1992

Son et Lumiere: an epic reading

Ian McGrath

University of Wollongong

UNIVERSITY OF WOLLONGONG

COPYRIGHT WARNING

You may print or download ONE copy of this document for the purpose of your own research or study. The University does not authorise you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site. You are reminded of the following:

This work is copyright. Apart from any use permitted under the Copyright Act 1968, no part of this work may be reproduced by any process, nor may any other exclusive right be exercised, without the permission of the author.

Copyright owners are entitled to take legal action against persons who infringe their copyright. A reproduction of material that is protected by copyright may be a copyright infringement. A court may impose penalties and award damages in relation to offences and infringements relating to copyright material. Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

Recommended Citation


Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au
Son et Lumiere: 
AN EPIC READING.

A written submission in partial fulfilment of the requirements for the award of
the degree of

DOCTOR OF CREATIVE ARTS

from

THE UNIVERSITY OF WOLLONGONG

by

Ian McGRATH  M.C.A.

SCHOOL OF CREATIVE ARTS
1992
Son et Lumiere:
AN EPIC READING.

Volume One.
Contents.

Volume One.

Contents. p. 3
Abstract. p. 6
Introduction. p. 7

1. COLERIDGE, THE ANCIENT MARINER AND GAIA: p.9
   An Analysis with a view to Production:
   1.2 The Problem and its Worth.
   1.3 A Background in Literature.
   1.4 Hypothesis, Evidence Outline and their Significance.
   1.5 The Argument.
      1.5.1 The importance of the "Mariner" in Coleridge's career.
      1.5.2 Pipe-dream or Propaganda?
      1.5.3 The Moral of the "Mariner".
      1.5.4 Romanticism, Coleridge............and Hutton!
      1.5.5 Linking Gaia to Coleridge.
   1.6 Conclusion.

2. SON ET LUMIERE p.40
   An Analysis of the Origins and Status of the Artform.
   2.2 Defining a Vision.
   2.3 Origins - an Historic Perspective.
      2.3.1 Early days - Inigo Jones to the Garrick/de Loutherbourg partnership.
      2.3.2 Gas, Limes and Arcs - epitomised by Henry Irving at the Lyceum.
      2.3.3 Advent of Electricity - D'Oyly Carte et al.
      2.3.4 The Music of Light - Appia versus Craig.
      2.3.5 Control and Integration- the secrets for further development.
   2.4 The Craft.
      2.4.1 A Stormy night at Chambord - Paul Robert-Houdin.
      2.4.2 Historic Nights - Son et Lumiere around the world.
      2.4.3 Out of Fashion.
   2.5 Current Trends.
   2.6 Conclusions.

3. RECORDING THE POEM p.67
   A Report on the Process and Results obtained.
   3.2 Performance Values.
3.3 Characterisation.
   3.3.1 Narrator
   3.3.2 Wedding Guest
   3.3.3 Mariner
   3.3.4 Life-in-Death
   3.3.5 First Voice-in-the-Air
   3.3.6 Second Voice-in-the-Air
   3.3.7 Pilot
   3.3.8 Hermit
   3.3.9 Pilot's Boy

3.4 Sectioning and Phrasing.

3.5 Pronunciation.

3.6 Plotting Action, Mood and Attitudes.

3.7 Drilling and Rough-cut.

3.8 Comparison.

3.9 Fine Drilling.

3.10 Technical Details.

3.11 Recording.

3.12 Editing.

3.13 Additional Recording.

3.14 Summary.

4. CLOSE ENCOUNTER WITH A DEAD ALBATROSS p.89
   4.2 Parameters.
   4.3 Sound Cue Synopsis.
   4.4 Sound Source Schedule - The Sound Palette.
      4.4.1 Albatross
      4.4.2 Whalesong
      4.4.3 Suspenseful effect.
      4.4.4 Melodic effects
      4.4.5 Shipboard
      4.4.6 Music
      4.4.7 Added vocals
      4.4.8 Weather
      4.4.9 Naturalistic effects
   4.5 Sequences.
   4.6 Equipment.
   4.7 Mixing processes.
   4.8 Editing.
   4.9 Playback.
   4.10 Summary.

5. PAINTING WITH LIGHT p.106
   5.2 Visions in Light:
      5.2.1 Cue synopsis
      5.2.2 Limitations and Parameters:
         Hope Theatre
         Personnel
         Equipment
         Budget
      5.2.3 Setting
5.3 Process:
  5.3.1 Circuits and equipment.
  5.3.2 Preliminary SOB Sheets

5.4 Imparting the Vision to others:

5.5 Realisation:
  5.5.1 Manufacture
  5.5.2 Bump-in
  5.5.3 Focus and Plot
  5.5.4 Technical Rehearsal
  5.5.5 Drilling and Fine Tuning
  5.5.6 Performances

5.6 Summary.

6. IN CONCLUSION

6.1 Technical
6.2 Aesthetic
6.3 Toward "Fantasia"

Volume Two

Appendices: 4.1. Sound Cue Synopsis
  4.2. Sound Source Schedule
  4.3. Sequence Graphs
  4.4. Sound Cassette -
    Side A: Rough cut of Poem
    Side B: Burton's recording of poem

5.1: Lighting Cue Synopsis.
5.2A: Plan drawing: Scale 1:50
5.2B: Section drawing: Scale 1:50
5.2C: Elevation: Scale 1:50
5.3A: List of Lighting Circuits.
5.3B: Lantern Allocation.
5.4: Preliminary SOB Sheets.
5.5: Text of Poem with Cue Positions.
5.6A: Artworks: "Seraphs"
5.6B: Artwork: "The Mariner's Hand"
5.6C: Artwork: Example of Gobos manufactured for
       the "Mariner" by acid etching aluminium printer's
       plate.
5.7A: Lighting Plan: Scale 1:125
5.7B: Lantern Schedule.
5.7C: Examples of Realised Plots: Cues 15-17
5.8: Sound System layout.
5.9A: Flier.
5.9B: Program.
5.10: Video recording of Performance.

Bibliography
Abstract.

*Son et Lumiere: AN EPIC READING* traces the evolution of a *son et lumiere* production of Coleridge's epic poem "The Rime of the Ancient Mariner" performed in the Hope Theatre, University of Wollongong in July '92.

This production explored the manner in which those crafts and skills loosely grouped under the term 'theatre technology' (e.g. lighting, sound and scenery) could enunciate an interpretation of the poem, a role more usually considered the province of performers. Symbols and images used in this production were the product of inter-disciplinary collaboration and were designed to generate in audiences a better appreciation of Coleridge's message in contemporary terms by engendering close associations with F.C.Lovelock's *Gaia Hypothesis*.

My intention was to encourage a re-consideration of the potential for artistic expression by purely technical areas of theatre, to foster *son et lumiere* as a viable component of theatre's interpretive 'palette' and to promote a higher degree of collaboration between all areas of theatrical endeavour.
Introduction.

The approach taken in this thesis is one of a 'case study' of the production process for "The Rime of the Ancient Mariner" with particular emphasis on content and interpretation, rather than a detailed list of every element that goes to making a theatre production of this magnitude. Examples are selected for their relevance to the topic under discussion, though an emphasis is placed on analysing those items that, in some way, did not fulfil the production's demands.

The work extended over three and a half years with the search for a viable interpretation occupying the first year, sound production the second and the realisation in the theatre filling the third year. As with any sizeable production, the myriad details that comprise a production cannot be undertaken entirely by one individual; those others whose energy and dedication contributed so remarkably to "The Rime of the Ancient Mariner" are credited throughout but this thesis emphasises the viewpoint of the Director and designer, roles that were my responsibility throughout.

The thesis is divided into two volumes: the first contains analysis and commentary, while the second contains examples sufficient for the reader to appreciate the purpose of each document and their contribution to the final presentation.

Volume One.

Chapter 1 details the background to my artistic inspiration, the literature search and analysis necessary prior to any theatrical venture; they verify and justify the interpretation I intended presenting to audiences. In Theatre absolute verification is not always necessary or appropriate - after all, we are concerned with a creation in which the Director's intuition and theatricality will prevail; however, for consistency and homogeneity of production, a process which
'launders' every element used through selection criteria based on a carefully detailed interpretation is highly desirable.

Chapter 2 places the art and craft of *son et lumiere* in an historic and theatrical context, though that viewpoint is necessarily shallow due to a desperate lack of information available from either practitioners or commentators, a lack this paper hopes - in part - to redress.

Chapters 3 and 4 detail the methods and reasoning used in the creation of the sound track, both the recording of the poem and the accompanying effects.

Chapter 5 is a commentary upon our final realisation in the Hope theatre, the selection and creation of setting and images and the manner in which a collaborative, inter-disciplinary team brought the production to fruition.

Chapter 6 summarises the process and results while attempting to broaden these into observations of a more generalised nature that could have application elsewhere in theatre.
Chapter 1:

COLERIDGE, THE ANCIENT MARINER AND GAIA:
An Analysis with a view to Production:

In the mid 1960's Her Majesty's Australian destroyer ANZAC was in the Tasman Sea engaged in a training cruise for Midshipmen. One young gentleman was sent for'd to better secure anchoring gear that threatened to break loose in the storm. He huddled in the "eyes" of the ship: that protected point on the fo'c's'le where the flare of the bows sends tonnes of water roaring either side and the wind shrieking safely overhead. At school they had been meaningless, but in that situation lines of poetry became as palpable as the forces of Nature about me:

And now the STORM-BLAST came, and he
Was tyrannous and strong:
He struck with his o'ertaking wings,
And chased us south along.  [lines 41-44; see Appendix 5.5 for poem text]

During my ten years at sea portions of "the Rime of the Ancient Mariner" returned to mind frequently, often imparting depth to my appreciation of the ocean's beauty:

Nor dim nor red, like God's own head,
The glorious Sun uprist...  [lines 97-8]
.....came to me as I peered down a sextant to obtain a ship's positioning which definitely located us one hundred and three nautical miles inland of Townsville.

Water, water, every where,
And all the boards did shrink...  [lines 119-20]
.....as I scrubbed decks interminably. Later, during the obscenity that was Australia's involvement in Vietnam, one line echoed through my head:

The many men, so beautiful!
And they all dead did lie...  [lines 236-7]
Still later, as my direction in life changed toward theatre and, in particular, lighting and technical effects, the "Mariner" continued his haunting.

And the bay was white with silent light,
Till rising from the same,
Full many shapes that shadows were,
In crimson colours came... [lines 480-3]

This and many other equally vibrant images in light impressed themselves upon my creative imagination as models to which I might aspire.

Thus, as I cast about for a suitable DCA research topic in my field of theatre technology, what subject could be closer to my heart than a son et lumiere performance of "The Rime of the Ancient Mariner"? [The precise definition of son et lumiere, its history and more recent applications, are the topic of Chapter 2; for the time being, I ask you to accept the notion of a theatrical realisation using only images created in light and sound.]

1.2 The Problem and Its Worth.

The major difficulty for anyone contemplating a presentation of poetry in dramatic form appears to be a clash of genre. How can we take Coleridge's ethereal images from the page - and hence out of the imagination of the reader! - and place them onstage in concrete form where they must be diminished by limitations of style and mechanics?

This may be a question of artistic integrity rather than a matter of feasibility: in his essay On Fairy-Stories J.R.R. Tolkien complains,

I once saw a so-called 'children's pantomime', the straight story of Puss-in-Boots, with even the metamorphosis of the ogre into a mouse. Had this been mechanically successful it would have either terrified the spectators or else have just been a turn of high-class conjuring. As it was, though done with some ingenuity of lighting, disbelief had not so much to be suspended as hung, drawn and quartered.¹

In other words, how dare we pervert pure fantasy - or poetry! - by using it as grist to our theatrical mill?

The same question must have haunted Sophocles, Shakespeare, even opera's Rickard Strauss: but their answer is clear! Poetry has been an integral part of theatre since its inception; without it Greek choruses would have been unemployed, Shakespearean actors reduced to mundane prose and opera singers limited to interminable recitative.

The question therefore becomes a matter of purpose and objective rather than potential or practicability. Continuing the tradition of poetry in theatre outlined above, we can only assume that "The Rime of the Ancient Mariner" is suitable grist to our mill but the more important question becomes, how well will it provide theatrical fare and how might that best be achieved within the form of *son et lumiere*? This must be the basis from which further argument proceeds.

However, before we can continue in that direction, the worthiness of the task needs consideration. Let's return briefly to that forlorn Midshipman trapped on a fo'c's'le somewhere on the Tasman: till that moment poetry had been for him a chore, merely a means of obtaining a satisfactory assessment in examinations. The joy, the excitement, the satisfaction of expressing himself in words whose depth and purpose elevated them beyond their literal meaning had, prior to that moment, been denied him. How many others are there like him today in our classrooms?

The "Mariner" is considered a masterpiece and, as such, we require its study by our aspiring colleagues but many students have no sense of what 'masterpiece' implies, let alone what value it may have for each of them. If we can present the "Mariner" in a fashion which brings to its audience an appreciation of the poem's lasting significance and universality by making it more pertinent to today and, perhaps, tomorrow then a service will have been done to Coleridge, the language and to all those - like our Midshipman - who are ignorant of the pleasures it contains.

Then, surely, a powerful reading is more suited to our purpose: why bother with *son et lumiere*? Many audiences today are attracted to events which boast a 'lights-and-sound show': rock concerts, New Year's Eve pyrotechnics displays performed in conjunction with FM radio stations, even more legitimate
theatrical productions. There is power in the technique that adds appeal to any event with which it is associated. What better vehicle for bringing a masterpiece to the attention of a modern audience?

And if, in the process, we are able - in the words of Oscar Hammerstein II, referring to our audiences - to:

......send him out a nicer giant / than he was when he came in.2

......then so much the better. [More of that when I investigate the moral contained within "The Rime of the Ancient Mariner" later in this chapter.]

But there is a further reason for me to use son et lumiere. As my book An Approach to Stage Lighting3 attests, together with other theatrical lighting designers such as Tharon Musser4, I have long been concerned with the neglect of subtlety in our craft. It seems that the headlong march of technical innovation has reduced stage lighting to theatrical trickery and spectacle rather than an effective instrument with which we can artfully manipulate audiences to better appreciate the content of the presentation they are witnessing. By applying the highest form of my craft to a masterful and infinitely more subtle vehicle, I may improve the standing of theatre lighting with a wider audience.

1.3 A Background in Literature.

Go to any library and request material on Samuel Taylor Coleridge; you will be deluged with a huge volume of texts, books and articles. A 1935-77 Selected Bibliography5 lists over two thousand and fifty four individual titles while the British Library Catalogue to 1975 has twenty five pages dedicated to Coleridge [the 1976-82 Supplement lists another fifty eight or more titles]. A lifetime could be spent researching the man, let alone the poem. On the other hand, the material on poetry-in-performance and son et lumiere is small and lacking in

2 Hammerstein, Oscar II. "The Big Black Giant" from Me and Juliet (C) Williamson Music Inc. N.Y.
3 McGrath, Ian. An Approach to Stage Lighting Allyn & Bacon, Boston 1990
depth. The researcher must therefore select very carefully if they are not to succumb to an oft-experienced malady: Input overload. Output minimal!

When deciding what proportion of this material might be pertinent I discovered far too late the point made earlier in this paper: that is, that research in this topic should first establish the purpose and objective of a production before proceeding to the potential and practicability of the content material. The vast majority of references outlined above belongs to the latter category and I had to look elsewhere for material which could express an ideal model of theatre towards which a production of Coleridge's "Ancient Mariner" might strive.

A search of literature for a definition of what might constitute 'good' theatre also generates a huge volume of information - some of it theory, maybe a proposition or two and a great deal of it guess-work. After all, how do you define 'good': commercially successful? If we had such a definition there would be no such thing as a failed production company, a bankrupt entrepreneur or an empty theatre.

Theatre theorists [e.g. Stanislavski, Brecht, Grotowski, etc] tend to concern themselves with the mechanics of piecing together a production successfully rather than any consideration of why we should bother; they assume that theatre is worthwhile and it is rare for them to question that basic premise. However, those obscure lyrics from a failed show by Hammerstein quoted earlier offer a direction in which to search and Uta Hagen - an actor/teacher - takes it further:

To bring to an audience the revelation of the failings and aspirations, the dreams and desires, the negative and the positive aspects of human beings - that is what we should set as our goal as committed theatre artists. 6

The most sublime expression of this ideal, in my opinion, comes from Elia Kazan - an influential teacher/director - in a fictionalised "backstage" novel The Understudy:

It's not cleverness that get's to people, Sonny. The great plays were not great because of cleverness. Today it's all experiment in style. What counts and what endures is meaning, theme. What

---

you have to touch in an audience is their fundamental concerns, what's worrying them now and always will, even if they don't know it, the mind's despair, the heart's hope. 7

What a challenge! - to find in a piece of masterful poetry sufficient material to "...touch...the mind's despair..." and "...the heart's hope" of a modern audience. To express this somewhat more prosaically, I believe that our production must find a unifying theme that links today's audience with Coleridge through the artifice of son et lumiere if it is to reach an individual patron on a level where we might succeed in sending "him out a nicer giant/than he was when he came in." We must search for a unifying viewpoint, a philosophy, a moral...against which every element in the "Mariner" and the production can be measured. And, having reached the concept of a 'moral', my way into the vast body of material on Coleridge was clear for, as you will see in what follows, the question of moral content in the "Mariner" has occupied commentators almost from the moment the poem was written.

1.4 Hypothesis, Evidence Outline and their Significance.

An epic voyage to unknown seas; murder of a noble bird; avenging Spirits, "...the invisible inhabitants of this planet..." 8; Death and Life-in-Death dicing away the fate of a ship's crew; beautiful creatures in a great calm that elicit a persecuted sailor's blessing; rescue by angelic powers, salvation and eternal penance: these form the substance of the "Mariner", and throughout the verses Coleridge makes continuous reference to heavenly bodies, the elements and the raw power of Nature! Is this simply fantasy, a laudanum-induced pipe-dream, or was the poet trying to link it all together: if so, to what purpose?

At the commencement of the poem Coleridge includes a Latin quotation from Burnet 9 which, in a recent translation reads:

I am inclined to believe that there are more invisible than visible things of nature in the universe. But who can enlighten us on the relationship between all these things? What are the status,

8 Gloss, preceding line 131.  
9 Attributed in the standard version to Burnet, T. Archeol. Phil, p.68
similarities and differences, and the qualities of each of them? Which places do they inhabit? The human mind has always sought knowledge of these things but has never attained it. But it will be obviously useful in the meantime to contemplate both mentally and in pictorial representations the image of a bigger and better world, if only to prevent our minds, preoccupied as they are by the mundane details of everyday life, from becoming too narrow and from dwelling exclusively on petty thoughts. Meantime we must seek avidly after the truth and carefully nurture our ability to distinguish certainty from uncertainty, day from night. 10

This exhortation to seek the truth concerning the "invisible... things of nature..." in the context of "a bigger and better world..." seems far more that simply justification from a poet for his fanciful cast of characters. Coleridge, I felt, is implying that these Spirits of the earth - so specifically detailed in the gloss to the poem - are central to his purpose in writing the verses.

The concept of earth-spirits haunted me and, as I searched further through the life and background of Coleridge hoping to clarify the enigmas of moral and purpose, my mind frequently leaped to another of my concerns, the environment. I began to wonder whether there was a link between the spectacular power, clarity and vividness of image encompassed by Coleridge in "The Rime of the Ancient Mariner" and his concern for the well-being of our planet, similar to that voiced by ecologically aware people today?

In the current climate of concern, when thoughts of increased global warming and pollution sit somewhat uncomfortably beside our new-found respect for whales, there is a certain smugness in some attitudes. "We are the generation who will fight to correct the excesses of our forebears!" seems implied in the rhetoric of zealots who may be as concerned with their own political futures as they are with the survival of the planet. I began to wonder whether we are the first to have had these concerns? Have artists been anticipating, like Nostradamus, the implications of our disregard for the environment ......and could Coleridge have been among them? The paper to follow argues that in

10 Commissioned translation by Dr G.S.Hull, NAATI translator of the Department of Languages, University of Wollongong dated 12th April 1990.
1797 when writing "The Rime of the Ancient Mariner" Coleridge was concerned with the effects of human actions on the world at large; further, I conjecture that his thinking can be directly linked to the Gaia Hypothesis, a leading influence in today's ecological argument.

1.5 The Argument.

The evidence for this proposition will consist of supporting quotations from relevant authorities on the life and work of Coleridge together with a study of the text. I will argue that the writing of "The Rime of the Ancient Mariner" forms for Coleridge portion of a brief artistically productive interlude between his student radicalism and later academic constipation. I will maintain that while in that phase Coleridge used his blossoming talent to propagandise a growing concern for an almost pantheistic concept of Nature and the effect upon it humankind was having. This embryonic concept developed into Coleridge's Theory of Life and it will be argued that the philosopher/poet was broadly echoing the new spirit of Romanticism which also spawned other great theories such as Hutton's Theory of the Earth. This work has again seen prominence recently not so much as a radical geological theory but rather as the inspiration of Lovelock's Gaia Hypothesis. The link between Gaia and the "Mariner" rests in the evidence of Coleridge having read some of Hutton's work and I conjecture that someone as widely read as Coleridge could not have avoided reading the sensational Theory of the Earth, published in abstract form twelve years prior to the composition of "The Rime of the Ancient Mariner".

1.5.1 The importance of the "Mariner" in Coleridge's career.

The decade spanning 1792 to 1802 was for political Europe, religion, art and Coleridge alike a time of tremendous upheaval; all are inextricably linked and an understanding of their inter-relationship vital to an appreciation of "The Rime of the Ancient Mariner".

The volatility of the period might best be illustrated by considering the changes wrought in France. 1792 opens there with the Revolution well under way though, in any territorial sense, wholly contained within France's borders. The Bastille had been stormed two and a half years earlier and, subsequently, a constitutional monarchy declared. However, events moved apace with the
beginning of '92: France went to war with Austria and in the following year executed their monarch, Louis XVI. England, under William Pitt's Prime Ministership, declared war on France and used influence to rally much of Europe to counter the Republicanism exemplified there and hailed by dissidents within the remaining monarchies. Republicanism - not France - was the enemy!! The end of the Reign of Terror and the execution of Robespierre in July '94 must have satisfied Pitt enormously, though his sense of well-being would have been short-lived; by 1802 Napoleon had made himself Consul for Life and his threat to the whole of Europe did not end until his defeat at Waterloo in 1815.

It took ten short years for France to shift from constitutional monarchy through Republicanism to dictatorship, an upheaval with few precedents throughout history. Such massive change is rarely isolated but symptomatic of deeper and broader shifts within society; it is not surprising, therefore, to find this same period marks the growth of the Romantic movement.

Though less easy to limit within this ten year period, changes to most artforms were as radical as those political changes in France:

The Romantic period was eminently an age obsessed with the fact of violent and inclusive change, and Romantic poetry cannot be understood, historically, without awareness of the degree to which this preoccupation affected its substance and form.¹¹

In essence the shift is from an emphasis on beauty and proportion to one of structure, where the emotional content takes precedence over form and it was likely that an individual clearly articulating "romantic" views on art would also have heart-felt opinions regarding revolution, republicanism and Mr. Pitt.

Any person with the integrity and strength to work their way toward such profoundly divergent opinions might also allow themselves to question other basic influences upon humanity, such as religion, and perhaps find themselves arguing, as did R. Price:

the dominion of kings changed for the dominion of laws, and the dominion of priests giving way to the dominion of reason and conscience. 12

This Unitarian battle cry rang across England during the period, particularly among the more educated. Truth, reason and liberalism brought Unitarians to avow Jesus' humanity which led naturally to a belief in the inherent goodness of humankind and on into political applications; they fought to abolish slavery, replace war with negotiation - in fact, most of the radical viewpoints of the period.

There was in England during this time a man who held all these opinions and was, particularly in poetry, actively involved in shaping them: Samuel Taylor Coleridge. The years 1792 to 1802 took Coleridge from 20 to 30 years of age during which time he experienced change as dynamic as anything in France: from radicalism to orthodox respectability, from burgeoning poet of enormous power to one of limited output, from relatively good health to opium addiction and from militant revolutionary youth to uncertain disillusioned maturity. Central to this eventful decade and to each of the dynamic changes occurring in its creator lies "The Mariner"!

1792 was Coleridge's fifth year at Jesus College, Cambridge and - as the following illustrates - it was a hot-bed of political and religious dissent:

The majority of these men [at Cambridge] were Unitarian dissenters, and though they met to celebrate the Glorious Revolution they also looked forward to.... the removal of the exclusive Test Acts, and a 'common participation' in the civil and religious liberties enjoyed by the French after the Revolution. 13

William Frend was tried before the Vice Chancellor's court at Cambridge following the publication of his pamphlet PEACE AND UNION in February '93. Gunning [a chronicler of Cambridge at the time] remembered that, despite his unitarianism, 'the great object


COLERIDGE, THE ANCIENT MARINER AND GAIA
in prosecuting Frend was of a political rather than of a religious character.\textsuperscript{14}

That Coleridge was actively involved in these upheavals there is no doubt; there is considerable evidence [again from Gunning] that Coleridge was responsible for orchestrating interjections during Frend’s trial, applauding defence speeches then avoiding detection by exchanging places with another student, who could not possibly have applauded in the usual manner due to a deformed arm.

This was not merely an isolated example of youthful high spirits; together with his close associate Southy, Coleridge was actively involved in propagandising many dissenting viewpoints - anti-war with France, anti Slave trade, anti-Pitt and pro-Unitarianism - by means of lectures, pamphlets and sermons. This wide body of dissenting opinion found form in a single scheme entitled Pantisocracy; it was proposed as a system of collective living based upon no personal ownership, thus removing all motives to Evil. Those involved intended to follow J.B.Priestly - eminent scientist and Unitarian - into exile in America, there to carve out a new world from virgin forests ..........but within a year the scheme had faded. It is interesting to note that within that same year (‘94-‘95) Robespierre, for whom Coleridge had felt a close affinity, was executed and the Revolution had faltered into impotence.

It was a time of turmoil in Coleridge's private life too; rejected in love by Mary Evans and badly in debt, he took a most unexpected turn for someone so radical - he joined the King's Regiment of Dragoons under an assumed name. Only after citing insanity to gain a discharge and considerable financial assistance from his brothers was he able to return to Cambridge where:

.....about the middle of December ’94, a few days before the close of the term, Coleridge quitted Cambridge without taking his degree...... The Master of Coleridge's college made repeated efforts to reclaim his errant pupil but to no purpose. 'Upon one occasion, after a long discussion on the visionary and ruinous tendency of his conduct and schemes, Coleridge cut short the argument by bluntly assuring him, his friend and master, that he

\textsuperscript{14} Ibid, p.18
mistook the matter altogether - "he was neither Jacobin, nor Democrat but a Pantisocrat." 

Intentionally or otherwise Coleridge was persecuted by the university establishment in precisely the same way as Frend.

1795 has Coleridge without a degree, in financial straits, clutching at fading dreams and engaged to Sarah Fricker. He had met her through Pantisocracy and there is the implication that their relationship was marred from the outset - Coleridge was "on the rebound" from Mary Evans and Pantisocracy demanded immigrant couples to populate its utopian community in America. And already Coleridge had used laudanum, an opium-based, readily available drug that was to become his bane! He initially used it for pain relief from a rheumatic condition but the indications are that it also relieved mental agony.

If '95 provided Coleridge with ample justification to occasionally seek relief through laudanum, it also provided the means to a solution; his poetic talent, inspired by the experience of marriage, developed sufficiently to produce "The Eolian Harp" together with "Religious Musings", considered by many as the commencement of a poetic flowering that was to help instigate the Romantic revolution in English poetry. Financial support came from a new-found publisher, Cottle by name, that enabled Coleridge to bring his expectant wife back to Bristol from rural Clevedon where financial circumstances had forced him to seek reasonable rentals. In Bristol Coleridge found the enthusiasm to continue his political activism through the propaganda vehicle THE WATCHMAN:

His chief 'objects' announced in the Prospectus to the WATCHMAN was explicitly 'to co-operate...with the PATRIOTIC SOCIETIES' in opposing Pitt's and Grenville's Two Acts and in Pressing for 'a Right of Suffrage general and frequent'.

Despite the rapid failure of THE WATCHMAN (by May '96), it served an historic purpose; through the association of supporters Coleridge met with William Wordsworth and by the end of the year they both resided near Thomas

---

Poole - another Pantisocrat - at Nether Stowey; though both radical Cambridge students they had not met prior to this. The next two years of close association with both Wordsworth and his sister Dorothy produced not only a revolution in poetry but also a redirection of energies in Coleridge. Disillusioned with political activism and particularly the failure of the French Revolution, Coleridge was led by Dorothy to:

......devote himself to the much worthier cause of deepening man's sensitivity to nature. 17

This resulted in "This Lime-Tree Bower my Prison" which looks for religious significance in the natural world.

If he expected to find solace in Nature, Coleridge was again disillusioned:

the Coleridgean symbol has an inherently divisive structure, pointing in one direction to the celebration of nature as a medium of divine revelation, yet also in the opposite direction, to a denunciation of nature as a dangerous ground of identification for the self. 18

This dichotomy, which manifested itself in both a fascination for and a fear of Pantheism, created not only the inspiration for his best poetry, of which "The Ancient Mariner" is paramount, but also the seeds of its destruction:

It is true that between 1798 and 1806 approximately, Coleridge was more keenly involved in an exploration of nature's picturesque sights than at any later time, due in part to the fact that this was a period of travel...... But this was also the period in which Coleridge's ...philosophy of symbolism was born ....which contributed to his alienation from nature.19

Poetry dominated the year 1798 for Coleridge; apart from the writing of the "Mariner" (considered in detail in 1.5.2) he completed at least four major works - "Frost at Midnight", "France: An Ode", "Fears in Solitude" and probably "Kubla Khan" (difficult to date precisely) - in addition to the melodrama "Osorio" (rejected by Drury Lane) and the preparation of Lyrical Ballads for publication.

17 Modiano, R. Coleridge and the Concept of Nature Florida State University Press, Tallahassee 1985, p.x
18 Ibid p.6
19 Ibid p.99
This flurry of activity was largely due to Coleridge being relieved of much of his financial, and perhaps emotional, difficulties by way of a condition-free annuity by the Wedgwood china-manufacturing family. He no longer had to struggle with the pressures of employment as a Unitarian minister, lecturer, tutor or whatever presented itself but could indulge in the freedom to create with like-minded artists: the Wordsworths.

This association's major achievement was the jointly written *Lyrical Ballads*, published with little critical acclaim in September '98 which included "The Rime of the Ancient Mariner". Coleridge's purpose in this venture had been simply to explore and make credible the "super natural and wonderful" without strictures of tradition; however, the joint achievement was a revolutionary change in poetic metrics that many believe marks the beginning of the Romantic period in poetry.

Enthused by the prospect of supplementing their income through publication of translations from the German and, perhaps, in an effort to escape surveillance by a government spy sent to investigate their "suspicious" activities as they surveyed the poetic possibilities of a local river, both the Wordsworths and Coleridge set out for a tour across Germany in August '98. But the crossing of the Channel seems to mark a definite, though not immediately apparent, watershed for Coleridge! His output of poetry diminished rapidly as his preoccupation with philosophy grew; a study of Naturphilosophen led him to:

...locate a 'distinct current' of his own. Coleridge found it imperative to reject Wordsworth's cult of nature and isolate himself in the magic sphere of the mind which contained 'pure Action, defecated of all that is material and passive'. 20

What caused Coleridge to eventually leave the Wordsworths to continue the tour and return to England in July '99 is not clear; certainly receiving news in March of his second son's death in February had provided insufficient justification to bring him home. We may speculate whether the divergence of opinion implied in this quotation or some other difficulty, perhaps with Dorothy, eventually drove him away from this association; it would continue sporadically for some time but eventually cease after a misunderstanding in 1810.

20 Ibid p.50
Coleridge returned to London and spent the next two years primarily in Journalism continuing his campaign against Pitt and also the growing threat of Napoleon. He wrote "Christabel" but it remained a fragment, only being published - still as a fragment! - in 1816. "The Mariner" was revised for the Second Edition of Lyrical Ballads (and eventually revised yet again just before Coleridge's death in 1834) but little else poetic was created. In June 1800 he visited Wordsworth in the Lakeslands, perhaps in an attempt to rekindle the inspiration of earlier years, but the visit was ill-fated. The climate around the lakes - or perhaps the emotional climate? - was not to Coleridge's liking and his health declined; again we may speculate on the part laudanum had in this decline. He also met Sara Hutchinson and their subsequent affair sounded the death knell for Coleridge's marriage which eventually failed completely in 1806; however, the liaison did supply the impetus for writing "Dejection: An Ode" in 1802, considered the last of Coleridge's good poetry.

In ten eventful years so much changed for Coleridge - but at what cost and what did he achieve? House maintains that:

...all that is worth preserving of Coleridge's writing could be printed on fifty pages, but those pages should be bound with gold.21

Poetry and politics would fill a substantial number of those pages and it was these two topics that brought Coleridge and the Wordsworths together; their association and mutual regard for things natural became merely the starting point for a voyage of discovery that was to take Coleridge into the world of Philosophy searching for a Theory of Life - 'the one Life within all things':

Coleridge is not interested in exploring the strife between nature and mind, sense and reason; rather, he is interested in the process whereby one merges with the other in an 'adorable' image of 'omneity in unity'.22

To the vexation of some, though no doubt to the relief of others, this voyage separated the poet from the philosopher and led to the stagnation of his poetic creativity:

---

21 House, H. Coleridge: The Clark Lectures 1951-52 p.16
22 Modiano, R. Coleridge and the Concept of Nature Florida State University Press, Tallahassee 1985, p.128
In Coleridge's personal experience a retreat into subjectivity often meant not a purifying ascent to a spiritual ideal, but a descent into 'the unfathomable hell within' that led to progressive isolation and artistic sterility.\(^{23}\)

The creation of "The Rime of the Ancient Mariner" occurred near the centre of this continuum and in 1.5.2 I illustrate how it contains elements from both extremes.

1.5.2 Pipe-dream or Propaganda?

On the 13th of that month [November '97], at half-past four in the afternoon, Coleridge and the two Wordsworths set off to walk to Watchet en route to Linton and the Valley of the Stones - a little tour the expense of which they meant to defray (solvitur ambulando) by a joint composition of the two poets.....\(^{24}\)

Largely thanks to the records maintained by Dorothy Wordsworth, the writing of the "Mariner" is well documented. Commencing as a piece jointly written, it took only eight miles walking before Coleridge was the sole author; however, at least one of Wordsworth's suggestions is acknowledged by Coleridge. The poem was completed within four months and ten days, though subsequent reprints (in 1801 & 1834) involved drastic modifications.

The date and details surrounding the composition of the "Mariner" are well known but I had to discover the creative pressures under which it was written so that I might ascertain how they fitted Coleridge's developmental continuums of politics, religion and propaganda established in 1.5.1.

The piece was immediately remarkable, a radical change for Coleridge:

They [the "Mariner" and "Kubla Khan"] are both abnormal to his [Coleridge's] whole previous technique, which ran to rhetoric and involution, turning thought and feeling to abstraction, whereas the uniqueness of the new work consists in the extreme concrete simplicity given to visions far aloof from experience.....\(^{25}\)

\(^{23}\) Ibid p.66  
\(^{24}\) House, H. Coleridge: The Clark Lectures 1951-52 p.79  
\(^{25}\) Lowes, J.L. The Road to Xanadu Riverside Press, Cambridge1964 p.382
In 1794 he described to Southy the difficulties with his usual style:

I cannot write without a body of thought. Hence my poetry is crowded and sweats beneath a heavy burden of ideas and imagery! It has seldom ease.26

What could have caused such radical changes? Was it simply the influence of the Wordsworths or were there other factors?

The sensational answer would be 'opium'. Coleridge confessed in a note attached to the manuscript (held by the British Library) that "Kubla Khan" was written:

....in a sort of Reverie brought on by two grains of Opium taken to check a dysentery... 27

Since the "Mariner" was written around the same period, the suggestion would be that it too was born of this new-found, drug-induced clarity and directness.

Lowes maintains that:

....during the fall of 1797 and the spring of '98 the use of opium had not yet become habitual, but had with little doubt begun to exercise its spell.28

This implies that the drug could have been used as a freeing trigger without yet hampering Coleridge with an incapacitating loss of motivation. However, Lowes goes on to state that:

....in genius of the highest order that sudden, incalculable, and puissant energy which pours from the hidden depths is controlled by a will which serves a vision - the vision which sees in chaos the potential of Form.29

We cannot have it both ways; either Coleridge's creative will drove him to a work of 'extreme concrete simplicity' or a drug-induced accident was the enabling force. The evidence to follow will strongly support the former viewpoint.

28 Lowes, J.L. The Road to Xanadu Riverside Press, Cambridge 1964 p.381
29 Ibid p.394
It could be said of Coleridge that he was a prolific 'beginner' but that his 'finishes' are fewer. To add up all those items mentioned by Coleridge in his notebooks as intended or potential subjects and compare them with completed projects would be a major study; fortunately we have the work of J.L. Lowes in *The Road to Xanadu* as a quick reference. He proves that, immediately prior to writing "The Rime of the Ancient Mariner", Coleridge was intending to work on all the following: an epic poem "The Origin of Evil" 30, "Hymns to the Sun, the Moon, and the Elements... [and]... Adventures of Christian, the mutineer" 31, the "Wandering Jew, a romance" 32, "The Wanderings of Cain" 33 and "The Brook" 34. Lowes goes on to suggest that:

...the Ancient Mariner has fallen heir to the precious hoardings of Coleridge's unborn poems....[and]...these flawless stanzas...far outweigh the loss of the Hymns to the Sun, Moon and the Elements" and of "The Brook" itself. 35

Coleridge explained his method of working on at least two telling occasions: in *Anima Poetæ* he describes the products of his musings as:

...the streamy nature of association, which thinking curbs and rudders 36

...and he illustrates his attention to detail by saying:

I turn faint and sick...when I reflect on the labour I have expended on the mere endeavour to avoid or remedy imperfections, which only one in ten thousand would have noticed. 37

Neither describes the random mental activity of an individual under the influence of opium; rather, they describe the workings of a dedicated artist applying his craft to wrest "form" from "chaos" in the service of an all-consuming "vision".

The tremendous breadth of topics amalgamated to form the "Mariner" gives some clue to Coleridge's state of mind at the time of composition. They fall

---

30 Ibid p.19  
31 Ibid p.26-7  
32 Ibid p.227  
33 Ibid p.235  
34 Ibid p.190  
35 Ibid p.191  
36 Ibid p.68  
37 Ibid p.279

COлерIDGE, THE ANCIENT MARINER AND GAIA
into three basic categories: studies of natural phenomena, religious musings and gothic-style adventures. When considered next to the continuum in Coleridge's life discussed in 1.5.1, they describe the position he held at the moment of writing the "Mariner" - allowing, of course, for later amendments. Under the influence of Dorothy Wordsworth he had shaken off his disillusionment with politics and opened his mind to the infinite beauty of nature which provided ample inspiration for his verses. In a search for poetic means to represent the power and diversity of the "super natural and wonderful", he discovered daemons............ and already the "alienation from nature" that was to overtake him in Germany commenced. It took the form of doubts concerning the tendency of Naturphilosophen to degenerate into Pantheism and created feelings of religious guilt that manifested in new preoccupations with Cain, the Wandering Jew and the "Origins of Evil".

If, as Abrams maintains, a Romantic poet such as Coleridge was trying:

......to incorporate what he regarded as the stupendous events of the age in the suitably great poetic forms 38

...then the one unchanging drive in Coleridge's psyche was his need to propagandise. From THE WATCHMAN through the "Mariner" to Coleridge's journalism of 1799-1800 there is an unbroken line of endeavour. Triggered by Shevlocke's narrative of the shooting of a sooty albatross 39, the multitude of projects Coleridge had in mind coalesced into a single Gothic-style entity driven by the poet's desire to bring to his audience a matter of great import. What this "vision" was, what "moral" Coleridge was attempting to illustrate is the subject considered in 1.5.3.

1.5.3 The Moral of the "Mariner".
Almost from the day it was written controversy has surrounded Coleridge's intended moral for "The Rime of the Ancient Mariner". Even today, scholars sift through the poem and each other's writings to choose a standpoint. I found myself in the same situation as I contemplated presenting the poem in...
et lumiere form; I needed an understanding of Coleridge's intentions so that I could truthfully echo them in my stage realisation.

I felt compelled by a vague sense of duty to the poet to commence my search with pertinent comments from Coleridge. The first is oft quoted:

In my own judgement the poem has too much [moral]; and that the only, or chief fault,...was the obtrusion of the moral sentiment so openly on the reader as a principle or cause of action in a work of such pure imagination.40

The second is the motto placed by Coleridge at the head of the poem (see footnote 10); I find it remarkable how infrequently commentators use it as a guidepost to ascertain the direction Coleridge intended his readers to take - more of that shortly.

Too much Moral! It seems certain that Coleridge was referring to those platitudinous lines:

He prayeth best, who loveth best
All things both great and small;
For the dear God who loveth us,
He made and loveth all. 41

....and that he lived to regret their inclusion. If, as Stallknecht suggests:

Coleridge had a sense of the ridiculous which would have withheld him from writing a phantasy of some six hundred lines on the danger of cruelty to animals42

...then we must try to determine why he should retain these banal lines, even after two revisions.

The most popularly held view, according to Milton, is that the lines represent:

...not the meaning of the poem but the Mariner's ironic interpretation of what has happened to him. The moral is the Mariner's, not Coleridge's.....43

40 Reported in *Table Talk* 31st May 1830 and quoted in House, H. *Coleridge: The Clark Lectures 1951-52* p.90
41 Lines 614-617

**COLERIDGE, THE ANCIENT MARINER AND GAIA**
...but this still begs the question as to why Coleridge felt the need to add this platitude which seems to undermine the power of the majority of the narrative. Rather than being purely ironic, the lines appear to me tainted with fear; perhaps Coleridge grasped at the obvious in order to nullify growing doubts concerning his own deviation from strongly held and relatively conventional Christian beliefs into the realm of Pantheism. I would therefore concur with Fausset's opinion:

Coleridge knew....how often his dreams were vague and disorganic, how insecurely he lived beyond good and evil. And so, as 'The Ancient Mariner' drew to a close, his fears returned..... Troubled as he always was in his passive moments, with the sense of a vital moral obligation which he could not meet, he concluded the poem, as he was to conclude his life, with a conventional one.44

Whatever the truth of the matter, it seems that Coleridge, in the 1801 revision, attempted to defuse the controversy by down-grading his poem to a 'reverie' which freed him from the obligation to imply any specific moral. He could then say that the "Mariner" comprised a series of interconnected musings or 'floating ideas' - from the French, resvery - and that to draw any moral from them was to demand too much of the imaginative stream-of-consciousness. Lowes scoffs at the idea:

If Wordsworth and Southy and Mrs Barbauld were impervious to a work of pure imagination, Lamb and his tribe were not.... For if there is anything on earth that the Ancient Mariner is not, it is a reverie." 45

I can only agree.

The reference to Lamb alludes to a letter from Lamb to Southy, correspondence that further contributed to the 'moral' debate:

45 Lowes, J.L. The Road to Xanadu Riverside Press, Cambridge 1964 p.281
A moral should be wrought into the body and soul, the matter and tendency, of a poem, not tagged to the end, like 'God send the good ship into harbour' at the conclusion of our bills of lading.\textsuperscript{46}

If two such close associates of Coleridge held such strong views, it is likely that Coleridge too subscribed to them and we should search beyond the banal for the "Mariner's" moral.

The Oxford Dictionary defines moral as 'a concern with the distinction between right and wrong' but it is a matter of theological argument (or, perhaps, personal conviction) whether violations of moral codes require specific action or if mere sins-of-omission are sufficient. Perhaps, I felt, by precisely defining the mariner's sins I could approach the moral Coleridge was attempting to illustrate?

The argument, initially from Wordsworth and others since, that the mariner is always acted upon, never acting himself is fallacious; if nothing else he shoots dead the albatross. It would be a tremendous advantage to have Coleridge's ghost nearby during a similar occurrence to hear his comments; though that may not be possible, we do have recorded his thoughts at just such an event while travelling to Malta in 1804:

\begin{quote}
O Strange Lust of Murder in Man! -- It is not cruelty
It is mere non-feeling from non-thinking.\textsuperscript{47}
\end{quote}

Though Milton\textsuperscript{48} and Stallknecht\textsuperscript{49} concur, an interpretation of the mariner's sin is best summarised by House:

\begin{quote}
His sin may or may not be partly the sin of pride and self-assertion against the order of the universe. As the poem stands it is a sin of ignorance.....a wicked ignorance because [it is] accompanied by a wildly thoughtless failure to consider what might be the truth about the order of the universe.\textsuperscript{50}
\end{quote}

\begin{footnotes}
\textsuperscript{46} Letter of Lamb to Southy quoted in Lowes, J.L. \textit{The Road to Xanadu} Riverside Press, Cambridge 1964 p.277


\textsuperscript{49} Stallknecht, N.P. \textit{The Moral of the Ancient Mariner} PMLA Vol 47 (1932) p.564

\textsuperscript{50} House, H. \textit{Coleridge: The Clark Lectures 1951-52} p.98
\end{footnotes}
By adding to this Milton's opinion that:

...the world of the poem is one of benevolent order and law and that its underlying notion is the natural and spiritual oneness of the universe \[51\]

...I began to get a feeling for Coleridge's primary moral concern: it was not a matter of "cruelty to animals" but rather mankind's thoughtlessness and lack of feeling for the whole of nature.

Remembering that research for "The Brook" immediately preceded the writing of the "Mariner" and that the two melded together, I was interested to note that Coleridge set out upon that project with a specific goal:

I sought for a subject, that should give equal room and freedom for description, incident, and impressed reflections on men, nature and society, yet supply in itself a natural connection to the parts, and unity to the whole.\[52\] [highlighting is mine]

Seeking a refinement of Coleridge's objective Lowes traces the poet's research reading at the time through Dupuis':

...a mad performance... touching... genii and daemons and angel guardians...\[53\]

...to Psellus:

...the point on which Psellus lays most stress...is the distribution of the daemons among the elements - earth, air, fire and water" \[54\]

...and on to Taylor:

...there are other daemons transcending these, who are punishers of souls, converting them to a more perfect and elevated life." \[55\]

It seemed that, like Dupuis, Coleridge's lifelong preoccupation with the source of religion took him, just prior to the writing of the "Mariner", deeply into Pantheism - a viewpoint borne out by Coleridge's choice of Burnet's motto to head his work which includes such phrases as:


\[52\] "Biographia Literaria" V1 p.129 quoted in Lowes, J.L. The Road to Xanadu Riverside Press, Cambridge 1964 p.190

\[53\] Lowes, J.L. The Road to Xanadu Riverside Press, Cambridge 1964 p.212

\[54\] Ibid p.214

\[55\] Ibid p.216
"There are more invisible than visible things of nature...", "Contemplate...a bigger and better world..." and "Seek avidly after the truth..." 56

It seemed to me that I was close to Coleridge's purpose with the "Mariner" but that a clear statement eluded me. Perhaps at the time of writing it eluded Coleridge too: hence the need to write over six hundred lines illustrating his 'moral'? Something further was required.

We have seen in 1.5.1 how poetry, in the continuum of Coleridge's life, became philosophy. The need to clearly articulate those thoughts and emotions that inspired his poems became so great that he relinquished poetic illustrations such as the "Mariner" to develop precise philosophical statements. I realised that perhaps in that body of later material I would find a clearer encapsulation of the "Mariner" moral.

I happened upon Abrams' paper A Light in Sound in which he summarises how Coleridge's earlier intuitions developed into the Theory of Life from which Abrams quotes:

There is no gap between the living and the lifeless, nature and man, or matter and mind, but only a distinction of levels or organisation... This 'universal life' of ever-renewing strife and reconciliation pulses through all individual forms and all the orders of being...where in 'its utmost latency...life is one with the elementary powers of mechanism.'57

Here I felt was the full flowering of the embryonic vision held by Coleridge at the time of writing the "Mariner" and, as we shall see in 1.5.4, it triggered associations that echo today.

1.5.4 Romanticism, Coleridge............and Hutton!
To this point in the argument I have concentrated solely on Coleridge and the "Mariner" but it is time to spread a wider net, to trace through history echoes

56 Commissioned translation by Dr G.S.Hull, NAATI translator of the Department of Languages, University of Wollongong dated 12th April '90.
and reverberations that this observer experienced after finding some understanding of Coleridge's work.

As in my turn I struggled to find a moral for "The Rime of the Ancient Mariner", I was hampered by a sense of prescience: I had been here before or, at least, knew the sense of Coleridge's Theory of Life. If I could find the connection it might assist greatly in my task of making the "Mariner" accessible to a modern audience, who may also have experienced that same prescience.

What was the source? Since I am no believer in 'prior lives', the connection had to be here in the Twentieth Century! Precisely how the connection was made while listening to an Australian Broadcasting Corporation Science Show interview with James Lovelock, proposer of the "Gaia Hypothesis", I cannot say. As he spoke of his vision of the earth I realised that here was the connection I sought. [Rather than trace back from Gaia and today, I shall continue tracing chronologically from the Theory of Life down so that I might better describe the connections and avoid confusion that intuition may have introduced.]

The Romantic period:

...an age obsessed with the fact of violence and inclusive change 58
It spawned revolutionary movements in areas far more diverse than poetry: not only religion, art and politics but also the sciences took new heart from the spirit of the times and ventured along paths of new thought and endeavour:

...nobody who knows the period can dream of isolating its poetry from the ferment of thought, or of detaching Coleridge from that ferment. 59

Thus, a student of the times quickly realises that, at least in spirit, many of these advances were interconnected, taking inspiration and encouragement from each other. For example, we have already traced one interconnecting chain between natural studies, poetry and philosophy that Coleridge struggled with during the writing of the "Mariner". Similarly,

---

59 Lowes, J.L. The Road to Xanadu Riverside Press, Cambridge 1964 p.213
Naturphilosophen can be viewed as one among many forms in which Romantiscism manifested itself. It was perhaps, as one commentator put it, merely 'one extreme systematization' of Romantic ideas.\textsuperscript{60}

Another 'extreme systematization' that caused equal controversy in its field - geology - was James Hutton's \textit{Theory of the Earth}. Born in Scotland in 1726 and a founding Fellow of the Royal Society of Edinburgh, Hutton spent a lifetime diligently studying the minutia of the hill and rock formations of the Scottish highlands and, towards the end of his life, proposed this great theory that was to revolutionise the basis of earth-studies and create the still-firm foundations of Geology.

He proposed that the earth's crust displayed ample evidence that it was merely the slow-evolving mantle of a huge dynamic system in which magma became rock, was broken down into soil and sand which was washed to the sea where it formed sedimentary rock. These new formations could in turn be heaved up to form new mountains or ground under tectonic plates to rejoin the magma core of the earth.

Here is a compound system of things, forming together one whole living world; a world maintaining an almost endless diversity of plants and animals, by the disposition of its various parts, and by the circulation of its different kinds of matter.... That such a system is in perfect wisdom; and therefore that this system, so far as it is found corresponding properly with natural appearances, is the system of nature, and not the creature of imagination.\textsuperscript{61} [spelling has been modernised]

Here was a theory whose breadth of implication to human-kind's knowledge of ourselves and our place within the structures of Nature was to rival Newton's \textit{Principia} and \textit{Optics} and whose philosophical basis echoed the spirit of its age as, perhaps, it does our own. It seems, in retrospect, that in each of their various fields Hutton, Newton, Priestly, Blake, Coleridge, et. al. were all

\begin{flushleft}
\textsuperscript{60} Modiano, R. \textit{Coleridge and the Concept of Nature} Florida State University Press, Tallahassee 1985, p.141
\textsuperscript{61} Hutton, J. \textit{Theory of the Earth} Wheldon & Wesley Ltd. 1972 Vol II p.560-1
\end{flushleft}
Struggling towards an even-imperfect understanding of the manner in which Nature conforms to what would be called today a Unified Field Theory. A solution to this all-embracing problem still confronts the great minds of our century, as witnessed by the following:

In his search for a unified field theory, all [Albert Einstein] could build on was his unparalleled lifetime experience and his profound conviction that there ought to be such a theory - that, as the ancient Hebrews put it, the Lord is one.62

The similarities in philosophy, religious connotation and purpose of the Theory of Life, Theory of the Earth and the Unified Field Theory cried out to me. My intuition - more importantly, my theatricality - urged me to connect them.

Heated debate, both scientific and philosophical, lasted from 1785, when the Theory of the Earth was first published, to 1834 when the opposition German-based Wernerism school recanted in favour of Hutton's theory [he did not live to see the resolution, having died in 1797]. Was it likely that two such dynamic individuals as Hutton and Coleridge could have connections? Certainly they were contemporaries but could Coleridge, or perhaps the Wordsworths, have been influence by Hutton's theory? The Theory of the Earth was available in abstract from 1785 and published in the Transactions of the Royal Society of Edinburgh in 1788; eventually a two volume book was available in limited supply (500 copies) in 1795. Could Coleridge have seen any of these prior to writing the "Mariner" in 1797?

'I have read almost everything', said Coleridge, not without warrant, a year before he wrote the Ancient Mariner, and he who sets out to track him through his reading leaves unread at his peril anything readable whatsoever that was extant in Coleridge's day.63

If Lowes is correct, the likelihood of such a wide reader's interest being caught by the controversy surrounding the Theory of the Earth is high; however, enthusiasm should be tempered by reason:

63 Lowes, J.L. The Road to Xanadu Riverside Press, Cambridge 1964 p.xiii

COLERIDGE, THE ANCIENT MARINER AND GAIA
we must not allow the seductive enthusiasm of John Livingston Lowes to persuade us that Coleridge has in fact read everything. 64

Conjecture and argument could take us either way; something more concrete was required if I were to prove my case.

On page 483 of The British Library General Catalogue of Printed Books to 1975 Vol.65 I found under the heading "Coleridge, S.T. - Books containing manuscript notes by Coleridge" the following entry:

Hutton (James) F.R.S.E. - An Investigation of the Principles of Knowledge and the Progress of Reason from Sense to Science and Philosophy, (Edinburgh) 1794.

At last, here was proof that at least Coleridge knew of Hutton's work! Unfortunately, it is difficult to date Coleridge's marginalia and we cannot precisely detail when he became aware of Hutton; my suspicion is that it was some time after the writing of the "Mariner" as he searched for verification for his Theory of Life - though this certainly must have occurred prior to the final revision of the poem in 1834.

Is it stretching the realms of probability too far to connect the "Mariner" with the Theory of the Earth? In terms of a direct link, the answer must be "Yes". However, in terms sufficient to justify their inclusion in an artistic endeavour such as the production I proposed, I believe sufficient connection has been made - if in no other way than via Romantiscism, the spirit of the age from which both were formed.

1.5.5 Linking Gaia to Coleridge.
The link between the Theory of the Earth and the "Gaia Hypothesis" [from Gaia or Gaea or Ge: Greek goddess of the Earth who gave birth to the sky, mountains and sea] is unequivocal:

64 Whalley, G. The Harvest on the Ground: Coleridge's Marginalia University of Toronto Quartery Vol 38 No.3 April 1969 p.253
The idea that the Earth is alive is probably as old as human-kind. But the first public expression of it as a fact of science was by a Scottish scientist, James HUTTON.  

That Lovelock's work is an expansion of Hutton's is freely recognised by Lovelock. Lovelock's hypothesis, which developed from the burgeoning of knowledge that came to human-kind with our expansion into space, forms a major reference point for much of the environmental movement sweeping society today. In essence it proposes: 

the Earth's living matter, air, oceans, and land surface form a complex system which can be seen as a single organism and which has the capacity to keep our planet a fit place for life.  

When I compare Coleridge's *Theory of Life*, Hutton's *Theory of the Earth* and Lovelock's hypothesis the similarities of spirit and essential meaningfulness are so evident that it could be the mariner himself or Coleridge, rather than Lovelock who says: 

It may be that we are also programmed to recognise instinctively our optimum role in relation to other forms of life around us. When we act according to this instinct in our dealings with our partners in Gaia, we are rewarded by finding that what seems right also looks good and arouses those pleasurable feelings which comprise our sense of beauty. When this relationship with our environment is spoilt or mishandled, we suffer from a sense of emptiness and deprivation.  

All these great works imply that human-kind is the primary pollutant of this Earth; our 'non-feeling from non-thinking' is as evident in the careless discarding of a piece of packaging as it is in the shooting of an albatross.  

---

The Gaia hypothesis is for those who like to walk or simply stand and stare, to wonder about the Earth and the life it bears, and to speculate about the consequences of our own presence here. Among those who, I believe, liked to 'simply stand and stare' at Nature I would include Hutton, Coleridge and the mariner in addition to Lovelock and myself. It is a bountiful occupation that has inspired earth-shattering theories, great poetry and will, hopefully, promote a new regard for our world in the future.

1.6 Conclusion.

How interesting! Coleridge might have read and even been influenced by Hutton's theories whilst writing the "Mariner" - so what? Can such a tenuous connection have any import in my *son et lumière* production as it tries to "...touch...the mind's despair..." and "...the heart's hope" [see footnote 7] of a modern audience.

It is my belief that a concern for what damage we are each doing to our environment must become a matter of importance to the entire world. Many of us are already touched with despair but charged with hope and we are prepared - like Coleridge! - to propagandise on behalf of what we believe for, unless we succeed in similarly motivating all mankind, there is a high probability that the world as we know it cannot survive.

In the craft and art of theatre I have a powerful weapon to wield in this battle but didactic theatre - "soap-boxing!" - is generally unpalatable to audiences today; they demand a well disguised, heavily sugar-coated pill before they will swallow any "moral". The challenge is to find a vehicle that primarily entertains yet can advance our viewpoint.

This paper has proved that in "The Rime of the Ancient Mariner" I have such a vehicle. There is sufficient evidence to support the viewpoint that promoting concern for the greater world's well-being was a major part of Coleridge's purpose when composing his famous verses. It is therefore valid for me to use it as a means of carrying forward this environmental cause.

---

In his advice to actors Stanislavski wrote:

In a play the whole stream of individual, minor objectives, all the imaginative thoughts, feelings and actions of the actor, should converge to carry out the **super-objective** of the plot. The common bond must be so strong that even the most insignificant detail, if it is not related to the **super-objective**, will stand out as superfluous or wrong.69

My super-objective is clear. Every element of this production must reflect my intended moral without blatantly soap-boxing; the end result is expected to be the subliminal motivation of my audience to empathise more with the environment in which they live. How each element is manipulated will be a matter for greater consideration and the subject of later chapters. However, examples come quickly to mind. I have had the privilege of swimming among the "singing whales" and I can imagine no more appropriate sound effect to represent the Spirit of the South Pole as it follows the Mariner's ship northward from the ice. The images chosen to represent the elements must powerfully reflect their genesis in our world; textures will be reminiscent of both forest and sea; spirit-forms can be inspired by earthly origins as old as time itself and, most dynamic of all, the image and sound of the albatross could represent the anguish, frustration and eventual triumph of Gaia.

The effect of each of these choices may not be enormous; unless they become aware of the content of this dissertation, I suspect that the majority of patrons would be unable to precisely echo those sentiments expressed above. However, the combined effect of Coleridge's more obscure moral supported by the subliminal influences inherent in my production must send audiences out better able to empathise with Gaia's difficulty with her human inhabitants, more prepared to alter their behaviour to help her, more definite in their gratitude for her continuing benevolence - in short, "a nicer giant/ than he was when he came in."

---

Chapter 2:
SON ET LUMIERE
An Analysis of the Origins and Status of the Artform.

Theatrical practitioners have always appreciated that the senses in our audiences most accessible for manipulation are hearing and sight: sound and light/son et lumière plays on these senses. Experiments in "smell-e-vision", sound so loud it becomes touch-sensation or, indeed, direct physical stimulation (e.g. "sense-surround") have occasionally served their productions effectively but without sound and light the nature of theatre must change radically.

Despite the importance of lighting and sound to any production, it is only in this century that designers have been employed, whose specific responsibility has been to harness the new-found power of electricity to enhance performances with a degree of clarity hitherto impossible. That is not to say that, prior to electricity, theatre had no lighting and sound crews; rather, the technology of those earlier times was sufficiently accessible that specialist designers and operators were not required - with the possible exception of the theatre plumber in the days of gas. The Twentieth century has brought rapid advances in the power, sophistication and complexity of effects which have created in audiences and practitioners alike a demand for bigger and better, newer and more spectacular effects.

During the 1950's one such specialist - the son et lumière creator - appeared, enjoying a brief time in the spotlight. Was s/he merely a passing fad? What were their origins? Where did they go or, more correctly, into what did they metamorphose? Does the artform have any validity in today's theatrical practice? A search for the answers to these and more questions is the purpose of this chapter.
2.2 Defining a Vision.

In Genet's Letter from Paris he tells of the new Notre-Dame *son et lumiere* in the summer of 1963:

Aside from the singing by the choir of Notre-Dame - as affecting as if the Cathedral stones had suddenly taken voice - the sights before your eyes are far more memorable than any of the spoken words (great as they are)..."1

Such glowing reviews were repeated for similar performances all over Europe and as far afield as the Mayan ruins of Teotihuacan and Uxmal where it's reported that:

...the evening light and sound shows are stirring spectacles, worth taking in."2

However, more in-depth analysis of performances that might lead us to a clearer definition of precisely what a *son et lumiere* production comprises is difficult to find. Like so much else of our work as theatre technologists, the craft is inadequately documented and reported.

A Popular Science Picture News article gets closer when it describes the show at Philadelphia's Independence Square as:

...bringing to vivid life the story of the Liberty Bell and the birth of our nation..."3

The same show is classified elsewhere as:

...not a pageant but an impressive manipulation of lights and sound alone. It gives life, however, to an historic... event..."4

This comes from an article entitled LUMADRAMA, an American retitling of the term *son et lumiere*. The only reference that comes close to a definition describes an Electronic Poem by Le Corbusier in the Philips Pavilion of the 1957 Brussels World Exhibition as a:

---

1 Genet's "Letter from Paris": NEW YORKER magazine, Vol 39 1963 p.84
2 "Light-sound shows in Mexico": SUNSET magazine, Vol 161 October 1978 p.?12
3 "Light-and-sound drama brings history to life": POPULAR SCIENCE magazine, Vol 181 October 1962 p.82
4 Malcolm McTear Davis' "Lumadrama": TRAVEL magazine, September 1962 p.45

SON ET LUMIERE
...means of expression by colour and light, form and image together with sound in one great spectacle."\(^5\)

Compounding these scraps of definitions we get: "A spectacular means of expression using colour and light, form and image, together with sound which brings life to an historic event", a definition which I find less than satisfactory. It lacks any sense of the theatrical or the breathing of life into inanimate objects; most importantly, it gives no inkling of the evocative, imaginative and creative nature of the artform.

My almost fruitless search of literature did happen upon one gem; in an obscure magazine devoted to Scandinavian arts a critic suggests that the poetry and prose of one Arne Garborg uses:

...synesthesia, a 'son et lumiere' technique...\(^6\)

She goes on to say that the poet:

...uses sense analogy to describe character, mood, setting and natural scenes, to further essential dramatic narrative, and, then, to go beyond the narrative per se, touching on personal moods, feelings and illusions which...open the door to a world of interwoven sights, sounds and sensations ('son et lumiere')...\(^7\)

Though perhaps too florid to provide a working definition, I believe that this statement encompasses what a growing number of designers aspire to in their stage lighting, sound and technology. If we augmented our earlier rather mundane son et lumiere definition with a few ideas from Scandinavian poetry, it becomes: "son et lumiere is an evocative and spectacular means of theatrical expression using all the craft at the disposal of theatre designers to bring the illusion of life, character, mood and emotion to inanimate objects so that they may re-create for their audience an historic event or dramatic narrative."

That is a definition worthy of the subject and one which will facilitate our search through theatrical history for its origins.

---

\(^5\) "The Philips Pavilion, Brussels '58": INTERNATIONAL LIGHTING REVIEW magazine, No.3 1989 p.94

\(^6\) Lanae H. Isaacson's "Son et Lumiere' in Arne Garbor's Poetry and Prose": SCANDINAVICA magazine, Vol 23 (1) 1984 p.39

\(^7\) Ibid
2.3 Origins - an Historic Perspective.

The principal functions of modern stage lighting encompass simple illumination, isolation of elements one from the other, setting location and time, indicating period, providing mood and atmosphere, complementing the style of the production, providing an appropriate dynamic and assisting the audience’s interpretation of the material presented. However, despite the efforts of many craftspersons down the centuries of theatrical practice, it is only in recent times that English-speaking theatre has progressed much beyond the first one or two functions in the above list. For example, the isolation of the stage from the audience by darkening the auditorium is a relatively recent convention: only by 1850 or thereabouts were audiences conditioned to concentrate on the drama and leave the more frivolous occupation of audience-watching to the foyers and promenades. This is despite the fact that the Italian, Di Somi - among others - advocated as early as the 1560’s:

...the careful placing of candles...[dependent] upon the necessity for shading or concealing most of the lights, and upon reducing the amount of light in the auditorium

The development of lighting and sound for theatre has been erratic, to say the least, but a brief over-view will assist in comprehending the principles and conventions from which technology grew into a craft that could fulfil the aspirations outlined in our *son et lumiere* definition.

2.3.1 Early days.

In the opinion of many, *son et lumiere* is first and foremost a spectacle!...and that preoccupation has engaged theatre designers from earliest times.

Imagine the following effect by the Italian, Bastiano da San Gallo:

...a...lantern made of wood, with a sun measuring a braccio in diameter, which was formed by a ball of crystal filled with distilled water; behind the ball were kindled torches, which caused it to shine

---

in such sort that the ceiling, the decorations, and the stages were all illuminated by that splendour in a manner which made it appear to be the true and natural Sun.9

It was this spectacular effect and others similar that Inigo Jones (1573-1652), as the royal Surveyor of Works, introduced to England but not to the theatre! Jones made his time-honoured reputation devising masques for the royal court; not until after his death and the relaxation of Puritan restrictions, did his innovations percolate through to the playhouses.

An architect by profession - not the last to come to theatre from that source, as we shall see - Jones' official duties caused him to travel extensively through Italy and France; he brought back with him the best of European stagecraft. For example, he introduced the proscenium arch, a raked stage, the periaktos [from ancient Greece] and perspective scenery together with lighting developments which included concealed overhead and sidelight onstage, footlights, light tinted and focussed through spheres of coloured water and a degree of lighting control by means of:

...lamps...set on poles...and...turned by appropriate means...10

However,

...the concept of a unified production was probably the most important result of his adaptation of Italian scenic practice, but Jones constantly refined this concept. He added music and light to help distract attention from the scene changes...11

My practitioner's sensitivities suggest to me that the success Jones' designs had was due to the degree of integration of the elements; lighting, scenery, music, stage machinery, effects and costume all worked together to create the single entity of a masque, the power of which exceeded the combined effect of the single elements. This unity provided the perception of spectacle, ensured the

---

9 Quoted in Lee Simonson's THE STAGE IS SET; Theatre Arts Books, New York 1963 p.258
10 Furtenback's "Architectura Civilis" (1628) quoted in the OXFORD COMPANION TO THE THEATRE, Ed. Phyllis Hartnoll, Third Ed. 1967 p.560
masques' popularity with the court and guaranteed continued royal patronage for
Jones.

Excellence of technique such as that practised by Jones, is rarely sufficient to
maintain production values; mastery of the craft is required if we are not only to
maintain standards but allow latitude for experimentation. Over one hundred
years passed before Jones' innovations were brought to a peak of perfection by
David Garrick (1717-79) and his scenic director Philip de Loutherbourg (1740-
1812) at the Drury Lane theatre, London.

Garrick may be considered among the earliest theatrical directors, in the sense
that we currently understand that term. He promoted a more naturalistic and
truthful style of acting, insisted upon extensive rehearsals, engaged specialists
to realise his theatrical visions and oversaw every aspect of his productions.
Though he may not have been an innovator,

...an improvement of the existing arrangements was the real
substance of Garrick's famous lighting reforms of 1765 at Drury
Lane.\textsuperscript{12}

These include the banishment of audience members from the stage, removal of
all lighting (except footlights and forestage chandeliers) to concealed positions
behind the arch and reversion to Shakespeare's original texts by the removal of
'improvements' that other managements of the day habitually used. He is
known to have imported from France experimental light sources and, contrary
to popular misconception,

..although Garrick did not introduce floats [footlights] to the
English theatre, it seems that he began the process of
intensification...\textsuperscript{13}

Perhaps the greatest directorial attribute is the ability to recognise and utilise
talent in the service of the production, both onstage and behind the scenes.
Garrick's choice of de Loutherbourg enabled his later productions to engage in
the ever-popular exploitation of spectacle:

\textsuperscript{12} OXFORD COMPANION TO THE THEATRE, Ed. Phyllis Hartnoll, Third Ed. 1967
p.561
\textsuperscript{13} Ibid p.562

SON ET LUMIERE
...he [de Loutherbourg] was particularly successful in producing the illusion of fire, volcanoes, sun, moonlight and cloud effects, and inventing strikingly effective devices for thunder, guns, wind, the lapping of waves and the patter of hail and rain. He was the first to bring a breath of naturalism into the artificial scenic convention of the time...14

It is important to note that, by implication rather than direct evidence, it was not only effects in lighting but also stage sound that were achieved. It is not until the Victorian age that detailed descriptions of sound devices exist, though we must assume that they - like lighting - are the product of a long evolution which only met its betterment with the advent of electricity and sound recording techniques.

Thus, by the end of the eighteenth century, English-speaking theatre was the equal of that elsewhere in Europe; their stagecraft was refined to the limits of the power available to them and audience expectations were high. In what direction further experimentation might have led is a matter of conjecture, since the flow of invention was diverted into a new and more powerful energy source - gas!

2.3.2 Gas, Limes and Arcs.
The introduction of gas lighting to theatres from 1817 onwards brought three major advantages: power, economy and control.

A single "fishtail" gas burner produced 625 candlepower-hours compared to a wax candle's 3315, that is despite the fact that gas was nearly nine times cheaper than wax candles and three times cheaper than the less efficient tallow candles16. Gas also removed less oxygen from the air whilst producing less fumes, slightly less moisture and considerably less heat; in addition it created only a quarter of the "vitiation" - a somewhat dubious measurement of corruption or contamination of the atmosphere17. However, a contemporary

14 Ibid p.588
15 Frederick Penzel THEATRE LIGHTING BEFORE ELECTRICITY; Wesleyan University Press, Middletown 1978, Table 1 p.151
16 Ibid, Table 2 p.151
17 Ibid, Table 3 p.152
description of the lighting equipment for the new Prince of Wales Theatre in Liverpool (1866) best illustrates the principle advantage of gas control:

...a single person, placed in front of a system of taps, effectually controls all the gaslights of the stage and of the house, and he can, by a touch of an electric button, relight instantly, if needful, every burner in the house...18

As is often the case with innovation, those advantages easiest to exploit received the most attention and power was often applied indiscriminately throughout the Victorian age; take, for example, the following:

...the disposition of the lamps...is such that no shadow whatever can be presented to the audience, everything upon the stage and in the audience part is a glare of undistinguished lights, painful to the eye...19

Powerful illumination and very little else was the apparent preoccupation of theatrical gaslighters of the day - the same may be said today! - and, as Penzel observes, it was not always applied sensitively:

..the new mode of illumination made it rather difficult for old-line declamatory actors like Kemble to practice the tricks of their trade...

Things only half-seen before were now totally revealed, and all had to be toned down...20

It is not surprising therefore to discover that a new style of actor - Sir Henry Irving (1838-1905), the first theatrical knight - came to prominence with gas and that he championed its effective use:

...since Garrick's time little had been done 'beyond increasing the quantity of light', so that, as Bram Stoker claims, until Irving's reforms and experiments at the Lyceum in the 1880's, stage lighting by gas was 'crude and only partially effective'...21

19 "The Theatrical Observer" (No 1493) of 1826 quoted in the OXFORD COMPANION TO THE THEATRE, Ed. Phyllis Hartnoll, Third Ed. 1967 p.565
20 Frederick Penzel THEATRE LIGHTING BEFORE ELECTRICITY; Wesleyan University Press, Middletown 1978 p.54
As the basis from which to effect his innovations, Irving insisted that the Lyceum's auditorium be darkened; with control systems that included remote relighting of the gas jets using battery power, he at last had available to him technology that allowed houselight control the equal of what we enjoy today. Colour tinting with a range of hues previously unequalled became possible due to the higher colour-temperature of gas and the introduction by Irving of glass filters with transparent lacquers applied; these lacquers were similar to those recently re-introduced to the market, known as lamp dips or Colorine [referred to in 5.3.1]. By dividing his "floats" and overhead battens into control circuits according to colour, Irving introduced the possibility of painting his stage in light with an undreamed of flexibility. For further modelling of the stage picture, the Lyceum had available the much more powerful limelights and battery powered electric arcs to create apparent sources, directional washes and keylights onstage.

These new effects did not enjoy universal acclaim; a contemporary reviewer complained of the:

...blaze of light in which Juliet's bedchamber was filled, when even the moon's light was waning, in order that the fierce ghastly livor of the limelight might fall upon the parting caresses of Romeo and Juliet...\textsuperscript{22}

Unfortunately, Irving's period of gaslighting excellence was short-lived. Steam engine generated electricity and incandescent lamps, though providing less light that gas jets\textsuperscript{23}, radically improved the heat and pollution difficulties in theatres and also drastically reduced the danger of fire - with the introduction of gas the number of theatre fires had doubled! However among others Ellen Terry, the greatest actress of her day, regretted gas' passing:

...the thick softness of gaslight, with the lovely specks and motes in it, so like natural light, gave illusion to many a scene which is now revealed in all its naked trashiness by electricity...\textsuperscript{24}

\textsuperscript{22} "Quarterly Review" of April 1883 quoted in the OXFORD COMPANION TO THE THEATRE, Ed. Phyllis Hartnoll, Third Ed. 1967 p.566
\textsuperscript{23} Frederick Penzel THEATRE LIGHTING BEFORE ELECTRICITY; Wesleyan University Press, Middletown 1978, Table 1 p.151
\textsuperscript{24} Ellen Terry's "Memoirs" (1933) quoted in the OXFORD COMPANION TO THE THEATRE, Ed. Phyllis Hartnoll, Third Ed. 1967 p.566
2.3.3 Advent of Electricity.

It was Richard D'Oyly Carte (1844-1901), Gilbert and Sullivan's entrepreneur, who was first able to say in the prospectus of his new Savoy Theatre in 1881:

...I have been convinced that electric light in some form is the light of the future for use in theatres... There are several extremely good incandescent lamps, but I have finally decided to adopt that of Mr. J.W. Swan... About 1,200 lights are used, and the power to generate a sufficient current for these is obtained from large steam-engines, giving about 120 horse-power, placed on some open land near the theatre... This is the first time that it has been attempted to light any public building entirely by electricity...25

As we have already noted with the advent of gas, the introduction of new technology does not necessarily imply improved standards;

...the initial advances [with electricity] were technical - perfecting equipment, materials and controls - rather than artistic. This was a set-back for lighting design which had developed to sophisticated levels among gaslight technicians...26

It's fair to say that, by the time electricity became a viable alternative to gas, all the innovations Irving had introduced at the Lyceum were not common practise in theatres: according to Clement Scott27 even D'Oyle Carte at the new Savoy did not darken the auditorium during performances.

However, the advantages of power and dimmer control in the hands of craftspersons sensitive to the needs of the production overcame the crassness of early electrical lighting:

....[Sir Hubert von Herkomer] was one of the first to abolish footlights because their light was so unnatural, and to see the

26 Ian McGrath A PROCESS FOR LIGHTING THE STAGE; Allyn & Bacon, Boston 1990 p.3
27 OXFORD COMPANION TO THE THEATRE, Ed. Phyllis Hartnoll, Third Ed. 1967 p.567
possibilities of projection, using a magic lantern to create his moving clouds...\textsuperscript{28}

whilst:

...in Mar. 1879, in San Francisco at the Grand Opera, David Belasco [1859-1931] began the experiments which...lighted his stage from the front with old locomotive bull's-eye lanterns...\textsuperscript{29}

Of course, the device considered basic to modern lighting, the cyclorama, was only made possible with the power provided by gas or electricity.

Humankind - not to mention artists - being what they are, once again universal acceptance of the potential of this new technology was not forthcoming and could not be expected. G.B.Shaw, the playwright and critic, is reported to have said to Basil Dean (1888-1967) after a demonstration of cyclorama effects:

..I'll take good care that you don't use any of these contraptions in my plays, young man. The audience would be so busy staring at the clouds, they wouldn't listen to my words.\textsuperscript{30}

Dean was an important producer, director and lighting designer in London's West End between the Wars and during the 50's; he championed the use of lighting in realistic drama, introducing equipment from U.S.A. and Germany to satisfy his needs. Dean was exceptional, however; in the majority of theatres:

...all lighting details are left to the Stage Manager and the Electrician...\textsuperscript{31}

Even so Dean was not alone in his desire to fully utilise stage lighting:

...the other major source of lighting innovation, Terence Gray's (1895-19??) Cambridge Festival Theatre, explored styles representing various departures from naturalism...[he] worked with Harold Ridge, who can be regarded as Britain's first specialised lighting designer... [though] it was not until the 1960's that the

\textsuperscript{28} Tim Streader & John A. Williams CREATE YOUR OWN STAGE-LIGHTING; Prentice-Hall, New Jersey 1895 p.17

\textsuperscript{29} OXFORD COMPANION TO THE THEATRE, Ed. Phyllis Hartnoll, Third Ed. 1967 p.567

\textsuperscript{30} Francis Reid's The Development of Lighting in the Staging of Drama, 1900-1945" in the DICTIONARY OF LITERARY BIOGRAPHY, VOL 10: MODERN BRITISH DRAMATISTS, 1900-1945; Ed. Stanley Weintraub, Gale 1982 pp.267-275

\textsuperscript{31} "1910 Stage Year Book" quoted in the OXFORD COMPANION TO THE THEATRE, Ed. Phyllis Hartnoll, Third Ed. 1967 p.569
lighting designer became an automatic member of the production team.32

To counteract G.B. Shaw's popularly held opinion quoted earlier, Ridge found it necessary to state in 1930:

...good acting can only be enhanced by suitable scenery and beautiful lighting, but it is a crime to spend time and money on scenery lighting to the neglect of the acting... It is also a crime to stage a bad play simply because it lends itself to spectacular effects...33

Thus, by the 1960's stage lighting technicians throughout English-speaking theatre had the enterprise, capacity and technology to become craftspersons of the highest order. What they needed to become artists and, hence, legitimate partners in any collaborative production team - whether in theatre or son et lumiere - was a philosophy against which to evaluate their endeavours.

2.3.4 The Music of Light.

Stage lighting throughout its long history has been an empiric craft; that is, it is based on observation and experiment rather than any particular body of theory. As this brief history illustrates, on occasions individuals (e.g. Jones, Garrick, Irving and more recently Belasco, Dean and Gray) have, through the excellence of their craft, raised stage lighting to such perfection that it could only be considered an artform whose excellence demanded a philosophical background. However, it was through the vision of a seemingly unskilled patron, Adolphe Appia (1862-1928), that a theoretical direction for stage lighting was elucidated.

Appia's first opportunity to view live theatre came...at the age of nineteen [when] he attend[ed] a performance of Gounod's FAUST. The experience was an aesthetic disaster... In his imagination, he had created an expectation of how the opera would come to life on the stage, and the reality of the performance was in opposition to his vision...34

32 Francis Reid's The Development of Lighting in the Staging of Drama, 1900-1945" in the DICTIONARY OF LITERARY BIOGRAPHY, VOL 10: MODERN BRITISH DRAMATISTS, 1900-1945; Ed. Stanley Weintraub, Gale 1982 pp.267-275
33 Ibid.
34 Jerry V. Pickering THEATRE: A HISTORY OF THE ART; West Publishing Co, St Paul 1978 p.466
Obviously Appia had been watching the worst of gas floodlighting or, perhaps, his imagination - so completely unfettered by convention - would have judged even the best example appalling. His vision demanded the freedom (a combination of power and control) that electricity would provide. Hence, Appia is credited with providing a basis from which both stage settings and lighting could progress into the Twentieth century:

...as a philosopher Appia longed for the consolation of the Absolute and found it in a new kind of operatic score [Wagner]...once its secrets had been penetrated, its musical intervals, tonalities, and rhythms deeply felt, these could supply an unerring clue to their scenic interpretation, determining not only the form of the stage-setting itself but the movement of actors within it down to the smallest detail of stage business and the fluctuations of light that illuminate them. As an artist Appia found release in music because its emphasis was emotional rather than factual and so supplied a norm which an artist could approximate until his settings were equally expressive...

Appia's output as a creative theatre artist was minimal; he rarely engaged in theatrical practice and wrote only two illustrated works: La Mise en Scene du Drame Wagnerien (The Staging of Wagner's Music-dramas), a fifty two page brochure published in Paris in 1895 and Die Musik und die Inscenierung (Music and Stage-Setting), a book published in Munich in 1899. Yet, despite this, his influence continues to spread; even among those ignorant of his work, he is honoured in practise.

Appia's initial premise was that those plastic elements that surround the actor - perpendicular scenery, horizontal floor and light - should also be three-dimensional but, further, they should be unified into one aesthetic whole. The primary unifying force, he proposed, was light:

...light alone, quite apart from its subsidiary importance in illuminating a dark stage, has the greatest plastic power, for it is subject to a minimum of conventions and so is able to reveal vividly

---

In its most expressive form the eternally fluctuating appearance of a phenomenal world...36

In addition to having the power of unification, Appia believed that light's other properties suited it to even greater things: its flexibility enabled it to match with and reflect or counterpoint rhythms; it could fluctuate subliminally to create emphasis or sequences required by the script; and he proposed its use as a followspot. But, most importantly:

...only light and music can express 'the inner nature of all appearance'. Even if their relative importance in music-drama is not always the same, their effect is very similar. Both require an object to whose purely superficial aspect they can give creative form. The poet provides the object for music, the actor, in the stage setting, that for light...37

Hence, in Appia's philosophy, light - like music and sound - was not simply a tool for illumination, creating focus and representing naturalistic phenomenon but it had an interpretive function that gave added insight to the spectator. As Freedley and Reeves observe:

...it is interesting that Appia's art... should develop almost simultaneously with naturalism, which was the antithesis of everything for which he stood..38

Appia's legacy is not only confined to the visual; he believed that the principal task of the director was to:

...convince the individual members of his acting company [including technicians] that only the arduous subjection of their personalities to the unity of the production will create an important result...39

...and that:

37 Ibid p.360

SON ET LUMIERE
...theatre...is a joy that is compounded to the degree that we share it with others...40

This brief summary of the man's work is intended to support my contention that Appia's position among theatrical theorists is important and those who disparage his philosophies by emphasising his lack of practical experience are depriving themselves of enormous intellectual stimulation.

The sense of competition contrived by some commentators between Edward Gordon Craig (1872-1966), an English contemporary with similar ideas, and Appia is, I believe, counter-productive. As we shall see, both served the profession in the fashion most suited to their talent and we theatrical descendants are richer for both their efforts.

Craig was the son of an architect and the actress Ellen Terry; he trained under Irving at the Lyceum as an actor but turned from the realistic style adhered to there. He preferred mood, colour and light over rigid realism and form in his new-found profession of stage director and scenic designer. Throughout his long career he wrote extensively, starting with THE ART OF THEATRE (1905), in an effort to shift conventional thinking on design, lighting and theatre architecture into more imaginative spheres. For instance, one proposed auditorium had:

...no boxes, no circles...and scene changes masked by darkness and not...a curtain. He also devised a small box at the back of the auditorium from which the director could run the show. He made no provision for footlights; all lighting was from the side or above...41

In another design he:

...developed the idea of a stage [like a chess board] with each square an elevator that would be able to raise and lower to any number of positions, thus providing an almost infinite variety of levels and playing areas...42

41 Ibid p.653
42 Ibid p.655
This idea has since been realised using hydraulics (Schaubuhne in Medelsohn-bau, Lehiner-Platz, Berlin).

During his season as director at the Lyceum (1900) he experimented with innovations that are considered commonplace today; he created fog from dry ice, devised a cyclorama graded horizontally from a light bottom to a dark top and used light to represent the Christ-child in the Nativity crib rather than the realistic alternative.

Craig is notorious for advocating the dehumanisation of theatre; though - as we shall see later - I suspect that this concept may have had some influence in the inspiration of son et lumiere, it is a misrepresentation of Craig's philosophy. He did advocate the predominance of the director which many have interpreted as reducing actors to the position of puppets [he used the term Uber-marionette]; however, to report more fairly:

...Craig postulated that...actors had to be in complete control of their instinct [emotions] so that their imagination and ability to create could lead them through their parts...he also experimented with masks to dehumanise the actors, thereby making them conscious of their movements and gestures...

Further fuel to the dehumanising gossip was provided when Craig experimented with non-literary theatre where the establishment of mood within an environment replaced the spoken word. He considered that the director should be:

...capable of inventing and rehearsing a play; capable of designing and superintending the construction of both scenery and costume; of writing any necessary music; of inventing such machinery as is needed and the lighting that is to be used...

It is therefore fair to say that Craig did not believe theatre to be a collaborative art; at best it could only be a benevolent dictatorship.

Unlike Appia, Craig continually experimented both as director and designer in theatres all over the world. In 1912 he designed HAMLET for Stanislavski at

43 Ibid p.654-5
44 OXFORD COMPANION TO THE THEATRE, Ed. Phyllis Hartnoll, Third Ed. 1967 p.219
the Moscow Art Theatre and the two are said to have parted with mutual respect; in Italy he opened a school to propagate his ideas and he also edited a theatrical magazine, MASK, but both ventures failed due to the intervention of the first World War.

Craig's work was generally admired in Europe and the USA, though in England he was often regarded as an impractical theorist; however, this opinion must be considered in the light of what the man was trying to generate. In order to free the imagination of convention-bound practitioners, Craig tended to:

...disregard the architectural limitations of theatres...\(^{45}\)

He believed that theatre:

...should not only be a place to show facts in a material way, but the place to show the whole world of fancy, and in a spiritual way...\(^{46}\)

The vindictive attitude of such commentators as Simonson\(^{47}\) toward Craig, in favour of Appia's theories, is not justified; both have given the profession a body of theory from which theatre has been able to move forward. We may prefer the attitudes of one over the other but, beyond that, credit must be given for achievement.

The definitive factor in the argument, for me, is a matter of focus. Two quotes go to the core of the difference:

...unlike...Appia, Craig put all elements of theatre on the same creative level, insisting that they all contribute to the total production... neither the script nor the acting alone constitute the art of theatre...\(^{48}\)

Conversely:

...the chiaroscuro of Appia's drawings is shadowy like Craig's; its misty envelopments, its dissolving silhouettes and vaporous distances, are characteristically romantic. But this picturesque


\(^{47}\) Lee Simonson THE STAGE IS SET; Theatre Arts Books, New York 1963

\(^{48}\) Jerry V.Pickering THEATRE: A HISTORY OF THE ART; West Publishing Co, St Paul 1978 p.656

SON ET LUMIERE
atmosphere is made an integral part of stage pictures that, instead of dwarfing the actor, are directly related to him as a human being.\textsuperscript{49}

In my perception Craig's designs\textsuperscript{50} and attitudes tend to pull focus away from the performer; the actor is sometimes lost in the wide expanse of a vision perhaps better suited to a moody cinemascope screen whereas Appia's work tends to concentrate the attention onto the actor and, hence, the words and music. It seems a matter of taste or conviction where you choose to base your loyalties.....but to ignore either is foolhardy.

\textbf{2.3.5 Control and Integration.}

The objective of this background has been to draw attention to the state of theatre lighting in the 1950's when the industry experienced rapid expansion, accompanied by an increased recognition from audiences and colleagues alike. This expansion also enabled lighting technicians to break out of the narrow confines of theatre and apply their skills to a much broader spectrum of events, \textit{son et lumiere} among them.

To summarise the 1950's: a substantial body of philosophy was available (albeit with some degree of contention), the craft was supported by a heritage of at least four centuries and sufficient controllable power was available from electricity to service any imaginings conceivable. However, a number of innovations and minor explorations enabled us to edge closer to a \textit{son et lumiere} premiere performance.

Remote control, made possible initially by wire connected controls and later by electronic means, brought both the operator and designer into positions where they could communicate better and, more importantly, experience for themselves the results of their endeavours from a similar perspective to that of their audience (e.g. Front-of-House control). The old days of leaning over the railing above Prompt Corner or using a periscope and fish-eye lens from below the stage to catch a distorted glimpse of the stage picture were over!

\textsuperscript{49} Lee Simonson THE STAGE IS SET; Theatre Arts Books, New York 1963 p.364
\textsuperscript{50} CRAIG ON THEATRE, Ed..Michael Walton; Methuen, London 1983
The degree of control also improved dramatically, even without the use of computers upon which we rely so heavily now. Perhaps the most important advance occurred when:

...Frederick Bentham invented the Strand Lighting Console, in which a special Compton-organ console was used to control a...motorised dimmer bank. The principle...was to make use of the inertial inherent in a mechanical system, and thus only select circuits when some change was required to affect them. The selectors became organ-stop keys and the masters to operate organ keyboards...51

This machine was put to work in:

..bigger commercial theatres and the super cinemas - where the auditorium architecture was expected to perform complex colour music (...intensity, colour, and form of light [mixed] in a flexible manner) between films...52

How like son et lumiere those performances sound!....and I wonder what Appia would have thought of this intimate linking of light with music?

Many may be surprised to know that these pre-computer control desks also had the capacity to memorise cue states by various means (e.g. punchcard, pin matrix, etc.) As Stanley McCandless states:

...the significant development in...control is the multi-scene preset, a means of recording the dimmer readings of an infinite number of scenes...the entire show... The fading between scenes can also be automatically predetermined, based on the artistic and dramatic tempo established in rehearsal. This feature can only be recommended whole-heatedly for the timing of the changes...in the 'Son et lumiere' performances now popular in Europe...53

This was written in the 60's and McCandless has made the association that was yet to occur to initiate son et lumiere.

51 OXFORD COMPANION TO THE THEATRE, Ed. Phyllis Hartnoll, Third Ed. 1967 p.573
52 Francis Reid's The Development of Lighting in the Staging of Drama, 1900-1945" in the DICTIONARY OF LITERARY BIOGRAPHY, VOL 10: MODERN BRITISH DRAMATISTS, 1900-1945; Ed. Stanley Weintraub, Gale 1982 pp.267-275
53 OXFORD COMPANION TO THE THEATRE, Ed. Phyllis Hartnoll, Third Ed. 1967 p.577
This facility enabled technicians to use multi-track magnetic tape to record both music together with the timing and placement of cues, thus integrating the two media together in time.

### 2.4 The Craft.

With these technical facilities developed, the keystone was at last in place; *son et lumiere* as a craft was technically feasible. All that was needed was for circumstance to trigger the event.

#### 2.4.1 A Stormy night at Chambord.

In the early 1950's:

...a French architect named Paul Robert-Houdin chanced one night to observe the chateau of Chambord during a thunderstorm. Lightning leaped about the stonework; the heavens crashed with sound. To Robert-Houdin it seemed that history had been re-created and Chambord was alive. "I then thought it might be possible," he wrote, "to reproduce artificially a spectacle like the one nature had just offered me." He set to work, using banks of powerful lights synchronised with a sound track carrying music, voices or special effects (cannon fire, the slam of a door), but no "live" performers. He christened his new form of presentation Sound and Light (Son et lumiere)...54

Despite extensive searching I can find little else concerning the life and work of Robert-Houdin. We do know that he continued in the field for at least ten years; he went to America in 1962 to assist in the creation of "The American Bell", a Lumadrama (*son et lumiere*) in Independence Square, Philadelphia55. However, other than that, information is scarce. It appears that, like too many practitioners, Robert-Houdin preferred to let the work speak for itself rather than write.....an attitude that must change if we are to encourage growth in the artform.

---

54 "Illuminations of History": THE NEW YORK TIMES MAGAZINE, 4th August 1963 p.20
55 Malcolm McTear Davis' "Lumadrama": TRAVEL magazine, September 1962 p.44
In the absence of any detailed documentation, it is futile to hope that we will ever know the deep sources of Robert-Houdin's methods and his inspiration. However, a stormy night, an architect's training and appropriate technical expertise do not, in my opinion, add up to s o n e t l u m i e r e! We have already traced the sources for theatrical tradition of spectacle and technical effect to which Robert-Houdin had access; that influence is clear in his art. But what else? Perhaps he experienced the "colour music" shows in major cinemas of the period and they struck a chord in his architect's soul? I also like to speculate that he was influenced by the extreme interpretations of Craig's philosophies which were popular in Europe at the time; perhaps Robert-Houdin asked himself whether the ultimate extension of dehumanising theatre was to remove actors altogether or, at least, reduce their contribution to voice recordings? This is speculation, I confess, but the chronological sequence is compatible with the facts at hand.

Despite the lack of a written legacy, Robert-Houdin's inspiration to imitate the spectacle of nature as an entertaining historic re-enactment, together with his ability to harness the power of stage lighting and its associated technology, have changed the nature of our profession and created a wide range of new lighting applications.

2.4.2 Historic Nights.
The tourist potential in s o n e t l u m i e r e was quickly appreciated. In the decade following Chambord similar events were staged in - among other places - the Roman Forum, Versailles, the Acropolis in Athens, the Tower of London, the Royal Palace of Madrid, the Chateau de Tourbillion in Sion\(^56\) and at Notre-Dame, Paris\(^57\). Outside of Europe the phenomenon spread as far afield as the Egyptian pyramids\(^58\) and the Mayan ruins in Mexico\(^59\).

The attractions for producers were obvious. Despite sometimes high initial production budgets, running cost - in particular, salaries - were minimal. The shows were easily and accurately reproduced by a minimum of staff yet the

\(^{56}\) "Illuminations of History": THE NEW YORK TIMES MAGAZINE, 4th August 1963 p.20
\(^{57}\) Genet's "Letter from Paris": NEW YORKER magazine, Vol 39, 1963 p.84
\(^{58}\) Glenn Loney's "Electronic Drama": THEATRE ARTS magazine, Vol 47 July 1963 p.27
\(^{59}\) "Light-sound shows in Mexico": SUNSET magazine, Vol 161 October 1978 p.?12
results were spectacular attractions, the content of which could include virtually anything the producers desired. Most entrepreneurs were of the opinion that:

...whatever the costs, the results are already worth it. And the park is drawing more and more visitors who are staying longer...60

The formula for son et lumiere of this period is apparent from the material available on the best documented of these events, "The American Bell". Basic to all is an historic site, preferably in a spectacular environment, around which could be fashioned a narrative that created for its audience a sense of the import of the building and the events it had hosted. A nation's or location's history and significance could be encapsulated by expert writers, its past glories evoked and the audience's imagination so stimulated by the accompanying music, sound effects and images in light that they departed with a heightened appreciation of the culture, its achievements and its right to a place under the sun. In short, early son et lumiere were often little more than propaganda.

Wherever possible the best available talent was gathered to mount the production; "The American Bell" used people of the quality of Archibald MacLeish as writer, historian Dr John Boyd, actors of the calibre of Fredric March and E.G.Marshall and composer/conductor David Amram with forty pieces from the Philadelphia Orchestra61 in addition to importing Robert-Houdin's technical expertise and experience.

Generally the best equipment was utilised; the Philips company developed a ten-channel recorder for "The American Bell" - the first five carried multi-directional sound while the other three channels

...carry instructions to monitors of sound and light switching and fading devices...62

Frederick Vogel was the general manager63 and he chose a punch-card memory system64 ,state-of-the-art at the time.

60 Glenn Loney's "Electronic Drama": THEATRE ARTS magazine, Vol 47 July 1963 p.28
61 Malcolm McTear Davis' "Lumadrama": TRAVEL magazine, September 1962 p.44
62 Glenn Loney's "Electronic Drama": THEATRE ARTS magazine, Vol 47 July 1963 p.28
63 Ibid
64 "Light-and-sound drama brings history to life": POPULAR SCIENCE magazine, October 1962 p.83
The care with which any installation must be made, particularly in an historic site, is apparent from the following:

...none of the equipment is visible during the day. Some of the lights, for instance, are cleverly hidden in park benches [others were placed nightly]. Nor has the fabric of the historic building been damaged in any way...65

Whether permanent or temporarily installed, the logistics of son et lumiere are daunting; as Steve Pollock observes, they are:

...not a lighting project for the faint of heart...66

He used eight thousand feet of five-wire feeder cable and a groundrow ninety feet long in his temporary installation and he well illustrates the pre-occupation all son et lumiere operators have with the weather forecast.

Though conventional son et lumiere performances based upon historic sites continue even today, the formula began to change and broaden later in the decade of its hey-day. Purpose-built venues and original imaginative narratives were accepted as equally valid expression of the same genre; for example, Le Corbusier's "The Electronic Poem" took for its theme the manner in which:

...our increasingly mechanised civilisation strives towards a new harmony...67

To accompany the original score by Edgar Varese, Le Corbusier used a:

...scenario consist[ing] of a sequence of large, projected black-and-white images (approx. 8x6m) following one another in a certain rhythm and accompanied by a variety of dynamic light effects in various colours...68

Though the format and technology was similar, this departure from formula indicates a healthy development in the artform. Here was a medium capable of much freer artistic expression where every detail could be contrived to serve the purpose of the production; more importantly, that 'purpose' was not longer restricted by convention to historic narrative; nor was the event limited by

65 Ibid p.83
66 Steve Pollock's "Son et Lumiere at Wake Forest University": THEATRE CRAFTS magazine, Vol 19(3) 1985 p.66
68 Ibid p.94
location. There was nothing to stop productions going anywhere or, for that matter, returning to the theatre from whence the genre originated. The limitations had been removed and *son et lumiere* had the freedom to fly.

### 2.4.3 Out of Fashion.

At about the same time that *son et lumiere* was freed of conventional restrictions, what few references there had been in journals and magazines began to disappear.

The phrase was and is still in common use\(^{69}\) and, on occasions, the original historic-site format is still used,\(^{70}\) though generally on a much smaller scale than in the heyday of *son et lumiere*. Today it is more likely to be found in the suburbs and regional areas than in the forefront of public attention; however, on those occasions the equipment applied to the task is considerably more capable, cost-effective and easy to use than that available during the 1960's. The recession in *son et lumiere* is not, therefore, a matter of outdated technology. Was it simply that the craft became over-exposed and dropped out of fashion?

There are those who would maintain that experiments in dehumanised theatre that relied primarily on spectacle, particularly those as extreme as *son et lumiere*, were doomed to extinction from their inception; they claim its demise as a victory for the philosophies of Appia over Craig. But the evidence from Broadway and the West End refutes this: popular shows from across the spectrum of theatre have incorporated more and more spectacular material to satisfy a seemingly insatiable desire in our audiences. It is said that that we are in the Technical Era of theatre where the magnitude of a show's special effects budget is at least as great a drawcard as any individual artist, an observation which also seems to belie the argument against the so-called dehumanisation of theatre - at least in the perception of our public.

It is my belief that *son et lumiere* did not become a theatrical dinosaur but, rather, that it underwent a metamorphosis. It became an integral part of high budget performances, providing spectacle that modern audiences have come to

---

69 Lanae H. Isaacson's "*Son et Lumiere' in Arne Garbor's Poetry and Prose": SCANDINAVICA magazine, Vol 23 (1) 1984 p.39

70 Steve Pollock's "Son et Lumiere at Wake Forest University": THEATRE CRAFTS magazine, Vol 19(3) 1985 p.66
expect in their entertainment. During the 1950's and 60's, when son et lumiere enjoyed popularity, stage lighting and sound entered into a period of laboratory-like isolation remote from the pressures of integration with other performers when technicians learned to better harness the power and effects available, developed new techniques and machinery and discovered how to more effectively integrate the technology. The craft emerged in a form more capable of servicing the industry and better fitted to apply its knowledge to much wider fields of endeavour.

The craft is well equipped to handle any task but whether designers, directors and producers have learned to apply it aesthetically is a moot point.

2.5 Current Trends.

Son et lumiere began the current trend to reverse Inigo Jones' footsteps. He made it possible for technology to enter the English-speaking theatre by way of the royal masques in the Seventeenth century; today we are taking our craft back out into the community at large. The opportunities for technicians to engage in spectacles that were once the exclusive province of a few specialists are many-fold today.

Patrons of the concert industry expect as much from the almost obligatory 'sound and light show' as they do from the star performer and the old days of a board operator 'dancing on the bump-buttons' in rhythm with the music are long since gone. Productions such as "The Wall"71, among many others of equal quality, incorporate all that son et lumiere became and much more. Detractors say that such concerts are more correctly classified as a realisation of music in light rather than a true blending of both and, thus, such events involve a diminution of the imaginative process in their audience; that's not son et lumiere of the old style! This may be a valid argument for a purist, but sufficient of our definition remains in the best of rock-concerts to justify their inclusion in our list of events into which son et lumiere metamorphosed.

71 John Huntington's "Bringing Down the Wall": THEATRE CRAFTS magazine, Vol 24/9, Nov. 1990 p.50
Visual artists have refined elements of the craft to serve them in their efforts to integrate music with dynamic images (e.g. Lumia Kinetic Art\textsuperscript{72} ) or to blend music and images with dancers\textsuperscript{73} by means of laser technology. They too can be said to have benefited from \textit{son et lumiere}.

In my own career I have worked to integrate image, music and light in performances strongly assisted with audio-visual technology, applied my theatrical experience to illuminating sculpture and public buildings, and striven to add theatricality to museum exhibitions; all of these applications borrowed heavily from \textit{son et lumiere}. The spectacle of a full-sized Boeing 747 entering through a curtain of fog during an industrial promotion will always stay in my memory and, of course, theatre and opera in particular will never relinquish their right to utilise the essence of \textit{son et lumiere}, to which they gave birth. Take, for example, a recent Broadway offering, \textit{SHOGUN, THE MUSICAL}:

...one of the more technically impressive parts of the show is the opening storm sequence, where a shipwreck takes place. Thunder cues...in conjunction with laser-scanned lightning bolts, which lead the sound from the back of the theatre to a spot on the front of the stage...\textsuperscript{74}

It's pure \textit{son et lumiere}! Equally impressive and probably more pure in their adherence to \textit{son et lumiere} techniques are the theme parks,\textsuperscript{75} while of late equally large audiences have tuned their FM radio stations to catch the 'soundtrack' to accompany synchronised fireworks displays.

The list of enterprises that have borrowed techniques or gained inspiration from the art of \textit{son et lumiere} is long and growing longer daily. Both audiences and practitioners have a debt of gratitude to craftsmen such as Robert-Houdin and our many other theatrical forebears. However, whether those early visionaries would applaud the purposes to which their innovations have been put is also a moot point.

\textsuperscript{72} W.Christian Sidenius with Raymond M.Farrell Jr. "Lumia Kinetic Art with Music; My Theatre of Light": LEONARDO magazine, Vol 15/3 1982 p.188-192

\textsuperscript{73} W.Christian Sidenius with Raymond M.Farrell Jr. "Lumia Kinetic Art with Music; My Theatre of Light": LEONARDO magazine, Vol 15/3 1982 p.188-192

\textsuperscript{74} John Huntington's "Shogun, the Technology": THEATRE CRAFTS magazine, Vol 24/10 Dec. 1990 p.10

\textsuperscript{75} John Calhoun's "Universal Studio Florida": THEATRE CRAFTS magazine, Vol 24/9 Nov. 1990 p.45
I would argue that, as in the past, these new technologies have been applied in the least subtle, even crass fashion. Productions in which perhaps the content or dynamic are lacking have been 'saved' by the indiscriminate application of vast amounts of money and spectacle. More reprehensible still is the tendency to use even larger publicity budgets to convince audiences - prior to their attendance - that bigger is better, dollars equate to quality and spectacle means dramatic excitement.

2.6 Conclusions.

In my *son et lumiere* production of Coleridge's poem "The Rime of the Ancient Mariner" my intention is to surround the narrative with a closely integrated web of sound and light which not only supports the poetry but also evokes in the souls of the audience an empathy with the underlying emotions and moral contained within Coleridge's epic. Spectacle there will be.....but in at least equal measure with subliminal shifts in emphasis and mood advocated by Adolphe Appia.

In essence, my technical objective with this production is to adhere to Appia's philosophies, in which precise integration of sound and light are the key to excellence, while using pure *son et lumiere* to "...touch...the mind's despair..." and "...the heart's hope" [see footnote 7] of our audience.

However, I shall remain mindful of the observation from the eminent Lighting Designer, Tharon Musser:

*In our field particularly, artistry gets very confused with technology.*

---

Chapter 3:

RECORDING THE POEM

A Report on the Process and Results obtained.

Having achieved a better understanding of the poem and the genre, my objective during the next period of study was to create a voice recording of "The Rime of the Ancient Mariner" which would not only serve as the framework by which all other aspects of my production would be supported but also be of sufficient quality to impart clearly to my audience the essence and detail of Coleridge's work.

The establishment of both artistic and technical standards for theatre performance necessarily involves myriad value-judgements and, almost as frequently, compromises imposed by circumstances as diverse as budget considerations and artistic taste. This chapter details those judgements with respect to the recording of the text, the possible alternatives and my reasons for taking those decisions.

However, as detailed earlier, the over-riding criterion when constructing the performance of the Voice-Over was the need to invoke in audiences an association between their own behaviour and the Mariner's dealings with the universal forces of Nature.

3.2 Performance Values

At the outset, two major questions occupied considerable time. Firstly, should the reading of the poem be carried by a single voice or a number of actors and, secondly, should the reading be neutral to allow the audience to exercise their own imagination as they would if they were reading the poem or should interpretation and characterisation be imposed by the reader/s? The first occupied my thinking for some considerable time and unduly delayed clear consideration of the second.
My son et lumiere production falls within the broad and ill-defined category of "performance poetry". In a search of literature I could find no clear definition; however, most commentators upon this recently coined classification imply that the work gains some further dimension from the act of performance for a live audience - apart from that, restrictions and/or conventions within the genre are negligible.

Whether Coleridge would have approved of this recent fashion seems rather academic; I would have to contend with more lively critics than he. Some would maintain that the power of poetry lies in its ability to stimulate the reader's imagination direct from the page without the interference of a performer/reader while the more pragmatic would accept any means of presentation as justifiable if the material becomes more accessible to a broader audience. Since my primary purpose was to lead an audience to the realisation that the moral content of Coleridge's verse has direct application to their own condition, I had to favour the latter.

It might, therefore, be surprising to learn that my primary reason for deciding upon a single-voice reading was to reinforce the fact that the basic material was poetry, not a play for voices. One of my earliest experiences as a beginning actor was to record "talking books" for the Blind Institute; readers were frequently exhorted not to turn the material into radio drama but to simply lift it off the page and place it - with clarity and truthfulness - within the grasp of the listener. When we asked why we could not compete with great radio productions of books such as Orson Wells' WAR OF THE WORLDS we were reminded that the resources available were better suited to a reading of the book, not the production of an adaptation for radio; furthermore, our intention must be to stimulate the listener to see for themselves characters, location, etc. as triggered by the artistry of the writer - to present the material for the listeners interpretation, not provide all the answers.

The distinction is fine, I agree, but my argument for presenting "The Rime of the Ancient Mariner" is precisely the same. I was not intending to adapt the piece in any way but, rather, present the poem with augmentations that added colour and dimension to the audience's own 'reading'.

RECORDING THE POEM
I reasoned that a single-voice reading would allow Coleridge's words to generate in each listener greater empathy since they would hear something more akin to what they would hear within their own heads as they read the poem, rather than witnessing from some protected position a more polished large scale production.

However, even within this more personalised single-voiced delivery, I justify the use of characterisation, dramatic pauses and other more theatrical devices since they substitute, in part, for those major elements of the written poem that are unavailable to the listener - punctuation and structure! Without these powerful guiding signifiers, the audience must be provided with the means of, for example, quickly identifying who is saying the words and in response to whom. The time frame is most important: a reader may suspend the passage of narrative time while they assimilate facts but, as in the "talking book" example, a reading's clarity must be the primary goal.

Secondly, and almost as importantly, the potential of the human voice to amplify by means of descriptive intonation the texture and quality of the poet's enunciation cannot be under-estimated. Word-pictures are pivotal in the poet's armoury of weapons against mundane language; to ignore the power of the human voice in the creation of these pictures - by means of tone, emphasis, phrasing, dynamic, etc. - is to deny their basic poetic purpose: the maintenance of the audience's attention.

For these reasons I decided against a multiple cast recording and settled upon a single-voice with license to use theatrical devices to maintain interest and ensure clarity.

### 3.3 Characterisation

Having made these initial decisions based upon the objectives of the production, the next step was to detail how each characterisation would serve that objective. I required careful delineation between the characters, particularly in terms of vocal qualities such as resonance, tempo-rhythm and accent. However, in my experience it is often more beneficial to visualise the whole character - their
physiognomy, attitudes, feelings and objectives, even origins - so that the performer can create unique vocal characterisations that are multi-dimensional, rather than merely technical constructions.

The notes below summarise my perception of each of Coleridge's characters:

3.3.1 Narrator
Mid-Atlantic neutral; the voice of Coleridge. The neutral quality must not be interpreted as lifeless; he is passionately concerned that the audience clearly understands the dynamics of the poem, particularly during the difficult opening passages - he must draw the audience into quickly identifying with the Wedding Guest's situation, making it their own.

3.3.2 Wedding Guest
Irish seaman, similar to those Coleridge would have known from around the port of Bristol. I see him as big-chested and rough-voiced, a well muscled worker with a square jaw, ingenuous and compassionate behind a brusque facade.

3.3.3 Mariner
A world-weary, aging, widely travelled (therefore, neutral accent), gaunt, lantern-jawed, wan individual driven by memories, loneliness and guilt; similar to some Vietnam Veterans of my acquaintance.

3.3.4 Life-in-Death
Not a distinct character herself, but rather a characterisation undertaken by the Mariner to better illustrate the witch-like apparition he describes. He similarly characterises the parched voice of a man dying of thirst during lines 161 & 167-170 (see Appendix 5.5 for text with line numbers).

3.3.5 First Voice-in-Air
A veritable Judge Jeffreys among angels!...with a permanent sneer; hard, dry and nasal in quality, the voice echoes the sneer on his face.
3.3.6 Second Voice-in-Air
With a capacity for deep compassion and a similarly deep resonance, this Voice is warm and mellow.

3.3.7 Pilot
A West-country seaman, possibly of smuggler heritage; highly superstitious and wary of the unfamiliar.

3.3.8 Hermit
Cherubic old man with pendulous jowls and lower lip; lightly framed with upper register resonances; educated sufficiently to remove any discernible accent. However, an energy and child-like enthusiasm suffuses him.

3.3.9 Pilot's Boy
Probably 14 years or thereabouts; hysteric quality made worse by the break in the voice due to the onset of puberty.

The demands upon a single performer to make rapid transitions between such differing vocalisations when reading the poem without interruption are enormous. However, editing techniques enable sound engineers to record all the elements of a single character's performance and inter-cut them into the principle narrative line - in this case, the Mariner's. I intended using both techniques as I developed a performance.

The major advantage of the editing approach for the performer is that it assists them to maintain consistent vocal qualities for each character throughout the production. However, it does introduce an alternate difficulty - continuity. This is a similar problem to that experienced by film actors shooting script elements out of sequence; the performer must have the preceding moment in the linear narrative clearly defined if they are to deliver their lines in a manner proportional to and dynamically matched with that which elicits their response. For example, in lines 229-230 the Wedding Guest is increasing in dynamic as he reaches the realisation that the Mariner may be a ghost and the Mariner must interrupt at precisely the same or slightly greater dynamic if the audience is to believe that both characters exist as separate entities, one interrupting and silencing the other.

RECORDING THE POEM
A further element of characterisation, made possible by the technology of stereo recordings, is the placement of characters within the audio image. The recording engineer is able to locate the image of each voice anywhere between hard-left and hard-right in a horizontal plane dictated eventually by the placement of the speakers; however, location should be an artistic decision determined by the interaction between characters.

I determined that each voice should maintain their position to help an audience identify them; should I be less than successful in the clarity of my eight vocal characterisations, then a further definition by location would assist identification. The decision to place the Mariner was obvious; he delivers 84% of the lines and should dominate the imagination of the audience - Centre! The Narrator and the Wedding Guest need to be clearly delineated immediately the poem commences and the decision to place them on either extremity was self-evident; whether left or right was beside the point at this juncture since it is a simple matter of re-plugging equipment later in the engineering process to select which is more appropriate.

The Voices-in-the-Air were equally simple to locate; each would dominate either side of the sky. However, a slight complication existed in the next segment - the arrival by boat of the Hermit: three characters to locate and only two extremities available. A simple line-count and assessment of the separation of characters in the time-frame quickly settled that Pilot and Pilot's Boy should occupy the same location, particularly since their voices would be so dissimilar.

Only one major decision remained: which extremity should each character occupy? It was finally a matter of balance which determined the decision; if the right channel carried the Wedding Guest and the First Voice - a relatively compassionate individual followed by a harder one - I decided that the "softer" Hermit should be placed on the left.
Thus, the character locations were, in summary:

<table>
<thead>
<tr>
<th>LEFT</th>
<th>CENTRE</th>
<th>RIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrator</td>
<td>Mariner</td>
<td>Wedding Guest</td>
</tr>
<tr>
<td>Voice-in-Air 2</td>
<td>&quot;</td>
<td>Voice-in-Air 1</td>
</tr>
<tr>
<td>Hermit</td>
<td>&quot;</td>
<td>Pilot &amp; P/Boy</td>
</tr>
</tbody>
</table>

### 3.4 Sectioning and Phrasing

I have already alluded to the impossibility of completing a recording of the entire poem in a single "take". Not only is the task of shifting from one voice characterisation to another with accuracy and sufficient agility extremely difficult but the likelihood of delivering over thirty minutes of sometimes convoluted poetry without a mistake is very small. Furthermore to set oneself such a task is to deny the power of the recording medium to hone and modify any given performance through repetition, selection and editing until it appears to the listener a much more erudite performance than, in fact, it was.

Thus, my next consideration, in order of priority, was to section the poem into blocks which would not only enable me to make the recording in more realistic sections - that is, sections more likely to be recorded without mistakes - but which also conformed to the apparent dynamic phrasing intentions of Coleridge.

The first indicators that could not be ignored were the seven parts into which the poem was divided by the poet. In all except one division I had to agree with Coleridge; they were suitable places to provide the listener with a moment to consolidate, provide for the performer a time for recuperation and to allow the dynamic of the narrative to re-commence a build. However, Coleridge marks the beginning of Part VI at what I consider to be an inopportune moment to take a pause. It occurs in the middle of the argument between the Voices-in-the-Air where any disruption to the flow of conversation would be detrimental to an audience's understanding of the dispute. I therefore chose to ignore Coleridge's directions in this instance.

Unfortunately, even the smallest of Coleridge's Parts (some 60 lines in duration) was not sufficiently small to be easily recorded without fear of...
mistakes and I looked for further opportunities. All except one pause I chose to take at a stanza-ending but that one exception (at line 380) made me wary of the verse structure as an infallible indicator.

I do not intend here to consider each moment, for they are apparent on the accompanying recording [see Appendix 4.4. Sound Cassette - Side A]; instead I supply some comments in amplification. Most pauses in performance indicate a change in location such as that from the storm-tossed Southern ocean to the ice fields (line 50) or a sudden shift in time: for example, the period lost to the Mariner whilst he lay in a faint (line 392). However, they may also indicate a change in attitude or intention of the Mariner.

I found that, at these pause moments, my imagination often interpolated a sound effect, sometimes its termination or commencement. I heard in my mind's ear not a pause but embryonic impressions of the sound effects montage I planned to accompany the voice-over.

Though sometimes as short as a stanza (lines 463-467) but equally as often of nearly sixty lines duration (lines 308-366), the divisions I chose each encompass complete sequences of events (e.g. the approach of the Death ship: lines 142-198), perhaps an emotional transition (e.g. the Mariner's recognition of his own 'countree': lines 464-467) or the entire exchange of dialogue between characters (e.g. Voice-in-the-Air: lines 392-429).

Thus, it is the narrative and emotional shape of the poem that dictated the shape of the delivery and, therefore, the recording segments. In other words, again clarity was the over-riding criterion.

The length of the intervening pauses could not be determined precisely at this early stage, since they were often dependent on the nature of the accompanying sound effects. However, a sound engineer has the skills (known by the term 'editing') to add or subtract sections of silent\(^1\) tape. Thus, long after the

\(^1\) The use of the word 'silent' is not technically correct; I am implying "tape of the same ambient noise level" i.e. the low noise level that would be on tape if the entire system was operated in the same environment with no signal being applied.
recording has been completed, we are able to adjust the positioning and duration of pauses; the precise time-frame for the final production was of no real concern to me at this early stage.

3.5 Pronunciation

During these early preparations for the recording, it was important to define correct pronunciations so that rehearsals of the poem would not reinforce mistakes.

I was surprised how modern the language of the poem sounded to my ear once I began reading aloud, particularly when compared to my school-boy impressions. Only those words and truncations of words used by Coleridge to imbue the poem with an artificial sense of period required study to ascertain meaning and exact pronunciation: words such as eftsoons (line 12), corse (line 491), marinieres (line 517) and shrieve (line 573).

More difficult for me were passages of alliteration (e.g. "the white foam flew, the furrow followed free...:

3.6 Plotting Action, Mood and Attitudes

Whether it's known by the term "verbing", "plotting intentions" or "action plotting" this basic process used by actors to analyse a performance moment by moment was the next process I undertook in preparing the "Mariner" for recording.

Why use an actor's technique for a poetry reading? Again my intention was to maximise the distinctions between the various characters to be portrayed by a single voice. As described in 3.3 above, I had already defined the physical characteristics of the various characters (sometimes known by actors as "adjustments" - e.g. dialect, tonal qualities, etc.) but this next process required definition of their feelings, objectives and motivations.
If successfully achieved then all a character's moments, when added together, would create a complete human being reacting proportionally to the changing situation; their journey from beginning to end of the poem would be a logical progression, closely linked to the character's change of emotion caused by the action upon them of external forces - action and equal reaction! Furthermore, the cause, manner and degree of change in particularly the Mariner and the Wedding Guest would provide for my audience a clear indication of the moral intended by Coleridge and myself.

Again I do not have the space available to report on the complete analysis of the poem; however, consideration of Part VII (lines 514-625) will enable the reader to compare the intention expressed here with the tape, then interpolate to the entire recording. I choose this Part since it contains a considerable number of characterisations and a large amount of character interaction together with perhaps the poem's most difficult to interpret passage: the moral in lines 610 to 617.

Part VII commences with the Mariner back in his own harbour being approached by the boat containing the Pilot, his Boy and the Hermit. These are the first humans with whom the Mariner has had contact since the death of his shipmates; his soul yearns for the confirmation of life that personal contact will give him and also the relief of unburdening himself to the Hermit. The mood is one of joyous relief, almost celebration; Coleridge takes every opportunity to alleviate any residual sense of foreboding and prepares his audience for the final resolution.

The first two stanzas (lines 514-522) allow the Mariner time to introduce the Hermit into the narrative - and thus to the Wedding Guest; though parenthetic in feel, these lines are important to emphasise the regard the Mariner has for the Hermit and, perhaps, the Hermit's qualifications for the task of ridding the Mariner of his guilt. However, I believe there is potential in the lines for some levity - what if the Hermit's singing (heard in the accompanying sound effects is more robust that sweet? Under these circumstances I believe the Mariner's action to introduce the Hermit as a suitably religious authority can be tempered with an ironic, amused attitude.
The Mariner uses line 523 to return to the time-frame of the narrative from the parenthetic moment.

The introduction of the Pilot in lines 524-526 allows Coleridge more opportunity for fun. The Pilot is wary of the situation - his superstitious nature is evident - but as a dutiful public servant he is trying to sort out as quickly as he is able what is happening. A "Sergeant Plod" character seems to be suggested.

The much anticipated Hermit makes his entrance on line 527; he too is assessing the situation but his attitude is entirely different. There is a sense of anticipation, a zest for life, an enthusiasm for the adventure upon which he is engaged. In fact he is so enthusiastic he takes the opportunity to not only communicate his assessment (lines 527-531) but to expand upon it (lines 532-534) and qualify it further (lines 535-537). The fellow is garrulous! - though for the performer to "play" garrulousness would risk creating a caricature. Rather, the intention of the Hermit is to amplify, reinforce or develop his assessment; it is for the audience to perceive him as verbose. The performer creates this impression by playing these actions and attitudes over-energetically and slightly in disproportion to the stimulus.

The Pilot has completed his assessment of the situation by this time and, during lines 538-540, tries to dissuade the Hermit from further involvement. True to his sense of adventure, the Hermit dismisses the Pilot's argument (lines 540-541) with, as Coleridge states, a cheery attitude; perhaps he is "cheerily" scoffing at the Pilot's superstition?

In the next passage (lines 541-549) the Mariner re-establishes responsibility for the narrative, painting a vivid word-picture that drives the action forward and pulls the Wedding Guest - and our audience - into the picture's centre.

After the awful destruction of the ship, the passage to follow (lines 550-559) has the Mariner continuing the narrative with a quality that enables the audience to empathise with him as he relives his emotional condition after the real event; he's disoriented, confused and desperately trying to recover control of his
senses. The dreamlike, surreal quality of the events and the still rebounding shock generates incredulity in the Mariner.

In lines 560-569 the Mariner relates a section of his tale that he remembers, in retrospect, as amusing and Coleridge uses the passage to relieve tension before proceeding on to the poem's moral and resolution. Like any good 'yarn' teller, the mariner's delivery is deliberately arranged to extract full comic value from the superstitious gibbering of the Pilot, the Hermit's religious fervour born of fear and the hysterics of the Boy as he tries to ward off the Mariner by naming him as the Devil; one can almost see the crossed fingers and signs against evil in the air.

After having been at sea for we know not how long, the feeling of firm land beneath him would have caused the Mariner disquiet as his sea-accustomed legs struggled with the stillness of earth. Yet, as he relives the joy of the moment (lines 570-571), he continues to squeeze mirth from the plight of the Hermit who, after so brief a voyage, is more unsteady on his feet than the Mariner (lines 572-573). To use a colloquial phrase, the Mariner is "taking the mickey" out of the Hermit but Coleridge's purpose is to heighten the effect of the next line (574) where the Mariner desperately begs absolution of the slightly ridiculous Hermit.

Coleridge arranges one last moment of light relief before plunging into the finale of the poem; lines 575-577 shows the floundering Hermit trying to come to terms with his fear and fulfil his duties as a priest - the best he can do is attempt to sort out the confusion is his head.

As the Mariner relives the anguish that is his nemesis (lines 578-590), his attitudes and objectives become very complex. He warns the Wedding Guest against the thoughtlessness that condemns him - and us - to a similar fate; he explains the depth of agony that drives him in some vague hope that the Guest will forgive the Mariner for subjecting him to this harrowing ordeal; it is a confession as to the depth of his ignominy with an appeal for individual compassion, understanding and absolution.
A burst of drunken hilarity from the Wedding reception shatters the intimacy of the moment and, in line 591, the Mariner rails at them for disturbing the mood. He continues (lines 592-594) to bitterly denigrate the trivialities of life compared to the depth of anguish he feels; it is this inability to accept life's continuance beyond the confines of his personal agony that makes him, ultimately, self-centred if not selfish.

Fortunately the vesper bell interrupts the Mariner's emotional outburst, bringing him back to reason; in lines 595-596 he seizes upon the stimulus of the bell to change the subject, collect himself and refocus on the Wedding Guest.

The passage to follow (lines 597-609) is central to the Mariner's motivation. We never know precisely why the Wedding Guest was chosen to hear the Mariner's tale but the clues in this section may hint at the answer. The number of times words like 'alone', 'together', 'company', 'all' and 'loving friends' occur suggests that the Mariner is seeking to make a friend of the Guest in the vague hope that they might travel together henceforth, thus making the shared nemesis more bearable. Perhaps it is the agony of loneliness that eventually drives the Mariner to select someone with whom to share the pain but he is yet to learn that an ingenuous character like the Guest is unlikely to accept the burden. Rather it would be a person with equally horrendous emotional baggage who might choose to travel the road with the Mariner. However, part of the Mariner's fate is to be only attracted to the ingenuous. Understandably, the Wedding Guest rejects the invitation.

Knowing that he has failed in his attempt to gain a travelling companion, the Mariner chooses to augment his farewell to the Wedding Guest by closing the narrative with a moral for the Guest in an attempt - as the Gloss indicates - to teach by example. However, the attitude the Mariner uses to colour his teaching is open to selection; in the rough-cut recording [see Append 4.4, side A] I used feelings of hurt and disappointment from the rejection to justify the Mariner's somewhat self-protective, superior attitude which continues the self-centredness of lines 592-594. This created the impression of a rather cold withdrawal of the Mariner and caused the phrasing of these penultimate lines of the poem to drop. In the final version [see Append 5.10] I chose to reverse this trend, to keep the dynamic upward, even though the Mariner is physically
withdrawing. This was achieved by altering his attitudes to more positive, less selfish ones. These can be justified if, instead of allowing the hurt of the rejection to become paramount, the Mariner accepts the failure of his quest; instead he chooses to leave the Guest not just "sadder and wiser" but also, perhaps, with the motivation to proselytise on Nature's behalf in the future. You, the reader, will appreciate how the second alternative not only better serves the phrasing of the performance but also my intentions for the the production as a whole.

The final lines (618-625) allow Coleridge, through the Narrator, to round out his story by emphasising the change that has occurred in the Wedding Guest; no longer is he pleasure-seeking but, instead, chooses to spend his leisure time reflecting upon the Mariner's plight so that he might approach the "morrow morn" wiser and, perhaps, less sad - more hopeful.

This lengthy section illustrates the importance I placed upon the analysis of each moment in the reading from the viewpoint of each of the characters. Without it the reading would have lacked dynamic variation and intensity, resulting in loss of attention from the theatre audience.

3.7 Drilling and Rough-cut

With this initial dissection complete, I commenced an eight week period of rehearsal to realise a product that incorporated all the analysis undertaken to that time.

The poem became bed-side reading and was re-read on numerous occasions in an attempt to become so familiar with the material that it would transfer to tape with fluidity and ease. After some weeks of this activity I took a chance opportunity to test my skills on a captive audience ..........and struggled to even make sense of the verse, let alone provide dramatic entertainment! I had forgotten an important lesson from my "talking books" experience, that the spoken word is an entirely different challenge to reading for comprehension. What flows freely in the mind will often flounder to an ignominious halt when confronted with the added difficulties of breath control, saliva production and vagaries of lips, teeth and tongue. Comprehension and familiarity are but
minor factors when compared to the craft of ensuring one's vocal delivery is attune to the tempo-rhythms of another's words.

I changed my rehearsal technique; with the text and interpolated notes propped beside the microphone, I began working each verse till the playback from cassette proved acceptable to my own ear. Words demanding emphasis were indicated, extended commas and pauses for effect noted; moments where sense demanded that I should ignore the verse structure and continue the flow into the following line were also marked. These notations remained fluid until I was satisfied - through trial and error - they were correct. When I considered myself sufficiently prepared, I undertook a recording of the entire poem.

The results were unsatisfying. Though mechanically correct and relatively pleasing to the ear, the recording was without passion or dynamic and hardly connected with the emotions of a listening audience (a number of long-suffering friends proved that). It was a reading from the page rather than someone talking to, or at least for, an audience. When teaching microphone technique to beginning actors I will often suggest that, in their imagination, they place some person just behind the microphone and talk directly to them; in this recording I had forgotten my own advice.

I next undertook a recording that, ignoring 'correct' delivery, concentrated on putting down the entire poem at one 'take'. By throwing caution to the wind and erring on the side of passion I hoped to obtain a benchmark recording with dynamic unity against which a more precise section-by-section recording might be judged. Mistakes there would be aplenty, a 'rough-cut' but one which would facilitate a more polished performance at some later date.

A copy of this recording is included as Appendix 4.4, side A. As you will hear, my inspiration for the 'rough-cut' came from a TV documentary on the life of Modeste Mussorgsky, the Russian Composer, seen on ABC's "Sunday Afternoon with Peter Ross"; in particular, Mussorgsky's creation of BORIS GODOUNOF triggered within me the passion that had been lacking in prior recordings. Precisely why, what connection there was in my mind between Russian opera and English romantic poetry I cannot say, but the motivation was sufficient for a satisfactory result at last.
3.8 Comparison

Now, with a recording against which I might make comparison, I went looking for others. I had not done this earlier because I wanted to complete a reading that was entirely my own work before being influenced by any other artist's interpretation.

At the time I could only find a version by Richard Burton\(^2\), though I have since heard another by Sir John Gielgud. Though a valuable exercise, I found - on the whole - the experience to be disappointing. I include a cassette copy of Burton's [see Append 4.4, side B] so that the reader might form their own opinion.

The first important difference is in the running time: mine is five minutes longer. Even allowing for the mistakes in my 'rough-cut', this might imply I was using the dramatic pause self-indulgently. Since Burton used other actors only for the Voices-in-the-Air and the Narrator, I could not justify the increased time by claiming I needed it to help differentiate the various characters. Clearly I needed to reconsider my rate of delivery seriously.

Burton relies heavily on vocal techniques of tempo variations, poetic rhythms and using each word for its inherent auditory value rather than emotional content and characterisation; his is a poetry reading depending on beauty of delivery and voice production. However, he is inconsistent: if it is a reading, why does he use other actors to relieve him of some of the difficulties? And, given that he decides to utilise other performers, why does he not keep that consistent throughout the performance? (Only the Narrator and a proportion of the Voices-in-the-Air are given to other actors while the Pilot, his Boy, the Hermit and the early section of the Voices-in-the-Air are retained by Burton.)

In the end Burton's version must be assessed for what it is: a demonstration of craftsmanship from an amazing vocal practitioner. However, even then the

idiosyncrasies (i.e. the distinctive gasping breathtaking that indicates emotional involvement) would be considered by many as flawed technique.

Essentially the differences in production values between my version and Burton's make them difficult to compare: a reading designed principally to show off vocal technique is far removed from the emotionally based theatrical reading I had chosen to undertake. Under these circumstances I considered it fruitless to continue with further comparisons and resolved to trust in the approach I had decided upon, leaving it to my audience to assess its value once all elements of the production were assembled.

3.9 Fine Drilling

Before embarking on further rehearsals I correlated comments from six associates who had heard the 'rough-cut'; my intention was to consider alterations suggested by any two or more.

Three criticisms fulfilled this criteria:
1. The dynamic toward the end of the poem (particularly lines 610-617: the moral) tended to fall away.
2. Since the reading was such a break-away from the usual poetry reading, I should also break the limitations of Coleridge's verse structure.
3. At times an Australian accent worked against the mid-Atlantic convention established for the Mariner's characterisation.

In section 3.6 above I have already described alterations to the Mariner's attitudes toward the Wedding Guest that would substantially correct the dynamic at the poem's end. It was at this juncture that I chose to use the alternative.

I attempted to counteract my tendency to be bound by the verse structure by altering the text from which I was reading. Instead of using a published version of the poem, I reformatted it by removing all capitalisation dictated by line structure; only those required by Coleridge's punctuation were used. Hence, for example, lines 618 to 625 now looked like this:
This version of the poem was used during all subsequent rehearsals and recordings. It is interesting to note, however, that Coleridge's structure is so strong that even after such brutal treatment the verses are apparent in the reading. They are so well integrated by means of the poet's choice of language that a pure prose reading is near impossible. Under these circumstances I felt I was committing less of a crime against the poet than I might have been; his work is sufficiently masterful to withstand my interpretation even if it turned out that my approach to the poem was mistaken.

The third matter - the Mariner's accent - was adjusted during subsequent drilling rehearsals; as before, cassette recording equipment was used. With increased familiarity came loss of spontaneity. Moments that had previously been successful were no longer so and new inspiration, fresh motivations and, sometimes, artificial variations designed to break inappropriate vocal patterns were applied to recreate these moments anew.

### 3.10 Technical Details

Digital Audio Tape (DAT) recording is new technology that stores sound in the form of encoded numeric information rather than a varying (analog) track that attempts to encapsulate the entire sound signal within a voltage envelope generated by means of a transducer (i.e. microphone). The degree of detail compared to the original source, lack of noise from recording medium (e.g. tape hiss) and reduced risk of corruption during storage make DAT technology highly desirable for a sound recording such as I was contemplating.

Since my access to DAT equipment was limited by budget, I resolved to use two recordings to attain a product useful in terms of both recording and performance quality. In the first I resolved to concentrate on performance values, using reel-to-reel analogue technology with its cut-and-splice editing convenience to shape the result. I was able to cut out mistakes, replace
unintelligible words, alter the length of pauses and generally 'manufacture' a better phrased product from relatively raw material. Using this analogue recording as a template for performance, I made a second recording with DAT technology because I did not have available DAT editing equipment. I would play the edited analogue recording to myself on headphones, then lay that track down on DAT a number of times so that I might choose the most effective for mixing into the soundtrack.

The following summarises the equipment used in the recording of "The Rime of the Ancient Mariner":

**Tapedecks**
- Two Sony DAT (digital audio tape) portable recorders
- Revox B77 analogue recorder: 1/4 inch tape, 1/2 track stereo, 15 inches per second tape speed.
  - [the machine was thoroughly serviced and checked prior to commencement.]

**Tape**
- Sony digital audio tape cassette.
- Ampex 456: low noise, high output, 1.5ml mastering tape.
  - [I have found this more robust tape less likely to distort due to stretching, tape hiss is minimal and it handles well during the editing process.]

**Microphones** - two Sennheiser MD 441 dynamic Cardioid studio microphones, set to Speech (i.e. frequencies below 700 Hz attenuated by 14 dB) which reduces the over-emphasis of lower frequencies when close proximity recordings are made.

**Studio** - a two person Noise Control booth manufactured by Pearce Engineering, Sydney was used to control extraneous signal.

### 3.11 Recording

With a Saturday afternoon, evening and Sunday morning available to us, an associate and I met to get the analogue version of "Mariner" on tape. With only a very basic knowledge of sound engineering, my associate was primarily concerned with performance values; he would stop/start the machinery but I
was depending upon him and his discerning ear to ensure that my performance was accurate, clear and truthful.

My associate initially familiarised himself with text, characterisation notes (see 3.3) and machinery then quickly devised a method of documenting the procedure; he carefully noted 'cut' (I sectioned the poem into 73), 'take number' and position on the tape together with details of recording level and tracking. This precision proved invaluable during editing, enabling me to quickly locate and compare any take with little difficulty.

Our intention was to obtain at least two versions that were free of mistakes and satisfying to both our ears. On most cuts we averaged three to four takes, though this on occasions went as high as seven; on four occasions the performance was so obviously 'right' that no second take was made. As I have already indicated, the characters were recorded in sequence so that I could maintain consistency of characterisation. The Mariner's 51 cuts took approximately 70 minutes on tape while the various other characters added another 18 minutes of taped material. These were completed in a single six hour session on the first day, a very successful recording rate considering that monitoring facilities were poor. Instead of listening back to the recorded material immediately after each take, I accepted the opinion of my associate regarding performance standards. However, this lack of monitoring did introduce the occasional mis-match between takes (e.g. the end of one take did not precisely match the dynamic of that which followed).

3.12 Editing

The analogue editing process commenced with the location and selection of the best of each of the takes from the point of view of performance values. On occasions this involved selecting a mechanically flawed take from which the flaw could be removed; for example, the best performance of line 70 was recorded as "And the helmsman..." rather than "The helmsman...": careful splicing removed the offending addition.

On other occasions portion of a take were more satisfying than others and I was able to splice together a better result; for example, the "Farewell, farewell.." of
Take 1 of line 610 was more satisfying than the other three takes, though the remaining lines were better performed in Take 3: again careful splicing achieved a better overall result.

A third performance mistake - too much volume! - was also corrected by editing. For example, the performance energy given to line 197, Life-in-Death's gloating cry, was too much, causing the recording to blur and distort. By editing in a take with less volume this was corrected, though it did give to the line a quality of distance. I determined to retain this in the final DAT recording since the effect isolated the line and gave it added import.

Once the selection of takes had been made a near-complete performance tape was obtained by splicing the appropriate sections together into sequence. Though simple to state, this task was far from simple to execute. It required two days of concentrated effort throughout which I was acutely conscious of the fact that a mistake was likely to destroy hard won results; it was too easy to trash the piece of tape desired, while editing in rubbish tape from the hundreds of pieces scattered about!

At last the shape of the complete poem was apparent and I must confess to being quite pleased with the result, apart from some slight dynamic mis-matches with the Wedding Guest and the Voices-in-the-Air. I was confident that they could be corrected in the DAT recording without too much difficulty.

However, I was able to progress the editing a stage further. By cutting in and out sections of 'silent' tape I shaped the performance better for phrasing, rate of delivery, pause for effect and anticipated accompanying effects. These pauses account largely for the different in performance time between my final version (30mins, 40sec) and that of Burton (28mins). Thus, the editing was taken to the point where I could test an audience's reaction to the basic voice-over before proceeding to the DAT recording. Again long-suffering colleagues were subjected to the "Mariner" and their reactions canvassed.

This search for constructive feed-back was important when so much of the product was my responsibility; the opinions of my colleagues forced me to retain a higher degree of objectivity than would otherwise have been possible.
3.13 Additional Recording

As outlined in 3.10 above, the final stage in the preparation of the Voice-over was its recording onto DAT equipment using the analogue version as a template for the performance. In this way I achieved a far higher sound recording quality with the poem in a form that would require very little manipulation before being added to the complete sound track.

I must re-iterate that this round-about approach was dictated due to the lack of DAT editing facility; only in this way could I achieve both digital clarity and a performance of equal quality.

The mechanics of the process were remarkably smooth: hear the analogue, make a cut, compare the two and re-record as necessary. By recording in sequence, it was demanded of the 'actor' that he make the characterisation transitions quickly; the major advantage of the sequential approach was that miss-matches were minimised. However, the process still took over sixteen hours to complete.

3.14 Summary

What was captured on tape was, I believed, sufficient to allow progress to the next stage: the addition of a sound effect montage which would compliment the voice-over and build upon the interpretive function of the production. Further editing and re-recording of the voice would be required but, until I had a more definite conception of the complete soundscape, further alteration to the voice-over was counter productive.
Chapter 4:
CLOSE ENCOUNTER WITH A DEAD ALBATROSS

Before embarking upon the creation of the sound montage to accompany the voice recording I resolved to refresh the aims for my *son et lumiere* production. My purpose was twofold: not only did my objectivity need invigorating but I wanted to distance myself from the minutiae of performance involved in the Voice-over. Had I not, there was a danger that the soundscape would merely echo the content of the poem rather than expand upon it, punctuate its rhythms, phrase the performance, add contrapuntal elements and provide ambivalence.

Every element of this production must reflect my intended moral ....... expected to be the subliminal motivation of my audience to empathise more with the environment in which they live. ........The images chosen to represent the elements must powerfully reflect their genesis in our world; textures will be reminiscent of both forest and sea; ........ and, most dynamic of all, the image and sound of the albatross could represent the anguish, frustration and eventual triumph of Gaia. (see page 38)

Within that statement lay elements that elucidate and justify the soundscape. Firstly, it should provide a voice for the Natural world representative of Gaia, a means whereby the audience might comprehend the emotional state of those elements within the poem whose poetic voices are indistinct. Almost as important would be its evocation of the physical environment, both location and mood. Thirdly, the soundscape should provide the means to comment upon the characters' actions and their interaction with the scapes in which they find themselves, whether real or imagined.
How loudly should Gaia speak? Is the voice florid or economic? How should the audience perceive her? These simple questions of style are largely a matter of taste for the creator of the work, yet their importance to the final product cannot be over-emphasised. I wanted to represent a Natural world that was powerful yet long-suffering, extraordinary in its complexity yet simple in purpose, both harsh and beautiful, angry and forgiving. Hence, I borrowed a descriptive phrase coined by sound engineers to encapsulate one possible approach to the creation of soundscapes which suited my purpose: evocative minimalism.

This style implies a richness of texture sparingly applied so that it truly accompanies the primary element - the voice track, in this case; it should rarely dominate but augment the poem to create a symphony of natural sounds [using the word symphony in its original Greek meaning: a harmony of sound].

4.2 Parameters.

All musical compositions have rules and conventions for their construction which serve not only as guides to the form but also assist in communicating the composer's intentions and feelings to their audience; my symphony of natural sounds would be no different.

The parameters I chose were:

Apart from what little music is used (overture, playout and 'wedding' music), all effects were to have their origins in Nature with minimal mechanical or electronic adjustment so that subliminally, at least, the audience would be guided still closer to the 'moral' of the poem.

A maxim of good design is economy; I therefore chose to select a palette of sounds each with multiple levels of meaning and, hence, with several uses. This would contribute to the minimalist style and assist in clarity of communication.

Each effect was to be associated in origin, tonal quality and dynamic range with as many other effects as possible to create a homogeneous palette well suited to the sound environment in

CLOSE ENCOUNTER WITH A DEAD ALBATROSS
which it would be performed (Hope Theatre, University of Wollongong).

The criteria for selecting 'spot' effects would primarily be their ability to clearly communicate location, emotional quality or mood; at all times the audience's understanding of the text must prevail. It should be noted that communication with an audience need not be immediate; for example, the use of what will be known as the Fixation effect during early stanzas may not resolve itself in the minds of audiences till late in the poem [line 590].

Wherever possible digital sources (e.g. DAT and CD) were to be used to minimise mechanical, tape and system noise on the final recording.

With these parameters firmly in mind I returned to the poem to consider the moment-by-moment application of sound.

4.3 Sound Cue Synopsis.

Your purpose is to formulate a concept for each moment in the theatre with visions flowing from one to the next, taking the audience from beginning to conclusion, from fetid gloom to ethereal brilliance, from morning to following day, from character's childishness to maturity - wherever the script and the production concept demand.\(^1\)

I used the above to describe the purpose of a Cue Synopsis in my textbook on lighting; however, the description fits a Sound synopsis equally well. The vision should not be limited by anything other than content, style and production concept. The equipment to be used, availability of source material, resource limitations and other similar hindrances should not be allowed to get in the way of the creative process. It's a document detailing the designer's intention, a work-in-progress whose form should never be allowed to restrict creativity and development; rather, its a blueprint that will maintain the soundscape on course, preventing deviations into self-indulgence and technical 'magnificence'. The blueprint outlines moments of sound and silence,

\(^1\) Ian McGrath "A Process for Lighting the Stage", Allyn & Bacon, Boston 1990 p.56
phrased and linked together to form a unity that must satisfy both the audience and the parameters I placed upon the soundscape.

The Sound Cue Synopsis devised for "The Rime of the Ancient Mariner" is contained in Appendix 4.1.

Despite the fact that details are listed against the line numbers in the printed text, the synopsis was drawn up after detailed reference to both the written poem [see Append 5.5] and the recorded performance. In particular, the rhythms inherent in each dictate the structure within which the sound effects operate, sometimes they are in harmony though often contrapuntal, sometimes rigidly adhering to the tempo while at other moments dominating as the voice-over pauses. Frequently the emotional content of the poem is 'played against' to generate in an audience ambivalent emotions - not confusion but mixed reactions of, say, pity and condemnation. For example, the shriek of the dying albatross is repeated later in the poem to remind listeners that, despite the pain the Mariner is currently suffering, he is the author of his situation and, in the eyes of Gaia, deserves punishment for his crime against Nature.

4.4 Sound Source Schedule - The Sound Palette.

To use a further musical analogy, I believe - as did Adolphe Appia - that the principals used by Wagner in the creation of his music can be applied more generally to theatre: in particular, the manner in which technical elements interact with the action. Thus, I resolved to use specific sounds as Wagnerian "leading motifs" [Leitmotiven] which may be defined as:

.......short pregnant.....phrases....recurring again and again to underline the thought or emotion behind the dramatic position at the moment^.

In this case the phrases will be soundtrack elements that may be supported by or counterpointed with visual elements in the realised production; their purpose remains precisely the same as Wagner's.

With this in mind I set about extracting from the Synopsis a schedule of Sound Sources, those elements from which the mix of sounds could be constructed.

The Sound Source Schedule for "The Rime of the Ancient Mariner" is contained in Appendix 4.2.

The primary task when compiling a Source schedule is the selection of specific sources from the myriad available. Even so we frequently cannot locate suitable material from commercial sources and must undertake a recording program to satisfy the needs of the production. There follow some notes on the selection process undertaken for the "Mariner" with particular emphasis on those we had to create.

4.4.1 Albatross, including Fixation Effect.
I required for the albatross a call based in naturalism but capable of romantically expressing pain/anger and regret; it needed melodic qualities to blend with the remainder of the sound palette, together with the capacity to penetrate - even irritate - human consciousness.

The natural sound had none of these qualities since it consisted of grunting, beak clacking and a cry easily confused with seagulls, a sound required elsewhere in the soundscape. In addition, a 'clean' (uncluttered with other extraneous sounds) recording of albatross from nature was difficult to obtain.

As a substitute I considered human vocalisation (song without words); this had the expressive range but did not sit well among the other sounds being considered for the palette. Electronically generated effects did not satisfy the 'all natural' parameter, nor did they blend with the palette; rather, they intruded a far too mechanical feel whose associations belie the spirit of the poem.

Two qualities of the effect (melodic, penetrating, even irritating) led me to re-investigate a little known instrument that had some popularity in the late eighteenth century, the glass harmonica. I discovered the instrument some

3 Though originally nothing more than a collection of tuned glasses identical to those I would use, the invention of the instrument known as a Glass Harmonica is attributed to Benjamin Franklin; he mechanised a horizontal spindle in such a way that thirty wet chromatically tuned glass bowls could be selected and sounded by the instrumentalist at will.
years ago while searching for 'ethereal' effects; then its multiple overtones and ultra-high frequencies were likely to "....send dogs mad, let alone what it would do to an audience" and it was rejected but I kept the information for future use.

However, a search of the limited recordings available failed to unearth suitable 'albatross' material; the instrument is highly reverberant and it was difficult to isolate elements appropriate for a bird call from compositions by Gluck, Mozart, Beethoven and the like.

With many years experience of vibrating the rim of a wine glass with a wet finger during boring dinner parties, I decided to create the albatross call from three glasses tuned to a middle, higher and lower frequencies by adjusting the water levels in identical wine goblets.

Experimentation revealed three 'tunes' suitable to express the following:

2. A shriek of anger/pain: sustained high frequency with volume variation added in the mix.
4. Departure call: as for the "natural" call but of extended duration.
5. Fixation effect denoting the Mariner driven to proselytise and his guilt/regret: a sustained low frequency with pulsation added by varying the rotation speed of the wet finger.

After an all-night session of experimentation to formulate the above, I was initially concerned when an associate laughingly referred to the three-toned 'natural' call as a "......close encounter with a dead albatross", alluding to Steven Speilberg's film "Close Encounters of a Third Kind". Upon reflection I realised I had been reminded of the film shortly before deciding upon the effect.

Was this Plagiarism? No: rather, I had found inspiration in the work of someone else. In my particular field the dividing line between plagiarism and

4 "Music for the Glass Harmonica", Bruno Hoffman; Candide recording CE 31007.
creation anew is often indistinct and it sometimes worries me that I may be confusing inspiration with 'borrowing'. I say to technology students: "Learn from every show you see. 'Borrow' the good and learn from the bad." Whenever I doubt the wisdom of my advice I return to Tolkien's essay **ON FAIRY STORIES**: he too must have had doubts about the derivative quality of his stories:

It is easy for the student to feel that he is collecting only a few leaves, many of them now torn or decayed, from the countless foliage of the Tree of Tales [or Invention] with which the Forest of Days is carpeted. It seems vain to add to the litter. Who can design a new leaf? The pattern from bud to unfolding, and the colours from Spring to Autumn were all discovered by men long ago. But that is not true. The seed of the Tree can be replanted in almost any soil........ Each leaf.......is a unique embodiment, the first ever seen and recognised, though ........[trees].......have put forth leaves for countless generations of men.\(^5\)

Upon reflection I believe that, should the association between the 'call' of the albatross and the "*Close Encounters*" theme also occur to audience members, it can only be productive. Speilberg chose a five-toned musical phrase as the means whereby extra-terrestrials and humankind attempted to bridge their gap in communication; my three-toned albatross call might represent an attempt at communication between humankind and the broader animal world - an association precisely matching the moral stance my production takes.

A final point in favour of the selection of this albatross effect was its similarity, though in an entirely different register, to the Humpback Whale song I intended using elsewhere.

4.4.2 Whalesong, including ice growling and the sinking of ship.

A most powerful natural effect popularised in recent years is the songs of the male Humpback whale. It has come to represent, with concerned persons, the struggle of endangered species against extinction at the hands of humankind.

---

The effect is even more powerful in my mind since I have had the rare privilege of experiencing those sounds at first hand. Its effect on both mind and soul verges on indescribable; with your entire body acting as a receptor for sonic energy of enormous power and range, the mind skitters from fear to delight and back again.

I intend using these sounds to represent:

1. Antarctic ice as it "cracked and growled and roared and howled" [lines 61-62]. Although at this point the audience will be unaware that a Spirit lives in the waters of Antarctica who will subsequently drive the poem's action inexorably along, I want to make the association with the Whale by using its sound to represent the movement in the ice.

2. As an element in the "music of the spirits" [lines 350-366]. The melodic qualities of the whale's call can be used to augment those moments when a positive association between Nature, the spirit world and Gaia are desirable.

3. A clear motif for the "Spirit who bideth.......in the land of mist and snow" who drives the ship along [lines 377-380].

4. The powerful sound that sinks the ship [lines 546-549]. Since I have attributed to the whale an active role in the revenge of the spirit world upon the Mariner, it was logical that an effect based upon whalesong should be used to represent the force which sinks the ship.

4.4.3 Suspenseful effect bridging to whales and birds.

I needed a source that might represent fear, particularly in the Mariner's mind. What I required was a disturbing noise, difficult to identify, yet which fitted with the remainder of the sound palette. I happened upon a recording of the echo-location signals from porpoise that, with some slight electronic modification (the enhancement of the higher frequencies), provided an irritating quality similar to that of the albatross call; the link to whalesong was obvious, yet it also had melodic and bird-like qualities which made it most suitable.
4.4.4 Melodic effects including windchimes, chapel bell, birdsong - bridging to whalesong and albatross.
For those occasions throughout the poem when Coleridge requires moments of affinity between the Mariner and Nature, moments when - regardless of his state of mind - the Mariner perceives beauty or experiences joy as a direct result of that connection, I required a motif, one that linked the natural world with that of the spirits. Coleridge frequently uses wind analogies to represent those links and, in order to broaden those associations into music and the natural world, I obtained a ceramic windchime which had - to my ear - a sweet sound. Its melody had associations with whalesong and the albatross call, whilst its bell-like qualities I could use - with pitch altered by slowing - as the chapel bell. Its rhythms and delicacy of tone were evocative of bird call and, thus, the chimes provided the ideal link between the more agreeable aspects of the Mariner's natural world.

4.4.5 Shipboard, including creaking timbers, row-boat, water and gulls.
From the many commercial recordings available depicting life at sea, I had to select a group that not only painted the required aural pictures but also whose ambience matched. Every recording has within it reverberations and overtones due to the natural environment in which it was made and, to a lesser extent, the equipment used; thus, a recording of water sounds different depending on whether it was made on a river surrounded by heavily vegetated banks, at sea from a wooden dinghy or whether it was faked in a bathtub. It was important to maintain the authenticity and consistency of the complete spectrum of effects required for the "Mariner" in order to retain an audience's suspension of disbelief.

I was fortunate to happen upon a Canadian recording of marine sounds (unfortunately only available on cassette) which provided a range of isolated sounds that could be mixed as desired; for example onto the track of 'ship travelling through water' the sound engineer could add either creaking timbers or engine noises. From my brief time on a square-rigger at sea I knew the creaking timbers effect was authentic; its similarities to the growling sounds within the whalesong was fortuitous.
Finally, Coleridge repeatedly asks his audience to suddenly return to the reality of the Wedding Guest. I required a motif indicating land that fitted the natural order yet was unique within the palette of sounds, one that could be harsh and attention-getting when required but could also create a subtle ambience. I decided that seagulls best fitted the criteria; every sailor knows them as indicators of land since they only become apparent as the ship approaches the coast.

4.4.6 Music.

When Coleridge chose music, having (he regretted) no training in music, his favourites were Cimarosa, Mozart, Purcell and Beethoven\(^6\)

The use of music does not fall within the 'all natural' parameter and therefore its use had to be severely limited. However, Coleridge demands the bassoon be heard as part of the wedding. Also I believed our audiences would feel most comfortable with the theatrical conventions of musical overture and playout, particularly since it is my intention to subject them to a somewhat confusing mixture of whalesong and subliminal ecological discussion as they pass through the foyer on their way in and out.

The overture and playout had to not only be of an appropriate period; its mood/content and structure/phrasing - particularly that of the overture - would set the dynamics of the poem and nurture the receptivity of the audience. Ideally the overture should be no more than 60-90 seconds of familiar though not immediately recognisable material, should phrase to a crescendo to cover the blackout of houselights, then subside under the effects preceding the voice; most importantly, it should 'smell' of the sea. The playout required a much more legato, contented mood; it should match precisely with the overture but should let the audience down lightly, prolonging their memory of events.

A search of Cimarosa, Mozart, Purcell and Beethoven failed to unearth a suitable piece and I had to search further. Considering all of the above criteria, I could not surpass Felix MENDELSSOHN's (1809-47) Hebrides Overture (Fingal's Cave) Op. 75, [composed in 1830]. For the overture I selected a

---

\(^6\) Whalley, George The Harvest on the Ground: Coleridge's Marginalia University of Toronto Quarterly Vol.38 No.3 April 69 p.61-62
segment of seventy seconds duration some six minutes into the piece while the more familiar opening bars were of the precise mood required for the playout.

The 'sting' of music at Line 32, used again at Line 591 as part of the uproar, had to be clearly bassoon with minimal further instrumentation; it should suggest a rustic wedding by means of a lively celebratory mood and it should also be of an appropriate period. Vivaldi's [abt.1676-1741] Bassoon Concerto in F-flat, "La Notte" provided all of the above though it is unlikely that Coleridge had ever heard of this then obscure Venetian priest/composer.

4.4.7 Added vocals of Hermit singing and muttering prayers.
Additional vocal recordings of the Hermit were incorporated to assist in promoting the light-hearted mood of the poem during Lines 500-540. Like many singers of questionable ability, the Hermit makes up with gusto what he lacks in talent or knowledge of the tune and lyrics while the prayers are so confused with fear that they are a jumbled conglomerate of any religious tract to jump into the Hermit's mind.

4.4.8 Weather: Storms, wind, thunder, rain, etc.
As with the shipboard effects discussed in 4.4.5 above, it was important to select components whose ambience matched throughout the poem, yet whose qualities closely represented the sometimes unworldly weather to which Coleridge subjects the mariner. It would have been easy to have available a series of thunder spot effects which could be injected into more generalised weather tracks. However, by carefully selecting and placing the precise weather conditions, we ensured that text and effects blended more homogeneously.

4.4.9 Naturalistic effects: wedding party, horse-drawn carriage, heartbeat.
These effects were selected primarily for the clarity with which they communicated to the audience locations, events or objects. For example, the horse-drawn carriage moving toward the wedding celebration was selected to communicate period and location while hinting at the event.

However, purely naturalistic effects can be used to signify supernatural events. To represent the death of the crew (lines 212-219) I selected an intermittent
heartbeat. Audiences world-wide are easily influenced by that sound, even when delivered at a subliminal level; we live with it all day and every day, though our mind edits out its perception from our consciousness, and the associations all humanity have with it are closely linked to our life-thread. I was certain that to use it erratically during the death of the crew would provoke horror in the audience, while during Lines 485-500 a consistent beat would echo that horror but advance towards a more positive mood as the seraph-band delivered the Mariner back to the world of the living.

4.5 Sequences.

Within the Sound Cue Synopsis there is one concession to the physical limitations under which the mixing occurred. The soundtrack was broken into twenty sequences, each of which could be constructed as a unit, then the units edited together to create the whole. To contemplate mixing the entire poem in a single 'take' was frightening! Hence, moments were chosen or constructed at regular and convenient intervals where linking material could be cut together without it being obvious. Sometimes a moment of silence was left or subsequent sequences started and finished with identical effects that would allow for cutting between (e.g. lapping water).

Just prior to entering the studio for the mixing sessions, I prepared one final set of documentation: graphic representations of each of the sequences. These simple contrivances serve to combine all the effect and text elements, add a sense of where each is located within the aural picture (left or right in a stereo image) together with the relative volume of each element and displays all of this within a time framework. Not every sound designer uses this format but I find it helpful in bridging the gap between cognition and the highly physical process of mixing; it is an interim step that aids communication between designer and sound engineer.

The Sequence Graphs for "The Rime of the Ancient Mariner" are contained in Appendix 4.3. It can be seen that, even with all this preparation, elements changed in the mixing studio; on occasions an effect was impossible to achieve with the limited facilities but just as often an artistic decision was taken to alter
or remove an element considered inappropriate when heard against the final product.

4.6 Equipment.

The mixing studio available was a hybrid of domestic and commercial, analogue and digital equipment with direct manual patching; though far from state-of-the-art it was the best available within budget limitations of this project.

The equipment is listed below together with an indication of its main use:

Two DAT (digital audio tape) recorders; one for the voice tracks, the other for additional live recordings such as the various albatross effects, windchimes and Hermit's singing.

Two reel-to-reel quarter inch tape, quarter track, 7 1/2 ips (inches per second) tape recorders one of which had variable capstan speed (i.e. pitch/speed control); the later machine carried such effects as the windchimes slowed to make the chapel bell and the whalesong slowed to create the effect which destroys the ship, while the other machine carried long background tracks such as the ship under sail.

A good quality cassette player; for bassoon music, lapping water and other marine effects.

Two CD (compact disk - digital) players; for whalesong, music and sound effects from the "Spectacular" library.

A 6-channel-in, 4-channel-out analogue mixer with sufficient tone controls, effects output jacks and satisfactory low-noise operation to provide all the mixing facilities.

A single channel digital delay/reverb machine to provide altered ambience for some of the effects such as the Voices-in-the-air.

A good quality (Revox B77) reel-to-reel quarter inch tape, half track, 15 ips tape recorder upon which the final mix was recorded and which was used in performance for playback.

Monitoring amplifier and speakers.

Various connectors, headphones, etc.
Since resources limited us to an analogue mixing desk, the 15 ips half-track reel-to-reel analogue machine was considered of sufficiently high quality to make the recording; however, the final mix was dubbed to DAT for security.

4.7 Mixing processes.

With sometimes as many as ten different signals to be manipulated through six channels, often continuously varying volumes for each, delicate questions of timing (such as two second pauses in the voice track to enable an extended fade of an effect) and a continuous eye to be kept on the recording meters to ensure the final product did not suffer from signal overload - with all of this and much more to be considered with every take, the sixty five hours spent in the poorly ventilated, hot studio were exhausting.

After an initial period of familiarisation, my recording engineer and I fell into a routine that comprised daily maintenance followed by a review of previous work, then onto the next sequence. After studying the documentation, trials and experiments to best organise the patching of each source for ease of operation were organised. Once these important decision were made, recording levels for each component were set to ensure maximum signal-to-noise ratio with sufficient clarity in the final product. With all of these manipulations clear, tasks allocated to each of us and copious notes taken to create cue sheets we would try a run.............often with disastrous results! Only after all misunderstandings, mistakes and blunders had been worked out in repeated rehearsals would we run yet again with the recorder in operation. Close scrutiny of the results of that recording would suggest refinements, shortcuts or even substantial modification to our cue sheets which resulted in more rehearsals and still more trial recordings. Sometimes two different approaches would be compared with careful deliberation over the qualities of one 'take' against another, qualities that the unprepared listener might be unable to detect. Often a complete comparison could not be made till we listened to not only both 'takes' but also the preceding sequence to see which 'take' best maintained the flow of the poem. Fractions of a second were important; subtle variations in the shape of fade had radical ramifications within the soundscape; hunches, vague feelings and intuition were given room to grow ............but
the guiding principles were always that our audience should clearly understand Coleridge's poem and the interpretation placed upon it.

We averaged three sequences per day. Often time or enthusiasm were not the limiting factor but mental exhaustion due to the concentrated effort and the conditions under which we worked. We fell into a pattern of finishing the day once the more mundane factors had been established for a sequence; we would then return fresh in the morning to undertake detailed rehearsals, achieving a satisfactory result more easily by so doing.

Eventually the entire soundtrack, all twenty sequences were on tape.

4.8 Editing.

The next task was to edit all twenty sequences together as planned (see 4.5 above) in such a way that the pace and tempo of the entire production held together without the audience being able to detect the mechanics of the joining process.

The primary danger throughout this process was that an incorrect splice would result in irreparable damage to a 'take' that would demand the entire sequence be re-recorded. Fortunately that did not happen.

A slight difficulty became obvious at the last moment. With the entire tape edited together there was too much to fit on a fifteen inch spool, the maximum available on our playback machine. By removing the playout music and resolving to take that direct from CD in performance, the problem was quickly solved ...............though with some slight inconvenience and loss of reliability being created. However, it did allow the DSM to more easily 'call in' the playout to suit the reaction of each audience.

My primary objective had been substantially achieved: thirty seven and a half minutes of carefully phrased poetry expressed in both words and a symphony of natural sound. Slight modification of the splices joining segments together were still possible once we added the visual elements to the soundtrack, though we had to wait till Production Week to discover that none were necessary.
4.9 Playback.

One final check remained: to playback the final product under as close to performance conditions as possible in the unique reverberant chamber that is the Hope Theatre.

Not only does the space itself provide a particular resonance but also its sound reproduction equipment, in particular the combination of amplifiers and speakers, provide peaks and troughs in the sound spectrum that vary with the material being reproduced and also the location of the listener within the theatre.

There was particular danger in our approach to the mixing of the soundscape. We decided to make the selection of balance and comparative volume in the studio and record it as a fait accompli on a stereo format since we did not have available multi-track equipment of sufficient quality. The advantage of this approach was that we would guarantee consistent performances; however, what we lost was the opportunity to easily adjust the balance between elements within the soundscape. Since it is possible for an environment to react differently to certain elements within a recording compared with the apparent result in the studio, this posed a danger to our work. Of course, some degree of control remains by means of tone control either at the theatre's mixer or by means of the stereo graphic equalisers available as part of the playback equipment in the venue but it could not be relied upon to solve extensive difficulties.

Fortunately we were not plagued by many faults. The chest tones in my voice are slightly too dominant in the Hope Theatre; as a general rule that could be modified by graphic equaliser for the majority of the performance. However, the warmth in tone of those same frequencies - together with the reverberation we added to the recording - suited the mood required for the Voices-in-the-air sequence [lines 398-429] admirably and I would suffer the slightly boomy quality of the remainder of the recording to enjoy those few moments of perfection!

---

7 This is the case with every venue, not just the Hope; in fact, its acoustics are quite pleasing to the majority of ears.
In addition a slight imbalance existed with the Fixation effects during the early stanzas; though I wanted the strident quality to disturb the audience, the effect achieved might be too strong for some observers. I was undecided then, and remain so today, whether a balance between 'disturbance' and 'clarity' has been well struck.

4.10 Summary.

With the completion of the soundtrack for the production several major hurdles had been surmounted. We had not merely devised the sound - the purely aural stimulus - in our son et lumiere; we had created the metronome for the production, its heartbeat, its bio-rhythms. Throughout the process the visual elements became more solid in my mind's eye; they had been waiting for both timing details and quality of sound before I could apportion to them their weighting in the overall structure. With those elements resolved, the form and visual impact of the lighting could be better attacked.
Chapter 5:
PAINTING WITH LIGHT

Two years ago, whilst hurrying down the School of Creative Arts Long Gallery with some administrative matter in hand and my mind all at sea with the difficulties inherent in my production of "The Rime of the Ancient Mariner", I saw the ship's sails before me on the wall. They, together with many other elements of a strong maritime flavour, were integral to the paintings of Edward King, then a second year Visual Arts student at the School of Creative Arts and currently an accomplished third year student. Immediately upon seeing that painting I had a solution to the difficulty of representing onstage Coleridge's ship but, more valuable than that, I had a source of inspiration.

I am not a great creator of images: I am able to draw only mechanical diagrams and the most rudimentary illustrations..........but give me any object and I'll light it fifty different ways, each with an atmospheric nuance that tells an entirely different story to the other forty nine. In Edward's work I saw things I had only before seen in my imagination; it was apparent to me that, if our production of the "Mariner" were to have the visual impact of which I dreamed, I needed the talents of artists such as Edward. Further, the complexity and scale of the production I foresaw demanded a work-force of widely varying talents, the like of which require a budget far beyond that available to me.

The solution to acquiring both the range and quality of talent was provided by the undergraduate course Interdisciplinary Projects at the School. This scheme provides opportunities for approved projects to utilise students' creative processes of high educational potential. From the outset I had no doubt the "Mariner" had the potential to involve volunteer theatre technicians, painters, actors, sculptors, designers - even science students! - in a collaborative enterprise that would be both educational and satisfying.
Time would prove me correct .... but five months were to elapse between the completion of the sound track and Opening Night, five months of evolution toward a production in which the 'sails' inspired by Edward's paintings became near naturalistic objects at the rear of the stage rather than the projections initially envisaged.

Not only the sails evolved; some items went through a violent metamorphosis from a figment of my imagination to the stage while others made the transition virtually unchanged. This paper will outline that evolution using the sails and some other selected items to illustrate the degree to which initial ideas can be compromised or modified by practicality; a complete catalogue would be impossible to contemplate. The reader interested in anything other than an outline must read further; a detailed description of the process involved is contained in my textbooks "A Process for Lighting the Stage"¹ and, to a lesser extent, "An Approach to Stage Lighting"².

A complete documentation of all the mundane details of budget, publicity and other minutiae that go to constructing a successful performance would be equally impossible to contemplate and, in any case, they do not fall within the scope of this paper. Here we are concerned primarily with the manner in which a concept - linking Coleridge to the Gaia Hypothesis - was realised in images, colour, depth of field and operational dynamic that, together, formed a theatrical entertainment of considerable power.

5.2 Visions in Light:

The seminal task in the creation of the visual aspects of any son et lumiere production is the formulation by the lighting designer of the Cue Synopsis. What is it precisely?

The document should encompass every potential you see for lighting within the production, with only a passing regard for limitations of time and equipment - those compromises will be

---

1 Ian McGrath A Process for Lighting the Stage Allyn & Bacon, Boston, '90 p.65
2 Ian McGrath An Approach to Stage Lighting School of Creative Arts, University of Wollongong, 1992
forced upon you later! It is an outline of the extent to which your design could serve the production, a document of intent - not a guarantee of results.

As can be seen from the enclosed Lighting Cue Synopsis for the "Mariner" [see Appendix 5.1], this document is principally a sequence of simple statements which express an interpretation in light that is linked directly to the source material - in this case, the sound recording of the poem. The statements succinctly describe what the audience may see during a sequence of moments; each moment is a 'vision', a picture plucked from the imagination of the designer that s/he hopes will trigger specific responses in an audience. Together, those responses will generate an impression that patrons take with them from the theatre. The care with which those 'visions' are constructed, the precision of their execution and the appropriateness of the individual images from which each 'vision' is constructed will determine the clarity with which patrons receive the intended message.

If the designer is to allow their imagination complete freedom of expression, they should ignore all limitations that might distort their interpretation of the source material. During these initial stages they should not be distracted from their task by budget considerations, limits on available equipment or the capacity of the venue to support the production since these mundane matters may inhibit their freedom. But to ignore all limitations is to design a production which makes such unrealistic demands that failure of the enterprise is guaranteed; the walls of the stage-house might need demolishing to fit the show onstage or the budget reach heights resembling the national debt - both are equally irresponsible!

Part of the artistry of the lighting designer is the skill with which they walk this tightrope between inspiration and disaster when writing their Lighting Cue Synopsis.

5.2.1 Cue synopsis
As intimated throughout the prior chapter, the development of a Cue synopsis from the triggers contained within the poem commenced long before the sound

---

3 Ian McGrath A Process for Lighting the Stage Allyn & Bacon, Boston, '90 p.65
track was laid down, if only in a subconscious fashion. I contend that the 'artist' in the soul of the creative individual often sees the completed artwork in a moment of inspiration; however, it is the 'craftsperson', also part of that same soul, who brings it to fruition by painstaking analysis, attention to detail in experimentation, dogged determination and careful application of craft.

The accompanying synopsis for "Mariner" represents a record of the dissection and analysis of that initial inspiration; it also documents the order struck from a confusion of subsequent creative moments when a sound or a phrase within the poem triggered a vision. Often entries document where my craft-sense recognised gaps between the visualised moments; unfilled such gaps might mean uncertainty in a patron's mind or a loss of dynamic in the structure of the visual stimulus.

In any successful theatrical piece the creators must be concerned not only with the transfer of impressions to an audience but also with the rate at which this occurs; to sustain interest over a prolonged period it is desirable to have an audience's interest phrase upward as the piece progresses to a conclusion. This can be achieved not simply by increasing the quantity of stimuli but by increasing their complexity, perhaps by re-introducing images used earlier but in such a fashion that new associations are formed in patron's minds. In short, the dynamic of a production can be sustained if we ask our audience to 'work' harder as the piece progresses.

This was the intention for what became known as the 'Fixation effect' which first appears in the state of Cue 5 (see Appendix 5.1). Throughout the production, it is closely associated with a strident sound effect derived from the call of the albatross in pain. The intention was to give substance to the Mariner's feelings of guilt, regret and shame - those forces which drive him to wander the globe in search of redemption. The form of the visual effect - an indistinct moving flame - was suggested by Coleridge's line ".....this heart within me burns" (line 585 in the state of Cue 102) where the Mariner, in conclusion, explains why he has been harassing the Wedding Guest. At this moment the Wedding Guest finds understanding and it was my intention that a similar sense of discovery would be experienced by our audience as they recalled those prior moments.
Often the 'vision' expressed in the Lighting Cue Synopsis is not complete or is, at best, a sketchy outline of what is required by the moment. This is in part due to my lack of ability in creating images but it should not be seen as a deficiency in the formulation of the synopsis; rather, this document provided an outline against which the images created by the visual artists working the production could be assessed. Too often a director of a theatre piece is reduced to evaluating input from other members of the collaborative team in purely subjective terms; they rely entirely upon intuition to direct their designers. In my opinion, this is counter-productive and, at worst, promotes an impression of an arbitrary, dictatorial superior artist who sits in judgement over the contribution of others. This synopsis outlined what was required by the moment, providing parameters against which the success of images could be judged by all concerned; it was the means by which the director communicated his 'vision' and a clear statement of the guide-lines under which he would exercise his role as 'caretaker of the Vision'.

Take, for example, the 'hands' sequence described in Cue 105. The interpretation expressed in the reading of the poem suggested that between lines 609 and 610 a major change in attitude occurs in the Mariner; up to that moment his intention is to convince the Wedding Guest to accompany him on his future wanderings - the Mariner is lonely and tired and needs the support of a companion. We required an image that pointed up the failure of this intention and, after discussion, settled upon a sequence of hands. The first is a hand, quiescent, belonging to the Wedding Guest; another hand reaches to make contact, the first withdraws quickly and the Mariner's hand fades slowly as he begins his farewells. We could find nothing better to express the moment but recognised that these images might not match with the style used elsewhere. To this point all images were to be of objects as much as possible derived from the animal world; we would need to interpolate prior imagery to justify the sudden inclusion of human physique. We chose to introduce a sequence of hand-based images to represent not only human beings (e.g. Pilot and Hermit in cues 92 & 93) but also the blessing inherent in the seraphs in cue 90; in this way we subliminally suggested that hands and the beings directing them are capable not only of activity but also of expressing intention and emotions.
Not all images were intended to be as literal as this sequence of hands; often effects forge subliminal associations with other occurrences or sensations and, thereby, take on added significance to an audience. significance that could be called upon at will to generate a recall of the original stimuli. In much the same way that Pavlov was able to predict the response of salivation in dogs, so too can we theatricals manipulate our audiences to generate predictable feelings or reactions at 'request'. Skinner, another behaviourist psychologist who furthered Pavlov's work, referred to "conditioned responses" and that term is most applicable to the manner in which we use these techniques in theatre. By carefully introducing an effect at a time when other stimuli make the location and/or emotional content unambiguous, we can later use that same effect to provide added significance to another moment or to subtly trigger a similar response. However, we must be careful not to confuse the audience by negative conditioning - that is, using the stimuli at inappropriate moments or when a different response is required.

For example, in cue 11 (line 54) we introduced an effect that came to be known as the "Aurora Australis" image, a gently moving and quite vague effect that was intended to represent Antarctica and the body of powerful spirits that dwelled there. Though realistic images of icebergs are the initial association, that base is quickly expanded to include the albatross and also the whale - it's almost as if the whale is the executive arm of the Aurora's power and the albatross is its favoured child. Hence, whenever we required a less specific trigger to remind the audience of the crime committed by the Mariner or to reinforce the need for retribution, we could call upon this image.

It was not accidental that the effect used for the Aurora had similarities with that used during the "Voices in the Air" sequence (lines 392-429); colouration, movement and tempo-rhythm were near identical though the basic form had solidified into a globe with dark and lighter sides inter-connected to hint at the Yin/Yang symbolism of Eastern religions. That image, in turn, found complete realisation in the final image of the production, that of the Earth seen from space. Thus the parochial powers of the Antarctic are subliminally connected with the greater powers of the cosmos and are finally embodied in a symbol that has come to be closely associated with Gaia.
My primary consideration when writing the cue synopsis was clarity of intention; if we, the creators of the production, were unsure of the meaning of any single image, then we could not expect an audience to follow our train of thought. This is not to say that we expected every patron to know precisely what we intended; rather, that the majority - not the lowest common denominator, but the expected 'norm' - of our patrons would be able to discern a consistent thread throughout the myriad of impressions given them and that they could identify sufficient associations between Coleridge's words and our son et lumiere to discover for themselves the link to Gaia .......though they may not have used those precise words to express what they felt.

Finally, any cue synopsis is a 'work in progress', hence the incomplete quality of the document. It is the means whereby the lighting designer communicates to those with whom he is associated - either design colleague, junior member of the realisation team or, ultimately, themselves - their current intentions for the show's lighting. The moment that information is reworked into more concrete form the synopsis is superseded but, until then, the information may be worked over, updated, modified and refined using this simple format, a form that may withstand maltreatment without losing clarity. The document appended was last modified only weeks before production and was used throughout the plotting of the show, though some of the information contained therein dates from nearly seven months prior.

5.2.2 Limitations and Parameters
In the same way that a cast of actors is carefully auditioned to select the best for the play, so too should the venue and backstage team be selected for their ability to best present the piece ......that is, in the best of all possible worlds! Usually we have no choice of 'house' into which we must fit the production; skilful design should make it appear that neither has an adverse affect upon the other and that the 'marriage' between them is harmonious. In the process we should ensure that maximum effect is extracted from the resources available to service the Production Concept.

What follows is a summary of the primary limiting parameters on our production of "The Rime of the Ancient Mariner":

PAINTING WITH LIGHT
**Hope Theatre.** University of Wollongong

This production was to be the first with major technical content to be mounted in the eight-month-old Hope Theatre. As Theatrical consultant for the construction of the Hope, I felt an added obligation to fully utilise the space since the "Mariner" would be seen to be a 'show-case' for the technical capabilities of the building.

It's primary limitations were, firstly, the lack of fly-tower in which to store scenery by lifting it out of sight of the audience using a counter-weight system. This capacity demands a grid-height over the stage of about 20m, depending on the height of the proscenium arch; instead the Hope has only 5m over and above a 7m opening.

Another major limitation is quantity of lifting equipment over the stage; there are three 0.5 tonne lighting winches (downstage, mid and up) and four scenery winches, all in fixed positions since grid access is impossible without hiring in equipment. The bars supplied are sufficient to light the stage well, to effectively mask the back-stage areas from the audience's sight using two sets of legs and borders and also to suspend the cyclorama (white sharkstooth gauze) with a set of black half-stage drapes on a french-action tab track toward the rear of the stagehouse.

Finally, the number of dimmers available and the associated patching system limit flexibility. There are currently seventy two 2.4kW dimmers divided equally between stage and Front-of-house. 120 'soft' patching outlets service each set of 36 dimmers but there is no means of patching between the stage system and Front-of-house. The patching outlets are generously distributed throughout the catwalks and stagehouse, though there is no provision for footlight patching along the apron of the stage.

To varying degrees each of these limitations contributed to the less successful elements of the "Mariner" production.

---

4 Budgetary restraints were necessary when designing the theatre and we were given the choice of an orchestra pit or a fly tower.
Personnel
Volunteers were recruited from the undergraduate student body by offering a six credit point Interdisciplinary project at any one of the three year levels; I actively pursued specific talents to cover important areas of responsibility (e.g. Stage Management, Lighting and creation of images) but no student was refused access to the course. In the final analysis, the majority of students were from the Theatre Strand drawn by the opportunity to participate in a major production of unusual form; however, other students came from Science - he was particularly effective in the creation of special effects machinery - and, of course, the Visual arts area. The interaction between the Visual and Theatre artforms became the most rewarding aspect of the production for me and also, I feel, for many of the students; certainly the two principle third year image makers, Julie Brokenshire from sculpture and Edward King from painting/sculpture, found the experience broadening and artistically satisfying though the practicalities of working in a collaborative enterprise rather than in isolation created some difficulties. The project was structured to fit into the academic year so that it created minimal interference to the student's other obligations; during the First Session regular meetings were held to ensure a clear understanding of our common purpose, to decide upon and manufacture the images and to complete preparations; the last fortnight of the mid-session break was dedicated to production and rehearsal while the first week of Session Two saw us completing the rehearsal process and performing.

Throughout students gave enthusiastically of their time and talent; the experience gained through working in collaboration on a production primarily concerned with ecological conservation, a topic for which they have great concerns, provided satisfaction.

Equipment
The majority of the equipment used in the production came from the stock of the Hope Theatre (lighting, sound, cyclorama and blacks) augmented with some items from the School of Creative Arts (back-projection screens and some lighting equipment).
One special effect machine was hired, though the majority were manufactured or adapted from stock items by students. All artworks, projections and items of scenery were created from minimal resources by students. A few items, such as a cargo net and aquarium equipment, were generously donated by local companies.

Budget

A production such as the "Mariner" might benefit from having a huge financial backing; however, this does not always guarantee proportional quality. Our intention was to extract maximum effect from the resources available rather than seek added sources of finance; all expenditure was to be met from earnings or myself. However, the true cost of this production is difficult to ascertain since the use of facilities, equipment and labour were provided in abundance without charge.

Estimated earnings from six public performances was $1,500 with a ticket price of $7 adult, $4 concession and more generous school's concessions, though students of the School of Creative Arts were provided with a free performance as part of the Art-of-Lunch series. With minimal expenditure in publicity and promotion, apart from simple posters and fliers, actual earnings totaling to $1,457.

However, costs blew out to $2,200 of which a considerable proportion remains as stock in the form of ten special effect motors, groundrow cover and the like.

5.2.3 Setting

Developing a setting from the triggers contained within the poem and cue synopsis were a matter of careful application of craft rather than 'art'; however, in the application of mechanical skills and the effective allocation of scant resources there is need for imagination and masterly workmanship. As a lecturer in the School, my familiarity with resources was important; I was able to carefully integrate available equipment to create a mosaic of projection surfaces in an arrangement that appeared far more 'custom-built' than it was.
In Appendices 5.2A, B & C the Plan, Section and Elevation drawings are provided to illustrate the manner in which the surfaces and equipment were related. We tried to ensure sufficient throw distance between screen and lantern to allow maximum image size while providing as many depths of field as possible in a shallow stage house. Near-complete masking of distracting mechanics was also achieved in a house with difficult horizontal sightlines. Tolerances were close, particularly in the mid-stage area, yet the scale drawings appended were sufficient to ensure success with all bar one item added late in the process. About 90% of the planned elements of the setting worked as predicted. A study of two late added items will illustrate how lack of attention to detail at any stage in the preparations can have a deleterious effect on the production well in excess of the magnitude of the contributing mistakes.

To keep things in perspective, it should be noted that, although one of the late additions was less than successful, the 'sails' enhanced the overall production by adding a further multi-dimensional depth-of-field and the opportunity for further emotional manipulation by means of the colour variations in the background. You will recall how a painting by Edward King inspired a 'solution' to difficulties I had with the ship's sails; those difficulties included the desirability for the sails to appear and vanish as required yet be central to the narrative, to give the appearance of movement in the wind and to vary colour to suit the environment in which the ship found itself. I envisaged interconnected projected images based on Edward's images from two lanterns focussed in the centre of the cyclorama through either side of a common 'flicker-wheel' which would be switched on and off to simulate movement; colour might be varied through use of colour-changing equipment or - at worst - physical alteration of colour by a crew member on the bridge. Three things mitigated against this solution: firstly, cost of manufacturing another 'flicker-wheel' and providing automatic colour-changing; secondly, insufficient lanterns suitable for the projection of these images (those 1.2kW profile lanterns we had were dedicated to other important functions, though we did have available 1.2kW fresnel lanterns more suitable for use behind the proscenium arch); and last but most importantly, the scarcity of available dimmers Front-of-House while there was an excess onstage.
If I could re-conceive the image using the available backstage equipment, it would be a more efficient use of available resources. We were able to create an effect very different from the original, but one which could be equally successful by draping in front of the black tabs a combination of calico strips and actual sails borrowed from local sails-makers and hang-glider manufacturers, then lighting from above and below using two dimmers to control fresnel lanterns in a variety of colours. My only fear was that the ambient light from other units backstage would make the white sails impossible to 'disappear' when not required; this difficulty eventuated in production, though the distraction was sufficiently muted to allow us to proceed. In fact, I believe there was advantage in having the added texture in the distant depth-of-field even when the 'sails' were not required (about 25% of the time).

Development of the 'cloud' was, however, less successful and, at root, the difficulty lay with a misconception regarding the nature of the effect. I wanted a representation for the "....one black cloud" (line 320) but, wrongly, originally imagined it as a projected effect. My mistake was, in retrospect, easy to see: projections use light to cast an image but what was required to represent a black cloud was an absence of light. I struggled with this misconception for too long; not only expediency but also my intuition demanded that I shift the 'cloud' away from Front-of-House but I did not realise the full implications till too late. Just days before bump-in I realised that the cloud must take the form of a silhouette - an absence of light! - and worked quickly to manufacture and suspend a 3.5x2.5m two-dimensional image from chain spot-lines in the upper prompt corner of the proscenium arch. I intended to pivot the image out of sight into the Prompt wing using a block-and-tackle but did not have the time to conduct experiments to ensure the possible movement would be sufficient to disappear such a large object or that the noise associated with the movement would not be distracting. The second mistake was to place the 'cloud' downstage of the cyclorama in the belief that I would need that distance between the lighting units casting the silhouette (rigged on the No.2 Lighting Bar) and the 'cloud'. I failed to realise that a solid object in front of the cyclorama would appear to the audience to be in a closer depth-of-field to the remainder of the images creating the 'sky'.

PAINTING WITH LIGHT
The necessity for haste was due to the inaccessibility of the grid; I needed the *Tallescope*[^1] at maximum 8m extension, a long stick and enormous patience to position two chains over the grid supports, an exercise that I knew had to be completed prior to the main bump-in since the delay such an activity would create might jeopardise the remainder of the production. In rehearsal we quickly realised both the difficulties and the likely improvements but the time required to make changes was not available without cancelling important consolidating rehearsals. Since I strongly disapprove of sending a crew to performance without the confidence born of sufficient rehearsal, I chose to suffer the consequences of poor preparation. The cloud was fixed in a position where it might still be seen as the source of the associated effects of rain and lightning, yet might not be too distracting for the remainder of the production; the crew also worked overtime and under great difficulty to drape the image in white gauze so that it might be less dominant. As it was, the most apparent deficiency in our production was due as much to insufficient time to execute a correction as to any lack of appreciation of the errors in my prediction.

### 5.3 Process:

The development of the Cue Synopsis into documentation to ensure accurate and speedy realisation of the product in the theatre takes two paths. The first produces information with which to pre-program the Lighting Control desk, known as Preliminary State-of-the-Board sheets [see Appendix 5.5], while the other results in the preparation of the Lighting Plan [see Appendix 5.7A], a blueprint for the layout and accessorising of equipment. Both have a common stem in a list of lighting Circuits [see Appendix 5.3A] which, in the opinion of the designer, will be effective tools from which to reconstruct the 'vision' expressed in the Synopsis.

The Lighting designer's purpose in spending so much time on documentation is to detail the mechanical, predictable aspects of a Lighting design to facilitate efficient installation, thus ensuring time for refinement of the product and detailed preparation of the operators - in other words, our intention is to get the mundane detail out of the way quickly so that we maximise the time spent on the 'art' of lighting.

[^1]: Trade name for an extendable mobile work platform.
5.3.1 Circuits and equipment.
Appendix 5.3A lists the final selection of circuits I made for the "Mariner". Each circuit is a fixed grouping of lighting units, images, accessories and colour which together create a single component in the 'vision'. Using these individual component 'tools' the designer re-constructs the composite pictures described in the cue synopsis.

The list took this form after much compromise and re-evaluation; the first extraction from the Synopsis contained 147 circuits - and that was after removal of all duplications! However, with only 72 dimmers available I was forced to retain only those which would be most effective. Of course, a single dimmer may be used to control more than one circuit if there is sufficient time and the available personnel to 're-patch' (either by mechanical re-plugging or switching) between consecutive uses of the dimmer without too great a danger of mistake and accident. Since "Mariner" would be very fast - averaging a cue every 20 seconds - we could not afford mistakes that would disrupt the smooth operation of the show. However, I needed additional flexibility Front-of-House and chose to re-patch ten circuits to three dimmers using the follow-spot operator, once he had left the bridge and returned to the bio-box.

The Lantern Allocation given as Appendix 5.3B details the next stage in the analysis, the allocation of specific equipment to best fulfil the designer's intention for the circuit while apportioning the available resources equitably. In a 'best-of-all-possible-worlds' a designer would use only equipment well suited to the task envisaged; however, in the real world we are required to compromise so that important images are well serviced and less important circuits use what remains of the equipment, often applying our craft to adapting inappropriate equipment to better service the task intended for them. It is in this area where a bigger budget would have been useful, enabling us to hire more suitable equipment.

Example, we used the ubiquitous lecture theatre over-head projectors in five circuits whereas hiring state-of-the-art slide projectors would have created more flexible images that did not require manual slide changers - one of our operators was crouched behind the guard-rail in the orchestra pit for the entire performance!
At the end of this process\(^7\) I was able to detail the precise equipment necessary for the rig, including accessories and a rough indication of colour, so that the crew and image makers could commence preparation of the specifics.

### 5.3.2 Preliminary SOB Sheets.

This massive document, only a portion of which is shown in Appendix 5.4 (34 cues only), is a means for the Lighting designer to encompass the entire breadth of the production at a single glance; for example, it is easy to check the number of times a circuit is used as a guide to the integration of the individual circuits into the fabric of the Whole. It allows him/her to organise detail, estimate levels and communicate this information to the Board operator in sufficient time to allow transcription onto the computer's memory prior to the Plotting session.

Because of the sheer magnitude of the task this document may often be full of mistakes or inconsistencies and, because of this, many feel its preparation is a waste of the designer's time. However, I believe that whatever can be done to make the Plotting session more efficient and maximise the time spent on refining the 'vision' rather than sorting out detail is of enormous benefit to the production.

In this production extreme detail was possible with the precise timing of cues, since the sound track was laid down and able to be carefully dissected and compared against the Cue Synopsis with the aid of a stopwatch. This activity can often take as much time as the plotting of states, particularly when such precision cuing as the "Mariner" demanded is involved. However, once again we were able to pre-program the control desk with this information well in advance. At the same time, we provided the Deputy Stage Manager with cuing details that made her familiarity with the calling of the show of exceptionally high standard prior to the stress of the Technical rehearsal. A copy of the complete text together with cue positions is included as Appendix 5.5. At the end of this process\(^8\) the board operator was able to check whether the control desk was capable of storing this mass of information in its memory.

---

\(^7\) Completed around April.

\(^8\) Completed around May.
The Lee-Colortran 'Scenemaster 120' lighting control desk is able to store up to 200 cue states before requiring a floppy-disc memory change; "Mariner" used 196. Had more memory been available I could have removed the images of 'running' dolphins from the Effects Sequencer during cues 6.6 and 7.5 and included them as part of the memorised cues. The advantage of doing this was that it would have been possible to smooth and shape the fades by adjusting timings (as in Q68), rather than suffer the switching on and off of the sequencer; the disadvantage was that, in so doing, we would use more memory than was available. Hence we suffered a loss of subtlety with the dolphin effect rather than risk a mishap with a memory change mid-show or the loss of an important effect. These figures illustrate the degree to which we designed to the practical limits of the available equipment without jeopardising the reliability of the performance.

5.4 Imparting the Vision to others:

"If we were in class I'd advise against an enterprise where so much is invested in one individual! Direction and conception; design of set, lighting and sound; performer and technical director - it's insane!! At the moment my head is trying to cart-wheel, leap ahead to Opening and all I'm managing to do is go round in circles.

What I need from Stage management is: someone to relieve me of the detail of organisation, someone with an overview of the production so that they can trouble-shoot, someone to oversee the performance details of the show and, most importantly, someone to keep an eye on me! - to ensure that if any one in the team has a problem with me they feel free to complain to you and you are free to raise it with me or with some other member of staff."

This memo to Stage management was intended to clarify what recourse they had should a repeat tantrum occur like the one that nearly destroyed the whole production for me on the first day of team meetings. After nearly three years of working alone I wanted the others in the team to be at the same speed I was and I begrudged the time it would take to even partially familiarise them with my thought processes; I wanted immediate results. Fortunately artists are an

PAINTING WITH LIGHT
understanding group of human beings; they forgave me my folly and we forged a working relationship that was mutually beneficial and artistically satisfying.

There was no need for the tantrum - it was, in all likelihood, more an expression of fear - because we had scheduled five weekly 2 hour sessions together with occasional specialist meetings (e.g. construction, publicity) to get the team up to 'speed'. Our goals were to allocate responsibilities to individual team members, to ensure each member was familiar with the objectives of the project and to communally create and approve basic artwork from which all images for the performance and publicity would derive. These sessions were followed by another seven weeks of regular group meetings and specialist workshops in which artworks and equipment would be manufactured. In short, I had to get the group thinking as a team with common objectives, then get the design details out of my head and into their hearts and fingers.

It is in this second function that many directors are less than satisfactory. The pressures of time and the drive to succeed make communication difficult; it's often easier to do the job yourself rather than take the time to ensure a clear understanding in the team member. This approach might be quite successful up to but NOT including performance, since there is no way a single individual can do everything to satisfy an audience once the show is running. An even stronger argument against lack of communication is the wasted potential in the under-utilised team members, each of whom are creative individuals being constrained from delivering of their best by enforced ignorance of the production's objectives. I believe that we were relatively successful in this regard during the "Mariner" production, particularly once we were in the theatre and working together on a daily basis. During the earlier developmental period we had less success due largely to the external pressures on both undergraduates and myself of earning a living and meeting life's myriad other commitments.

In addition to the difficulty of communicating content, an added problem with style was experienced by the visual artists; they were concerned with what they perceived to be an over-simplicity of the images. The essence of the problem was the difference between an image that may satisfy a visual artist and one which is used to affect a theatre audience in, sometimes, the briefest of
moments; it is a difference in timing and clarity. The painting on a wall of a gallery may be viewed at the public's leisure and the artist is at liberty to include multiple depths that might eventually be fully appreciated after many viewings. However, images used in *son et lumiere* are often fleeting moments - opportunities in the narrative time-frame to communicate a point, trigger an emotion or, at the very least, provide quick access to previously generated responses. However, when seen in isolation the individual images might be considered cliche. I had anticipated difficulties of this nature and allowed further developmental time during the rehearsal process in which the visual artists could modify the images to better suit the context and time-frame once they saw them in performance. It was largely a matter of experience; prior to this event our colleagues from Visual Arts had never before worked in theatre and did not know what a *son et lumiere* was, let alone have an appreciation of the stylistic demands the artform might make. All of us needed time once the larger frame work of performance had been constructed to adapt and modify our ideas to better suit both the medium and the message - a responsibility the visual artists accepted without reservation and one from which, I believe, they derived a deal of satisfaction.

5.5 Realisation:

At the conclusion of the time allotted to imparting my vision to the others in the team, we agreed upon an image that would be the leading motif in all advertising material: the albatross eye with the Mariner's head and Moon superimposed [see Appendix 5.9]. A composite formed from elements contributed by a number of individuals, this image was seminal in the creation of the myriad images required in performance and its creation seemed to galvanise the entire team into production.

5.3.1 Manufacture and experimentation

The majority of manufacture and the decisions required prior to the making of each item were completed within a seven week period of regular meetings and specialist work periods. The crew was divided into parties with particular responsibilities but labour demands often required personnel to shift from team-to-team as work-load demanded. Teams were created with the following responsibilities:
STAGE MANAGEMENT.

Production management: personnel organisation, scheduling, budgets, space management, performance personnel management, calling performances, assistance to the Director.

CONSTRUCTION - SETTING.

Flying, screen support and movement, masking, groundrow.

IMAGE CREATION: Large.

Experimentation with and realisation of overhead projectors, live performance images, shadow puppets, including design and realisation of foyer display [see Append 5.6 A & B for examples of artworks]

IMAGE CREATION: Small.

Experimentation with and realisation of smaller images, gobos, lantern projectors, etc including apparent movement devices, ripple pool, Pat 252, effects projectors, etc. [see Append 5.6 C for examples]

LIGHTING PRODUCTION CREW.

Experimentation, documentation, crewing, rig, focus and operation.

SOUND OPERATION.

Operation of sound and communications in production and performance [see Appendix 5.8 - Sound System diagram].

PUBLICITY - FOH.

Liaison with publicist, preparation of copy for brochures, poster etc, invitations, credits, FOH management.

The experimentation required to realise the images was not simply a matter of applying well recognised techniques in lighting such as measurement of image sizes and acid etching aluminium plate to create gobos. Julie Brokenshire\(^9\), a sculpture student, was commissioned to produce a model of the skeletal ship in which Death approaches. She worked with wire and plaster but could not find anything satisfactory till, whilst walking in the country, she came upon the skeleton of a sheep, the ribcage of which formed the hull of our phantom ship. It was a little smelly...... but with its shadow being cast onto a screen from deep backstage, only the puppeteer had to contend with the odour. Colorine, a transparent colorant whose origins lay in the distant past of stage lighting\(^{10}\),

---

\(^9\) Also creator of the sculpted albatross image.

\(^{10}\) See 2.3.2.
has re-emerged recently as a lamp-dip; we used it as the principle colorant of all the large projected images. Pen-and-ink drawings were photostated onto clear acetate, then coloured using Colorine and, sometimes, sheet colour. Our Special Effects team not only created all the colour-wheels used in the show but also wave-machines in the reflecting 'puddle', largely using second-hand materials. They were cheap and effective but they were also well engineered - by a science student and an actor working together.

My primary task during this period was to produce detailed documentation for the rigging of the lighting [see Appendix 5.7A - Lighting Plan, Appendix 5.7B - Lantern Schedule] in sufficient time to complete preparations prior to the Rig. Other departments were equally busy with paperwork, in particular Publicity [see Appendix 5.9A - Flier and 5.9B - Program]. Stage management were working on their Prompt copy of the text, preparations for a mammoth task which, these days, would probably be fully computerised in a higher budget production.

This last point is worth amplification: computerisation of many backstage tasks - stage management calls, lighting and sound operation, flying and more - is increasing accuracy/reliability and decreasing the crew numbers required backstage, a major saving for Producers. In this production we substituted for technology with a group of students whose eagerness to learn and delight in achievement allowed talent to shine and ingenuity to blossom. Effects were created 'by hand' that computer control was unable to deliver and, together, operators and machinery produced a product of sufficient quality to generate in each individual a deserved sense of satisfaction. This poses the questions: how much technology is really necessary and who does it truly benefit?

5.5.2 Bump-in
We expected to complete the bump-in and rig within two days; however, due largely to a scarcity of experienced supervisory staff and a lack of detailed preparation (e.g. hardware items not purchased) in some departments, this process ran a half day over. The time was easily picked up on Saturday morning, which had been scheduled "To be advised". This rapid fall behind schedule was, however, daunting for me; had I over-estimated the ability of the students to undertake a major production?
5.5.3 Focus and Plot
The lighting focus and plot were scheduled for one and two days respectively. With 105 lanterns and professional rates for focus expected to be about 5 minutes per lantern, we would be hard pressed to maintain schedule with an undergraduate crew. However, the focus was completed within a normal working day, achieving a rate of 4 minutes per lantern. Perhaps my predictions weren't wrong, after all?

The plotting of sound levels was quickly accomplished and we embarked upon the light plot. Depending on the complexity, style of production and personalities involved, lighting a show can take between eight and twelve minutes per cue; with 111 cues, many of which had more than two parts, the "Mariner" was likely to run over. Largely due to the conscientiousness of both Board operator and Stage management we achieved a rate of 7.7 minutes per cue, running only half an hour over scheduled time. Both Simon, the operator, and Alex, the D.S.M., had worked diligently at familiarising themselves with their equipment and also the recording of the sound track so that we were all able to concentrate on refining of detail, rather than becoming preoccupied by mechanics.

It's interesting, though of little real value other than to the designer himself, to compare the form of the completed Plot [see Appendix 5.7C for examples] with what had been predicted in the preliminary State-of-the-Board sheets [see Appendix 5.4]. What is important is the final product, not the accuracy of a prediction made some months before the event; in that period many factors had worked to modify not just the mechanics of realisation but, to some degree, even the understanding of concepts involved.

5.5.4 Technical Rehearsal
After a weekend break we returned to the theatre for two days of Technical Rehearsal during which all elements that comprised the finished product were blended together and documented into running sheets for the crew. Stage management had gone some way toward producing preliminary sheets but these needed proofing and modification by the crew member to better describe the operations involved, with a particular emphasis on accuracy of reproduction.
As we slowly progressed through the sequence of the show the follow spot’s movement was detailed, the actor’s performance rehearsed a number of times under show conditions rather than the worklight to which he was accustomed and numerous other elements refined by repetition until a consistent level of performance was achieved across the entire production.

In essence what a Technical Rehearsal must achieve is the creation of an ensemble of both operators and performers in which no single element dominates but within which all are aware of the manner in which their performance services and augments that of their fellows. Once this is achieved, we commence the slow process of raising the performance level of the entire ensemble to higher levels by gently urging on those who fall below the achievement levels of the majority and, if necessary, limiting 'pyrotechnic' performances that do little other than draw attention to themselves.

At the end of the Technical Rehearsal we tried a Technical Run, the first non-stop performance of the entire piece during which everyone involved is forced to realise the pace at which the show moves; the imperative shifts from the mechanical necessities of producing the effects to performance synchronised with the sound tape. Adrenalin levels were high as we commenced the Run; this would be the first indication of the performance quality we might achieve........

Results, in terms of both practicalities and content, were very satisfying! We could be confident of satisfying an audience once we had refined details to the degree of precision we expected of each other but which was, as yet, missing.

5.5.5 Drilling and Fine Tuning
During the following five working days\(^{11}\) the crew worked towards refining their product and ensuring rigorous standards of accuracy, while I actively distanced myself in favour of Stage management taking responsibility for the show.

\(^{11}\) Spread over a period of eight days to ensure sufficient relaxation from the rigours of returning to a study regime in addition to performance.

PAINTING WITH LIGHT
It was predictable after such a creditable Technical Run that those immediately following were regressive, full of inaccuracies born of poor presets and containing mistakes attributable largely to over-confidence: adrenalin is a necessary part of every performance but reliance on it alone is insufficient for consistent quality. During this regressive stage the Director can do little other than take every opportunity to assist in the preparation of fail-safe checks and to encourage each and every operator/performer to be their own harshest critic. Only after that had been achieved could we commence refining the product, though the visual artists were able to begin modifications to images immediately after the Technical Run, from which they had gained a better appreciation of the Whole and their contribution to it.

Refinements included shaving a second here, adding it there; delicate alterations to the shape of a cue that better matched the tempo-rhythm of the soundtrack; changing a dimmer's intensity in one state, adding another elsewhere and, most importantly, ensuring each crew member so clearly understood the purpose and intention of every element that the Director's input was required less and less. Only once the production is completely 'owned' by those who will perform it can the Director relax in the knowledge that the company are ready for exposure to an audience.

5.5.6 Performances

It is customary for actors to 'warm-up' their instrument of performance - that is, themselves - prior to any show whereas the general expectation of technicians is that they ensure all equipment is working correctly and that their presets are checked. I wanted the student operators in this *son et lumiere* to think of themselves as nothing less than performers; they needed the same adrenalin and sense of ensemble as any group of actors facing an audience to achieve the high standards we set ourselves.

Using those students with an actor's training to lead them, the "Mariner's" crew gathered together prior to every performance for 5-10 minutes to join in group activities designed to pump their energy, focus their attention and increase their awareness of each other. The benefits, I believe, were evident in a performance that continued to improve subtly through to the closing performance. Nervousness born of insufficient preparation that may often mar
an Opening was replaced by energy derived from confidence in the show. The crew's ability to perform well continued to improve throughout the run, regardless of the size of the audience.

It was these benefits I risked losing had I insisted upon correcting the mistakes I made with the cloud [see 5.2.3 above]; the two days needed to strip the cyc, reposition the cloud, refocus and replot the lighting would have meant the crew went to Opening under-rehearsed and lacking in confidence. The cloud may have been distracting to some but the nervousness apparent in performance would, I believe, have been more detrimental to the entire audience's enjoyment and appreciation of the production.

Appendix 5.10 is a video recording of a performance without ambient sound but with a direct dub of the sound track; hence you have a clear representation of the sound as the audience perceived it, rather than any appreciation of their reactions. The recording of the visual elements is, frankly, of poor quality due to the generally low levels of light available to be gathered by the camera's lens. This does not mean that the audience had equal difficulty reading the performance; rather, a show designed to be appreciated using the human eye cannot be perceived in all its detail and 'glorious colour' by a video camera of the standard available to us. Many of the delicate changes of level and colour are not evident as they were too subtle to be picked up by the camera (e.g. the arrival of the seraphs in Q.89; however, see Appendix 5.6A). Also, the relative proportions of image size is distorted by the high camera angle, well above that of the majority of our audience.

Hence, this video should be used by those of us who saw a performance as a reminder of that experience, not as a 'true' representation of the quality the product achieved.

---

12 Generally, they were very quiet and increasingly still as the show progressed, regardless of age.
5.6 Summary.

Every theatrical venture is essentially ephemeral in nature and the "Mariner" was no exception: simply stated, a group of multi-talented people got together as a learning experience to realise a dream for the appreciation of an audience. Its success can be measured by the quality of the learning experience for each individual, the degree to which the team collaborated, the closeness of the realised product to the original 'vision', the numbers in the audience, budgetary consideration and also the reactions generated in each patron. None of those values taken alone is a true indicator of achievement and the degree of achievement will vary slightly from performance to performance, depending upon both audience and performers.

However, in summary the "Mariner" was a remarkably positive experience for all involved. The learning at all levels - including my own - was valuable; in particular for the younger members of the team, the experience of being a contributor to a productive collaboration - a rare experience for some theatricals - will stay with them for the rest of their careers.

Though the final product differed greatly in detail from my original 'vision', it rarely failed to equal and often surpassed the original; the quantity of difference is, perhaps, a good indicator of the manner in which the collaboration incorporated ideas from within the team.

Audience number and 'profits' are better indicators of the amount we spent on advertising - zero - but the warmth, sincerity and quantity of comments from patrons of widely differing backgrounds who continue to comment months later indicates that those who attended appreciated the experience. Unsolicited comments range in subject from a positive experience of a poem they had learned during schooling to hate through to the uncanny way in which Coleridge's poem echoes today's environmental concerns. Of course, I must assume that, as many who made the effort to express positive comments, an equal number made a greater effort not to offer criticism out of kindness.

However, as with every artwork perhaps the only true indication of success rests with the observer: you and me.
Chapter 6:
IN CONCLUSION

From its genesis, my objective has been to argue for a greater integration of technical departments into areas of theatrical interpretation and conceptualisation - in short, to raise we artisans to the level of artists.

The argument has been three-pronged: firstly, I have attempted to clearly enunciate the ways in which Theatre might better utilise the technical facilities at its disposal. Secondly, I have used a *son et lumiere* production of Coleridge's epic poem "The Rime of the Ancient Mariner" to illustrate how a purely technical production could communicate to its audience a new interpretation of the poem based on the precepts of Lovelock's *Gaia Hypothesis*. Finally, I have indicated where I perceive a general acceptance of this potential might lead Theatre.

In conclusion, let me reiterate each of the argument's.

6.1 Technical

Technical theatre is a viable means of carrying forward dramatic purpose; it is demonstrably able to sustain artistic intention, narrative and conflict for extended periods without recourse to the more usual performance media.

I do not suggest that, henceforth, theatre can survive without live performers. On the contrary, only carefully selected and produced material would be suitable for pure *son et lumiere* treatment. However, persons holding to the misconception that technical theatre is merely a source of spectacle or a service to more 'legitimate' artistic endeavours in theatre have, in the example of the "Mariner", evidence that may cause them to re-evaluate and accept technology as a full partner in any theatrical collaboration.
6.2 Aesthetic

There is a misconception prevalent that would have us believe our ecological concerns for the Planet are developing at a sufficient pace, considering the 'embryonic' nature of the movement. Reactionary forces try to imply that such 'recent' philosophies need more time to develop before they can be entrusted with the fate of an entire world; after all, modern technology is the product of centuries of study whereas 'green' philosophies are immature by comparison.

This mis-information is easily rebutted:

Legend has it that in 1854, American Indian Chief Seattle wrote these words to a US government offer to buy his native land and, in return, received a reservation.

*What is man without the beasts? If all the beasts were gone, man would die from a great loneliness of spirit. For whatever happens to the beasts, soon happens to man. All things are connected.*

Whatever befalls the earth befalls the sons of earth. Man did not weave the web of life; he is merely a strand in it. Whatever he does to the web, he does to himself.\(^1\)

Lo, the poor Indian! whose untutor'd mind
Sees God in clouds, or hears Him in the wind.\(^2\)

David Suzukie in his recent book *Wisdom of the Elders*\(^3\) disputes the credibility of Seattle's statement quoted above, preferring to consider it as a poetic interpretation inspired by the traditions and belief of Seattle. Either way, it is apparent that we of the late twentieth century have simply chosen to ignore the work, intuition and fears expressed by Seattle's people, Pope, Coleridge, Hutton and Lovelock - among many, many others - during the eighteenth, nineteenth and our own centuries. All could see that Western civilisation was bent upon pillaging that which sustains us.

\(^1\) From Greenpeace's Australia News, Vol 1 No 1 (July/August/September '90) p.14
\(^2\) Alexander POPE "Essay on Man", lines 99-100
\(^3\) Knutson, P & Suzukie, D *Wisdom of the Elders* Stoddart Publishing, Toronto '92 p.XV
This production of Coleridge's "The Rime of the Ancient Mariner" tries to refute those misconceptions by marrying Coleridge and the "Mariner" to Gaia and planet ecology. Having seen and heard Coleridge's well respected moral presented in modern guise, our audience may better appreciate that the great crime of our forefathers, our parents and ourselves has been to ignore the many warnings, dismissing them as the impiety of 'savages' or the crack-pot notions of 'greenies'.

In his lifetime Coleridge was made to feel embarrassed by the sentiment contained within his poem:

In my own judgement the poem has too much [moral]; and that the only, or chief fault,...was the obtrusion of the moral sentiment so openly on the reader as a principle or cause of action in a work of such pure imagination.4

It is interesting to conjecture whether he would reply in a similar vein if he were to answer that same question today. I believe he would not, since the support Coleridge would have from a growing number number of individuals makes his message more acceptable in today's society - though the battle is barely engaged and the victory far from certain.

6.3 Toward "Fantasia"

Shortly after the "Mariner" was completed I took the opportunity to view again Disney's incomparable cartoon "Fantasia". I do not intend any comparison between it and what we achieved with the "Mariner" but, rather, to acknowledge it as one source of my inspiration. Disney's great achievement was to create an artwork through a visionary marriage of the craft of cartooning with the craft of music-making. I believe that similar achievements are possible in opera, dance, music theatre and drama through a greater sense of collaboration.

Subsequent to the "Mariner" production I have received the following suggestions for new enterprises using son et lumiere techniques:

---

4 Reported in Table Talk 31st May 1830 and quoted in House, H. Coleridge: The Clark Lectures 1951-52 p.90

IN CONCLUSION
a production of Dickens' "A Christmas Carol"
a fantasy opera
a peripatetic re-production of "The Rime of the Ancient Mariner" using the walls of the Australian National Maritime Museum to project upon
a version of Carl Orff's "Carmina Burana"
and as a source of experimentation and inspiration for printing fabric!

Far more than simply re-establishing son et lumiere within theatres as a viable means of artistic expression, our production of "The Rime of the Ancient Mariner" has inspired other artists to new and greater applications of the techniques that may enrich future endeavours in ways hitherto not foreseen.

For me this is particularly satisfying. It was never my intention to create a unique - and, perhaps, insular - Theatre of Light and Sound but to reinforce in the minds of my fellow theatricals the collaborative nature of theatre and to remind them of the manner in which lighting and sound may stand with other theatrical skills as an equally effective means of involving and manipulating audiences. It is only when all available theatrical skills are applied in collaboration to affect audiences that we create the opportunity for the Whole to take on glamour and power greater than the sum of the parts.

IN CONCLUSION