



Spirit of Life Unitarian Fellowship

Kirribilli Neighbourhood Centre
16-18 Fitzroy Street, Kirribilli
(near Milsons Point Station)

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Schedule of Services

Services are held every Sunday at 10:30 at Kirribilli Neighbourhood Centre

3 July, Martin Horlacher: "Spinoza: Was He the Prince of Philosophers?"

Baruch Spinoza is widely considered one of the greatest rationalist philosophers not only of 17th-century Europe, but perhaps of all time, laying the groundwork for the 18th-century Enlightenment and modern biblical criticism, as well as modern conceptions of the self and the universe. His moral character and philosophical accomplishments throughout his 44 years of life have led one 20th-century philosopher to name him "the 'prince' of philosophers", and this talk will examine why.

(This talk was cancelled again last month owing to wild weather. Third time lucky?)

10 July, No meeting due to markets

17 July, Colin Whatmough: "Iraq: Corruption, Crime, Oil."

24 July, Sandy Biar: "Change Makers and Unitarian Values: the Qualities of Effective Leaders"

Many of the inherent traits of Unitarians are the same traits that underpin effective community organisers and leaders - curiosity, irreverence, imagination, a free and open mind and a sense of humour. We'll explore how these values are at the heart of reform and movement building, and how they can help us chart a course towards a stronger movement in Australia for Unitarian values.

31 July, Rev. Geoff Usher: "Ram Mohan Roy and the Brahma Samaj."

The Brahma Samaj was formed in Calcutta early in the 19th century, during a drive to reform Hinduism and Indian society. It continues to this day as a small but influential movement, based in India but with branches in other places around the world. Ram Mohan Roy, who was generally regarded as the Founder of Modern India, was particularly important in the reform movement which led to the formation of the Brahma Samaj.

Linus Pauling, Scientist and Peace Activist

Linus Pauling Linus Carl Pauling (February 28, 1901-August 19, 1994), a distinguished American chemist, helped to integrate chemistry with quantum theory and founded the discipline now called molecular biology. From 1945 on much of his time was devoted to antiwar activities and stopping the atmospheric testing of nuclear weapons. He is the only person to win two unshared Nobel Prizes, one for chemistry and one for peace.

The Pauling family came from a German Lutheran background, but Linus's parents were not especially active in church affairs. He was born in Portland, Oregon to Herman Pauling, a self-trained pharmacist, and Lucy Darling. His father was very supportive, but died when Linus was nine. He started working to help support his mother and two sisters at twelve. Despite this, he made good grades in school, became an avid reader, and had a pleasant and adventurous childhood.

Linus first expressed his scientific interest in collecting insects and rock mineral samples. He was introduced to the world of chemistry by Lloyd Jeffress, a classmate who became a lifelong friend. Recognizing Linus's unusual abilities and devotion to class work, his high school teachers encouraged him and allowed him to work independently in the school laboratory. He also excelled in the language arts, including public speaking. Like his father he was an extremely hard worker and possessed great self-confidence, but was reserved.

After high school his mother wanted him to take a job as a machinist. Determined to become a research chemist, Linus instead entered nearby Oregon Agricultural College (now Oregon State University). He was considered a genius by his teachers and fellow students. After taking analytical chemistry he was allowed to teach the course. While teaching a chemistry class designed for home economics majors, he was impressed by and attracted to one of his students, Ava Helen Miller, whom he later married. In the summers he worked for the Oregon transportation department testing paving materials on location. Such jobs broadened his outlook on the world, offsetting

his tendency to isolate himself in research. In 1922 Pauling graduated as salutatorian of his class and entered the California Institute of Technology (Caltech) with a generous fellowship. The following year he and Miller were married. For the rest of her life Ava Helen was his only really close companion. She took charge of the rearing of their four children.

At Caltech Pauling became an expert on X-ray diffraction, analyzing the spacing and orientation of atoms in crystalline materials. He produced the first of his many research papers on crystal structure after only three months. He completed his doctorate in 1925 and, with a Guggenheim fellowship, studied in Europe, 1926-27.

At this time physical science was in a state of fundamental change. Niels Bohr, Werner Heisenberg, and Erwin Schrödinger had developed mathematical approaches—quantum mechanics—to describe the structure of atoms and molecules. The Schrödinger Equation was the key to understanding matter and energy at the atomic and molecular level, but the mathematics was such that it could not be applied in exact form to the situations encountered in a chemistry laboratory.

Pauling's breakthrough was to formulate approximate methods for solving the equation that could be applied to compounds such as methane and benzene. His calculated values for the orientation and bond strength of atoms within molecules closely matched the experimental results from X-ray and electron diffraction. **Pauling was the first to make quantum theory and chemical experiment work together** and, in so doing, added important terms and ideas such as "hydrogen bonding," "resonance," "hybrid bond," and "valence bond theory" to the chemist's repertoire.

Having developed the valence bond method of approximate calculation, Pauling rapidly published a landmark series of research papers. His crowning achievement was to explain the carbon bonding in molecules such as methane.

Shortly thereafter, Pauling returned to the

vexing problem of interpreting X-ray diffraction data.

With an uncanny ability to see simple solutions to complex problems, he drew up a list of step by step rules—now called Pauling's Rules—for the interpretation of diffraction patterns. England's leading diffraction specialist, Sir William Bragg, declared the rules "a master stroke." Pauling's valence bond method and his rules together simplified and illuminated both the theoretical and experimental sides of structural chemistry.

In 1927 Pauling became assistant professor of theoretical chemistry at Caltech, teaching and doing research in the diffraction laboratory. He was made professor in 1931, a position he held until 1963. In 1939 Pauling gathered and expanded his papers to form a book, *The Nature of the Chemical Bond*, the most important chemical text of the twentieth century. He also wrote the well-received *Introduction to Quantum Mechanics with Applications to Chemistry* (with E. Bright Wilson), 1935, and the most popular freshman chemistry text ever, *General Chemistry*, 1947. The many editions of the latter text made him a wealthy man.

Shortly before the Second World War, Pauling switched his attention to organic molecules—proteins, in particular. These studies led to the identification of the genetic defect in the structure of the hemoglobin molecule that causes sickle cell anemia.

With the experimental assistance of Herman Branson and Robert Corey, Pauling devised the famous alpha helix model for protein structures. Along the way Pauling developed the useful, and now commonplace, method of "tinker-toy" modeling to help himself and others visualize and understand such complicated molecules. This work formed the basis for the discovery of the double helix structure of DNA by James Watson and Francis Crick, which in turn led to the unlocking of the secrets of the genetic code.

During the war Pauling worked on propellants, explosives, an oxygen concentration meter for submarines, and a synthetic blood plasma. In recognition of this service he re-

ceived the Medal of Merit from President Harry Truman. Towards the end of the war, Pauling restarted his program on molecular biology. In a paper entitled "A Molecular Theory of General Anesthesia," he demonstrated that anesthetics affect the brain in a way chemically similar to extreme cold temperature.

Meanwhile Ava Helen worked at Caltech on the synthetic rubber program, and trained as an emergency air raid warden and fire controller. By nature more inclined to social activism than Linus was, in 1942 she volunteered time to the American Civil Liberties Union to fight the internment of Japanese-Americans. In 1945 when she hired a Japanese-American soon to join the U. S. army for a weekend of gardening, the Pauling house was defaced with racist messages and the Paulings received numerous anonymous phone calls.

The realization that the atomic bomb could end the civilized world turned Pauling into a pacifist. He joined Albert Einstein and Bertrand Russell in protesting the atmospheric testing of nuclear weapons and opposing the development of the hydrogen bomb. He traveled thousands of miles giving speeches and circulating petitions. As a result the FBI compiled a massive file of his earlier activities in support of the union movement and world government; the State Department refused to grant him a passport to attend a science conference in England, fearing that he would use the occasion to promote his peace agenda; and he was brought before a Congressional investigative committee to answer for his loyalty to the United States.



Pauling found much-needed support for his antiwar campaign from Unitarians in the Los Angeles area. He and Ava Helen gave talks at the Unitarian churches in Los Angeles and Pasadena. On April 15, 1954, Pauling

addressed a crowd of a thousand listeners at the Los Angeles Unitarian Church, attacking the recent super bomb test in the Bikini atoll and its high level of radioactive fallout and also criticizing the government's treatment of physicist J. Robert Oppenheimer.

Pauling developed close relationships with several Unitarian peace activists including the Los Angeles minister, Stephen Fritchman. **"My wife and I joined the Los Angeles Unitarian Church," Pauling later wrote, "because it accepts as members people who believe in trying to make the world a better place."**



Pauling family, 1930

Pauling made it clear on several occasions that he had no interest in mystical aspects of religion. In an interview on the Phil Donohue television show he was asked, "Do you believe in God?" He replied, "No, I do not." This response brought forth letters of complaint from some of the wealthy donors to his research programs. Having no tolerance for discussion of the philosophy of science, in seminars Pauling did not hesitate to bring matters to earth with the remark, "I thought chemistry was an experimental science." He took a similar view of religion. He dealt with the world as he perceived it. In an interview in the Fall 1974 issue of the Humanist magazine he said, "my basic philosophy is oriented to the diminution of suffering in the world...a basic ethical principal with me (is) that decisions be made that will increase happiness."

In 1954 Pauling was awarded the Nobel Prize for his work on the chemical bond and the structure of molecules.



Nobel Prize for Chemistry, 1954

He thought this award obligated him to take a stand on public issues such as segregation and the Viet Nam war. Snubbed by more conforming faculty members and under pressure from the long-suffering Caltech administration to lower his public profile or resign, he chose to resign.

In 1958, Pauling wrote No More War! to counter the views of physicist Edward Teller, the principal advocate for the development of the hydrogen bomb. Pauling could not or would not, however, rely on the strength of his arguments to make his case. When unfairly attacked he often filed a law suit for defamation or unconstitutionality. In one instance he sued the Eisenhower administration, claiming that it had not been granted the authority by Congress to threaten people's right to life through the release of radiation into the atmosphere. In March 1958 the Soviets surprised the West by calling for an immediate halt to nuclear testing. Although largely a ploy, this indicated that atomic weapons were now widely acknowledged to threaten the continuance of civilization. Slowly public opinion became to shift. On the day after the first nuclear test-ban treaty went into effect in 1963, Pauling learned that he had been awarded the Nobel Prize for peace.

Pauling was professor of sciences at the Center for the Studies of Democratic Institutions, 1963-67, and professor of chemistry at the University of California, San Diego, 1967-69, and at Stanford University, 1969-74. He was made emeritus professor of chemistry at Stanford in 1974.

In 1973 Pauling created the Linus Pauling Institute of Science and Medicine to advance a new field he called "orthomolecular medicine." He undertook to convince the medical world that vitamin C helped cure the common cold and could help prevent certain cancers. He had little success convincing the medical profession, but his bestseller, Vitamin C and the Common Cold, 1970, made the public at large more aware of the need for vitamins and good nutrition.

A man of great conviction and inner strength, Pauling became somewhat self-righteous

after he received world acclaim. When convinced that he was correct he made his points more aggressively than was necessary. This sometimes cost him friendships. Although he had often been unsparing and harsh in his criticism of premature statements by other scientists, he overstated the case for the data at hand on the usefulness of vitamin C. In this instance the confidence, energy, and persistence that had made him a valuable peace advocate worked against him and dimmed his reputation.

Following Ava Helen's death from stomach cancer in 1981, Pauling continued to produce new ideas on nuclear structure and researched the diet of our Old World ancestors to gain insight into proper nutrition. In 1986, he published his last book, How to Live Longer and Feel Better.

After several years of declining health, Pauling died in 1994 at age 93.

Pauling's many honors, aside from his Nobel prizes, include the Royal Society's Humphrey Davy Medal, 1947; the American Chemical Society's Langmuir Prize, 1931; the ACS's Willard Gibbs Medal, 1946; and the ACS's Theodore William Richards Medal, 1947. In 1933 he was the youngest chemist ever elected to the National Academy of Sciences. He received honorary degrees from Cambridge, 1947; Oxford, 1948; and London, 1948 (the only chemist to be given this triple honor). In 1975 he received the National Medal of Science from President Gerald Ford. Pauling was elected Rationalist of the Year by the Rationalist Society, 1960, and Humanist of the Year by the Humanist Society, 1961. The World Fellowship of Religions named him Supreme Peace Sponsor in 1966 and he was awarded the International Lenin Peace Prize in 1971.

The primary repository of Pauling papers is the Ava Helen and Linus Pauling Collection at Oregon State University. Some other materials of interest are in the archives of the California Institute of Technology. Clifford Mead and Thomas Hager, eds., Linus Pauling: Scientist and Peace Maker (2001) is a collection of short writings by Linus Pauling and others drawn from the Oregon State University collections. Thomas Hager's Force of Nature (1995)

contains a list of his major research papers. The indices to the Journal of the American Chemical Society, Journal of Chemical Education, and especially Chemical Abstracts list Pauling's research and review papers. For a comprehensive listing see Clifford Mead, ed. The Pauling Catalogue: Ava Helen and Linus Pauling Papers (1991). Pauling gave many interviews for various publications, including Barbara Marinacci, ed., Linus Pauling in His Own Words (1995) and Daisaku Ikeda and Linus Pauling, A Lifelong Quest for Peace (1992). Personal views of Pauling and his work are in The Pauling Symposium (1995). Interviews with Pauling's contemporaries are contained in Anthony Serafini, Linus Pauling: A Man and His Science (1989).

The standard biography of Pauling is Thomas Hager's Force of Nature (1995). Another is Ted Goertzel and Ben Goertzel, Linus Pauling: A Life in Science and Politics (1995). Two biographies for younger readers are Thomas Hager, Linus Pauling and the Chemistry of Life (1998) and Florence White, Linus Pauling: Scientist and Crusader (1980). For background on the science see Robert Paradowski, "The Structural Chemistry of Linus Pauling" (1972), a Ph.D dissertation for the University of Michigan.

Useful books on this important period in the development of modern physics include George Gamow, Thirty Years that shook Physics (1966) and Henry Boorse, The Atomic Scientists: a Biographical History (1989). Although the definitive general work on the scientist's obligations to politics and ethics has not yet appeared, Abraham Pais has written solid studies on Bohr and Einstein's personal reactions to events—Niels Bohr's Times: In Physics, Philosophy, and Polity (1991) and Subtle Is the Lord: The Science and the Life of Albert Einstein (1982)—and Silvan S. Schweber's In the Shadow of the Bomb: Bethe, Oppenheimer, and the Moral Responsibility of the Scientist (2000) is also useful.

This biography of Linus Pauling was written by **Jerry Frazee**: Unitarian, chemist & physicist; posted March 29, 2002 in the Dictionary of Unitarian and Universalist Biography, an on-line resource of the Unitarian Universalist History & Heritage Society.

Aldous Huxley's thoughts on Music

An English writer, novelist and philosopher, Aldous Huxley (1894-1963) is best known for his dystopian "Brave New World" and his "Doors of Perception" exploring possible links between psychedelic drugs & mysticism.

The essay "The Rest Is Silence" from Music at Night and Other Essays 1931 gives us Huxley's thoughts on the relation of music to the spiritual. Some quotes:

"From pure sensation to the intuition of beauty, from pleasure and pain to love and the



mystical ecstasy and death — all the things that are fundamental, all the things that, to the human spirit, are most profoundly significant, can only be experienced, not expressed. The rest is always and everywhere silence.

After silence that which comes nearest to expressing the inexpressible is music."

"Silence is an integral part of all good music. Compared with Beethoven's or Mozart's, the ceaseless torrent of Wagner's music is very poor in silence. Perhaps that is one of the reasons why it seems so much less significant than theirs. It "says" less because it is always speaking."

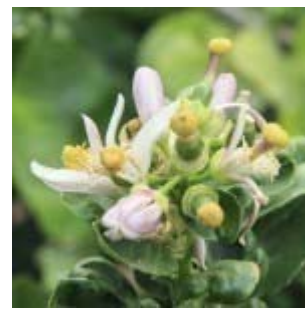
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"In a different mode, or another plane of being, music is the equivalent of some of man's most significant and most inexpressible experiences. By mysterious analogy it evokes in the mind of the listener, sometimes the phantom of these experiences, sometimes even the experiences themselves in their full force of life — it is a question of intensity; the phantom is dim, the reality, near and burning. Music may call up either; it is chance or providence which

decides. The intermittences of the heart are subject to no known law.

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"Music "says" things about the world, but in specifically musical terms. Any attempt to reproduce these musical statements "in our own words" is necessarily doomed to failure. We cannot isolate the truth contained in a piece of music; for it is a beauty-truth and inseparable from its partner. The best we can do is to indicate in the most general terms the nature of the musical beauty-truth under consideration and to refer curious truth-seekers to the original. Thus, the introduction to the Benedictus in the Missa Solemnis is a statement about the blessedness that is at the heart of things. But this is about as far as "our words" will take us. If we were to start describing in our "own words" exactly what Beethoven felt about this blessedness, how he conceived it, what he thought its nature to be, we should very soon find ourselves writing lyrical nonsense... Only music, and only Beethoven's music, and only this particular music of Beethoven, can tell us with any precision what Beethoven's conception of the blessedness at the heart of things actually was. If we want to know, we must listen — on a still June night, by preference, with the breathing of the invisible sea for background to the music and the scent of lime trees drifting through the darkness, like some exquisite soft harmony apprehended by another sense."



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"There is, at least there sometimes seems to be, a certain blessedness lying at the heart of things, a mysterious blessedness."

Read more Huxley quotes selected by Maria Popova' at:

<https://www.brainpickings.org/2016/04/05/aldous-huxley-music-at-night/>

## **UUA President on SCOTUS DACA/ DAPA Decision:**

A Betrayal of Immigrant Roots

June 23, 2016

The Rev. Peter Morales, president of the Unitarian Universalist Association (UUA), issued this statement on today's U.S. Supreme Court decision in *United States v. Texas*:

"I am profoundly disappointed in the U.S. Supreme Court's 4-4 decision in *United States v. Texas* upholding a lower court decision that struck down President Obama's executive actions on immigration that expanded Deferred Action for Childhood Arrivals \* (DACA) and created Deferred Action for Parents of Americans and Lawful Permanent Residents (DAPA).\*\* My thoughts are with the millions of immigrant families whose lives are made harsher by this outcome.

Blocking the DACA and DAPA programs is a betrayal of our country's immigrant roots. The American justice system has failed millions of people who are living in fear of deportation. On a daily basis, these immigrants face the possibility of being torn from their loved ones and homes.

For years, our Unitarian Universalist community has supported immigrant families and immigration reform. In 2010, I was arrested for non-violent civil disobedience along with dozens of people of faith protesting SB1070, Arizona's inhumane anti-immigrant law. In 2012, the UUA focused its annual General Assembly on social justice for immigrant reform and migrant rights. In 2013, delegates at the UUA's General Assembly passed a statement of conscience declaring immigration to be a moral issue. The UUA has also recommitted to the Sanctuary Movement, where congregations provide safety, housing, and assistance for individuals facing deportations.

And still it is not enough.

We cannot rest until the U.S. Congress passes comprehensive immigration reform. No one should have to live in the shadows based on their immigration status. Together, we can light the way to a path to citizenship

for millions of hard-working people in this country.

As a nation of immigrants, we must shape our laws, practices and policies to support immigrant families. As a religious community, we cannot ignore the moral call to help those who are suffering. And as citizens of the world, we must remember that love has no borders."

\* Deferred Action for Childhood Arrivals (DACA) is an American immigration policy that allows certain illegal and undocumented immigrants who entered the country before their 16th birthday and before June 2007 to receive a renewable two-year work permit and exemption from deportation. DACA confers non-immigrant legal status but does not provide a path to citizenship. It was started by the Obama administration in June 2012.

\*\* Deferred Action for Parents of Americans and Lawful Permanent Residents (DAPA), sometimes called Deferred Action for Parental Accountability, is a planned American immigration policy to grant deferred action status to certain illegal immigrants who have lived in the United States since 2010 and have children who are either American citizens or lawful permanent residents. Deferred action is not full legal status but would come with a three-year, renewable work permit and exemption from deportation.

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Brexit not just about immigration

.....Britain doing what Nigel Farage and Rupert Murdoch and Boris Johnson wanted isn't just about an anti-immigration xenophobia agenda, although it is related to that. No, the Brexit is a symptom of the mass anxiety felt by the people who were once considered the working class, and are now not sure what they are except anxious and scared all the time.

These are the people who feel left behind by globalisation, over-priced, not able to compete, not sure what their futures hold, wishing they could go back to the safe-old-days when they had jobs in manufacturing and coal mines and could work in the same company

for 40 years and retire on a comfortable pension. This is what Brexit is about. Such anxiety and fear is very easy to stoke because it's there, living inside people, all the time. **Casualized jobs. No job security. Offshoring of manufacturing. A hollowing out of social services which used to catch people from falling. And a government who constantly tells them their anxiety is all their fault. If they can't make-good in a capitalist, free market, globalised world, they're told, the problem is with them.** Not the government who refuses to implement policies which ensure the wealth created by globalization is shared fairly and equally amongst everyone who contributes. No, the problem is with those losing out, whose wages haven't grown at the same rate as the profits, who feel a deep-seated resentment towards 'the system' which has left them behind. It's no wonder they're resentful.

This anxiety and fear is also very easy to transfer onto easy targets. To some, the villain is symbolised by free trade agreements, fears of world government and unelected EU officials. To others, and I would suggest many, this anxiety is encapsulated by immigration; the faces of the newly-arrived families in their towns are representative of their loss of confidence, of the death of the good old days, the end of the stable, comfortable Britain they grew up in. No matter whether life was better back then or not (and for most, it wasn't), when resentful, anxious and fearful people see their communities becoming increasingly multi-cultural, it's incredibly easy to blame those who don't look like them for every problem they perceive as being caused by a globalised world. So they want these people gone. They think with them gone their anxiety will subside. They're wrong. The real villains aren't the immigrants next door. The real villain is an economic system which advantages the rich at the expense of the poor.

Frustratingly, bitterness and resentment make people vulnerable to fear campaigns. What Murdoch, Farage and Johnson didn't mention was that the Brexit is predicted to make the UK's economic situation worse by reducing the value of the Pound, thereby decreasing savings, cutting the value of pensions and possibly causing a deep recession and massive job losses. I'm sad for the UK today because I think they've made a bad decision. I'm sad for those who voted not to leave, and for those who wanted out. I don't think anyone wins from this situation and everyone will likely live to regret it.

Read the rest of this article written by Victorian Rollison for AIMN, The Australian Independent Media Network, at

<http://theaimn.com/the-disenchanted-brexit/>

Would you care to join Spirit of Life Unitarian Fellowship?

Membership is open to all adults and includes this newsletter. *Full membership \$50 concession \$20* . If you would like to join us as an active member of Spirit of Life, please ring **0466 940 461** or consult our website www.sydneynunitarians.org . Please note that all membership applications are subject to approval at a meeting of the Committee. Ask Rev. Geoff Usher for an application form at the Sunday service.

If you have a news item or written article you believe would be of interest to the congregation, we invite you to submit it for Esprit. It would be helpful if items for publication, including articles and talk topics with themes could reach Esprit editor by the 15th of each month: jantendys@yahoo.com.au or hand to Jan Tendys at the Sunday service.

Do you have a topic of a spiritual / ethical nature that you would like to share with the congregation? As Unitarians, we support an "Open Pulpit" and invite members of the congregation to lead the service if they so wish. *Please see Caz Donnelly at the Sunday service*

Fellowship contact 0466 940 461