An analysis of deficiencies of recent curriculum reform efforts in Australia and recommendations for improvement are presented in this paper. Despite criticisms that have been levelled at the educational system, a conclusion is that educators are well prepared to meet the demands for restructuring. What is needed is not merely restructuring, but a new, holistic, "colligative," spirit bared on faith, love, and hope to counteract the present pessimistic, fragmented, and reductionistic approach. Borrowing concepts from Buddhism, Taoism, and global ecology, the new perspective is contrasted with the inherently individualistic, destructive, competitive, and antagonistic Western approach. Nine ways in which teachers can build a balanced worldview for personal and global survival are discussed from within a teaching perspective that instills the values of harmony, community, and gaiety. (16 references) (LMI)
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The Curriculum for the 1990s: 
A New Package or a New Spirit?

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The biennial A.W. Jones Lecture is sponsored by the South Australian Chapter of the Australian College of Education to acknowledge the contribution to education by Dr. A. W. Jones, formerly Director-General of Education in South Australia.

This lecture, which inaugurated the series, was presented in Elder Hall, University of Adelaide, North Terrace, Adelaide on Thursday, 17 August 1989.
THE A.W. JONES LECTURE

The Australian College of Education is a national association of those involved in the education profession. A unique feature of the College in the Australian education scene is that its membership includes all levels and all sectors of education. The College was founded in May 1959 and is organised on a national basis, with chapters in each Australian State and Territory.

The College has among its objectives the following:

- to foster educational thought and practice
- to promote the higher values of education within the profession and in the general community
- to promote communication and information dissemination in the educational field
- to recognise in appropriate ways outstanding contributions to educational practice.

It is in the spirit of these objectives that the South Australian Chapter of the Australian College of Education has established the A.W. Jones biennial lecture. The choice of Dr Alby Jones as the person to honour with this lecture was easy. His contribution to education in this state has been outstanding. He is a founding member of the College and has been the only South Australian to fill the position of National President.
Dr Albert Walter (Alby) Jones has had and continues to pursue a vigorous career as a distinguished Australian educator. Indeed, Alby's curriculum vitae since his retirement as South Australian Director General of Education in 1977 would be impressive enough for a person as the peak of a full-time career.

Alby Jones, born in South Australia in 1912, took his baccalaureate degrees in Science and Arts at the University of Adelaide in 1932 and 1937, followed by a Diploma of Secondary Education in 1939. In 1944 he was awarded a Master of Arts by that University for research in the field of educational measurement. Many years later, Alby showed his practical commitment to the ideal of recurrent education by returning to formal academic work on his retirement, culminating in the award of Doctor of Philosophy by the University of New England in 1986.

From 1934 to 1948 Alby Jones taught mathematics at country and metropolitan high schools and at the University of Adelaide and what is now the Institute of Technology. In 1949 he was appointed an Inspector of Schools, serving in various country districts before becoming Inspector of Secondary Schools in Adelaide in 1954. In 1959 he became the Department's foundation Superintendent of Recruiting and Training, with responsibility for teacher education. From 1957 to 1979 Alby served as Deputy Director General of Education. During his term as Director General from 1970 to 1977, Alby Jones was the architect of significant reforms to the educational administration of the State, most notably through his 'Freedom and Authority' memorandum which significantly altered the balance between the professional responsibilities of teachers and school and system administrators.
Throughout his career, Alby Jones has been generous in his commitment to professional and public bodies within the State, across the nation and in the international community. In 1985 he was invited to become a member of the European Academy of Arts, Sciences and Humanities, a fitting culmination to an international career which began as the first South Australian Fulbright Scholar in educational administration in 1956. Duties with government and international agencies took him to many places in the Pacific and South East Asia, to the UK, Germany and other European countries and to Japan. In retirement, international invitations have taken him as far afield as Sabah, South America, the United States and New Zealand.

Alby Jones has always believed that professionalism involves reflection, research and dissemination of ideas as well as practice and performance. He has contributed to five major books, written numerous journal articles and addressed audiences from primary schools to international gatherings. He is an Officer of the Order of Australia, has been awarded an Honorary Fellowship by the Australian College of Education and Fellowships and memberships of other professional bodies as well as the College Medal and the ANZAAAS Mackie Medal for education. This inaugural Jones Lecture is one more recognition of an outstanding South Australian educator and pioneer of the Australian College of Education in this State.
Hedley Beare was born in Barmera, South Australia. A scholarship winner from Unley High School, he became a leader in student government at the Adelaide Teachers’ College and graduated with distinction from the University of Adelaide.

He spent a very successful period of eleven years as a teacher of English, Mathematics and Latin in South Australian high schools, during which time he also completed studies for a Master of Education degree from the University of Melbourne. In 1964 he was selected to pioneer the new position of Education Officer in the South Australian Education Department. In this position he was involved in the development of teacher selection procedures and an extensive in-service education program for teachers; was executive officer of the committee to establish the Raywood In-Service Centre and the Arbury Park Camp School; and was involved in the planning and development of five teachers’ colleges.

As a Harkness Fellow (1967-69) he completed his Doctor of Education studies in educational administration at Harvard University. He returned to South Australia as Assistant Superintendent of Teacher Education and then as one of the first Regional Directors of Education, at Whyalla. In 1972 he moved to Darwin as Director of Education and, following the transfer of administration to Commonwealth control, he was appointed as the first Secretary of the Northern Territory Education Department. As well as setting up an independent school system and supervising many innovative developments in integrated and Aboriginal education, he served as a government-nominated member of the Northern Territory Legislative Council. The end of his stay coincided with the disaster of Cyclone Tracy, following which he co-ordinated
The period 1975 to the end of 1980 saw Hedley Beare as Chief Education Officer of another new education service, the ACT Schools Authority. As chief executive, he was the Authority's principal education adviser, senior planner and political adviser. In this system, incorporating new features such as school boards, participative government and peer assessment procedures, his administrative skill and innovative flair were used to the full. In 1981, he took up the Chair of Educational Administration and Policy at the University of Melbourne, which position he presently holds.

Professor Beare has travelled and lectured extensively. He was Fulbright Senior Scholar in 1978-79. His international standing has been enhanced by his contributions to the work of UNESCO and OECD, and in the US-Australia Policy Project. He has spoken widely and published many articles and speeches; he is a regular commentator on educational affairs. He has taken a lead in Australia in public discussion of educational issues, particularly those related to longer-term policy development.

Hedley Beare has been elected to Fellowship of the Australian College of Education, the Australian Council for Educational Administration, and the Australian Institute of Management. He has been a member of the Council of the Australian College of Education, Vice-President and member of its Executive Committee, and Chairperson of its Publications Committee.
The curriculum for the 1990s: A new package or a new spirit?

HEDLEY BEARE
Professor of Education
University of Melbourne
Balance and imbalance

The yin and the yang

Let me begin anecdotally. When I was undertaking my preservice teacher education more than three decades ago Dr Harry Penny, the Principal of the Adelaide Teachers College, used to convene a regular Wednesday afternoon assembly for all students at the College. He would always end the assembly with a short comment or homily. I remember his speaking one afternoon about the symbol which now appears on the national flag of Korea, the circle something like a tennis ball in section, with two interlocking tear-shaped segments, one black and one white, representing the yin and the yang in Buddhist thought. There is a beautiful symmetry in that wholeness which balances the black against the white; even inside the black segment is a white dot, and there is a black dot inside the white segment. Here is shadow within the light, light within the shadow, masculine balanced against feminine, the concrete posed with the abstract, strength nestled within weakness. Here is the comeliness of paradox about which the mystics speak, no matter what race or religious tradition they come from. Here is the wholeness resulting from the balance of opposites, the oneness that can only be produced by means of the many. As Dr Penny rightly knew, every educator needs the intuition expressed in that symbol, even though at the time we may have only dimly perceived what the great man was driving at. At the outset, let us be reminded that balance and harmony represent simplicity fashioned out of complexity. Let us not confuse the simple with the simplistic. There is a universe of difference between the two.

Criticism of education through the 1980s

During the 1980s, education has taken a battering which has
been constant, many-sided, often quite unfair and frequently simplistic. As a parent leader recently remarked, many educators and classroom teachers are at present feeling very bruised. In the 1980s thousands of educators have had their career paths radically fractured, the pleasure of their work diminished, their contributions maligned, their public standing vilified, their material rewards devalued, and their professionalism questioned. People who have unstintingly contributed a lifetime of service have been unhoused from their positions without praise, celebration or joy. The 1980s have not been years of harmony and balance - at least, not in education.

The sad thing is that educators not only understand the need to change but have been willing participants in the process. Educators know that education is absolutely pivotal to the health of this country through the 1990s and that a massive re-gearing of our provisions is required if we are to achieve our aspirations as a society. But why, in order to make the point, it is necessary to wound and sour the very people from whom so much is expected? Throughout the 1980s the very element missing has been balance and harmony. Educators are fairly well prepared, it seems to me, to deliver the changes which politicians, critics and the public seem to be calling for. We know not only what needs to be done but also how to achieve it.

II

What we know already about reform

What makes a good school

*We already know what makes a good school.* The topic has been extensively researched over the past two decades (Australian syntheses include Mellor and Chapman 1984; Beare, 1984; Mulford, 1986; Caldwell and Spinks, 1986,

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1988; Beal, Caldwell and Millikan, 1989), although what we have discovered is not spectacularly new.

We know that:

Good schools have clear educational aims, which apply to the behaviours of staff no less than to students. Good schools target learning outcomes. They believe that every student can learn and is willing to learn. An attitude of success permeates the whole school. Good schools are constantly on the search for a better way of doing things. They do not just talk about good ideas; they go out and practise them. A good school has a good Principal who is an educator rather than merely a manager, a person whose interest is primarily in teaching and learning. Good schools concentrate on teaching and learning. They understand that their core task is educating, they devote more classroom time to that task, their teachers direct their energy to academic learning, they test regularly for achievement, they set homework and follow up to see that it is done. There is a school-wide systematic, regular assessment program for the school. Good schools maintain an orderly and safe environment for learning. In good schools, it is safe for a student to be curious, to play with ideas, to experiment and to make mistakes. Good schools do not burden either their students or their staff so heavily that time for enrichment, time to reflect, time to participate in recreation or artistic or professional or other educational pursuits are crowded out of the program. To quote Clark, Lotto and Astuto (1989: 183), "Good schools are good places to live and work (in) for everybody".

So we can recognise what a good school is like, its characteristics isolated by more than twenty years of systematic research and inquiry. In consequence, we know that there are literally thousands of good schools in Australia, schools
which conform with these prescriptions. We also know that there are literally hundreds of really excellent schools which have all these qualities to a high degree.

Administering and managing schools
We also know a great deal about how to run schools. Many of those who manage the education enterprise now have sophisticated training in management, policymaking and planning and they are handling a wider range of functions than was the case even ten years ago.

For example, if you aggregate the salary bill in any normally sized school of, say, about forty staff members, the capital value of the buildings and equipment, the cost of maintenance and supplies, and its other recurrent expenditures, it becomes immediately apparent that a normally sized school is not only a multi-million dollar enterprise, but that it is usually the largest business enterprise in the town or suburb. It is often the municipality’s biggest company and it occupies the largest piece of real estate in the locality. So the managers of these enterprises should be respected for what they really are. They are not “middle management”, they are among the most highly skilled and qualified executives in the community. Furthermore, the firm they run is usually much more complicated than other local businesses, largely because its purposes are more complex, more public and more politically sensitive.

We also know about running school systems. At the State, provincial, or territory level, the education corporation is huge by any standards. The Bulletin (Boag, 1989: 108-109) recently pointed out that, with an annual budget of $2.3 billion, the Victorian Ministry of Education was “the fourth largest enterprise in Australia”. The Scott Report (1989 : 4) on the New South Wales Education system, published in June 1989, states that:
the New South Wales State school system is one of the largest centralised systems in the world, both in numbers of students and teachers, and in geographical dimensions. There are currently 2,227 schools, over 60,000 employees (about 48,400 of them teachers) and 759,500 students in an area covering eight million square kilometres. The Department's annual budget in 1988-89 is almost $2.78 billion.

In short, the New South Wales and Victorian school systems are among the corporate giants in Australia. An education system and individual schools are very complicated enterprises, and, by and large, they are being very ably run.

I could go on. We know a great deal now about assessment and grading; indeed we appear to have far outstripped the public's comprehension of the process. We know about curriculum design, and learning processes, about technology in the classroom and so on. The education enterprise is a highly sophisticated one, and there are some very knowledgeable operators within it.

Trends for the next decade
On top of all that, we already know a great deal about what the next decade will be like. A great number of the trends have been so well documented and described in print that they ought to have been thoroughly digested by now. But of course they are not! Nor are the implications for these young people hard for us to draw. But of course we tend to notice them later rather than sooner, and often when it is almost too late to react to them positively. Let me illustrate.

From 1988 onwards, every group of students who start in Year One of Primary School will be strongly encouraged (if not forced) to complete twelve years of schooling. So the 1988 cohort will leave school in the Year 2000. In consequence,
the 1988 cohort and all those who follow will spend their entire post-school lives in the 21st century; the citizens of the 21st century are sitting in our classrooms today. The quality of their lives and the health of this country will depend significantly on their schooling experiences in the 1990s.

*We know a great deal about the kind of world those children are about to inherit.* Take one example. Figures from the 1989 United Nations world population survey showed that in spite of world development, family planning, and birth control, the planet’s population is still climbing by 90 million people every year - the world’s population adds to itself six times the population of Australia annually. At this rate, one hundred years from now the world’s population will have tripled. Consider the consequences of that one statistic in terms of food, the use of electricity and power, global pollution, the disposal of waste rubbish, government, and so on; and remember that we are talking about the living space and the life span of the children who are now in primary schools. A girl in Grade I this year will have seen the equivalent of about 80 Australian populations born by the time she gets to Year 12; and they are her generation, her workmates.

Remember also that on this evidence, it is the poor, black and developing countries who are devoid of birth controls. So only about one in every ten live births in the world will be of European-derivative stock. We can guess now what we need to teach students today so that they can thrive in that kind of world community tomorrow.

**Curriculum changes**

*We know a great deal about what needs to be put into the school curriculum for those students.* It seems obvious that Australians must learn a great deal more about the Pacific and the Asian areas than they know at the present. We should expect in the ordinary citizen an awareness of the geography of this region, some knowledge about its various histories, an
appreciation of the politics of our region, some understanding of the different languages and culture in Asia and the Pacific Rim. How many of us know the literature which has helped to create the psyche of people living in India (say), or China, or Japan?

When four-fifths of our exports are raw materials like wheat, wool, meat and minerals, our country’s economy will remain vulnerable to the shifts in commodity prices around the world unless we learn to add value to our exports before they leave Australia. We can also clearly do better in the export of services, for example, of which educational services are one element. So Australian workers, these children in our schools, must develop different kinds of skills before we can achieve these transformations in our earning capacity as a nation.

We also must learn to be more enterprising as a people. It has taken us a long time to break clear of our convict and colonial origins, perhaps most clearly evident in the way Australians keep turning to Governments to fix things up and in the way we prefer to be employees of large businesses (to be salary earners, in short) rather than to be entrepreneurial and innovative, or to establish and run small enterprises. Generally speaking, we prefer others to take the risks.

These young Australians will need to have a far greater degree of sophistication about politics and political systems, about the economy, about financial affairs, about the way wealth is created and maintained, about the system of law and about forms of government. Every citizen must have a core of common knowledge about these matters.

And these young Australians will have to be truly international. It is no longer tenable for Australians to compare themselves only with other Australians, in terms of education or employment or living standards or work habits or social life. For example, we have become familiar with the practice of computing an “HSC score” or a “tertiary entrance
score” which purports to rank a student against the performance of those in his or her own age group in the same school year in that State or Territory. But increasingly, what is taught and learnt by the same age-grade cohort in Japan, Singapore, New Zealand, Brazil, Fiji, or Canada is of relevance to Australian students. Increasingly, those overseas students will be competing with Australians for the same jobs, or trading against them in a rival firm, or working with them as colleagues in the same enterprise or mixing with them socially in the global village.

Educational standards
We know what we must do as a nation if the workforce is to be made competitive with those of our trading partners. If the services, information, and technological sectors of the economy are to be expanded to provide employment openings for a greater percentage of the Australian workforce, then the “educational water table” of the entire Australian population has to be raised. The tertiary and quaternary sectors have always tended to require not only post-school training, but usually also some kind of credential as a passport to practice. The achievements in Australia in this respect have been almost spectacular over the past decade. Since 1962 when 36.2 per cent of the beginning secondary school cohort proceeded to Year 12, we have reached the point where approximately two out of three will remain until the final year.

Those who drop out will continue to cause us enormous concern as a society, because not only will they be at risk over finding employment, but they will not have the educational foundation on which to build new careers in the future. If students across the whole range of abilities are kept in school, then we already know that they will not be served well, indeed their attitudes will deteriorate, if they are force-fed a traditional, subjects-based, academically oriented curriculum created in the first place for that minority of the student population who hoped to proceed to a university or into the professions (and
we are not so convinced now that it was particularly good even for them). Over recent decades and in several countries, schools have developed a promising set of alternative programs for students with other aspirations and backgrounds, and many of these programs have given new hope to groups who were disavantaged under the traditional programs.

The educational task of the 1990s
If making the appropriate changes to schooling were a simple task, then teachers and school administrators would already have accomplished it. Educators are great activists. They do not need structural or legislative reforms to transform their curricula; they do it every day as they prepare their lessons and their learning programs. But this exercise is so large and complex that it needs more than teachers to get the task done. And it is not helped when the solutions invented by those not closely associated with schools are simplistic, naive and bring the very outcomes which we want as a society to circumvent.

It should now be clear that if the educational task were simply one of planning and implementation so that these changes were coherently built into the fabric of our schools, the task would be awesome enough. In fact, it is important for the community to comprehend just how complex even that task is. Yet it seems to me that the curriculum of the 1990s needs something far more fundamental than all that. It needs those reforms, certainly, but it requires something more as well, and it is this “something” more which it is so hard to define. If it is a restructure we are seeking, then it is one that affects our way of viewing the world. We need, in short, a new spirit to infuse education, not simply a new package of programs.

I believe that the future of the world, the planet, and certainly of this country and our children depends quite literally on how well we can accommodate this new way of seeing in schools across the length and breadth of this nation.
and within the next three or four years. Let us try to define, then, exactly what sort of balance we are groping for with which to infuse the curriculum for the 1990s.

III

The concept of wholeness

Earth, a living entity

James Lovelock is an independent scientist who carries on his work outside of established laboratories. He comments in the preface of his most recent book (Lovelock, 1988 : xiv) that: nearly all scientists are employed by some large organisation, such as a governmental department, a university or a multinational company. Only rarely are they free to express their science as a personal view.

They are constrained by official frameworks and attitudes, by the "tribal rules of the discipline", by peer reviews, by conventional wisdom of one kind or another.

In 1979, Lovelock startled the scientific establishment with his book called Gaia: A New Look at Life on Earth (1979). Existing theories held that plants and animals evolve on, but are distinct from, an inanimate planet, but Lovelock advanced the view - based upon quite impressive computer simulations, the so-called "Daisyworld" model - "that the Earth, its rocks, oceans and atmosphere, and all living things are part of one great organism, evolving over the vast range of geological time". Lovelock’s thesis, then, is that Earth itself is a "coherent system of life, self-regulating, self-changing, a sort of immense organism (Lovelock, 1988 : x). His 1988 book titled The Ages of Gaia: a biography of our living planet, re-describes our planet’s living history from that perspective.

Because the earth is alive, it can also become sick.
Those who practise medicine must subscribe to the Hippocratic Oath, and affirm that they will do nothing to harm the life of the patient. At the present time, Lovelock tells us, those whose work influences the health of planet earth need to take a similar kind of oath; and it is not easy to do so since some treatments have “consequences more severe than those of the poison” (Lovelock, 1988: xviii).

Lovelock is appealing to us to see the Earth in its wholeness, indeed in its wholesomeness. We are murdering Earth because we have disconnected ourselves from it:

Earth and life sciences ..... have...... been torn apart by the ruthless dissection of science into separate and blinkered disciplines. Geologists have tried to persuade us that the Earth is just a ball of rock ... Life is merely an accident, a quiet passenger that happens to have hitched a ride on this rock ball in its journey through space and time. Biologists have been no better.... (pp. 11-12)

It is this piecemeal approach that has closed our eyes to seeing wholeness. Gaia, Earth is one living system!

If that is the case we need to understand an important characteristic about a living organism. It is social, says Lovelock: “it exists in communities and collectives” (p.18). Any living system, any life form, big or small, huge or minute, is a bundle or collection, just as a living human being is a collection of organs and tissues - a heart, a kidney, lungs and so on - and any one of them can be kept alive independent of the body. We have shown that to be the case by means of transplants. So life is “colligative”, to use Lovelock’s term; it is a bundle of things bound or bonded together. The life bundle regulates itself and keeps itself alive. The technical term for that property is “homeostasis”; it is a kind of wisdom that controls the whole and maintains its living-ness.

So after a beautiful exposition of how this one colligative
life-form called Earth was born and has grown, Lovelock, in a lovely final chapter, poses the essential question, "How can you and I live in harmony with Gaia (p.225). He gives several useful, almost whimsical, suggestions, and then he makes this quite disturbing comment:

Any species (that is, any part of Gaia) that adversely affects the environment is doomed; but life goes on...

Gaia is not purposefully antihuman, but so long as we continue to change the global environment against her preferences, we encourage our replacement with a more environmentally seemly species (p.236).

So Gaia will survive, but the human species (like the dinosaurs) may not! I am not scientist enough to give a credible critique of Lovelock's theory about life on earth, but it is clear that he is working in the right direction. We know intuitively that his feeling for Earth is the appropriate one. And it is now being espoused by some powerful friends.

The Brundtland Report
In 1988 the United Nations published the Brundtland Report title *Our Common Future*. It was the result of the deliberations of an impressive panel of international experts chaired by the Prime Minister of Norway and convened as the World Commission on the Environment and Development. It ought to be compulsory reading for every educator in the world.

The report begins and virtually closes with a repeated paragraph which could have been written by Lovelock himself. It says:

In the middle of the 20th century, we saw our planet from space for the first time. Historians may eventually find that this vision had a greater impact on thought than did the Copernican revolution of the 16th century...

From space, we see a small fragile ball dominated not by human activity and edifices but by a pattern of
clouds, oceans, greenery, and soils. Humanity’s inability to fit its doings into that pattern is changing planetary systems, fundamentally. Many such changes are accompanied by life-threatening hazards. This new reality, from which there is no escape, must be recognised and managed (Brundtland Report, 1988: 1,308).

Earth, Brundtland says, is “an organism whose health depends on health of all its parts”, and that balance can now only be achieved by deliberate action on humanity’s part. Some of the actions of individual human beings, of institutions and of nations can best be described as diseases within that body the earth. Indeed, some of the consequences of human behaviour, like the greenhouse effect, are literally cancers; they may indeed be terminal illnesses for planet Earth unless we do something very quickly about them. The Report speaks of the “downward spiral” caused by the interlocking of economic systems with ecological ones, and warns that doing nothing about that spiral is not a satisfactory option. The Report recognises that administering the cure will devolve largely to our young people. Most of today’s decision makers will be dead by the time Earth feels the full impact of illnesses like:

- acid precipitation, global warming, ozone depletion, or widespread desertification and species loss. But most of the young voters today will still be alive.

The Report points out that as the Commission collected its evidence:
- it was the young, those with the most to lose, who were the harshest critics of the planet’s present management (p.8)

The Report does provide an achievable strategy to restore balance to the life of planet Earth. They say that although the Commissioners came from 21 different countries,
they were able to agree about the plan. So “the present generation must begin now, and begin together, nationally and internationally” to put it into effect. “We are unanimous in our conviction that the security, well-being, and very survival of the planet depend on such changes, now.” (p.343).

Parents, politicians, public and educators must realise that to preserve this incredible life-form called planet Earth will require a new way of thinking about our world, not merely new educational packages and programs. What we need in the rising generation is a better frame of thinking, both about the world and also about our place in it. How can schools cope with that awesome demand?

Let me take up two aspects of this question.

IV

Two comments about harmony

Hope, a prime commodity

The celebrated German theologian Jurgen Moltmann (1988: 166) wrote recently that “Hiroshima in 1945 fundamentally changed the quality of human history”. We now live in what he called “the end-time”, an “epoch in which we can bring about (the world’s) end” on almost any day. Because of the existence of nuclear arsenals around the globe, he says, all humanity is now united in its own powerlessness. “Whoever fire first (simply) dies second” (p.161). Now that human beings have “won this power of world annihilation”, they will never be able to get rid of it again (p.165). So for the first time in human history and now for ever, humanity is faced with instant catastrophe if it makes a major mistake. We live literally in the end-time.

Of course, Moltmann points out, the end-time may not arrive; but it will depend upon us. We flirt with the end-time
when we allow an Afghan War or a Falklands War or a hostage crisis or international terrorism, for any of these could escalate to cause the end. There is one supreme and critical quality which will keep the end-time at bay, says Moltmann. It is hope! The only practical way to avert the end-time is to commit ourselves unequivocally to “the peace, the justice and the life of the creation” (p.170). You must not despair; you must not let young people despair. Despair - loss of hope - is literally lethal!

Yet we are generating exactly that! The pessimism and despair developing among young people across the whole world should fill us with alarm. It has been so often documented and studied that I wonder why we do not take notice of it. One of the most recent syntheses of those studies was done for Australia’s Commission for the Future by Richard Eckersley. He begins by saying, quite rightly in my view:

Australians are not facing up to the seriousness of the predicament confronting youth today...... More young people each year become casualties of the changes sweeping our society (Eckersley, 1988:1)

And those who do succeed, in the very way they adapt, “reinforce the negative impact of the changes on society”. They use technology wrongly, they are cavalier about the poor and those under-provided for, and they are conservative since they no longer want to change a system which put them on top.

The most disturbing part about his survey is what Eckersley calls the “bleakness and hopelessness” which characterises their visions of the future.

Some Australian and overseas researchers who have studied youth’s perceptions about the future, especially their concerns about nuclear war, have suggested that these attitudes could be having a profound effect on their development, resulting, for example, in apathy, anger, mistrust of adult society, and a lifetime
based upon instant gratification rather than long term goals (p.3)

And, Eckersley points out, the causes of these problems are growing worse. As an educator, a parent, a grandparent and a citizen, I cannot just stand by and do nothing, and neither can you. Society - and certainly schools - dare not let that pessimism continue.

But the remarkable thing is that the generation of that hope can be entrusted to children themselves. It can be achieved largely through schools, if only educators collectively were persistent, systematic, and consistent about doing so.

Let me illustrate with a cameo from my time as a Regional Director of Education in Whyalla. Both the Cowell and the Cleve Area schools became associated with fauna parks developed by Dr. John Wittwer, the Lutheran pastor in the area and a world authority on marsupials. The students of those two schools acquired a genuine, informed, hard-nosed, caring attitude towards the native animals of South Australia’s West Coast. Pastor Wittwer told me of the gentle transformation he saw occurring in those farming districts. One farmer would leave a stand of trees instead of clearing it for agriculture. Another would re-plant an area with natural vegetation. Another would fence off an area known to be the habitat of a rare species of wallaby. He realised that it was the children who were teaching their parents how to be sensitive custodians of the land and its delicate creatures.

No one is more effective at educating parents than are their children. Every educator knows that! One of the most effective ways to transform the world is to let children teach their adults! “The child is the father of the man”, wrote Wordsworth. But the job of schools is complicated by a view of the world which is widespread throughout the world.
The disjointed curriculum

In 1985 during my last period of sabbatical leave in England my wife Lyn and I rented a basement flat in an old three-storey house in Bristol. When the landlady learnt that I was a University Professor, she asked me whether I was interested in having a book - she obviously thought it looked a very strange one - left behind by a student lodger who had occupied the flat in the attic. The book was a well leafed, heavily marked and annotated copy of Fritjof Capra's *The Tao of Physics*. It did look odd. *Tao*, of course, is an Eastern word meaning the whole, the oneness of being, the completeness and harmony of the cosmic order - the universe in fact.

I was soon to discover that Capra's book had almost a cult following among graduate students, for it developed a remarkable theme. Capra is a physicist. He has a doctorate from Vienna and has been a researcher at the Lawrence Laboratories in Berkeley, California, specialising in high energy physics. He has specialised in the purest of the pure sciences. And what Capra postulates is somewhat breathtaking, namely that physicists are now saying things about the nature of the universe which are almost exactly identical with what, for centuries, has been said by the Taoists, the purest of the abstract philosophers. Put bluntly, the physicists, mathematicians and the mystics are now of one mind about the unity of the cosmos. Capra develops his theme more exhaustively in his more recent and now famous *The Turning Point* (1982).

The beginning of our present problems, Capra points out, occurred precisely with the onset of the scientific revolution, the so-called Age of Enlightenment. Before 1500, "the dominant world view in Europe... was organic"; the material and the spiritual interpenetrated each other (Capra, 1982: 37). But in the next two centuries, that medieval world view was supplanted:

The notion of an organic, living, and spiritual universe
was placed by that of the world as a machine, and the world-machine became the dominant metaphor of the modern era (p.38).

So inquiry became scientific, reductionist. We made progress with knowledge by breaking any phenomenon down into its component bits. As we studied and analysed all those pieces, we would build logically and systematically, by synthesis, an understanding about the whole. By adopting that same empirical, piece-by-piece approach to every aspect of the reality we could grapple with, we made spectacular progress. We applied that approach to Newtonian Physics, biology and living organisms systems theory, medicine, psychology, even to economics and political systems.

The whole education establishment now operates that way. In fact, the same bits and pieces approach applies to the way we have constructed the curriculum of secondary and primary schools. We break human knowledge down into pieces and parcels; we create “disciplines”, subjects and courses; we allocate those specialisations to people. We make the assumption that the parts will add up to a coherent whole, and that the whole is indeed merely the sum of the parts.

What we have developed is a fragmented, fractured view of the cosmos and of our part in maintaining its health. We encourage people so much in the “bits” approach that they do not identify with the whole. How else can we explain the expenditure of billions of dollars on armaments while children starve? Or why industries can concentrate on producing materials and their own private riches with little concern about the pollution of streams and atmosphere resulting from their own waste products? How else can we explain destruction parading as growth; starvation being produced by multinational agribusiness corporations whose business is food production; health and the prevention of illness being treated as separate enterprises? How else can we explain the facts that while half
the world's scientists are engaged on research related to warfare, and while in 1978 world military spending was about one billion dollars a day, one person in every three on the planet does not have access to safe drinking water? It has produced what Capra calls "the dark side of growth".

Not only have we manufactured our own discontentedness, but schools faithfully reproduce that worldview, both in what they teach and also in the very way the learning process is conceived of and organised. This approach permeates the warp and woof of education. It is engendered by the artificially produced competition in schools, by an infatuation with marks and grades, by the scramble for status created by hierarchies of schools, by the reduction of children to statistics and classes and cohorts and HSC scores. This approach has led to some of the most remarkable achievements of the human race and also to some of its most deplorable deprivities. For the 1990s, we had better discover quickly how schools can sponsor wholeness and connectedness, rather than disconnectedness, balance rather than disease. So where can we look?
Favoured ways of seeing

The term “colligative”
Let me return for a moment to Lovelock. You will recall his comment that life is colligative. Pause for a while with that unusual word. The rare English verb “colligative” means “to bind together”; it is derived from the Latin ligare, “to bind”, which gives us the English word “ligature”.

It reminds me of that other word which comes from the same Latin root, “religion”; it is a word much abused because it is so much misunderstood. “Religio” is based on the verb re-ligare, literally “to bind again and again and again”. That is a very accurate description of what we all do. We are forever synthesizing our views about ourselves, about others, about the cosmos, about reality. We repeat and repeat until we believe what we are telling ourselves. We bind to ourselves a patterned way of seeing or perceiving, and then we read and interpret our world out of that framework, that paradigm.

That is indeed why many people reject formalised or conventional religion. Because it does not line up with reality as they experience it, they jettison what does not look genuine, what does not render adequate explanation or prediction. But the very act of throwing beliefs away indicates that they have a robust and living religious view. For our religion is that which we have bound to ourselves again and again. It is the frame, the casement, through which we look out on our world; it is our favoured way of seeing. It constitutes the meanings we read into what we experience.

That marvellous hymn of the mystic Celt, Saint Patrick
of Ireland, is so honestly accurate:

I bind unto myself today
The threefold name (identity) of Trinity.

Every one of us does that kind of thing, and every day. But what do we bind? That is the point. For our act of viewing is also an act of choice. It may not always seem deliberate, it is sometimes almost subconscious, somewhere below being a conscious act, and it is frequently incidental and often almost careless. Even so, we make the choices. Day by day, minute by minute, I weave a tapestry of coherence for my life, a web of beliefs, out of the incidental fabrics which I select from my ordinary experience. You and I are individually colligative; each of us systematically generates our own wholeness of seeing.

Of course, that way of seeing can sometimes be destructive, negative, diabolical. It can literally destroy a person, or others near them, and indeed their part of the world. If, for example, you constantly represent to yourself and to others another country as a threat, as unfriendly, that belief will lead you into an arms race, and you will call it, rather oddly "defence" or "security". For some people, though, their wholeness of seeing, their visioning, can lead to the most sublime acts of love, to the most breathtaking creativity, to the most awesome reaches of the human spirit.

So an educative process which does not engage that basic human activity of creating meanings is not worth a great deal. Schools, teachers, and curricula - whether you like it or not, whether you like them or not - are agents for manufacturing meaning. Schools are colligative places.

We have said that everyone of us has a system of beliefs, a set of fundamental assumptions on which we base all our actions, thinking, and living. Those beliefs, once they are firmly held, start to manifest themselves in tangible ways, indeed as tangible things and events. In a sense, beliefs are
self-fulfilling prophecies. In a thousand incidental ways, we act in one way rather than another, we go to one place rather than to another, we give priority in our thoughts and in our actions to one rather than to another, we choose things, we talk about things; and with these building blocks we create the conditions which bring into existence the very things we believe in! It is a widely demonstrated law about human behaviour that what you are convinced about manifests; it clothes itself in reality. The sad fact is that we so often attach our beliefs and convictions to the wrong things, and we make them happen! Listen to Andersen (1954: 165):

We are so ready to see on all sides a hostile and predatory world that we are constantly going about our daily tasks affirming our faith in disease, poverty, failure, and loneliness... "As ye believe, so it shall be unto you".

We shall have our beliefs anyway, why not make them beliefs in good, ... in abundance, in health, in vigor, in integrity? ...It seems strange most of us find it so much easier to attach our beliefs to negative things rather than positive...

We let the negative have dominion over us, and manifest itself into reality.

Perhaps worse still, we allow our convictions to be shaped by others, by, for example, the arbitrary judgements of politicians, by what the newspaper editors select as their lead stories for the day, by the TV items which, after all, are selected from among literally hundreds of options available to them. We let other people control the agenda of our conversations. So our view about reality, about what is and is not important, we permit to be manipulated by someone else's faith or belief system.

Especially for young people, then, we must teach them
not to give in so easily. You make the choice of what will dominate your life. You select the things which will fill your thoughts. It is a choice with consequences, because the things which you allow yourself to become convinced about will come into being! There is a deadly seriousness, then, in St Paul’s counsel, and I wish young people especially would espouse it:

> Whatever is true, whatever is noble, whatever is right, whatever is pure, whatever is lovely, whatever admirable - if anything is excellent or praiseworthy - think about such things (that is, let these things occupy your mind). [Phil.4: 8-9]

**Faith, hope and love**

Somewhat surprisingly, then, we have come to this point. We do need a new spirit to interpenetrate the whole of schooling, to infuse the curriculum, and to re-connect us. It will be based upon three qualities:

Faith; that set of beliefs which we develop and which tends to control not only our choices but the things we allow to happen to us;

Hope; that freedom from despair which opens to us the possibilities inherent in our future. Hope or despair creates our vision of the future.

And love: our identification with and care for the cosmic order of which we are a living part.
So what can teachers do?

It seems to me, therefore, that we do not need new curriculum packages, or more courses of integrated studies, or a rejection of the traditional subject disciplines so much as teaching and learning which are in the strictest sense of the word moral. We need to be aware that in a thousand small but cumulative ways, teachers, schools, classrooms and curricula impinge on a child’s mores, a Latin word which means “those things that pertain to character, customs, and beliefs.”

When I was in my first year of teaching, Alby Jones - as my Inspector that year - gave me one of the best bits of advise I have ever had; if you want to be an outstanding teacher, he told me, do just one outstanding or unusual thing each lesson. Of course. Quality, success, wholeness are cumulative, built up step by step over time with consistent purpose.

Parents and teachers affect a child’s faith, hope and love (or their opposites) day by day and almost incidentally. There are some fairly simple things teachers can do to build the balanced way of seeing which this generation needs for survival - personal, national, international, planetary. Let me suggest nine, very briefly.

Firstly, watch your imagery. Choose your metaphors with care! By representing the universe as mechanical, something that works like a clock rather than like a living creature, we reduce a complex, fascinating, living world to a set of abstract formulae, driving God out of the cosmos, demythologizing the world, destroying the wonder and the mysteries which produce poetry, music and art. Yet it is the physicists and mathematicians who have changed our perception about the universe by changing the metaphor. It behaves not like a machine, they tell us, but like a mind - learning, developing, becoming, in our very act of discovering it.

Secondly, teach for wholeness. We ought to revive
that remarkably coherent perception which the Judaeo-Christian tradition developed about the dichotomy between shalom and hamartia. The ancient view was that the world-order is an incredible balance of harmonies. Shalom is the peace, balance, fulfilment, order, well-being which pervades the universe. Anything which causes shalom to be violated, anything which produces disharmony or lack of balance, which diminishes the well-being of ourselves, or of others, or of any other creature which cohabits with us on the planet, anything like that is to be condemned, no matter by whom or what it is caused. The violation is called hamartia, "missing the mark", failing to be what things ought to be. Essentially, then, the "bits and pieces" approach to knowledge, to our planet, to the cosmos fails to show that we are all responsible for the whole. To the extent that we create discord, destruction and disease, we are to be condemned.

But the antithesis is shalom, and it shows in our wonder, awe, reverence for our universe. Are we confident that these are the characteristics which infuse even our science curricula?

Thirdly, teach identification, connectedness, integration. In our recent book on meditation, Lyn and I allude to a remarkable lecture given at Murdoch University by Professor Arne Naess, a Norwegian scholar in the philosophy of science (Beare and Beare, 1988: 66-67). His 1986 Roby Memorial Lecture was entitled An Ecological Approach to Being in the World. Naess proposed that our individualisms endanger the world, and that it is necessary for us to identify with our cosmos in order to restore our collective health. "There must be identification in order for there to be compassion", he argued. "Self-interest" has to be raised to a new level where we realise that we contribute to everyone's well-being by loving our environment. So, he asserts, "the 'everything hangs together' maxim of ecology applies to the self and its relation to other living beings ... and the Earth ...."
Every living being is connected intimately”. We underestimate ourselves by being selfish, for we are “much greater, deeper, (more) generous and capable of more dignity and joy” than we think we are. We are part of the ecology of the universe.

It is significant that Naess uses the two words “empathy” and “compassion” to express our right relationship with the universe. “Empathy” means entering inside the skin of the other and having the emotions and the perceptions that the other experiences. “Compassion” is a similar word, except that it comes from Latin and not Greek. It means to feel with, to have the same “passion” as someone else. In both cases, the words invite us to be part of the consciousness of the Being, the living ness, which inhabits the universe. Could you call that anything less than religative?

Fourthly, teach children not to accept blindly the value-sets other people try to foist on us. Let me put that in a practical way. If the television news disturbs you because it dwells on the latest murder, or on war, or on some scandal, you can turn it off! You don’t have to accept the priorities being paraded before you. And if the stories regular appearing in the morning newspapers fill you with unease or foreboding or ill-will, simply decide not to read it first thing in the morning; fill that first half hour instead with the ideas, moods and emotions which will set the right pattern for the rest of the day. And if someone’s conversation is full of negatives or anger or unease, play the game of veering the conversation onto something that is wholesome or noble or constructive. Take control! Teach children the healthy power of building their beliefs for themselves.

Fifth, teach about visualisation, the power of the pictures which we are carrying around daily in our heads. What can we do about them? When we want to lose weight, or improve our blood pressure, or develop our fitness, we simply go on a diet. We choose to eat certain things and to forego others. You can do the same thing with your thoughts.
You can make the conscious choice to go without the things, the thoughts, the ideas which disturb and distract you. You can choose what you are going to give your attention to. So swear off accepting negative or poisonous thinking; embrace all the positive and wholesome things that come to your attention. Erase the negative and the destructive talk from your conversations; introduce strongly positive and constructive topics to your thinking and your speaking. You can re-track your thinking onto what is wholesome and balanced.

Success depends very strongly, we now realise, on language, especially upon picture-language, upon imagery. Our real intentions are implicit in the firmly held picture planted in our imagination. Adopt the advice, then, of that brilliantly insightful contemplative monk, Carlo Carretto (1975: 170):

I have a secret I would like to share with you.... I have put it to the test time and time again. It goes like this: “act as if” ...... Are you in trouble and yet have the feeling that you do not have sufficient faith to cope with it? All right then, “act as if” you did have faith, organise the details of your life as if you lived by faith. You will find that everything will work out in accordance with your desire for faith ...... “Act as if” you possessed .... unbounded hope and endless charity, and cast yourself into the fray .... “Act as if” ......

Sixth, give particular attention to visions of the future. How they conceive of the future is of fundamental importance to young people. What pictures of the future do you repeatedly carry around in your head? Be careful, because that is the future we will help to bring into existence. We all have expectations about our own immediate future (we sometimes call it “ambition”, or a “career plan”) and they tend to regulate our behaviours and choices. In most respects, then, we make up our minds what we want our world to be, and
then select and reject opportunities according to that interior plan.

**Seventh, distinguish between faith and hope.** To say, "I hope that so and so will happen" is a longing that has not yet quite become an expectation. But to say, "So and so will happen" is an affirmation, a statement of confidence and conviction. Because you can be convinced about it, from all the evidence available to you, you know that the creative powers of the universe, seen and unseen, will work together in harmony to convert that conviction into reality.

**Eighth, tell stories, apocryphal stories.** Stories are probably the most powerful teaching medium humankind has ever invented. Because we all take part in thousands if not millions of incidents throughout our lives, when we retell adventures, or relay an anecdote, we have invariably made a selection from a vast library of stories we would have told. Listen to old people recalling their past and you will find that they do not tell thousands of newly minted stories but they and to go back again and again to the same stories, the same incidents. Why? They have made an implicit judgment about significance. These particular stories are to them in some way important, memorable, the conveyor of some significant message or messages. **Recurrent** stories are enormously important because they reveal the patterned way - indeed the pattern of the way - in which people conceive of their lives.

We ought to be attentive to what stories are told by a person, or by a group which shares an ideology, or within an organisation, or an ethnic group, particularly stories about the past and the future. What are being revealed in those tellings? In fact, are there common features, consistent underlying values, and recurrent imagery being used? All great religions abound in stories. They would never have survived unless they had discovered a means of conveying effectively the intangible, intellectually demanding value frameworks to millions of relatively simple, uneducated adherents. Those
shared belief systems become embodied in stories, often about the heroes, heroines and saints who have gone before them, and especially about the founder or founders. Sometimes, of course, we deliberately invent apocryphal stories, or fictions, or symbolical incidents to embody these meanings that "oft do lie too deep for tears".

What stories, then, are we telling about our futures? There are many, in fact, from the Science Fiction writers, from movies, from TV series. We do not often think of these as image-makers and the conveyors of values, but they are. They are the more important because they are shared; they give more than a private vision, but cultivate in a vast audience a "way of seeing", so that millions of viewers are willing to suspend their disbelief for a period and to allow the persuasive coherence of this fabricated set of incidents to be entertained (in every sense) as a set of possibilities.

For goodness' sake, then, tell stories!

And ninth, teach and learn how to celebrate! In 1987 Harvard University was 350 years old, and its alumni were invited to contribute to a celebratory fund. We hardly needed to be told why we should contribute; we only had to recall all the famous people, ideas, books, discoveries and events which that great institution had contributed to the world. But alongside those were the memories of the incidents (intellectual, social and spiritual), the friendships and contacts, and the life-chances which one personally acquired there - how in fact, Harvard invested in my life and its possibilities. That 350th anniversary celebration embraced me, ennobled me in the act of including me.

While I was in Britain in 1985, the Wells Cathedral Choir School celebrated its one thousandth birthday! Imagine how exclusive, important, and personally enlarged you would feel if you could claim to have been connected to such a school. That is the point about celebrations and cultures.

Every good teacher, every good school, every wise
parent uses all these devices. It does not surprise me, then, that at this particular point in our history, parents are so insistent upon being given the right to choose their child’s school. Sometimes they are unclear why they want one school rather than the next, but it has to do with sensing balance, wholeness, health. They know there is a pervading spirit to a school; they can smell, as it were, the milieu, the learning environment, the way the students are valued, the value-set embedded in the syllabuses. Their intuition leads them to what is colligative about the curriculum and the school that sponsors it.

VI

Dance and Playfulness

So where have we travelled in this paper? We began by affirming that, in spite of the criticisms which have been levelled at education and educators throughout the 1980s, much of it simple-minded, naive, and of a kind to sour the very people we are relying on, educators are nevertheless fairly well placed to build excellent schools, to internationalise the curriculum, to develop more appropriate learning programs for the new range of educational clients, to assess them more appropriately and accurately, and also to manage the educational enterprise. There are of course practical things we must do to make schools match the needs of the citizens of the next century.

However, education does not need merely a mechanistic, technocratic restructure. There is something fundamental, at the heart of our society, which has to be engaged. The pervading disconnectedness in the way people view the world has imposed a fractured approach on both schooling and the curriculum which is quite threatening to our survival. Lovelock’s life system he calls Gaia and the United Nations Brundtland
Report have drawn attention to the fact that the way human beings now vision the world is deadly, in a quite literal sense. In the face of Moltmann’s comments about end-time, we recognised the destructiveness of the pessimism which we have allowed to develop among young people.

The antidote is to develop unity from disunity, cohesion out of plurality, responsibility instead of carelessness, a sense of community to balance our destructive individuality. So we are back where we started, with the yin and the yang and that balanced harmony which spells health, wholeness, and poise - with shalom, in fact. And we know that in the 1990s schooling must set that harmony among its highest goals. What is more, it can be accomplished more easily than might at first seem possible, in many incidental actions by teachers and parents.

My conclusion may in consequence seem unexpected if not startling. In that monumental volume called *Mysticism: A study in the nature and development of Man’s spiritual consciousness* (1955), Evelyn Underhill reviews the writings of hundreds of saints, mystics, yogi and spiritual masters down through the centuries who have struggled to describe what that state of balance, harmony and union is like. They seem universally to testify that it is characterised not by solemnity or heavy seriousness but by lightness, gaiety, a simple and almost innocent joy. In the works of people like Francis of Assisi, St Catherine of Genoa, the Zen masters and the Sufis, it has been described as “a childlike gaiety”, a “gladness of heart”, a “delicate playfulness” (pp 437-438). The image which they return to, over and over, is “dance”. Both Underhill (1955 : 438) and Alan Watts (1971 : 153) quote the Victorian poet-mystic Coventry Pulmore who says that when you fall in love with the universe, you are led beyond “reverence and worship into (a sphere) of laughter and dalliance” where the soul exclaims:

Shall I, a gnat which dances in Thy ray,
Dare to be reverent?

After decades of dealing with schools and school systems, and after visiting literally hundreds of them in my professional life, I know when I am confronted by an excellent school, one whose heart is right and where there is balance and good health in its soul. It has that same unmistakeable trademark. It is a playful place! It has a light-hearted, loving exuberance about it.

In his article on the mythologies which develop in big corporations, Koprowski (1983) tries to explain why Japanese management eclipsed the Americans at their own game. He says that the oriental world view "stresses the organic unity of all things - in which individuality is an illusion in the endless cycle of life". The American approach, on the other hand, he labels the cowboy mentality; it represents each of us as a lone fighter competing against a hostile world, and it engenders an individualism which is antagonistic to the collective unity of the cosmos. The Western world-view is destructive, whereas the oriental is affirmative. The Western is cerebral, rational, whereas the oriental is intuitive. Koprowski cites the story of an American sociologist who told a Shinto priest that he could not understand Eastern theology. The Shinto priest replied, "We do not have theology. We dance".

I have tried to suggest that perhaps there is too much curricular "theology" around the moment. We are too rationalistic, too earnest in our planning, too mechanistic, too deadly serious. We would ennable our younger generation and ensure their future more adequately, I think, if we reinstated compassion, responsibility, and respect for the incredible oneness of the cosmos; if we valued gaiety, playfulness, and an organic connectedness in our educating.

What our students need in the 1990s, then - and I am in deadly earnest - is the message of the heart, the awareness that the universe is a harmonious dance and that usually our
best response is to let our spirits dance with it. For the 1990s, we need educators, parents, schools and a society who can help children to identify with the Being-ness and the Becoming-ness that dance in balanced harmony at the expansive heart of the universe.
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