Reformation Rome
- 2.5 The history of Italy from 1860 to 1936.

3. Church History

- 3.1 The history of the papacy in Rome to 1502
- 3.2 The history of the papacy from 1502 to the present day
- 3.3 The liturgy
- 3.4 Ceremonies
- 3.5 Privileges
- 3.6 Priests serving in St. Peter's

4. Architectural and Art History

- 4.1 The history of the old St. Peter's from Constantine to 1506
- 4.2 The history of the new St. Peter's from 1506-
 - 4.2.1 La Fabbrica and its upkeep
 - 4.2.2 Building materials
 - 4.2.3 The models of the basilica
- 4.3 Tombs and monuments
- 4.4 Other sculptures and basreliefs
- 4.5 Mosaics
- 4.6 Paintings
- 4.7 Relics in their setting
- 4.8 Inscriptions
- 4.9 Architects, builders and artists of the church

5. Music

- 5.1 St. Peter's choirs through the ages
 - 5.1.1 The chapel for the choir
 - 5.1.2 Individual singers
 - 5.1.3 The evolution of the organ
- 5.2 Music written for performances in the basilica
- 5.3 Music played in the basilica on festive occasions

6. City Planning

- 6.1 Transformations in the city of Rome to accommodate the old basilica
- 6.2 Transformations to accommodate the new basilica
- 6.2.1 The Borgo
- 6.2.2 The Square: colonnades, fountains, the obelisk
- 6.3 The Vatican and the perimeter walls of St. Peter's

7. Social History

- 7.1 Suppliers and the supplies
- 7.2 Festivities
- 7.2.1 Commemorative medals and coins
- 7.3 Visitors
- 7.4 Guides and guiding
- 7.5 St. Peter's in literature and lore

8. Iconography

(Picture representations which do not readily fall under the categories 1-7, e.g. Vatican stamps showing St. Peter's) (Objects that once belonged to St. Peter's but now adorn other churches or museums).

NOTES

1. The first in the John Paul Library Lecture series was "The Basilica of St. Peter's" by Thomas Kabebo in 1984. It featured slides. Since the mid-eighties, Dr. Kabebo has been engaged in compiling the bibliography of the basilica which should one day update his librarianship thesis: *A Bibliography of St. Peter's, 1506-1699*. He spent three periods of research in the libraries of Rome and the Vatican, in 1964, 1972 and 1993.
2. Come i Roman, per l'esercito molto,
L'anno del Giubbileo, su per lo ponte
Hanno a passar la gente, modo colto,
Che dall' un lato tutti hanno la fronte
Verso il Castello, e vanno a Santo Pietro,
Dall' altra sponda vanno verso il monte.
(Dante. *Inferno* XVIII 28-33)
3. Leo X. [Begin] Albertus ...scte Moguntiner sedis. ac Magdeburgen. eccl' e Archieps....Per ... Leonem ... Papam decimu. [Roma], MDXVII.
4. A comprehensive work on *Le Guide* is by Schudt, *Le Guide di Roma* (1957).
5. The former director of the library, Count F.G.W. Metternich has written one of the best

researched works on the first phase of the new basilica: *Bramante und St. Peter*. München, W. Fink Verlag, 1975.

6. Alberto C. Caracci: *La Fabbrica di San Pietro Venti Secoli di Storia e di Progetti* Roma, Libreria Editrice Vaticana, 1983.
7. *Esplorazioni sotto la Confessione di San Pietro in Vaticano eseguite negli anni 1940-1949*. La Necropoli, La Memoria, La Basilica. Relazione a cura di B.M. Apollorj Ghetti, A. Ferrua, E. Josi, E. Kirschbaum, 1951, 2 volumi, pp. 110.
8. Ferdinand Gregorovius: *History of the City of Rome in the Middle Ages*. London, Bell, 1900. VII vols.
9. Ludwig Pastor: *The History of the Popes from the close of the Middle Ages*. London, Kegan Paul, 1901-1953. 40 vols.
10. The best overview to date may be obtained from James Lee-Milne: *Saint Peter's* London, Hamish Hamilton, 1967.
11. The most famous of these being:
Tu es Petrus, et super hanc
petrum aedificabo ecclesiam meam,
et portae inferi non praevalent
adversus eam.
(Matt. XVI., 19).

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