Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Canolfan Sophia
The Sophia Centre

CULTURE AND COSMOS

A Journal of the History of Astrology and Cultural Astronomy

Vol. 8 no 1 and 2
Spring/Summer and Autumn/Winter 2004

Papers from the fourth conference on the Inspiration of Astronomical Phenomena (INSAP IV), Magdalen College, Oxford, 3-9 August 2003.

Published by Culture and Cosmos
and the Sophia Centre Press,
in partnership with the University of Wales Trinity Saint David,
in association with the Sophia Centre for the Study of Cosmology in Culture, University of Wales Trinity Saint David,
Institute of Education and Humanities
Lampeter, Ceredigion, Wales, SA48 7ED, UK
www.cultureandcosmos.org

Cite this paper as: Olowin, R.P., 'Robinson Jeffers: Poetic Responses to a Cosmological Revolution', *Culture and Cosmos* 8, nos. 1 and 2, Spring/Summer and Autumn/Winter 2004, pp. 271–86.

British Library Cataloguing in Publication Data
A catalogue card for this book is available from the British Library

ISSN 1368-6534

Printed in Great Britain by Lightning Source

21

Robinson Jeffers: Poetic Responses to a Cosmological Revolution

R.P. Olowin,
Department of Physics and Astronomy, Saint Mary's College of California

Abstract. Robinson Jeffers is considered one of the few twentieth-century poets who include contemporary scientific astronomical observations and theory as not merely an image vehicle but as an interpretive element in their work. He uses scientific terminology and refers to what were advanced theories regarding the nature of the universe and humankind's place in it. It is suggested that his brother, Hamilton, an astronomer working at the Lick Observatory, may have been one of the sources and a stimulant for his inspiration and ruminations on the mysteries of the cosmos. Jeffers' use of novel astronomical ideas as well as personal observations of celestial phenomena lends a potent veracity to his work as he develops a poetic response to the cosmological revolution led by Einstein and punctuated by Hubble.

In December of 1609 the Florentine Galileo trained his feeble telescope on Jupiter and discovered four bright 'stars' circling the planet in a miniature model of the solar system, a discovery supporting the Copernican hypothesis that the earth circled the sun and was not, therefore, the center of the universe. This discovery heralded the birth of a new cosmological model, a re-evolution of humanity's sense-of-place, giving a new and cosmic context to humankind.

The poets too, began to interpret these new understandings, bridging the scientific discoveries with the written word in an attempt to convolve them with interpretation and meaning. Writing in seventeenth-century England, John Donne, lamented

> A new Philosophy calls all in doubt,
> The Element of fire is quite put out;

R. P. Olowin, 'Robinson Jeffers: Poetic Responses to a Cosmological Revolution', *The Inspiration of Astronomical Phenomena*: Proceedings of the fourth conference on the Inspiration of Astronomical Phenomena, Magdalen College, Oxford, England, 3-9 August 2003, special issue of *Culture and Cosmos* 8, nos. 1 and 2, Spring/Summer-Autumn/Winter 2004, pp. 271–86.
www.CultureAndCosmos.com

The Sun is lost, and th' earth, and no
mans wit
Can well direct him, where to looke
for it.[1]

The poets often lacked the precision about how the cosmos had been rearranged since they often invoked the old and familiar geocentric (here permute the first letters to read 'ego'-centric) Ptolemaic plan of the heavens. Nevertheless, a surprising awareness of spaciousness awakened, expressed in imagery that spanned the new cosmos, soaring into the void far beyond the crystalline celestial spheres in which the planets and the stars had been previously confined. The poetry of that age revealed a unique beauty pervaded by a sense of wonder and a singular freshness of vision. The universe had burst open its boundaries and freed the earth into an ocean of stars.

Until late in the sixteenth century, to poet and literate citizen alike, humankind was the focus of a visible, interconnected cosmos. This connectivity penetrated the very essence of existence, from the elemental forms of the four substances – fire, air, water and earth – to their harmonious regulation by the fixed stars. From the time of the early Greek philosophers, human form and proportions were a pattern for all structure in the universe, including the fixed patterns observed in the sky. The planets, set like sequins in the black fabric of the sky, obediently circled the earth, and beyond them, set in their own sphere, revolved the 'fixed' stars visible to the unaided eye, stars that were perfect, unchanging, divinely numbered, and placed there by God. Each planet and star had a potent role in human living and watched over terrestrial affairs. Visible in the heavens but curiously not included in the model was the Milky Way, explained by ancient myth as the copious output of Hera's bountiful breasts.

Into this comfortable and obvious world view broke a brilliant new star in 1572 (Tycho's nova), a great comet in 1577 and another brilliant new star in 1604 (Kepler's nova). These changes in the immutable heavens were a disaster (dis-aster = 'bad star') to believers of the ancient astrologies but they beckoned like a liberation for those observers who

[1] John Donne, 'The First Anniversary', An Anatomy of the World, [c. 1612], lines 205–208, in Charles M. Coffin, ed., *The Complete Poetry and Selected Prose of John Donne* (New York: Random House, 1952), p. 191; A. L. Clemens, ed., *John Donne's Poetry: Authoritative Texts, Criticism* (New York: W.W. Norton, Norton Critical Editions, 2000).

for centuries had been struggling to reconcile philosophy and what they were seeing as observers. The notion of a heliocentric system of the world began long before Copernicus had published his thesis of the sun's centrality in 1543, but there was no evidence to prove this assertion. Tycho Brahe (1546–1601) revolutionized astronomical instrumentation and observation by amassing a huge store of measures of the planets and stars and even calculated that the comets traveled through the supposedly rigid heavenly spheres. But in the end, even he could not abandon Aristotelian physics, which is predicated on an absolute notion of place, and with that demonstrated logically that the sun, along with the planets, must circle the earth. Johannes Kepler (1571–1630), using Tycho's complete series of observations of unprecedented accuracy, discovered that planets actually move in elliptical orbits and demolished the comfortable cult of the circular pattern of heavenly perfection. He retained the ancient notion of the Music of the Spheres, but the complicated orbits meant that each planet contributed full harmonics to the heavenly chorus rather than a fundamental tone. Galileo and his irrefutable observations of the phases of Venus and the 'Medici stars' of Jupiter doomed the old earth-centered cosmology. He declared that the sun is indeed central and the Earth is merely a planet, and not even a principal one at that. Moreover, through his 'optic glass' (as Milton wrote in *Paradise Lost*) that mysterious milk of Hera in the Via Lactea was seen for the first time (in his *Siderius Nuncius*) to consist of faint stars in uncountable myriads: ;For the galaxy is nothing else than a congeries of innumerable stars distributed in clusters. To whatever region of it you direct your spyglass, an immense number of stars immediately offer themselves to view, of which many appear rather large and very conspicuous but the magnitude of small ones is truly unfathomable'.

Gradually, these new ideas infiltrated the Continent, arriving in England at a time when poetic expression in the English language was at its peak. The poets could be seen as interpreters of these newly discovered truths of nature, and we see in their work a growing awareness of a larger universe, of space, of time, and of infinity. Yet at the same time they were fettered by the constraints of the old cosmology: humankind was still the focus of the cosmos bound in a close relationship with a universe of planets and stars.

The canon of cosmic poetry begins with John Donne. Crucial to the impact of Donne was his broad learning and his association with the learned men of his day. Thomas Harriot, the English astronomer who observed the Moon and planets with a telescope prior to Galileo, can be

connected with Donne through mutual friends and associates. It is likely that Donne's ideas of the cosmos were nurtured directly by such contacts and we can see Donne's scientific sophistication in his description of Galileo and his glass: Donne says, 'of late hath summoned the other worlds, the Stars, to come neerer to him, and give him an account of themselves ... '. He serves as an example of the bridge that can be built between science and the sculpted word. But if Donne was one of the lyric singers of the canticle of the cosmos, then John Milton was the epic voice. With *Paradise Lost* there comes into existence another – and perhaps the greatest – cosmic vision of the age. The entire epic represented by *Paradise Lost* can be outlined in a succession of flights across a three-sphere universe consisting of heaven, Earth and hell. Although Milton's message in *Paradise Lost* was theological and political, the awareness of space that was brought about by the revolutionary cosmology of Copernicus, Kepler and Galileo gave him a vast arena for his account of struggle between good and evil. The legendary meeting of Milton and Galileo at his farm in Arcetri following his condemnation in 1633 serves as another model of the meeting of the scientific and poetic minds. And by the end of the seventeenth century the poet could no longer write unaided as a prophet and a seer into the nature of things; private intuition had increasingly to give way to the collaboration of scientist and artist that was to follow.

Today the four ancient elements – fire, air, water and earth – have yielded to the half dozen quarks, another half dozen leptons like the familiar electron, and the bewildering array of force carrying particles described in the 'Standard Model'. These comprise the components of all visible (not Dark) matter and construct the world from the scale of atoms, to planets, stars and galaxies. In principle, those early intuitions brought by poets with only their four elements may have been on the right track after all, albeit most conservatively!

No poet in our times has been more aware of the impact of science or more poignant and pregnant in its meaning than Robinson Jeffers.[2] Jeffers' poetry imaginatively portrayed humanity's new awareness of a vaster universe. His poetic imagination was rooted in the science of his day and in the end became a bridge to a new understanding of our cosmic

[2] Tim Hunt, ed., *The collected poetry of Robinson Jeffers*, Vol. 1 1920–1928, Vol. 2 1928–1938, Vol. 3 1938–1962, Vol. 4 Poetry 1903–1920 prose and unpublished writings, Vol. 5 Textual evidence and commentary. Stanford, CA: Stanford University Press, 1988–2001).

sense-of-place. His personal relationships with major scientists of his day, particularly that of his astronomer brother Hamilton, helped forge the existential horror seen in his poems. That he leaves us with an accurate assessment of the human condition, without sentimentality or frills, 'Inhuman', as he called it, and detached, forces his readers to evaluate whatever it is that makes us human, in a cosmic context.

Born in 1887, John Robinson Jeffers was raised in an ordinary family. His father was a teacher and religious scholar, his mother, Annie Robinson Tuttle, a beautiful and talented musician. Though not wealthy, the family moved about rather freely. In 1891, when the boy was four, his parents took him on the first of what was to be a succession of European sojourns, placing him in a Zurich kindergarten, where he learned German and French and was often taken to galleries and concerts. In 1893 there was a second tour, the kindergarten this time in Lucerne and, in October of that same year, his brother Hamilton Moore Jeffers was born.

The elderly patriarch Jeffers, dismayed at the quality of the local schools and never satisfied at his sons' progress, sent Annie and the two boys to Europe where they remained till Robinson was fifteen and Hamilton nine. Robinson later recalled: 'When I was nine years, old my father began to slap Latin into me, literally with his hands; and when I was eleven he put me in a boarding school in Switzerland--a new one every year for four years--Vevey, Lausanne, Geneva, Zurich'. During these years in the Swiss Riviera, from age eleven to fourteen, Jeffers became fluent in German and French and could read Latin and Greek, with his brother Hamilton following his example.

By 1902 the European sojourn had ended, and the family moved westward to the hospitable climate of California. They first arrived at Long Beach, then moved to Highland Park (Los Angeles), where young Robinson matriculated as a junior, age sixteen, at Occidental College, then a small Presbyterian school. There he took courses in biblical literature, economics, geology, history, Greek, rhetoric and astronomy, a discipline which featured frequent field trips to Mount Wilson and Echo Mountain observatories. With his native intelligence and wide background in language and culture, he became a frequent contributor to the school literary magazine, *The Aurora*, and finally became its editor in his senior year. Already showing his interest in astronomical subjects ,Jeffers published his first poem, 'The Measure', in 1903 in *The Aurora*. His poem unveiled a more than casual understanding of the nature of the gaseous nebulae as star formation regions, and serves as a prelude to the influence of science and astronomy on his writing.

Robinson immediately entered graduate school at the University of Southern California in Los Angeles as a student of literature. In April 1906 came another abrupt family interlude in Switzerland, where Jeffers took courses at the University of Zurich in philosophy, Old English, French literary history, Dante, Spanish romantic poetry, and the history of the Roman Empire. The following semester found him back at USC, translating German articles for one of the medical school faculty. In September 1907 he was accepted into the medical school and, although evidently not intending to become a practicing physician, he rose to the top of his class, becoming a special physician's assistant and teaching physiology at the USC dental college. His background in Classical scholarship and his practical immersion in the sciences gave Jeffers a unique posture in being able to speak authoritatively from both points of view.

Jeffers married Una Call Kuster in 1913 after a torrid affair and adulterous public scandal. They temporarily settled in La Jolla and later moved to Carmel which was to become the umbilicus of the rest of their lives. Meanwhile, Robinson's brother, Hamilton, had become seriously interested in astronomy and matriculated at Throop College, later to become CalTech, but transferred to the University of California receiving his BA with honors in 1917. During his undergraduate years he had been an assistant at the University of California's Department of Astronomy and had already assisted astronomers in their publications on the orbits of comets. His first work at the Lick Observatory was in May, 1918, when he worked as a two-week volunteer observer at the Lick Crossley Telescope. The result was a publication with the famous Heber D. Curtis in a Lick Observatory Bulletin. It was this same Curtis who would feature in the 'Great Debate' two years later with Harlow Shapley on the nature of the spiral nebulae.

In 1921, Hamilton received his PhD from the University of California and returned as Assistant Astronomer at the Lick Observatory with the assignment to attend to the measurement of the positions of comets, asteroids, and other moving celestial objects.[3] Later, with Robert Aitken, he prepared a major catalog of the orbits of visual binary stars.

Hamilton Jeffers remained at the Lick Observatory for the rest of his career, finally retiring to the Carmel Highlands in 1961. The attachments to the land were very strong, for both of the brothers: Hamilton to the

[3] Mary Lea Shane, *Archives of the Lick Observatory* (Santa Cruz, CA: University of Santa Cruz Library, n.d.).

Lick Observatory at Mt Hamilton, Robinson to Carmel. Yet though both were rooted to one place, there were clear family ties throughout their adult lives. Hamilton's hobbies of photography and flying found their way into the families' albums and trips to Death Valley and New Mexico. The brothers' parallel lives near Carmel have been linked from the beginning. For Robinson at the coast, the magnificent natural surroundings must have been all but overwhelming. Life in Carmel was simple, almost primitive: a rented log cabin, many walks in the woods and along the beach, much reading, few friends, and nightly sojourns for stargazing.

In 1919 Robinson and Una managed to buy land on a hill overlooking Carmel Bay facing Point Lobos. There, apprenticed to a stonemason, Jeffers began work on the structure which was to be so formative in his thinking and expressive of his aesthetics: Tor House. This stone cottage was followed by a five-year opus, the forty-foot, multileveled Hawk Tower, from which he could view the Pacific and the brilliant night sky. During his early adult years Jeffers had been writing poetry, initially romantic, imitative, melodramatic, and melancholy verse which filled his first two books, *Flagons and Apples* (1912) and *Californians* (1916). Then, sometime close to his thirtieth year, Jeffers underwent an extraordinary deepening and self-integration, often described in terms of a religious conversion. During college or shortly thereafter, it is certain that the orthodox religious world of his father fell away. The transitional period, hedonistic, experimental, at times drunken, was liberating if painful. However, on his settling down with his wife in the primitive, soul-scouring landscape of Carmel came a peace and integration, which gave his poetry unusual strength and authenticity. He found himself possessed of a philosophy which he was later to label 'Inhumanism', a consistent, thorough-going world-view based on his scientific insights, paced by astronomic perspectives, and inspirited by a mystic sense of immanent divinity. For him, the world became the ongoing self-discovery by God, who unfolds in the secrets of atoms and galaxies all the possibilities of being in the universe.

From this point on, Jeffers's biography can easily become a list of yearly publications. There were few dramatic turns, no world tours, no great milestones, little domestic drama. Jeffers became a master stonemason, expanding Tor House year by year with extensions, walls, and a courtyard. There were three trips to Europe, instigated by Una, a change in publishers, yearly summer trips to Taos, New Mexico, beginning in 1930, also instigated by Una and protested but endured by

Jeffers. Their meetings with Mabel Dodge Luhan and cohorts may have resembled the literary salons of Paris or the more proximate Bohemian Grove and would have offered a smorgasbord of intellectual stimulation.

That his own background fashioned his expression is clear; that he was influenced in his work by his exposure to science, undoubtedly. But what we see in Jeffers is a fusion of personal scientific understanding and expression. Robinson Jeffers is one of the few twentieth-century poets who include scientific theory as not merely illustrative but a functioning element of their work. Although Jeffers, like many other contemporary thinkers, warns of the mistake of relying too much on scientific explanations or scientific discoveries he uses scientific terminology to bolster his philosophical beliefs and refers to what, at the time he wrote, were advanced theories regarding the nature of the universe and humankind's place in it. It is my contention, that by his personal interest and academic preparation and exposure to astronomy and direct contact with astronomers, particularly his brother Hamilton, Robinson Jeffers forged an amalgam of contemporary astronomical and cosmological thought as his poetic response to the cosmological revolution of the twentieth century.

His visits with his brother Hamilton provided both a vehicle and a venue for conversations of new astronomical discoveries. That the Lick Observatory was the home of the very astronomers laying the groundwork of the discovery of the galaxies, that both Jeffers had access to the leading edge of scientific knowledge and the principals that revealed it, gives Robinson Jeffers a unique position as a poet, counseled by the scientists of his day. We see him in the tradition of Milton and Galileo; Donne and Hariot or Kepler; Michelangelo and Copernicus; Shakespeare and Digges.

Examples of Jeffers' use of scientific explanation in his poetry are many, but let us concentrate on the astronomical. For example, Antares' ruddy complexion was known to the ancients (ant-Aries, rival of Mars), but the diameter of the star was not calculated until Jeffers's own time, so when Jeffers writes that the Red Giant star,

> … Antares reddens, / The great one, the ancient torch, a lord
> among lost children, / The earth's orbit doubled would not girdle
> his greatness ('Night', 1:115),

he is revealing an intimate understanding of the astronomical details. As the fifteenth brightest star in the heavens, Antares' diameter was first

measured at nearby Lick and Mt Wilson Observatories by Michaelson and Pease, and catalogued in Hamilton Jeffers' 'Index Catalog of Visual Double Stars'. The connections are obvious. Jeffers' medical training gives him insights into the problem of the 'Plurality of Worlds' as he explores the possibilities of exobiology and possible biochemical pathways to the life process:

> … I think about the rapid and furious lives in the sun… There are many other chemistries of animal life
> Besides the slow oxidation of carbohydrates and amino-acids. 'Animals' 3:364)

Or to another extreme, his notions of a multiverse:

> It seemed to Barclay the cloud broke and he saw the stars,
> Those of this swarm were many, but beyond them universe past universe
> Flared to infinity, no end conceivable. Alien, alien, alien universes. 'The Women at Point Sur' 1:312)

> When have you considered the stars, what have you known of the streams in my soul,
> And one lit point lost in the sky's eternity
> A universe, millions of many-planeted suns, but another a universe
> Of universes: they move in my mind . . . 'The Women at Point Sur' 1:313)

We see his cautious approach to the models of science and intellectual humility born from a realization of a cosmic sense-of-place:

> There is nothing like astronomy to pull the stuff out of man,
> His stupid dreams and red-rooster importance: let him count the star-swirls. 'The polar ice-caps are melting' 3:476)

(Jeffers' comment about 'counting the star-swirls' refers to the difficult and tedious task of counting galaxies visible on the plates of photographic sky surveys, a technique pioneered at Lick Observatory by Shane and Wirtanen.)

> We know the stars, hotter and more fatal than earth; we have learned lately the fire-wheel galaxies,
> Infinite in number or all but infinite, among which our great sun's galaxy's
> Flight is as a gnat's, one grain of sand in the Sahara: it is necessary to stretch our minds
> To these dimensions . . . ('Not Solid Earth' 4:538)

He is also familiar with the details of the night sky as with his description of the farthest thing that can be seen with the naked eye, the Andromeda nebula:

> The fire of the sun and stars and the pale sheet-fire
> Of a far-off nebula, a mist-fleck at midnight
> In the infinite sky; a sworl of a million million suns, dragging their satellites
> Like dark women by the hair
> Through the wild acre.

His actual observations also include the recollection of a meteor shower:

> It was like the glittering night last October
> When the earth swam through a comet's tail, and fiery serpents
> Filled half of heaven. ('The Double Axe: The Inhumanist' 3:283)

(On October 9, 1946 the Earth sailed by comet Giacobini's orbital path only 15 days after perihelion passage, and there was a historic meteor storm. In some places over 25,000 meteors per hour were observed! It is noteworthy that Jeffers' poem was written after the event, proving the assertion that the poet witnessed the phenomenon, with the 'fiery serpents' emerging from the Constellation Draco, the dragon, the radiant point for the meteor shower.) Jeffers also pays homage to the classical scientists, again with a sense of intellectual humility:

> To whom this monument: Jesus or Caesar or Mother Eve?
> "No" he said, "To Copernicus: Nicky Kupernick: who first pushed man
> Out of his insane self-importance and the world's navel, and taught him his place.

> And the next one to Darwin. ('The Double Axe: The Inhumanist' 3:274) ;

He recognizes an accurate local physical perspective:

> our tributary planets
> Tamed like the earth, the morning star[1] and the many-mooned
> Three-belted giant[2], and those red sands of Mars between
> them[3]…;
> ([1]Venus, [2]Jupiter; [3]accurate orbital disposition of the planets)

and explores diurnal "wheeling" motion of the heavens (found also in the *Odyssey* of Homer):

> . . . [I]s it unendurable
> To know that the huge season and wheel of things
> Turns on itself forever, the new stars pass
> And the old return and find their old places . . . ('Point Pinos and Point Lobos' 1:94)

He was also poignantly aware of what was to be known as stellar evolution and aspects of process under physical laws in the universe:

> I seem to have stood a long time and watched the stars pass.
> They also shall perish I believe.
> Here to-day, gone to-morrow, desperate wee galaxies
> Scattering themselves and shining their substance away
> Like a passionate thought. It is very well ordered. ('Margrave' 2:171)

> It is likely our moderate
> Father the sun will sometime put off his nature for a similar glory. ('Nova' 2:530)

> Time will come no doubt
> When the sun too shall die; the planets will freeze…
> Also the galaxy will die; the glitter of the Milky Way, our universe, all the stars that have names are dead. ('The Double Axe: The Inhumanist' 3:261)

> The heroic stars spending themselves,
> Coining their very flesh into bullets for the lost battle,
> They must burn out at length like used candles;
> And Mother Night will weep in her triumph, taking home her heroes. ('The Epic Stars' 3:466)

He endures a cosmic perspective:

> And the earth is a particle of dust by a sand-grain sun, lost in a nameless cove of the shores of a continent.
> Galaxy on galaxy, innumerable swirls of innumerable stars, endured as it were forever and humanity
> Came into being, its two or three million years are a moment, in a moment it will certainly cease out from being
> And galaxy on galaxy endure after that as it were forever . . . ('Margrave' 2:160);

> of an expanding universe from observations of spectral redshifts
> The learned astronomer
> Analyzing the light of most remote star-swirls
> Has found them—or a trick of distance deludes his prism[1]—
> All at incredible speeds fleeing outward from ours.
> ('Margrave' 2:161)

([1]a subtle physical detail here, since astronomers cautiously cite 'redshift' without recourse to its origin, be it Doppler, Cosmological, or otherwise. The 'trick' may be Jeffers' awareness of an early 'tired light' hypothesis that was suggested to be the reason for the observed redshift.)

Finally Jeffers claims that '… Science usually takes things to pieces in order to discover them; it dissects and analyzes; poetry puts things together, producing equally valid discovery, and actual creation'. ('Themes in My Poems' 4:416) He is also scrupulously aware of the power of metaphor in science:

> Or as mathematics, a human invention
> That parallels but never touches reality, gives the astronomer
> Metaphors through which he may comprehend
> The powers and the flow of things . . . ('The Double Axe: The Inhumanist' 3:260)

> Science and mathematics
> Run parallel to reality, they symbolize it, they squint at it,
> They never touch it . . . ('What's the best life for a man?' 3:425)
> . . .they work alongside the truth
> Never touching it; their equations are false
> But the things work.[1] ('The mathematicians and physics men' 3:459)

([1]Perhaps an allusion to Jeffers' contemporary, Bertrand Russell's comments on mathematics and poetry, aptly explored in Eugene Wigner's famous paper, *The Unreasonable Effectiveness of Mathematics in the Natural Sciences.)*

> All our knowledge then,
> Our opinions, our observations, our science,
> Are subjective; are something studying itself
> By the light of itself. That is to say all our knowledge is a
> dreamer dreaming:—say rather a dream
> Dreaming a dream. 'We see ourselves from within' 4:534)

> It brings under one rule atoms and galaxies, gravitation and time,
> Photons and light-waves. ('The Double Axe: The Inhumanist'
> 3:291)

Robinson Jeffers, more than any poet of this age, was uniquely qualified to respond to the cosmological revolution of the last century. His academic preparation, his in-depth knowledge of the sciences, his relationship with his astronomer-brother and hence awareness of the emerging cosmological models, places him squarely in the center of the embryonic development of our awareness of the scale of the universe and our relationship to it:

> . . . the universe is one being, a single organism, one great life
> that includes all life and all things; and is so beautiful that it must
> be loved and reverenced; and in moments of mystical vision we
> identify ourselves with it. ('Themes in My Poems' 4:412)

Acknowledgement
I would like to thank Robinson Jeffers Tor House Foundation

Figure 1. Robinson Jeffers (1887–1962), copyright Robinson Jeffers Tor House Foundation.

Figure 2. Robinson and Hamilton Jeffers at Tor House, Carmel, CA, copyright University Library, UC Santa Cruz.