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ROLLING THANATOS: WHEELS OF DEATH
THE WHEEL AS AN IMAGE OF DESTRUCTION
IN MYTH, RELIGION, LITERATURE, AND
POPULAR CULTURE

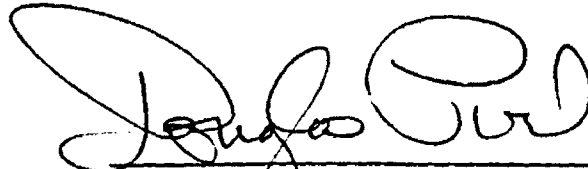
By

John Holt Myers

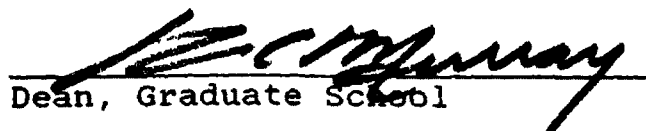
B. A., Montana State University, 1978

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English

Rolling Thanatos: Wheels of Death
The Wheel as an Image of Destruction in Myth,
Religion, Literature, and Popular Culture (127 pp.)

Director: Douglas C. Purl



This study focuses on the evolution of the wheel as a symbol of destruction in religion, mythology, literature, and popular culture. At one time the wheel symbolized the annual cycle of nature associated with the female and with the pattern of death and rebirth. With the development of the war chariot in northern Asia around 2000 B.C., the wheel became linked with male warrior gods associated with the sun. As male-dominated warrior societies conquered agricultural societies, especially in India and Greece, they superimposed the image of the solar chariot of the sun god onto the circle of the dominant earth-mother goddesses of the conquered societies. The Greek myth of Ixion, tied to a wheel of fire by Zeus; the practice of followers of the Aryan Indian god Jagannatha of throwing themselves beneath the wheels of a vehicle bearing the god's image; and Ezekiel's depiction of God's chariot spreading fiery destruction over Jerusalem are early representations of the dominance of male solar gods over the wheel.

During the Renaissance and the industrial revolution the last vestiges of the symbolic association of the female with the wheel disappeared. Developments in astronomy led to the dissolution of the round universe of concentric spheres centered on the earth; devices of human manufacture--first the clock, then the steam-engine--became the new models for the universe, replacing a model based on the globes of heaven, on nature. The wheels of the universe became cogs, the "Starry Wheels" despised by William Blake. In works by Thomas Carlyle, Thomas Hardy, and Franz Kafka the universe becomes an infernal machine, in which the work of a benevolent creator cannot be discerned.

As the wheel has become increasingly associated with male-dominated technology, it has become increasingly associated with self-destructive behavior. A recurrent image in the sources used in this study is that of a man decapitated by a wheel. In this symbolic castration, Western man, deprived of the female principle, is seen to seek an apocalyptic sacrifice of self beneath the wheeled machine of the father.

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'Cease, my much-respected Herr von Voltaire,'
thus apostrophizes the Professor: 'shut thy sweet
voice; for the task appointed thee seems finished.
Sufficiently hast thou demonstrated this
proposition, considerable or otherwise: That the
Mythus of the Christian Religion looks not in the
eighteenth century as it did in the eighth.'
(Thomas Carlyle, Sartor Resartus.)

And did those feet in ancient time
Walk upon Englands mountain green:
And was the holy Lamb of God
On Englands pleasant pastures seen!

And did the countenance Divine
Shine forth upon our clouded hills?
And was Jerusalem builded here,
Among these dark Satanic Mills?

Bring me my Bow of burning gold:
Bring me my Arrows of Desire:
Bring me my Spear: O clouds unfold:
Bring me my Chariot of Fire!

I will not cease from Mental Flight,
Nor shall my Sword sleep in my hand:
Till we have built Jerusalem,
In Englands green & pleasant Land.
(William Blake, poetic preface to Milton.)

Ezekiel saw the wheel,
Way in the middle of the air.
Now the big wheel is run by faith,
The little wheel by the grace of God.
(Traditional American Negro Spiritual).

Will the circle be unbroken
Bye and bye, Lord, bye and bye;
There's a better home awaiting
In the sky, Lord, in the sky.
(Traditional American Spiritual).

Come on for home to Beulah Land
 Outshine the sun,
 Way beyond the sky.
 (Traditional American Negro Spiritual).

I don't even know where we are;
 They'll tell you we're circling a star.
 Well, I'll take their word, I don't know,
 But I'm dizzy so it may be so.
 (from the song, "Defying Gravity" by Jesse
 Winchester, copyright 1974 Fourth Floor Music-
 ASCAP).

THE WHEEL

Through winter-time we call on spring,
 And through the spring on summer call,
 And when abounding hedges ring
 Declare that winter's best of all;
 And after that there's nothing good
 Because the spring-time has not come--
 Nor know that what disturbs our blood
 Is but its longing for the tomb.
 (W.B. Yeats)

O Sorrow, cruel fellowship,
 O Priestess in the vaults of Death,
 O sweet and bitter in a breath,
 What whispers from the lying lip?

'The stars,' she whispers, 'blindly run;
 A web is woven across the sky;
 From out waste places comes a cry,
 And murmurs of the dying sun:

'And all the phantom, Nature, stands-
 With all the music in her tone,
 A hollow echo of my own,-
 A hollow form with empty hands.'
 (Tennyson, "In Memoriam A.H.H.")

Heaven is a place where nothing ever happens.
 (From the song "Heaven," by David Byrne, published
 by Index Music/Bleu Disque Music Co., copyright
 1979)

To us, heaven switches on daylight, or turns on
the showerbath. We little gods are gods of the
machine only. It is our highest. Our cosmos is a
great engine. And we die of ennui. A subtle
dragon stings us in the midst of plenty.
(D.H. Lawrence)

Let us drive cars
up
the light beams
to the stars...

And return to earth crouched inside the drop of
sweat
that falls
from the chin of the Protestant tied in the fire.
(Robert Bly, "The Teeth Mother Naked at Last")

In its earliest incarnation as a symbol the circle represented the female principle--female sexuality and the yearly cycle of nature. With the development of the wheel the circle-as-wheel assumed a male aspect in addition to its original female one. This male quality of the wheel came from the superimposition of the male concept of technology on the originally earth-centered female circle.

Nevertheless the wheel remained linked to the female, in part because the primary power enabling it to function was still the force of nature in the form of the animal, most often a horse, that propelled the wheeled vehicle or machine. The association of the female with the wheel remained strong in the West through the middle ages, as demonstrated by the persistence of the Goddess Fortuna--the only major pagan deity to maintain a following in all levels of European society after the fall of Rome--and the Wheel of Fortune associated with her. (See Patch, Introduction and Chapter 5.)

Around the time of the Renaissance, however, the wheel began a period of progressive dissociation from the female. Beginning in the late sixteenth century the Classical pagan and medieval Christian model of the universe--a plenum of concentric spheres created and motivated by the hand of God--was replaced by two successive models, first by the clock and then by the steam engine. Unlike the plenum of

concentric spheres which had been modelled on the globes of heaven, the sun and moon, the clock-work and steam-engine were images derived, not from nature, but from technological artifacts of human manufacture.

The clock and the steam-engine universe still depended on the power of the circle, on gears and cogs, to function, but each new model became less dependent on nature or God and more dependent on man. The clockwork model of the universe adopted by the Deists of the seventeenth century needed God to start the clock, but not necessarily to keep it going. The steam-engine universe derived its fuel, in catabolistic fashion, from the universe itself. The steam-engine universe did not necessarily need a god for its source of energy, even to get itself going, but its catabolistic nature--the fact that it used itself, not some outside force, for fuel--prevented it from being eternal. The steam-engine universe--essentially the universe we still inhabit--must, barring the intervention of some outside force, either consume itself for fuel or destroy itself in a cataclysm through consuming its fuel too rapidly, as in the explosion of an over-stoked boiler. The steam-engine universe is an apocalyptic universe. It must end with either a bang or a whimper, in either fire or ice.

We can see the harbingers of these two possible ends of the steam-engine universe around us now here on the Earth, the universe controlled by man. Since the Renaissance, we

find evidence for the exhaustion-of-fuel-hypothesis in the geometric rate of increase of man's consumption of the earth's natural resources, and evidence for the cataclysm hypothesis in the recent development of nuclear weapons capable of destroying the planet.

In this paper I will trace the evolution of the symbol of the wheel from the time at which the male principle of technology began to dominate the circle and transform it from a symbol of the cycle of nature into the wheel, symbol of man's domination of nature through technology. I define this point as the time of the invention of the horse-drawn war-chariot and its early religious association with male solar gods.

I will attempt to show how anthropomorphic male gods associated with the evolving technology of the wheel came to represent the domination of the feminine, of nature, by man and how eventually man replaced anthropomorphic male gods with the image of man himself as the incarnation of the most powerful force in the universe. I will also show how this victory of man, first over feminine nature, then over a male God, has led to despair, despair that the universe and its nominal author, God, are as flawed and as subject to dissolution and annihilation as man himself.

I will begin by examining three figures from ancient Greek, Aryan Indian, and Hebrew religion and their association with the wheel. These figures are the Greek

"hero' Ixion, the Indian God Jagannatha and the Hebrew God as envisioned by the prophet Ezekiel. I will also look into an ancient Aryan rite, the Horse Sacrifice, because of the horse's special role as the propulsive force of the wheel, before the wheel--in the form of the locomotive and later the automobile--could propel itself. I will also examine the Horse Sacrifice because of its importance in understanding sacrificial traditions linked to Ixion, Jagannatha, and the God of Ezekiel, and because of the relationship of these sacrificial traditions to the major themes of my paper.

From these ancient religious archetypes I will move to representations of the wheel (and the horse) in Renaissance and Post-Renaissance Europe and America, concentrating on European and especially English literature. Major works by Shakespeare, Voltaire, William Blake, Thomas DeQuincey, Thomas Carlyle, Thomas Hardy, Franz Kafka, D.H. Lawrence, W.B. Yeats, and others will be examined in detail. In the final part of my paper, concentrating on recent apocalyptic images of the wheel, I will allude to popular songs, films, contemporary art and even to jokes and television advertisements.

* * * * *

The vision of the wheeled vehicle as a cosmic engine of destruction dates back at least to 2000 B.C., to the invention of "the light two-wheeled chariot drawn by two swift horses," featuring spoked, rather than solid, wheels which "revolved freely on their axles so that the cars could be readily turned" (Campbell, Vol. 2, 173). These chariots, first seen north of the Caucasus range, rolled out of the steppes of northern Asia into India, Greece, Asia minor and Egypt (Ibid.). The achievements of Classical Greece and Aryan India can be attributed in large part to these barbaric Asians who, with their superior technology (the development of the two-wheeled war chariot and later of iron), conquered civilizations considered more advanced culturally, especially in India. The interaction between these barbarian conquerors, with their male-dominated pantheon of war gods, and the people whom they conquered, with their reigning female agricultural deities, created the Golden Age mythologies of Olympic Greece and Hindu India and contributed to the mythological-religious synthesis of the middle and near East.

Perhaps the earliest image of man's sado-masochistic relationship to the wheeled machine can be seen in the Hindu myth of Jagannatha, literally Lord and protector of the world in Hindi, a warrior in carnation of the god Vishnu. The god's name was also transformed into the English word Juggernaut, meaning an unstoppable force (O.E.D.,

"Juggernaut"). According to Webster's New World Dictionary of the American Language, 2nd. Ed., "devotees of Vishnu sometimes allowed themselves to be crushed beneath the wheels of the car [chariot] on which his image was being drawn in procession." Worshippers were reported still sacrificing themselves in this manner as late as 1790 (Poynder, 1827, quoted in O.E.D., "Juggernaut"). In most towns in India devotees of Jagannatha still follow his car (nowadays usually a truck with a shrine containing an image of the god) on an annual pilgrimage, although worshippers no longer sacrifice themselves under its wheels (Wilkins, 259).

In the religious tradition of the Middle East the wheels of a Chariot also came to be associated with the power of a god to destroy his own followers. Seen by the Biblical prophet Ezekiel, a conveyance similar to Jagannatha's has become the most misinterpreted set of wheels in history. God appears, in the beginning of the book of Ezekiel, as a fiery figure in a many-wheeled chariot coming "out of the north," a Canaanite expression indicating the land of the gods (Oxford Bible, footnote to Ezekiel 1.4). (The north, we recall, was also the homeland of the inventors of the two-wheeled war chariot.)

As I looked, behold, a stormy wind came out of the north, and a great cloud, with brightness round about it, and fire flashing forth continually, and in the midst of the fire as it were gleaming bronze. And from the midst of it came the likeness of four living creatures. (Ezekiel 1.4-5)

(The creatures are the four cherubim, the four-faced winged guardians and living engines of God's throne.)

In the midst of the living creatures there was something that looked like burning coals of fire, like torches moving to and from among the living creatures; and the fire was bright and out of the fire went forth lightning. And the living creatures darted to and fro, like a flash of lightning.

Now as I looked at the living creatures, I saw a wheel upon the earth beside the living creatures, one for each of the four of them. As for the appearance of the wheels and their construction: their appearance was like the gleaming of a chrysolite, and the four had the same likeness, their construction being as it were a wheel within a wheel. When they went, they went in any of their four directions without turning as they went. The four wheels had rims and they had spokes; and their rims were full of eyes round about. And when the living creatures rose from the earth, the wheels rose. Wherever the spirit would go, they went, and the wheels rose along with them; for the spirit of the living creatures was in the wheels. . . . (Ezekiel 1.12-22)

And above the firmament over their heads there was the likeness of a throne, in appearance like sapphire; and seated above the likeness of a throne was a likeness as it were of a human form. And upward from what had the appearance of his loins I saw as it were the appearance of fire, and there was brightness round about him. Like the appearance of the bow that is in the cloud on the day of rain, so was the appearance of the brightness round about.

Such was the appearance of the likeness of the glory of the Lord. (Ezekiel 1: 26-28)

Quite a rig! The significance of this description lies not just in the fact that it is the most vividly anthropomorphic representation of the Deity in the Bible, but in the depiction of God as a chariot-driving warrior like the gods of Golden Age Greece and Vedic India. Also

important is the association of the wheeled chariot of the deity with the solar wheel of fire.

This solar fire is seen in Ezekiel in the coals between the Cherubim and in the lower half of God's form, which has "the appearance of fire." Compare this description of God to descriptions of Indian and Greek solar deities whose horse drawn chariots either pulled the sun, or were the sun, like the hymn of praise for Savitri, the "director" of the sun, in the Rig Veda:

Rolling this way through a darkling space,
Laying to rest both the immortal and the mortal,
In his golden car Savitri comes, the god beholding
all beings

Golden-handed Savitri, the active one,
Fares between heaven and earth.
He banishes disease, directs the sun,
And through the spaces of darkness reaches heaven.

By a downward path, by an upward path he goes;
Adorable he goes, with his two bright steeds.
From afar comes the god Savitri,
Dispelling all tribulation. (In Campbell, Vol. 2,
174-5)

Euripides evokes a markedly similar vision of the Greek sun-god Hyperion, in the opening lines of "The Phoenician Maidens":

O sun-god, who cleavest thy way along the starry
sky, mounted on golden-studded car, rolling on thy
path of flame behind fleet coursers (trans. E.P.
Coleridge, 378)

Something of the harshness of the solar deity in his horse-drawn chariot is seen in the Homeric Hymn to Hyperion.

Sun
who is tireless
and like the gods

He shines down on men
and immortal gods
as he rides in his chariot

Hard, he looks down
hard out of his golden helmet
with his eyes

The bright rays beam out of him
so brilliantly (trans. C. Boer, 21-31)

Like Hyperion in the Homeric Hymns, the chariot-driving God in Ezekiel is indeed "hard." He has come to punish the Jews for blasphemy and corruption. In fact Ezekiel is a religious interpretation of the historical conquest of Jerusalem by Babylon in 587 B.C., the final destruction of Jewish temporal power in the Bible and the beginning of the diaspora. The final description in Ezekiel of the glory of God departing from the temple in Jerusalem presents the destruction of Jerusalem as a ritual sacrifice, which begins in the temple and is performed by a man "clothed in linen," the traditional garb of priests.

And the Lord said to the man clothed in linen, "Go in among the whirling wheels underneath the cherubim, fill your hands with burning coals from between the Cherubim, and scatter them over the city." (Ezekiel 10.2)

The coals under the chariot of God may be a vestige of the power of a solar god, or, more likely, an adaptation from the mythology of the chariot-riding invaders. The Babylonians are accomplishing God's will; therefore God appears in the form of a charioteer spreading fiery death, in the form of the victorious enemy and his solar god. But

as Ezekiel suggests, all is seeming. The chariot-rider is not the real form of God, but simply the temporary symbolic form of a God who works through history to teach his chosen people obedience. Since God here works through the Babylonians he seems to take their form and the form of their god. Whatever form history takes, Ezekiel is saying, is the form of God.

In reality everything that the Babylonians think they are accomplishing through force of arms, God is accomplishing through ritual in the Temple: the selection and marking of those who are to escape death and, as the chariot departs, the destruction of Jerusalem by the spreading of coals.

God's chariot leaving Jerusalem is reminiscent of the image of Jagannatha. As the destruction of Jerusalem begins, the Jews, like the followers of Jagannatha, die beneath the wheels of their God's chariot, in this case as it rises in the air. As in the case of Jagannatha, the appearance of God in his chariot signals the destruction of His followers--the deaths of many Jews and the fall of Jerusalem.

In the religious tradition of the West, as well as in the traditions of the East and Middle East, the wheel was associated with the power of god to destroy man. The Greek myth of Ixion, like the description of God's vengeance in Ezekiel, involves flame and destruction and the image of the

wheel. Like many Greek myths, the myth of Ixion has an Oedipal component. The mortal king Ixion, invited to feast with Zeus, betrays the god's trust by attempting to seduce Zeus' wife Hera. Suspecting his guest, Zeus thwarts Ixion by substituting a cloud for Hera. Ixion is punished by Zeus "who ordered Hermes to scourge him [Ixion] mercilessly until he repeated the words 'Benefactors deserve honor' and then bind him to a fiery wheel which rolled without cease through the sky" (Graves, 208).¹ Graves also suggests a relationship between Ixion's wheel of fire and the solar wheel, reminding us of Ezekiel's vision of God (the wheels within wheels, the coals) and the wheeled chariots of the Indian and Greek solar deities.

Elsewhere he, [Ixion] is bound in the same 'fivefold bond' with which the Irish hero Curoi tied Cuchulain--bent backwards into a hoop (Philostratus: Life of Apollonius of Tyana vii.12), with his ankles, wrists, and neck tied together, like Osiris in the Book of the Dead. This attitude recalls the burning wheels rolled downhill at European midsummer festivities, as a sign that the sun has reached its zenith and must now decline again until the winter solstice. (Vol. 1, 209)

Graves implies that human beings may once have been affixed as sacrifices to these burning wheels, and that the myth of Ixion may have served as an explanation of the custom. The fiery wheel of Ixion's punishment, like the wheels of the chariot of Jagannatha and the fiery wheels and coals of God's chariot in Ezekiel, links the solar god to

ritual forms of human sacrifice. This link will be seen again when we examine the Vedic Indian Horse Sacrifice.

For now let us just observe an important distinction between East and West: while the followers of Jagannatha voluntarily sacrifice themselves under his chariot wheels, the Jews in Ezekiel and Ixion in the Greek myth must be caught and punished. In the image of Jagannatha there is no implication of guilt, or punishment, or redemption--the human being involved is too insignificant, merely a drop of oil to lubricate the wheels of the god's conveyance. In the myth of Ixion we can see Western man's active defiance of God--the hubris that causes Ixion to attempt to raise himself to the level of the gods by attempting to seduce the wife of the king of the gods. The destruction of Jerusalem in Ezekiel is also the result of individual acts of defiance against God, the acceptance by some of the worship of heathen deities in the Temple of Jerusalem. Note that God makes important distinctions between individuals in Ezekiel: the guilty and the innocent are marked, for punishment or exemption. Ezekiel himself, as an individual, like all the Jewish prophets, attempts to transcend earthly events by interpreting history: the sacking of Jerusalem becomes God's punishment of the Jews. By teaching the Jews the meaning of history, Ezekiel rises above history, hoping to prevent, through his teaching, the repetition of history. If the Jews learn the lesson of the fall of Jerusalem then they

will not have to be destroyed again. This ability of the Hero to transcend the cycles of history is rare in the East. As Campbell remarks, this concept, that individual mortal man can come to comprehend God's purpose and even enter into a dialogue with God, is not a feature of Eastern religion:

Whereas the typical Occidental hero is a personality, and therefore necessarily tragic, doomed to be implicated seriously in the agony and mystery of temporality, the Oriental hero is the monad: in essence without character but an image of eternity, untouched by, or else casting off successfully, the delusory involvements of the mortal sphere. And just as in the West the orientation to personality is reflected in the concept and experience even of God as a personality, so in the Orient, in perfect contrast, the overpowering sense of an absolutely impersonal law suffusing and harmonizing all things reduces to a mere blot the accident of an individual life. (Masks, vol. 2, 243)

While Jagannatha reduces the voluntary sacrifices of human beings to meaningless blots beneath his chariot wheels, the God of Ezekiel has a human prophet explain the meaning of he human sacrifice involved in the destruction of Jerusalem.

In the wheels of Jagannatha we see the great symbols of Oriental mythology: the Jain, Hindu and Buddhist wheels of reincarnation through which each individual is reborn according to the laws of Karma. If the individual has transgressed these laws in a previous life he may be reincarnated on the bottom of the wheel of transmigration, to live, perhaps, the life of an insect. Like a self-sacrificing devotee of Jagannatha, such an individual finds himself beneath the wheel. In European culture the

inquisitional device of the wheel, on which victims were broken, presents a similar visual image.

In fact the Oriental wheels of life--Jain, Hindu and Buddhist--are remarkably similar to the medieval European Wheel of Life or Fortune. All are based on the yearly cycle of agricultural life interpreted in the light of religion. The primary difference between the occidental and oriental conceptions of this wheel is the absence of a European belief in multiple reincarnations, emphasizing again the Western concept of the uniqueness of the individual. Western man, unlike Eastern man, is special. He will live on earth, in historical time, only once. Nevertheless, both Eastern and Western religious systems tend towards quietism by insisting on the divine origin of the prevailing social order, the wheel of life.

Still, rebellion against the established order is ingrained in the nature of the individual in the Western tradition, a trait we see in the Jews' refusal to follow God's law in Ezekiel, and in Ixion's defiance of Zeus. Punishment and subsequent enlightenment are almost unheard of in the East. The Godhead is too remote for such personal interaction with man. In the West the cycle of punishment and enlightenment became the path by which man attempted to attain the level of the divine, as Ixion experimented, testing the limits of Zeus' omniscience. (This cycle of punishment and enlightenment bears a remarkable resemblance

to the "scientific method" of experimentation through which assumptions are tested to see if they conform with reality. Through the scientific method, a process also called trial and error, enlightenment is reached through the making of mistakes. This method, because it implied a lack of faith, was reviled by William Blake, who called it "Demonstration.") Even in his failure Ixion raised himself to the level of the divine. In his punishment he is set ablaze in the midst of the eternal--the unchanging sky where the gods dwell. Ixion must pay a price for his entry into the divine realm--the torment of being eternally on fire. Eternal suffering is the price paid by those who discover what only the gods were meant to know, as another Greek who crossed Zeus, Prometheus, also discovered.

Renaissance writers in Europe and England borrowed heavily from the mythic images of pagan Rome and Greece. Shakespeare uses powerful images of the wheel, especially of the wheel of Ixion's torment in his greatest play, King Lear, to symbolize Lear's punishment and suffering, and especially to show the transcendent awareness that comes to Lear because of his punishment and suffering. The image of the wheel unifies Lear and can be tied to pagan Lear's continual evocation of his limited god "Nature," whose visual representation in the play is the circle or the sphere. The most direct and powerful allusion to Ixion's burning wheel of punishment occurs when Lear, in the madness

of his sorrow, believes himself to be dead and suffering the same eternal torment as Ixion.

You do me wrong to take me out o' th' grave:
Thou art a soul in bliss; but I am bound
Upon a wheel of fire, that mine own tears
Do scald like molten lead. (IV.7.44-47)

Aside from his association with the wheel of Ixion and its possible origin in human sacrifice, Lear seems to be involved in another form of ancient sacrifice, the Horse Sacrifice. Both the Ixion/midsummer's day wheel sacrifices and the Horse Sacrifice can be tied to a system of relationships between the earth, the sun and man. Joseph Campbell in The Masks of God describes the Vedic Aryan Horse Sacrifice ritual which originated among "the northern steppe folk, among whom the horse was first mastered and of whom the Vedic Aryans were a branch," the same people credited with the invention of the two-wheeled war chariot (Vol. 2, 197). The horse for the sacrifice, "a stallion of pure breed, distinguished by special marks," is chosen, and after a special ceremony,

is released and allowed to run at will for one year in the company of a hundred nags but no shining mares, followed by a cavalry of a hundred princes, another hundred sons of officers of high rank, and a hundred sons of lower rank; so that if anyone should offer to make off with the gallant mount or prohibit its entrance in his kingdom, that king would have to fight. Whereas, on the other hand, if any king submitted to the passage of this horse, he therewith conceded overlordship to the great monarch who had set him loose (192).

This ceremony reminds us of Lear's plan to rove his kingdom, a king in name only, after abdicating his real powers to his daughters and their husbands.

Ourself, by monthly course,
 With reservation of an hundred knights,
 By you to be sustain'd, shall our abode
 Make with you by due turns. Only we shall retain
 The name, and all the addition to a king;
 the sway, revenue, execution of the rest,
 Beloved sons, [his daughters' husbands] be yours.
 . . (1.1.134-140, emphasis added)

The retinue of a hundred princes (knights) is the same in Lear as in Campbell's description of the Horse Sacrifice ritual. (In ancient Greece a standard sacrifice was a hecatomb, a hundred cows. The number one hundred, in the West at least, is generally associated with the solar sacrifice.) We might even assume, taking Parkinson's Law of a minimum of two subordinates for every knight, that the knights in Lear's company would have an additional two hundred men in their train, exactly duplicating the Horse Sacrifice retinue. Also, as in the Horse Sacrifice, wherever Lear's troop wanders, there, in name at least, is the domain of the king established.

In fact Lear himself has become the stallion at the center of the Horse Sacrifice. A king unwise in the appointment of substitutes, choosing Goneril and Regan and rejecting Cordelia, Lear has substituted the real king, himself, for the surrogate sacrificial victim, the horse in the Horse Sacrifice. In the Horse Sacrifice the stallion clearly substitutes for the king-- wherever the horse goes, there is the king's domain established. Later, after the animal's year of roving is finished and it is ritually

strangled, the Queen is made to lie with its body and entreat it to sexual activity. Obviously the ritual is one in which a proxy victim, human or animal, is substituted for the "proper" victim, because the indicated victim (in this case the king) is too important to sacrifice, as the ram (like the horse, an animal associated with the sun) is substituted for Isaac in the Bible story. Lear does not discover that he has become his own scapegoat until it is too late.

In the ceremony of the Horse Sacrifice the horse is first tethered to a sacrificial post representing the sun, near an altar representing the earth. As the sacrificial horse is bound to a post representing the sun, and the nearby altar, where the sacrifice is consecrated, represents the earth, so, as human beings, we are bound to the sun, source of all life on earth, and our sacrifices, our deaths, take place on the altar of the earth.

The allusions to wheels of pain in Lear are simply variations on this pattern of solar sacrifice. When Lear claims to be "bound/Upon a wheel of fire, that mine own tears/Do scald like molten lead," he describes a situation analogous to the Horse sacrifice. The fiery wheel is the sun and as the horse is tethered to the post of the sun, so Lear is tied to the wheel of the sun and bound to its inevitable seasonal decline. The sacrificial deaths of the horse and Lear allow both to re-create the world: the horse

through the renewal of the kingdom and Lear through the remaking of the world in the image of his own suffering awareness.

As described earlier, the myth of Ixion tied to a fiery wheel seems related to a European tradition of rolling flaming wheels downhill on midsummer's day, and this tradition linked to an older one which called for human sacrifices to be attached to these wheels. That Shakespeare alludes to such a tradition of human sacrifice, as well as specifically to the myth of Ixion in the wheel imagery in Lear, seems obvious from the Fool's speech to Lear in Act 2, Scene 4: "Let go thy hold when a great wheel runs down a hill, lest it break thy neck with following" (71-72). In this foreshadowing of Lear's vision of himself upon a fiery wheel, the Fool indicates with the expression "break thy neck" that a wheel will indeed cause Lear's death. (In contrast Ixion presumably still lives upon his fiery wheel.) The "broken neck" mentioned in the Fool's speech indicates a more common, less glorious fate than Ixion's. The neck broken by the wheel reminds us of the strangled victim of the Horse Sacrifice and even more of the followers of Jagannatha who allowed themselves to be run over by the car of the god. One imagines these followers assuming a position of prayer, supplication, or submission (see Lorenz, 208)--on their knees, extending their bodies forward and

laying their heads on the ground so that a single wheel of the chariot will break their necks.

The same image occurs in popular American song in reference to suicidal submission to what Longfellow called "that American Juggernaut the railway locomotive" (66).

I'm gonna lay my head
 On some lonesome railroad line
 And let that 2:19 [train]
 Pacify my mind.
 (Richard M. Jones, "Troubled in Mind")

In the last scene in Lear the wheel of pain/death metaphor raises Lear's suffering to cosmic proportions. The wheel becomes the globe of the earth and Lear the victim attached to what Kent calls "the rack of this tough world" (5.3.15). Here Shakespeare magnifies Lear's torment until Lear's suffering form covers the planet, reminding us of tortured Prometheus bound to the world mountain.

Although Lear through this image covers the earth, the sub-lunar world of nature, he still, as a pagan, cannot transcend the earth. Through suffering and resultant awareness Lear can encompass the globe, but he cannot become more than nature herself. Nature's forms, the circle and the sphere, and her cycles of life and death constrain Lear. Lear would stretch out like Christ upon the cross, would transcend the cycles of life and death, but as a pagan he cannot. This inability to transcend nature and her symbols, the globe and the circle, is the fate of pagan man and also the reality behind all the images of man bound in the form

of a circle, whether hog-tied like Cuchulain and Osiris, or affixed to a wheel or a globe like Ixion and Lear. In all these cases the image is of linear man mutilated on the procrustean bed of round nature.

A later work of English literature, set in the same region of England as Lear, Thomas Hardy's Tess of the d'Urbervilles, also contains hints of the Horse Sacrifice. In fact Tess, written nearly three centuries after Lear, contains what seems a more complete enactment of the ritual. Perhaps the rite was once practiced in the region and Shakespeare and Hardy were familiar with vestiges of the ancient ceremony. In Tess the Horse Sacrifice occurs early, foreshadowing the sacrifice of Tess herself and establishing the first link in the novel's tragic chain of events, the death of the horse Prince.

In Lear the Horse Sacrifice is implied by the band of knights accompanying the roving Lear. In Tess a horse is actually killed during a night-time road journey. Tess's father, a tranter who makes his living transporting items on a horse cart, is too drunk to drive a load to market and Tess, accompanied by her younger brother Abraham, drives instead. Tess falls asleep and her father's horse Prince wanders onto the wrong side of the road and is impaled on the shaft of the morning mail cart.

The pointed shaft of the cart had entered the breast of the unhappy Prince like a sword, and from the wound his life's blood was spouting in a stream, and falling with a hiss onto the road.

In her despair Tess sprang forward and put her hand upon the hole, with the only result that she became splashed from face to skirt with the crimson drops. Then she stood helplessly looking on. Prince also stood firm and motionless as long as he could; till he suddenly sank down in a heap. (Ch.3)

Tess's covering of Prince's wound is reminiscent of the queen's futile attempts to rouse (sexually) the ritually slain steed of the Horse Sacrifice: "Nobody will take me! The poor nag sleeps!" (Campbell 194-5). That Tess is participating in a ritual sacrifice with a sexual content is clear also from the blood on her skirt, foreshadowing her maiden's blood soon to be shed by Alec d'Urberville, whose own blood will be shed by a knife-wielding Tess at the novel's end. In fact the sacrifice of Prince foreshadows and leads to a series of ritual sacrifices. The impoverishment of Tess's family because of Prince's death, and Tess's father's subsequent inability to practice his trade, lead to the necessity of Tess's employment with the false d'Urbervilles. This employment in turn results in Tess's violation and impregnation by Alec, leading eventually to the murder of Alec and the execution of Tess. Tess is captured at Stonehenge, legendary site of Druid sacrifice, soon after she "sacrifices" Alec with a knife. The imagery of sacrifice permeates Tess of the d'Urbervilles.

It is also significant that Prince is impaled by an official functionary of the King--the driver of the morning

mail-cart. In the Horse Sacrifice the priest who ritually slays the horse also acts in the name of the king. Even the horse's name, Prince, can be related to the Horse Sacrifice, for the sacrificial horse was a substitute for royalty.

Still other links between Prince's death and the ancient Aryan Horse Sacrifice are the martial metaphors Hardy uses to describe the incident. The mail cart speeds along "like an arrow" and the shaft that impales Prince is "like a sword" (ch.3). Although the victim of the Horse Sacrifice was generally suffocated, the ceremony itself was largely a ritualized form of equestrian war.

Both Tess and Lear show a diminishment of the Horse Sacrifice. In Lear this diminishment is effected by Goneril and Regan who successively reduce the size of Lear's troop of mounted knights, until finally only Lear and a few loyal followers are left to wander on foot. Similarly Tess's family, the Derbyfields, once proud knights of the name d'Urberville with great estates and stables, are reduced to a social level a short step above the common peasantry. The only noble vestiges of this once princely family still possessed by the Derbyfields are a worn silver spoon, a single horse, Prince, and their name, worn away as Tess says from d'Urberville to plain Derbyfield (a name which, pathetically, Tess's father wishes to sell for a few pounds).

In Lear the king, Lear, must be reduced to the level of the basest peasant--half-naked and shivering in a wretched hovel while the storms of an indifferent and brutal nature rage outside--so that he can become everyman and finally attain self-knowledge by experiencing the sufferings of everyman. The sufferings of the Derbyfields result in no such knowledge. Hardy's purpose in reducing the noble family to peasants, then to paupers, is not to show that suffering leads to knowledge and ennoblement, but to point out a lamentable historical fact--the disappearance of the folkways associated with the English countryside that had revolved around the twin poles of the aristocracy and the peasantry, and the concurrent rise of a mercantile class without traditions of its own (the false d'Urbervilles). The eviction of Tess's family after her father's death sounds the final note of this theme. The old way is dead. The new way is false and only superficially descended from the old.

Returning to the Horse Sacrifice, we can see the death of Prince at the beginning of the novel as the death of nobility and chivalry. Though the entourage of the sacrificial horse has been reduced from a hundred riderless horses and three hundred mounted nobles to Tess and her little brother, the nobility of the sacrificial animal, an old cart horse, is undeniable. For the Derbyfield family Prince, as his name indicates, is not just a noble horse,

but centaur-like, noble horse and noble rider in one. He is the "bread-winner" whose death means "ruin" for the family, especially Tess (Ch.4). Prince is the Derbyfield Don Quixote, whose earning power is the only thing capable of keeping Tess from the evil clutches of Alec d'Urberville. Alec quickly proves himself a false knight, not just by his assumption of the d'Urberville name, but by his reprehensible use of horses: first in the gig, driving fast to force Tess to kiss him to get him to stop, and later when, on horseback, he "rescues" Tess from the Darch sisters, only to abduct and ravish her. The knight is supposed to use his mount to rescue women, not to take advantage of them. The death of Prince and the subsequent equestrian shenanigans of Alec prove that chivalry is indeed dead.

In Tess the "d'Urberville coach," associated with some grim unnamed act of depravity in the noble family's distant past, appears as a ghostly harbinger of the doom of a living d'Urberville descendant. It is a type of juggernaut, a wheeled vehicle whose appearance signals death. The coach takes the humble form of the mail cart early in the novel, the cart which proves fatal to Prince, whose death initiates the subsequent series of deaths. Hardy also alludes to the fatal d'Urberville coach immediately before Tess is abducted by Alec when he refers to Car Darch, the "Queen of Spades" with whom Tess is fighting, as the "dark Car" (58, Ch.10).

19th century English Literature has yet another mail cart, or rather coach, which is depicted as a juggernaut, the vehicle in Thomas de Quincey's autobiographical essay "The English Mail Coach." The correspondences between *Tess* and "The English Mail Coach" are striking. In "The English Mail Coach" De Quincey relates events which occur a few years after the English victory at Waterloo. De Quincey is riding as a passenger atop a heavy mail coach with the coach's driver and its guard. Both have fallen asleep, and the coach and horses have drifted to the wrong side of the road. De Quincey hears the approach of another vehicle and soon spies "a frail reedy gig, in which were seated a young man, and by his side, a young lady" who are kissing (263, "Vision of Sudden Death"). Unable to wake the driver or the guard, or remove the reins from the vice-like grip of the sleeping driver or reach the horn in the possession of the guard, De Quincey shouts and shouts again. The young man driving the gig finally hears and drives his gig safely onto the margin of the road, although the back of the gig is soundly struck by the passing mail coach. De Quincey goes on to relate a series of dreams derived from the incident that continued to plague him some thirty years later.

In both Tess and "The English Mail Coach," the Royal Mail Coach, or Cart, is somehow invulnerable, an irresistible object, a Juggernaut. In Tess the invulnerability of the mail cart is demonstrated by the fact

that the mail cart driver simply extricates his shaft from Prince's chest, helps drag the carcass to the side of the road, and drives on. In "The English Mail Coach" De Quincey observes that "our bulk and impetus charmed against peril in any collision," the word charmed attaching a kind of magic invulnerability to the King's coach, taking it into the realm of the mystical.

De Quincey, in "The English Mail Coach," observes that the mail coach, as a Royal coach, the King's coach, by all legal precedents had the right of way wherever it was. In fact, by definition the Royal coach couldn't be on the wrong side of the road. "According to the law of the case as established by legal precedents, all carriages were required to give way before royal equipages, and therefore before the mail as one of them" (262, "Vision").

In other words, the King's carriage could neither be in an inappropriate place nor do any wrong thing. We are immediately reminded by this assumption of infallibility of the horse in the Horse Sacrifice--the horse and his retinue go wherever they will, moving at random, and wherever they tread becomes the sacred ground of the kingdom. (God in Ezekiel behaves in a similarly arbitrary manner, taking the form of the Babylonian invaders for no apparent reason.) This arbitrary nature of the king and of God, the insistence of the father on his total right to have his own way and at all times, calls to mind Oedipus' father, staking his claim

to the whole of the Thebes road before dying by the hand on his son.

Another element that Tess and "The English Mail Coach" have in common is the night road journey which replaces the night sea journey (see Campbell, vol. III 155-77) as the ultimate spiritual test of the human being in these 19th century works. The sensations of individual isolation and insignificance and the phantasmal and despairing loneliness of the unpopulated world flying by, as described in Tess, should be familiar to any modern reader who has travelled at night by automobile.

The mute procession past her shoulders of trees and hedges became attached to fantastic scenes outside reality, and the occasional heave of the wind became the sigh of some immense sad soul, coterminous with the universe in space, and with history in time (Ch.4).

We get a similar feeling of unreality in "The English Mail Coach" when De Quincey describes the scene of the near-tragedy as looking like "a cathedral aisle" (263, "Vision"). In "The English Mail Coach" the reader especially feels the author's sense of loneliness (his companions: the driver and the guard, are asleep) and his sense of being tested. The driver at night is like a military sentry--it is a fatal violation of duty to fall asleep or even not to be alert. (Tess fails this test by falling asleep, as she does in other moments of danger: before she is ravished by d'Urberville, and before she is captured at Stonehenge.) De

Quincey sees the incident of the Mail Coach and the gig as a test of himself and the driver of the gig. Both are alert and respond correctly, passing the test and saving lives.

Curiously, before describing the accident De Quincey analyzes a childhood dream "of meeting a lion, and, through languishing prostration in hope and the energies of hope, [he envisions] that constant sequel of lying down before the lion," that action revealing "the secret frailty of human nature" (254, "Vision"). For De Quincey this attitude of suicidal acquiescence is caused by despair brought on by the coldness and futility of the life and death cycle of nature.

"Nature, from her seat, sighing through all her works," again "gives signs of woe that all is lost"; and again the countersigh is repeated to the sorrowing heavens for the endless heavens for the endless rebellion against God. (255, "Vision")

(Compare the "heave of the wind became the sigh of some immense sad soul," in Hardy's description of Tess's journey.)

For De Quincey the ultimate defiance of God is the unwillingness to accept free will, the unwillingness to act. This unwillingness to act is Tess's great flaw. When Tess falls asleep at moments of great danger she abdicates her responsibilities as a Christian with free will, or so De Quincey would say. Instead Tess gives in to the lulling despair of the siren song of fatalistic nature. For Tess, however, this resort to unconsciousness is only fitting because she is a child of nature, not of Christ (something confirmed when her baby cannot be buried in consecrated

ground). Because her Christian free will is not aroused, she sleeps in the woods with Alec and as a consequence bears a child of nature, a bastard. As De Quincey might observe, her problems derive from the tendency of her moral nature to sleep (or feign sleep) in the face of danger.

Other elements that both Tess and "The English Mail Coach" have in common with the Horse Sacrifice are the imagery of war and the imagery of ritual sacrifice. In the final dream sequence that succeeds the description of the actual accident in "The English Mail Coach," De Quincey sees himself riding in a "triumphal car" inside a fantastically large cathedral, whose interior is, in part, a cemetery for war dead.

"A vast necropolis rising upon the far-off horizon, a city of sepulchers, built within the saintly cathedral for the warrior dead that rested from their feuds on earth" (272, "Dream Fugue.")

This martial imagery can easily be related to the warlike images linked to Prince's death: the arrow, the sword and the shaft.

In the cathedral De Quincey sees the girl from the gig transformed into a girl-child in front of the path of De Quincey's "triumphal car," and then transformed again into a woman "clinging to the horns of the altar, voiceless she stood--sinking, rising, raving, despairing; and behind the volume of incense that, night and day streamed upwards from

the altar, dimly was seen the fiery fount and the shadow of that being who should have baptized her with the baptism of death" (273-4, "Dream Fugue").

Even more surely than Tess splattered with Prince's blood, this woman is taking part in a ritual sacrifice. (In fact she is reminiscent of Tess discovered by the altarstone at Stonehenge.) Like the girl in the original gig that encountered the Mail Coach (and unlike Tess who is hanged after her discovery at Stonehenge), the girl on the altar in the dream is saved:

But by her side was kneeling her better angel,
that hid his face with wings, that wept and
pleaded for her, that prayed when she could not,
that fought with heaven by tears for her
deliverance, which also, as he raised his immortal
countenance from his wings, I saw, by the glory in
his eye, that from heaven he had won at last."
(274, "Dream Fugue")

Tess could have used one of these angels to assist her in counteracting her weakness of spirit, to pray for her "when she could not."

The conclusion of De Quincey's dream represents a simple reworking of the Book of Revelation. The event that transports the girl from the path of the car and onto the altar is the "last" trump from a trumpeter on a bas-relief of a sarcophagus who has come to life, signalling the general reanimation of the inhabitants of the necropolis. The girl on the altar is receiving her final judgment, with the two angels acting as opposing attorneys. After she is

found worthy and saved, "the quick and the dead" sing "together to God," and the Christian millennium transcends the horror of the runaway coach and the scene at the horns of the altar (Ibid.). We also recognize in the "fiery fount" on the altar the censer which sets the earth ablaze in Revelation and also the coals under God's chariot in the vision of Ezekiel. This fearful and holy apocalyptic glow would be seen again in the fireboxes of the steam engine locomotives of the nineteenth century.

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Between the ancient world of Greek and Indian mythology and the modern world of Thomas Hardy's realistic fiction an important change in humanity's perception of the wheel occurred. According to the ancient view the wheel was controlled by a divine consciousness: anthropomorphic representations of the Godhead control the wheels of the chariots of Jagannatha and of the Hebrew God described in Ezekiel, and Zeus controls the wheel on which Ixion is set. According to the medieval world view in the West, the guiding intelligence of an anthropomorphic god controlled the wheels of the universe which were actually concentric spheres with the earth at their center, each sphere being kept in motion by the divine hand of either God or one of his angels.

This cosmos of spirit was changed forever by science when astronomers like Copernicus, Galileo and Johannes Kepler discovered that the earth was not the center of the universe. Kepler finally killed the old system by proving that the orbits of the planets were ellipses, not the perfect circles of the ancients, thus purging the sun-centered system of its final mathematical inconsistencies. Kepler knew exactly how he had changed the universe and issued a plea for belief in the new system as the handiwork of a divine, if now somewhat more remote, hand. In his plea he outlines the new metaphor for the relationship among the human, the divine and the wheel. No longer is the wheel infused with the spirit of the human--Ixion, or the divine--the wheels within wheels controlled by God's Cherubim in Ezekiel. In Kepler's metaphor the wheels of the universe become cogs, gears in a clockwork mechanism. In a metaphor that became central to Deism, Kepler describes a universe separated from God. No longer is God constantly present in the everyday working of the universe, the author of all events. Rather, God, in Kepler's metaphor, becomes a kind of clockmaker who winds his universe up and then sits back at a distance, behind his physical laws, and watches it go.

My aim is to show that the heavenly machine is not a kind of divine, live being, but a kind of clockwork and he who believes that a clock has a soul, attributes the maker's glory to the work, insofar as nearly all the manifold motions are caused by a most simple magnetic, and material force, just as all motions of the clock are caused by a simple weight. And I also show how these

physical causes are to be given numerical, and geometrical expression. (Quoted in Koestler, 340)

The universe was no longer alive. Its face was no longer divine or human. Man was henceforth to understand the universe in mathematical terms. God no longer inhered in the substance of the universe, but He still stood behind it all, as a clockmaker, a creator of mathematical laws and physical relationships.

For mankind the obvious question became: How could the glory of God be seen in the mathematically precise functioning of the natural laws of the universe, when the working of those laws so often resulted in the seemingly random and meaningless suffering and deaths of innocent human beings? An event that particularly upset the rationalists of eighteenth century Europe, who were still attempting to find their place within the new clockwork universe, was the Lisbon Earthquake of November 1, 1755. In his poem "The Lisbon Earthquake," the French rationalist Voltaire wonders how the people of Lisbon could have been so much more evil than the people of Paris and London that thirty thousand of them had to die while the people of the other two corrupt cities went unscathed. Voltaire can see no special marking of the righteous and the unrighteous like that found in the Biblical stories of Passover and the Destruction of Jerusalem in Ezekiel.

Say, will you then eternal laws maintain,
Which God to cruelties like these constrain?
Whilst you these facts replete with horror view,

Will you maintain death to their crimes was due?
 And can you then impute a sinful deed
 To babes who on their mother's bosoms bleed?
 Was more vice in fallen Lisbon found
 Than Paris, where voluptuous joys abound
 Was less debauchery to London known,
 Where opulence luxurious holds her throne?
 (15-26)

In an introduction Voltaire explains that his poem is a refutation of the philosophy expressed by the English poet Pope in his "Essay on Man" that "WHATEVER IS, IS RIGHT" (Voltaire, 5). Voltaire cannot find, in the Lisbon earthquake, and in the workings of the mechanistic universe in general, proof of a rational, compassionate God. Using the clockwork metaphor of Kepler and the Deists, Voltaire, describing human beings as cogs in a machine, sounds a note that reverberates throughout subsequent European literature and philosophy.

If a man devoured by wild beasts, causes the well-being of those beasts, and contributes to promote the orders of the universe; if the misfortunes of individuals are only the consequence of this general and necessary order, we are nothing more than wheels which serve to keep the great machine in motion; we are not more precious in the eyes of God, than the animals by whom we are devoured.
 (6)

Like Ixion and Lear modern man, as depicted by Voltaire, is bound to a wheel (actually becomes a wheel), a wheel controlled now by the indifferent machinery of the physical laws of the universe, not by the direct hand of an anthropomorphic God. Voltaire especially fears the loss of Man's special place as the focus of God's creation, a loss

that became inevitable once man discovered that the earth was not the center of the universe. Nevertheless, Voltaire, despite his doubts, continued to embrace Christianity and the doctrine of the Great Chain of Being, which placed humanity at the pinnacle of the visible portion of Creation.

Voltaire's continued acceptance of Christianity, coupled with his inability to reject completely the clockwork universe of the Deists, led him to a personal philosophy based more on wishful thinking than on any great conviction. At the end of "The Lisbon Earthquake" Voltaire expresses growing doubt about the possibility of finding meaning in Earthly events. He also expresses his willingness to accept the inevitable--that he will probably die without knowing if there is purpose behind the mechanics of human suffering. In the end Voltaire, like a follower of Jagannatha, willingly submits to death, a death that he can only hope is the handiwork of God:

...taught by age and care
 Whilst I mistaken mortals' weakness share
 The light of truth I seek in this dark state,
 And without murmuring submit to fate. (253-6)

At the end of "The Lisbon Earthquake," alluding to the last sprite to emerge from Pandora's mythical jar of evil, Voltaire, somewhat pathetically, proposes the balm of "Hope...man's sole bliss below" as modern man's only remedy for doubt (262).

In a similarly faint expression of conviction in his introduction to "The Lisbon Earthquake," Voltaire makes a case for belief in a Christian afterlife, not with arguments of logic or faith but with an argument of desperation. Without an afterlife, Voltaire says, human life on Earth can have no meaning, that "no thing but the hope of our existence being continued in a future state can console us under our present misfortunes; that the goodness of providence is the only asylum in which man can take refuge in the darkness of reason, and in the calamities to which this weak and frail nature is exposed" (7).

Like Voltaire, David Hume, in his essay "Immortality of the Soul," argues from the premise that human beings are provided no real proof of immortality in this world, but, unlike Voltaire, concludes that the individual human soul cannot be immortal, unless God be some kind of sadist.

What cruelty, what inequity, what injustice in nature, to confine all our concern, as well as all our knowledge, to the present life, if there be another scene still waiting us of infinitely greater consequence? Ought this barbarous deceit to be ascribed to a beneficent and wise being?
(425)

The Lisbon earthquake became the focus of Voltaire's lifelong crisis of religious belief. As Dorothy Schlegel observed in her analysis of English and French Deism, Shaftesbury, and the French Deists,

Voltaire could not comprehend the paradox of a just God who would permit a disaster such as the Lisbon earthquake to occur. Yet the alternative was unthinkable. He could not accept with

equanimity a hopeless, materialistic determinism. Lurking always at the back of his skeptical mind were uncomfortable doubts as to the existence and nature of God. (14)

More than a century later, John Stuart Mill, describing the spirit of his own age, could have been speaking about Voltaire: "We are in an age of weak beliefs, and in which such belief as men have is much more determined by their wish to believe than by any mental appreciation of evidence" (403).

Voltaire was a transitional figure in the history of ideas. Ultimately he could neither accept nor reject the clockwork universe of the Deists, but he embraced most of the rest of seventeenth and eighteenth century rationalism, the fabric of ideas into which the Deistic clock model of the universe was irrevocably woven.

William Blake, on the other hand, was a philosophical reactionary in many ways, opposed to a mechanistic clockwork universe which put God at a remove from the everyday workings of the world. Blake was, rather, something of a Platonic Idealist, believing this world to be an imperfect reflection of an ideal eternal world. Blake did not embrace nature and the visible physical universe with the pantheistic abandon of Rousseau, Voltaire's contemporary, who felt that by studying nature and her laws, "natural man" could create an ideal paradise in the real world. For Blake nature represented merely an inferior reflection of an ideal

world: "There Exist in that Eternal World the Permanent Realities of Every Thing which we see reflected in this Vegetable Glass of Nature" (from "Vision of the Last Judgement," in Poetry & Prose, 555).

Indeed, for Blake, Nature, the world of organic life and death, which he termed Generation, was the third lowest of four levels of existence. Blake created his own system of worlds, a system derived from traditional Christian cosmogony and concentric spheres. The lowest world in Blake's system is Ulro, the world of unliving matter. Depicted as a realm of stone under the earth, Ulro is the Blakeian equivalent of the Christian hell, the lowest state of existence of the human soul, a place maintained by the ascendant spirit of materialism in Blake's day. In Ulro, in the midst of the dead material world, Los--the eternal poet incarnated in Blake--toils in his forges creating the works of human imagination that turn the eyes of fallen man upwards towards Eden, the highest world.

Above Ulro, on the surface of the earth, is the fallen world of nature, of life and death, called by Blake Generation. The Christian equivalent of Generation is the sublunar world of earth, subject to the ravages of death since the fall of Adam.

Above Generation, above the surface of the earth and extending to the "mundane shell" of the stars lie the projections of man's visions of the divine in the

transparent layers of the visible heavens. What man sees looking upwards towards the "mundane shell" of the stars are not the workings of eternity, but, like the heroes and monsters of the pagan zodiac, reflections of life on earth. Blake makes his layered sky a metaphor for the changing religious beliefs of man, which, though projected onto the sky, really only reflect the reality of Generation. Though flawed, these visions represent a higher reality than Generation because they are non-material creations of the human mind, spiritual strivings towards Eternity and perfection.

Most prominent among these "Incrustations of Error" are the Twenty-seven Churches, the "...Twenty-seven Heavens, numbered from Adam to Luther;/ From the blue Mundane Shell, reaching to the Vegetative Earth," representing the progressive stages of development of the institutions and dispensations of the Judeo-Christian tradition (Plate 13, 32-33). (Three is the number of imperfection or error in Blake: twenty-seven is three to the third power. Four, two to the second power, is Blake's number of perfection)

Above the mundane shell and its Incrustations of Error, the institutionalized religions of man, lies Blake's realm of Beulah, which actually surrounds Blake's next and most perfect world, that of Eden, on all sides. Beulah, in fact, is a cushioning realm. Linked to the moon, which is above the stars of the mundane shell in Blake's cosmology, Beulah

is a land of repose, a land where a dreamlike state that can be likened to post-coital sleepiness prevails. As the female moon reflects the light of the male sun and makes it bearable to human vision, so Beulah acts as a moderating filter for the blinding intellectual brightness of Eden. Beulah (a word meaning marriage or married land in Hebrew) is a feminine realm where the female emanations of male spirits, emanations which cannot exist separately from the male in Eden, can offer male spirits the comfort of the forgetfulness associated with the sexual act. Beulah offers the immortal beings from Eden temporary rest from the fierce intellectual warfare of their higher realm. If this rest turns into a deep enough sleep these immortals can even become incarnated into mortal bodies and descend into the world of Generation. Similarly mortal inhabitants of the world of Generation can ascend to Beulah in dreams, and in the dreaming state--through the mediation of the Daughter's of Beulah, Blake's muses--safely approach but not attain the blinding intellectual light of the ideal world of Eden. Blake also identifies Beulah with bodies of water, and hence with the waters above the firmament in Genesis, the waters of chaos out of which the world was formed. Water symbolizes the imagination for Blake, and the infinite possibilities inherent in the undifferentiated waters of chaos resemble the infinite possibilities of the human imagination. For Blake, who believed that the Fall came,

not with the sin of Adam, but with Creation, a return to the waters of chaos was a step backwards towards an ideal state existing before Creation.

The most perfect Blakeian realm, Eden, is surrounded by Beulah on both sides, inner and outer. In Eden all apparent contradictions are reconciled and all separate entities become united in Eternity without losing their individuality in the process. Blake in his "Vision of the Last Judgement" depicts the reconciliation of this seeming paradox in an image of individuals who "when distant they appear as One Man but as you approach they appear Multitudes of Nations" (in Poetry & Prose, 556-557). Blake's Eden can be equated with the Christian concept of Heaven.²

The highest of Blake's states that mortal man can hope to reach while still in the body is Beulah, although Beulah has its pitfalls, and one can become lost in dreaming as one can become lost in chaos.

Beulah or "married land" will also become the name of Palestine when it has returned to God's favor (Isaiah 62:4; Complete Poems, 1045). In fact, the "restoration" of the Holy Land is the subject of Blake's epic poem Jerusalem. Blake perceives the character Jerusalem, representing the Biblical Holy Land, as the female emanation of the character Albion, who represents both mankind and England. The problem of the poem, the reunion of Albion with Jerusalem, also involves the reunification of a divided earth

represented by England (Albion) and Jerusalem (the Holy Land), which belong together on a spiritual plane according to Blake. On another level the poem deals with the reunification of Mankind (Albion again) and Vision (Jerusalem again). In fact all of "Jerusalem" concerns the integration of seeming opposites. For Blake there can be no negations, only reconcilable contradictions.

Images of wheels dominate Blake's "Jerusalem." The wheels within wheels of Ezekiel's vision of God's chariot are, for Blake, the ideal wheels, symbolizing harmony and perfection. In their debased worldly forms--the "chariot wheels of war," the "wheels of compulsion" of the machines of the industrial revolution, and the "Starry Wheels," or "Satanic Wheels" of the new mechanistic Keplerian/Newtonian universe--Blake's wheels symbolize meaningless destruction and cosmic emptiness. Blake hated eighteenth century science and scientific cosmology which, he felt, substituted a mechanical clockwork for the spirit motivated heavens of Christian tradition, from which Blake derived his spirit realms of Beulah and Eden. While ascribing the error of the clockwork universe to a misguided trio of rationalist "sons of Albion"--Bacon, Locke and Newton--Blake particularly condemned Newton, whose laws of motion and gravity synthesized and completed the work of a series of cosmologists and physicists not mentioned by Blake--Copernicus, Galileo, and especially Kepler, men who had

presided over the replacement of the spirit-driven universe by the clockwork universe. Blake condemned Newton for replacing the spirit-occupied heavens of medieval Christianity with "the abstract Voids between the stars [that] are the Satanic Wheels" (pl.13.37).

The rationalists' debased wheels are found in "Jerusalem," not just in the sky of Blake's new cosmology, but in the cogs of the industrial revolution--a more earthly result of the materialistic science that Blake saw taking over the mind of Europe and which he despised:

I turn my eyes to the Schools & Universities of
Europe
And there behold the Loom of Locke whose Woof
rages dire
Washd by the Water-wheels of Newton, black the
cloth
In heavy wreathes folds over every Nation; cruel
Works
Of many Wheels I view, wheel without wheel, with
cogs
tyrannic
Moving by compulsion each other: not as those in
Eden: which
Wheel within Wheel in freedom revolve in harmony &
peace. (Pl.15. 14-20)

Blake formulates, in these lines, the principal conflict in Jerusalem, the conflict between two different systems of wheels--the tyrannic cogs of the new science and the industrial revolution versus the wheels within wheels of Ezekiel's vision of God's chariot. Blake contrasts the "freedom," "harmony," and "peace" of the wheels within wheels motivated by the spirits of the four-headed cherubim symbolizing the power of God with the "cruel," "tyrannic,"

wheels of the rationalistic universe "moving by compulsion each other."

The third use of wheels that Blake, in Jerusalem, depicts as misguided and distorted is the employment of wheels in engines of war. Here again Blake compares degenerate wheels to the motivating power of the Cherubim in Ezekiel, as Jerusalem speaks in an attempt to prevent war: "Why should Punishment Weave the Veil with Iron Wheel of War/ When forgiveness might it weave with Wings of Cherubim" (Pl. 22. 34-35).

Jerusalem's plea cannot prevent her own destruction in war, a destruction accomplished by chariot wheels: "The Nations are her dust: ground by the chariot wheels/ Of her lordly conquerors, her palaces levelled with the dust" (Pl. 43.23-24).

Blake even resurrects the old solar chariot of the Aryan sun-god, "The Sun shall be a Scythed Chariot of Britain," to symbolize Britain's misguided attempt to conquer the world through the force of arms in his own time (Pl. 56.18).

As usual, Blake's poetry here involves a radical reinterpretation of Christianity, in the case of his negatively depicted chariots of war, conveniently ignoring God's warlike acts in Ezekiel, the destruction of Jerusalem and the massacre of most of its inhabitants. Instead of addressing God's actions in Ezekiel, Blake prefers to

concentrate on the spiritual nature of the motive power of God's vehicle. In fact Blake's expression "wheels within wheels" seems to refer more properly to the concentric spheres of the plenum of the earth-centered medieval universe than to the chariot wheels of Ezekiel.

Part of the sexual nature of Blake's vision of the fallen world of nature, or Generation, in which we live, is that things divide. Thus Jerusalem separates from Albion (Vision from Mankind) creating a dichotomy between Spirit and Body that must be reconciled. In Blake the wheels of Satan, (the Newtonian mechanistic universe), the wheels of compulsion, (the machinery of the industrial revolution), and the chariot wheels, (of war), have separated from the wheels of Eden, the spirit-driven wheels within wheels of Ezekiel's vision, the concentric spheres of the universe. As Blake reconciles Albion and Jerusalem, he also reunites the degenerated wheels of cosmogony and cosmology, of industry and war with the harmonious wheels of God's chariot in Ezekiel and the concentric spheres of the earth-centered medieval universe. The "Three Immense Wheels" formed by Albion's sons, the rationalist men of Britain and the rest of the world, must be reconciled with the divine wheels.

This reconciliation of wheels occurs at the climax of "Jerusalem" when the fallen world of nature, "The Druid Spectre," is saved by the redeemed figures of human genius, including the formerly evil rationalist triumvirate "Bacon &

Newton & Locke," all appearing in threefold sexual completeness and more importantly in fourfold intellectual completeness, each with four faces, as the Cherubim, symbols of God's perfection, appeared in Ezekiel.

The Druid Spectre was Annihilate loud thundering
 rejoicing terrific vanishing
 Fourfold Annihilation & at the clangor of the
 Arrows of the Intellect
 The innumerable Chariots of the Almighty appeared
 in Heaven
 And Bacon & Newton & Locke, & Milton & Shakespeare
 & Chaucer
 A Sun of blood red wrath surrounding heaven on all
 sides around
 Glorious incompreh[en]sible by Mortal Man & each
 Chariot was sexual Threefold
 And every Man stood Fourfold, each Four Faces had.
 (Pl. 98.6-12)

These individual incarnations of the human intellect perfected--Bacon, Newton, Locke, Milton, Shakespeare and Chaucer--take on an aspect of God by appearing in airborne chariots, like God's in Ezekiel. The form that these intellectual saviors assume resembles that of the motivating spirits of God's will in Ezekiel, the Cherubim. These human saviors in airborne chariots, appearing in the four-faced form of perfection, recall the "freedom," "harmony," and "peace," of the wheels within wheels of God's chariot in Ezekiel and of the medieval universe of concentric spheres, thereby redeeming the fallen Starry Wheels of the Newtonian cosmic void, the cogs of the industrial revolution and the scythed chariot wheels of war. In a work of art, Jerusalem, Blake has restored the universe to the state which existed

before the revolution of the rationalists. Blake subdues the wheels of the clockwork and restores the wheels of the spirit. Somehow Blake reconciles the philosophies of the materialists with his own beliefs in imagination and spirituality. Materialism, the reader must assume, has finally been balanced by imagination, as Blake balances the appearance of the three great materialists--Bacon, Locke and Newton--with the appearance of the three great men of the imagination--the poets Chaucer, Shakespeare, and Milton--who also appear in four-faced form in airborne chariots at the end of Jerusalem.

Blake may have been the last great visionary of Western civilization. He imagined a complete universe, based on Christian theology and cosmogony, but antithetical to much of the dogma of conventional Christianity: the worship of virginity, the glorification of "holy" wars, and the subordination of individual vision to the orthodoxy of an established church.

Blake may have been the last major figure in English Literature to attempt to turn back time and replace the clockwork universe with the spirit-driven universe. As part of its attack on the wheels of rationalism Blake's Jerusalem makes one of the most effective attacks on industrialism in the English language. We find in Jerusalem the bitterest of pictures of man's enslavement to the newly ascendant machine

and of this enslavement's relationship to a new form of human worship of death.

And all the Arts of life: they changed into the
 Arts of Death in Albion.
 The hour-glass contemned because of it simple
 workmanship,
 Was like the workmanship of the plowman, & the
 water wheel,
 That raises water into cisterns: broken & burned
 with fire:
 Because its workmanship, was like the workmanship
 of the shepherd.
 And in their stead, intricate wheels invented,
 wheel without wheel:
 To perplex youth in their outgoings, & to bind to
 labours in Albion
 Of day & night the myriads of eternity that they
 may grind
 And polish brass & iron hour after hour laborious
 task:
 Kept ignorant of its use, that they might spend
 the days of wisdom
 In sorrowful drudgery, to obtain a scanty pittance
 of bread:
 In ignorance to view a small portion & think that
 All,
 And call it Demonstration: blind to all the simple
 rules of life.

(Pl. 65.16-28)

Blake begins here with an attack on the clock, metaphor for the new universe of the rationalists who have "contemned" the hourglass "because of its simple workmanship." A universe and a way of life are discarded simply because they are not complicated enough and replaced by a universe and a way of life incomprehensible to the average man, who could at least understand the workings of the hourglass and "the water wheel/ That raises water into cisterns." As Blake compared the "Starry Wheels" of the new cosmology and the "iron wheels of war" to the "freedom,"

"harmony," and "peace" of the spirit-motivated wheels in Ezekiel, so here he compares the ancient water wheel used for agriculture and to obtain drinking water to the intricate inventions of industry. The water wheel of nature, like the hourglass, is destroyed, "broken & burned with fire," because its workmanship "was like the workmanship of the shepard," like the workmanship of Christ the shepherd who guards and protects living creatures. In the "stead" of the hourglass and the water wheel Blake finds the abstract wheels of industrialism, the "wheels without wheels," the "wheels of compulsion" which enforce a meaningless worship of dead matter, "...to bind to labours in Albion/ Of day & night the myriads of eternity that they may grind/ And polish brass & iron hour after hour of laborious task." The workers must attend to these new wheels "in sorrowful drudgery" in order to obtain a meager living, "a scanty pittance of bread," kept all the while in ignorance of the true nature of the machine to which they are forced to devote their lives. The machine has destroyed man's relationship to other life, to his own former pastoral and agricultural existence (symbolized by the shepard, the plowman and the water wheel), and man is forced to serve a dead thing, a machine. Without knowing how or why, man is removed from the service of life and placed in the service of death. And yet, for Blake, even this horrible fate

cannot destroy the spark of creative imagination, of the eternal in man. As Jerusalem says, even in her despair,

Babel mocks saying, there is no God nor Son of God
That thou O Human Imagination, O Divine Body art
all
A delusion. But I know thee O Lord when thou
ariseest upon
My weary eyes even in this dungeon & this iron
mill.

(Pl.60.56-59)

Especially interesting in Blake's attack on industrialism in Jerusalem is the lack of any reference to the steam engine, dominant image of the industrial age, the image which replaced the clock in the metaphor of the mechanized universe, as we shall see shortly in Thomas Carlyle's "novel" Sartor Resartus. Blake remained content to excoriate "the water wheels of Newton," saving the big target for others, showing, even in his choice of targets, how old-fashioned he really was. (It was actually during the years of Jerusalem's composition, from 1804 to 1820, that the steam-engine assumed its position of dominance in the industrial revolution.)

Voltaire's apprehension that human beings might be "nothing more than wheels which serve to keep the great machine [of the universe] in motion" gave way to an even greater fear in the nineteenth century when the steam engine replaced the clock in the metaphor for the universe and also became the primary symbol of the industrial revolution. Thinking men no longer feared just human insignificance,

that man might be a mere cog in a universal mechanism; rather they feared senseless mechanical destruction in a mechanical universe. They feared being rent apart in the cosmic equivalent of an industrial accident.

In his novel Sartor Resartus Thomas Carlyle explores implications inherent in the idea of the universe as a machine--implications that made Voltaire uneasy and outraged William Blake--through a new image, the steam engine. Published in 1833, some seventy-five years after "The Lisbon Earthquake" and less than fifteen after William Blake finished Jerusalem, Carlyle's Sartor Resartus describes the spiritual odyssey of its protagonist, the professor Teufelsdröckh. The mechanical universe becomes an unbearable torment for Teufelsdröckh and, in the chapter "The Everlasting No," Teufelsdröckh sees himself torn apart by that very mechanical universe in the form of a steam-engine, the relentless juggernaut and symbol of the age.

In the midst of their crowded streets and assemblages, I walked solitary; and (except as it was my own heart, not another's, that I kept devouring) savage also, as the tiger in his jungle. Some comfort it would have been, could I, like a Faust, have fancied myself tempted and tormented of the Devil; for a Hell, as I imagine, without Life, though only diabolic Life, were more frightful: but in our age of Down-pulling and Disbelief, the very Devil has been pulled down, you cannot so much as believe in a Devil. To me the Universe was all void of Life, of Purpose, of Volition, even of Hostility: it was one huge, dead, immeasurable Steam-engine, rolling on, in its dead indifference, to grind me limb from limb. O, the vast, gloomy, solitary Golgotha, and Mill of Death! Why was the Living banished thither

companionless, conscious? Why, if there is no Devil; nay, unless the Devil is your God? (133)

Here Carlyle, while using imagery borrowed from Blake ("Mill of Death"), intensifies the horror of his depiction of the mechanical universe by making it as pedestrian as possible. While the rationalist deceptions in Blake's "Jerusalem" take on fantastic and even strangely beautiful form, like the "Starry Wheels" of the Newtonian universe, Teufelsdröckh, confronted by a universe that is just a giant version of an everyday machine, cannot bring himself to believe in even a single Devil. Teufelsdröckh lives in a much grimmer universe than the universe of the rationalists depicted in Jerusalem. In Jerusalem, though the Sons of Albion might take on the form of unliving matter, wheels, or stars, their humanity never disappears entirely. Ultimately Blake's rationalists, his sons of Albion, represent a force to be reckoned with and reintegrated into a universe where, finally, even dead matter is redeemed and made human, "even Tree Metal Earth & Stone, all/ Human Forms identified, living going forth" (Pl.99,1-2).

For Teufelsdröckh, though, undergoing his spiritual crisis in the chapter "The Everlasting No," the universe is "all void of Life, of Purpose, of Volition, even of Hostility: it [is] one huge, dead, immeasurable Steam-engine, rolling on, in its dead indifference, to grind me limb from limb." Blake's Sons of Albion, on the other hand,

appearing in Jerusalem as "distant stars, / Ascending & descending into Albion's sea of death," and representing the same cold and indifferent mechanical universe as Teufelsdröckh's steam engine, have an unearthly beauty that makes them considerably less terrifying than the steam-engine in Sartor Resartus (Pl. 50.20-21).

Kepler saw the universe transformed from living to non-living, but still believed it a beautiful clockwork, showing in its working the Divine hand of its Creator. Voltaire feared that the Creator of a clockwork universe would not hold man in as high esteem as the Creator of a living universe--that man might not be the pinnacle of visible creation, but just a cog, equal to other cogs, living and non-living. Teufelsdröckh, at the point of "The Everlasting No," living in the steam-engine universe, cannot see in that universe any of the beauty attributed to the previous, clockwork universe, and is past even imagining the universe of the spirit that Blake hoped to restore. Teufelsdröckh, at the nadir of his despair, sees the universe as non-living and cannot imagine so much as a Devil behind it, much less a God.

Carlyle in Sartor Resartus and Blake in Jerusalem have their characters descend into a realm of unredeemed unliving matter to grapple with personifications of their own weaknesses before they can rebuild their worlds. For Teufelsdröckh, of course, the steam-engine universe is

simply a metaphor for his own doubt, doubt about the existence of a Higher Intelligence in the universe, doubt about the existence of God and Christ. This doubt becomes the engine that tears Teufelsdröckh apart and makes him wish to see even a demon as proof that some spiritual realm might exist.

Blake's hero, the poet Los, on the other hand, never doubts the existence of a spiritual realm. Nevertheless Los is found, at the beginning of Jerusalem, in the caverns of Ulro, on the lowest plane of existence, that of unliving matter--the equivalent for Blake of the steam-engine universe, the "solitary Golgotha, and Mill of Death" of Teufelsdröckh. Los, in part a projection of Blake himself, struggles in this unliving realm with the materialistic part of himself, his Spectre, just as Teufelsdröckh struggles with the representation of his own materialism, the steam-engine. Los, like Teufelsdröckh, also struggles with the rationalist-materialist world-view, represented by Los' Spectre who seeks to "lure Los: by tears, by arguments of science & by terrors" into betraying mankind (Albion) by giving up his (Los') works of the Imagination, "which is the Divine Body of the Lord Jesus. blessed for ever" (Pl. 7.6). Still, the poet Los does not destroy his rationalist spectre, but rather chains it to his forge, forcing it to labor at his side, for the poet's vision must be tempered by order. Teufelsdröckh, in the toils of the steam-engine, and

Los, struggling with his Spectre, have reached ultimate depths of spiritual torment. Each is literally torn apart, Teufelsdröckh by the steam-engine of doubt and Los by the separation of his selfish rationalism, his Spectre, from his self.

From these points of despair both Teufelsdröckh and Los must reconstitute themselves and rebuild their respective worlds. Both begin again on a foundation of Christianity. Teufelsdröckh and Los both discover a new foundation in Golgotha, the hill of skulls, the hill of Christ's crucifixion. In Sartor Resartus Golgotha is clearly the spiritual location of the Steam-engine universe of Doubt, "the vast, gloomy, solitary Golgotha, and Mill of Death," where Teufelsdröckh, like the bread which symbolizes the body of Christ in the Christian sacrament, is torn apart. Teufelsdröckh, who will soon assume a form of the Christian religion, here assumes Christlike attributes. As Golgotha, the site of Christ's suffering and death, became the foundation of Christianity, so the site of the steam engine universe, location of Teufelsdröckh's spiritual torment, becomes his Golgotha, foundation of his Christianity.

Similarly, Los rebuilds on a foundation of Christianity, although admittedly a Christianity of an unconventional sort. For Los, once he has his Spectre chained and working at his side, subdued but not completely reintegrated, begins the work of constructing the city of

the creative intellect and imagination, a city founded on the body of Christ because Imagination was, for Blake, "the Divine Body of the Lord Jesus." Blake further identifies his city of Divine Imagination with the suffering and death of Christ through its name, Golgonooza, after Golgotha (Complete Poems, 1049). While Los subdues the divisive terrors of rationalism, in the form of his own Spectre, and even puts the spirit of rationalism to work for the ultimate triumph of the Creative Imagination, Teuflesdröckh ultimately submits to his rationalist demon, the steam-engine of doubt in the name of a different kind of Christianity. While Los chains the feared rationalist demon, his Spectre, and forces it to do his bidding in order to work for the ultimate triumph creative imagination, defined by Blake as the body of Christ, Teuflesdröckh ultimately submits to his rationalist demon, the mechanistic steam-engine universe, in the name of a different, self-abnegating, masochistic vision of Christianity despised by Blake. After passing through "The Everlasting No," and "The Centre of Indifference," Teuflesdröckh ultimately arrives at "The Everlasting Yea." "The Everlasting Yea" represents a strange kind of affirmation involving the destruction of the self.

'...The self in thee needed to be annihilated. By benignant fever-paroxysms is Life rooting out the deep-seated chronic Disease, and triumphs over death. On the roaring billows of Time, thou art not engulfed, but borne aloft into the azure of Eternity. Love not Pleasure; love God. This is

the EVERLASTING YEA, wherein all contradiction is solved: wherein whoso walks and works, it is well with him. And again: 'Small is it that thou canst trample the Earth with its injuries under thy feet as old Greek Zeno trained thee: thou canst love the Earth while it injures thee, and even because it injures thee; for this a Greater than Zeno was needed, and he too was sent. Knowest thou that "Worship of Sorrow"? The Temple thereof, founded some eighteen centuries ago, now lives in ruins, overgrown with jungle, the habitation of doleful creatures: nevertheless, venture forward; in a low crypt, arched out of falling fragments, thou findest the Altar still there, and its sacred Lamp perennially burning.' (153-54)

The religious impulse of Teuflesdrockh here is the same as that of the followers of Jagannatha who willingly throw themselves under the wheels of his chariot--to glorify their god by the elimination of their unworthy selves.³ The same self-destructive impulse motivates those who deliberately seek Christian martyrdom. Although Blake condemned the selfishness of excessive individualism (hence the invidiousness of the term "uncircumcised" in his poetry, by which he meant the unwillingness to surrender a small portion of individuality in affirmation of a larger community), nevertheless, Blake did not advocate extinction of the individual self. After all, for Blake the individual was the fount of the Creative Imagination, which was "the body of Christ." Blake believed, rather, in the conjoining of individuals into larger entities, retaining, not eliminating, all the individual characteristics of the composite members. Thus Blake does not destroy his Spectre, but attempts a reunion with it, and the climax of Jerusalem

comes with the reunification of Albion and Jerusalem. For Blake the Fall from grace, which began at the moment of Creation, was caused by the separation of once unified entities, and can be annulled by their reunion. Blake's vision here contains an element of democracy not evident in Teuflesdröckh's Christianity. While Teuflesdröckh feels that he must eliminate his own individuality because of his inferiority to God, Blake knows that God cannot be complete, indeed God cannot exist, without humanity and the human imagination. For Blake the individual does not disappear in the confrontation with God, but rather becomes a conscious atom in the configuration of God.

In Blake's view all humanity must be reunited in a series of steps in progressively larger and larger forms until it form the Eternal Family, the Godhead, out of its constituent parts. Every constituent part, even those that separately seem evil, must be included in this reunion or the Godhead will be incomplete. In order to achieve this completeness the three reviled rationalists: "Bacon & Newton and Locke" must appear among the drivers of "the innumerable Chariots of the Almighty" at the climax of Jerusalem, balanced by the three poets: "Milton & Shakespeare & Chaucer." All the poets and rationalists appear at the end of Jerusalem as avatars of Christ; all represent the power of salvation of the Creative Imagination of man which is also "the Divine Body of the Lord Jesus." All the chariot

drivers have four faces, like the Cherubim motivating God's throne in Ezekiel, indicating that each has achieved a level of unification of formerly separated qualities impossible here in Generation, beneath the Mundane Shell.

Most significantly, all six poets and rationalists drive chariots like that of God in Ezekiel. The charioteers have become integrated with God, as opposed to being expunged as unsightly blots unworthy of existence in the presence of God. For Blake men belong at the helms of Divine chariots, not beneath their wheels. This belief in the divinity of man separates Blake from Carlyle and the followers of Jagannatha who long to have their individuality expunged by a superior being, who long to have their worthless selves "annihilated."

Though Carlyle, through a belief in a self-denying version of Christianity, seemingly managed to find meaning in human suffering in an apparently uncaring and mechanistic universe, later writers would not find the discovery of meaning in human suffering so easy. Thomas Hardy, in Tess of the d'Urbervilles, published a half a century after Sartor Resartus, could never reconcile Christianity with his observations of a God who seemed indifferent to the fate of individual human beings. Like Carlyle's description of Teufelsdröckh's spiritual agony in "The Everlasting No," Hardy's description of Tess' nighttime road journey immediately before the killing of the horse Prince harkens

back to Kepler's machine metaphor for the universe reinvented by Enlightenment science.

Tess does not live in a universe instinct with the spirits of God and his angels; rather she dwells in a wasteland universe filled, not with caring spirits, but with indifferent bits of distant matter. Tess and her brother have become, in Hardy's words, "two wisps of human life" under "stars whose cold pulses were beating amid the black hollows above" in "serene dissociation" from Tess and Abraham (25, Ch.4). Her notion that the stars are not holes in the firmament, but other worlds, possibly more perfect than ours, reveals Tess's gnawing sense of the imperfection of our world. (Tess is a little unclear on the distinction between planets and stars.) Tess expresses her unique view of the universe, essentially a reinterpretation of the story of the Garden of Eden in the light of post-Copernican/post-Keplerian cosmology, in a conversation with her little brother, Abraham:

'Did you say the stars were worlds, Tess?'

'Yes.'

'All like ours?'

'I don't know; but I think so. They sometimes seem to be like the apples on our stubborn-tree. Most of them splendid and sound--a few blighted.'

'Which do we live on--a splendid one or a blighted one?'

'A blighted one.'

'Tis very unlucky that we didn't pitch on a sound one when there were so many more of 'em'

'Yes.' (Ch.3).

For Tess the earth is not special, located at the center of the universe, chosen by God as the only habitation for man, "blighted" by the fall of Adam and Eve, then redeemed by Christ. Rather, for Tess our world is blighted simply by the fall of Adam and Eve in comparison to other worlds which may never have experienced original sin at all. For Tess the redemption by Christ of our fallen world seems inferior work insufficient to restore its aboriginal glory. Tess's pessimistic cosmology seems exactly the kind of theological conclusion that the Catholic church feared when it banned the teachings of Copernicus and then forced Galileo to recant them.

Hardy derives Tess' metaphor for the universe, an apple tree on which some of the apples, including the Earth, have spoiled, from an ancient Christian archetype--the Tree of Knowledge in the story of the Fall in the Garden of Eden. Carlyle, writing fifty years earlier, used a more modern, more negative metaphor for the universe, the steam engine, a metaphor, unlike Hardy's, not derived from scriptural tradition. Despite Hardy's use of a traditional Christian image, the apple tree, to describe the universe in Tess, and Carlyle's use of a metaphor not traditionally Christian, the steam-engine, to represent the universe in Sartor Resartus, Carlyle ultimately embraces Christianity in Sartor Resartus, whereas Hardy seems to reject Christianity in Tess.

Hardy, the last of the great English pastoral novelists, appropriately uses a homely organic metaphor, the apple tree, to describe an essentially mechanistic view of the universe. This metaphor fits perfectly with the pattern of Hardy's fictional world, the avowedly "anachronistic" modern Wessex (Preface to Far From the Madding Crowd, Penguin Hardy, 161). In fact Hardy seldom depicts the industrial England of his own day, the England of factories and trains--not because he wasn't aware of industrial England, but because he didn't want it spoiling the bucolic paradise of his imaginary world.

One of the few industrial-age machines that Hardy allowed in his Wessex was the steam threshing-machine that appears near the end of Tess. Like the steam-engine in Sartor Resartus, the steam threshing-machine in Tess is depicted both as a vessel containing the fires of hell and as the mechanical activating force of a "world" or universe.

By describing the machine's operator as "a creature from Tophet," Hardy manages to introduce not only the spectre of hell but also the concept of human sacrifice integral to Carlyle's steam engine metaphor in Sartor Resartus (Ch.47). Tophet, a place near Jerusalem where human sacrifices were made to the god Moloch is also a synonym for "Hell." (The apotheosis of industrialism, a recurrent industrial age metaphor, is attacked in a similar manner in Fritz Lang's 1926 film "Metropolis," where the

machine which the workers serve transforms itself into the idol Moloch.) Hardy's steam threshing machine, like Carlyle's steam-engine, not only contains the fires of hell, but also serves as the motive force of a world. Hardy describes the machine as "the primum mobile of [the] little world" of the harvesters, including Tess (269, Ch.47). The primum mobile, of course, was the outermost of the concentric spheres of the Ptolemaic universe, that of the fixed stars, whose motion initiated the motion of all the other spheres. Thus the motion of the threshing machine, like that of the steam-engine in Sartor Resartus, controls the entire "little world" of the harvesters, from the infernal subterranean realm of Tophet to the outermost sphere of the stars.

The steam-thresher seems somehow related to the mechanistic force of fate leading to Tess' doom. During the course of the threshing Tess stands next to the man who feeds grain into the machine, and Hardy masterfully creates apprehension in the mind of the reader that Tess, standing next to the rapidly revolving "buzzing drum" which whisks the grain into the thresher, will be pulled into the machine by her hair and horribly mauled or killed.

The incessant quivering, in which every fibre of her frame participated, had thrown her into a stupefied reverie in which her arms worked on independently of her consciousness. She hardly knew where she was, and did not hear Izz Huett tell her from below that her hair was tumbling down. (Ch.48)

In fact the machine does not injure Tess, but at the threshing she meets Alec d'Urberville again, and this encounter, not the one with the steam-thresher, leads to her death. The machine here is only the symbol, not the agent of the mechanical inevitability of Tess's fate. Hardy seems to sense that Tess should die in the works of some nineteenth century mechanical monster, but, in the end, he cannot surrender his pagan queen to a machine. Rather, Tess wields the sacrificial knife of the mother goddess, is captured at the ancient temple of nature, Stonehenge, and dies in the manner of an ancient sacrifice, hanged by the neck.

Carlyle reconciled himself to the suffering induced by the mechanism of the universe by resorting to a masochistic Christianity, a belief that suffering and the sacrifice of self-hood lead to redemption. Hardy, the last of the great English pastoral novelists, unable to believe in the Christian God, found some solace in the cycles of nature, which if terribly cruel to individual human beings, could also display a terrible beauty. Nature, which could not offer the hope of eternal life for the individual, could at least provide the eternal renewal of the seasons and the cycles of the agricultural year.

Since the Renaissance, man has seen the universe transformed from living spirit into non-living matter, and then from a beautiful clock created for man's enjoyment into

a steam-engine in the process of tearing man apart. Voltaire, though unwilling to see man as a mere cog in a Godless, mechanistic universe, still could not bring himself to attribute the daily occurrence of undeserved human suffering to divine intent. Hardy, who has Tess describe the once immutable stars as imperfect and corruptible, feared that if God did exist He might be not just indifferent towards man, but actively malevolent. Hardy depicted a Universal Spirit which seemed to deliberately destroy his most beautiful creations. According to St. Paul a woman's long hair is her pride and glory, and unlike man, she needs no other covering from the sight of God (1 Corinthians.11.15). Yet Tess's long hair, emblem of her beauty, nearly draws her into the cogs of the steam-thresher. Earlier in the novel Alec d'Urberville singles Tess out for violation and degradation because of her beauty. "Tis always the comeliest! The plain ones be as safe as churches," observes one peasant woman of Tess's disgrace (76). Even Tess's mother sees the deliberate working of God's will in Tess's fall: "'T'is nater, after all, and what do please God!'" (70).

Behind this thinly veiled attack on God is the modern fear that the universe and God Himself, if He does in fact exist, are somehow flawed in their basic nature. We can discover hints of this anxiety in Genesis. Had God constructed man properly of adequate materials would it be

possible that Adam and Eve might be so flawed as to fall from grace? Later in Genesis, when God discusses the destruction of the earth with Noah after the flood, He remarks, "I will never again curse the ground because of man, for the imagination of man's heart is evil from his youth" (8.21). Here God disparages his greatest creation: man! This may be as close as the Old Testament God can come to admitting an error. As John Stuart Mill observed, the fault must lie either with the maker or the materials.

The limitation of his [the Creator's] power more probably results either from the qualities of the material--the substances and forces of which the universe is composed not admitting of any arrangements by which his purposes could be more completely fulfilled; or else, the purposes might have been more fully attained, but the Creator did not know how to do it; creative skill, wonderful as it is, was not sufficiently perfect to accomplish his purposes more thoroughly.
(Mill, 455)

In our own century we find, perhaps, the ultimate expression of the fear that the universe and/or its creator may be essentially flawed in Franz Kafka's short novel, In the Penal Colony, which contains new manifestations of images already examined in this paper. These images, the rack and the cog in In the Penal Colony, receive their most frightening formulation yet. In the Penal Colony continues the darkening of the aspect of the mechanistic universe that began the moment Keppler described the clockwork universe. It takes the relationships among Man, Machine, and God to their next logical level.

Kafka's masterpiece relates a simple story. The "Commandant" of a penal colony invites a visitor "the explorer," to a colony to witness an execution. The machine which performs the execution that the explorer observes can be seen as a model of the universe. This "Apparatus" is composed of three parts: the "Bed," the "Harrow," and the "Designer." At the bottom of the Apparatus is the Bed, the section of the device where the condemned man assumes his place, and onto which he is bound. The Bed represents man's place in the universe, the hollow prepared to accept his form. The straps which bind the condemned man to the bed indicate that man does not choose his place in the universe, but is forced from birth to accept it. Above the Bed rests the Harrow, a transparent glass frame into which steel needles have been fixed. The Harrow executes the sentence. Its motions, in combination with those of the Bed, drive the Harrow's needles progressively deeper and deeper into the body of the victim until he dies. The end result of the action of the needles is identical to the end result of the action of the universe on any human being--gradually increasing suffering and inevitable death. Whether by "accident" or "natural causes," we are all condemned to die. As the death of the "condemned man" is inevitable once the apparatus has been set in motion, so death is always inevitable once the machinery of life has been set in motion. As J.S. Mill observed,

Killing, the most criminal act recognized by Human laws, Nature does once to every being that lives; and in a large proportion of cases after protracted tortures such as only the greatest monsters whom we read of ever purposely inflicted on their living fellow creatures.... Nature impales men, breaks them as if on the wheel, casts them to be devoured by wild beasts, burns them to death, crushes them with stones like the First Christian martyr, starves them with hunger, freezes them with cold, poisons them by the quick or slow venom of her exhalations, and has hundreds of other hideous deaths in reserve, such as the ingenious cruelty of a Nabis or a Domitian never surpassed. (385)

The most significant and mysterious part of the execution Apparatus is the Designer, which consists of a vast number of cogs and wheels in a covered box above the Harrow. These cogs and wheels control the motion of both the Harrow and the Bed, the interaction of man and universe. The officer of the penal colony arranges the wheels and cogs in varying patterns depending on the offence of the particular condemned man. The Designer causes a message to be engraved on the body of the condemned man by controlling the interaction of the Bed and Harrow. As the officer in charge of the execution explains: "Whatever commandment the prisoner has disobeyed is written upon his body by the Harrow." The condemned man, who in this case has disobeyed an absurd order to salute the door of a sleeping officer, is sentenced to have "HONOR THY SUPERIORS" written on his body (197). Though this message seems to contain the information needed for the reform of the condemned man, nevertheless his punishment must end in his death. The acquisition of

Knowledge becomes simply another indignity to which a man must, even against his will, be subjected before his inevitable death.

And because man's conscious knowledge of the laws of the universe cannot alter the functioning of those laws no one tells the condemned man what his sentence is, or even if he has been sentenced. "There would be no point in telling him," the officer in charge explains, "He'll learn it on his body'" (Ibid.). Men can never be told the reasons for suffering and death, but by suffering physical pain themselves they may learn something about the reasons for suffering and death "on their bodies," something that cannot be communicated in words.

The pattern set in the Designer represents God's plan for the individual, the machine's victim. (If God's plan for the individual is simply a microcosm of his plan for the universe, then the Death of the Universe is inevitable.) In the history of the colony and of the Apparatus only two men have set the pattern for the designer: the young officer who is to conduct the execution that the "explorer" is to observe and the former Commandant of the penal colony who also originally designed and built the Apparatus. This former commandant assumes the attributes of the traditional Judeo-Christian God, and the young officer, because of his willingness to take on the burden of suffering and death, becomes a Christ figure. As God and Christ will judge and

execute sentence on the living and the dead on Judgment Day, so the young officer, and the old Commandant before him, serve not only as executioners, but as judges as well. The young officer's previous position as assistant to the former Commandant also indicates a father-son relationship between the two. The nature of the instructions written by the former Commandant and followed by the young officer in setting the cogs of the designer also affirms the identities of the former Commandant and the young officer as God and Christ. As men might read but not understand the Bible, God's plan for the universe, dictated by God but understood only by God and Christ, so the explorer reads but cannot understand the setting for the designer, originally prepared by the former Commandant, and shown to the explorer by the young officer.

The absence and presumed death of the former Commandant emphasizes the nature of God in Kafka's story--He is the remote and uncertain (and possibly dead) God of Kepler and the Deists, as indicated by the enigmatic message found written on his gravestone later in the story:

"There is a prophecy that after a certain number of years the commandant will rise again and lead his adherents from this house [the teahouse where the grave and gravestone are found] to recover the colony. Have faith and wait!" (226)

Another indication of the decline of faith in the world of Kafka's story is the absence of spectators at the executions conducted by the young officer. "'When the

executions were conducted by the old Commandant,'" the young officer remarks, "'hundreds of people swarmed around like flies'" (210).

The young officer's identity as Christ becomes certain, when, realizing that the explorer has no faith in the old Commandant's creation, the Apparatus, the young officer substitutes himself for the condemned man and sets the apparatus in motion, as Christ took on the sins of man by voluntarily submitting to crucifixion. Like Teuflesdröckh in Sartor Resartus, the young officer voluntarily submits to suffering and personal annihilation in the name of the glory of God the Father.

At first the Apparatus works smoothly, then suddenly the Designer emits a loud groan, its top opens up and cogwheels begin popping out. Soon the harrow begins "not writing," but "only jabbing," and finally impales the officer through the forehead with "a great iron spike" (224-5). The explorer, looking into the face of the dead officer, sees "no sign of the promised redemption," as if looking into the eyes of Christ, dead upon the cross, and seeing no hint of revelation, no promise of immortality.

Kafka's cog-filled Designer is a mechanical successor to Kepler's clockwork universe, a universe described in Voltaire's introduction to "The Lisbon Earthquake," in the "Starry Wheels," and "Wheels of Compulsion" in Blake's Jerusalem, in Carlyle's steam-engine universe, and in

Hardy's "primum mobile" steam thresher in Tess. Like the components of the primum mobile, that fixed sphere whose motion was believed to cause the motion of the rest of the universe, these cogs which enable the mechanistic universe to function are usually pictured as stars. Like the despised "Starry Wheels" and "Satanic Wheels" of Blake's Jerusalem, the cogs, especially in "In the Penal Colony," belong to a clockwork universe indifferent or inimical to individual human beings.

The perception of a faulty functioning of the cogs/stars of the universal machine leads to doubt about the perfection of God's creation. Likewise, the sudden appearances of two supernovas visible to the naked eye in 1572 and 1604 exploded the notion transmitted from Classical to Christian philosophers that the realm of the fixed stars, the primum mobile, was not just fixed but immutable. Tycho de Brahe, cartographer of the skies, after positively locating the supernova of 1572 in the sphere of fixed stars, summarized the shock felt by those who had believed in the Aristotelian concept of an unchanging stellar sphere.

When I had satisfied myself that no star of that kind had ever shone forth before, I was led into such perplexity by the unbelievable of the thing that I began to doubt the faith of my own eyes. (Quoted in Ferris, 71)

English metaphysical poet John Donne wrote of the impossibility of the supernova of 1604 (Kepler's nova) which Kepler positively placed in the sphere of fixed

stars:

Who vagrant transitory Comets sees,
Wonders, because they are rare: but a new star
Whose motion with the firmament agrees,
Is miracle, for there no new things are. (lines
5-8, "The Countesse of Huntingdon" [c.1608-14])

The subsequent disappearance of the "new" stars (before their explosions, of course, the stars had merely been invisible on earth) should have caused as much consternation as their sudden appearance: not only birth, but death was possible in the previously unchanging stellar realm. As Arthur Koestler observes, the appearance of a second new star, Kepler's nova, in the previously "immutable" sphere of the fixed stars drove yet "another nail into the coffin of the Aristotelian universe" (361).

The fallible cogs of the Designer in Kafka's "Penal Colony," like the supernovas of 1572 and 1604, hint at serious flaws in the structure the universe. Let us examine the fate of the cogs/stars as things begin to go awry with the apparatus.

The teeth of a cogwheel showed themselves and rose higher, soon the whole wheel was visible, it was as if some enormous force were squeezing the Designer so that there was no longer room for the wheel, the wheel moved up till it came to the very edge of the designer, fell down, rolled along the sand a little on its rim and then lay flat. But a second wheel was already rising after it, followed by many others, large and small and indistinguishably minute, the same thing happened to all of them, at every moment one imagined the Designer must now really be empty, but another complex of numerous wheels was already rising into sight, falling down, trundling along the sand and lying flat. (223)

Kafka here presents perfect metaphors for an expanding universe and for entropy. The machine of the universe is no longer simply tearing man apart, as in Carlyle's steam engine metaphor, but tearing itself apart as well, and in the process destroying any potential the universe may have had of accomplishing any significant work. Each gear (the surprising number indicating a universe more complicated than we expect) leaves its containing vessel, flung out and away from its original center like matter in an expanding universe, and finally rolls to a stop, no longer capable of transmitting information, even the negative information of suffering and death.

The analogy to the expansion of the universe and the possible subsequent decline of the ability of the universe to exchange energy and information is clear. The cogs flying out of the designer in every direction could represent clusters and super-clusters of galaxies separating from each other. We now know from the apparent red shift in the light of stars as seen from earth that most of the galaxies in visible space are flying apart from each other, and from us. The most distantly separated clusters are moving apart at considerable fractions of the speed of light.

Measurement of the special shifts in starlight begun by Vesto Slipher in 1912, in combination with work done mostly in the nineteen-twenties by various other scientists,

eventually led to Edwin Hubble's proclamation of "Hubble's law" in 1929, which offered proof that the majority of observable galaxies were moving away from the earth and that "a linear velocity distance law" could be applied to the movement of matter in the observable universe. Basically, according to Hubble's law the farther apart any two objects in the universe are, the faster they are moving apart (Ferris, 208-10; Harrison, 177-78).

Franz Kafka, who published "In the Penal Colony" in 1919, could not have had scientific "proof" at that time that the universe was flying apart and possibly entropic. (Even today, though most cosmologists agree that the universe is expanding, few would be willing to predict whether our universe will stagnate into entropy, be compressed by gravity and other forces into a primal ball of energy like the one from which it seems to have been created, or suffer some other fate.) Nevertheless the self-destruction of Kafka's Designer presents a powerful picture of a "universal" machine flying apart, resulting in a "universal" loss of ability to meaningfully exchange energy or information. Even before the cogs begin to fly out of the Designer we know that the machine is beginning to wear out. Replacement parts are either shoddily made or no longer available, a system for washing the wounds of the condemned man no longer works, and the wheels in the Designer creak. "Time," as the song goes, "is so old"

("Speak Low," words by Ogden Nash, Music by Kurt Weil). The Apparatus, the universe, is wearing out.

The most frightening image of separation in the story isn't that of the impersonal wheels of the Apparatus flying apart, or even of the rending of the officer's body by the apparatus, but the final scene where the explorer, escaping from the penal colony in a ferry boat, beats off the soldier and the condemned man, who have shared with the explorer the experience of the dissolution of the apparatus and the mutilation of the officer.

By the time they [the soldier and the condemned man] reached the foot of the steps the explorer was already in the boat, and the ferryman was just casting off from the shore. They could have jumped in to the boat but the explorer lifted a heavy knotted rope from the floor boards, threatened them with it and so kept them from attempting to leap. (227).

Here we see the force that drives everything apart in its most frightening aspect, wearing the all too familiar human form of selfishness. In the same event we also see the entropic force in its human form--the force that prevents communication, the exchange of useful information, between human beings--in this case information about a shared humanity fails to pass from the condemned man and the soldier to the explorer.

A pulling apart, whether of galaxies or of individual human beings, resulting in an inability to exchange useful information, dominates the symbolism of the twentieth

century. Kafka's vision of the cogs/stars of the mechanism of the universe popping out of their established places and flying apart is repeated in other twentieth century apocalyptic imagery, where not just cogs, but the universe itself, represented as a circle or wheel, is seen flying apart. William Butler Yeats uses this imagery in one of his best-known poems, the apocalyptic "The Second Coming," in which the circle of the universe, "the widening gyre" must "fall apart" because its "centre cannot hold." The ultimate result of this falling apart will be the birth of the "rough beast," the anti-Christ:

Turning and turning in the widening gyre
 The falcon cannot hear the falconer;
 Things fall apart; the centre cannot hold. (1-3)
 The falcon represents the predatory destructive forces

of the universe, like Voltaire's man-devouring beast.⁴ As the center of the circle fails, as the gyre widens, "the falcon cannot hear the falconer," and the potentially destructive forces of the universe, of nature, represented by the falcon become separated from the controlling mind of the universe, God, represented by the falconer. This expanding universe, the widening gyre, tends towards entropy, reducing the chances of meaningful exchange of information by separating the entities attempting to exchange information, eventually making it impossible for the falcon to hear the falconer, for the universe to respond to the principle of rationality and order. Following a

familiar pattern, God becomes increasingly separated from his creation.

The separation of the falconer from the falcon is analogous to the failure of the Designer in "In the Penal Colony," which allows the Harrow, like the falcon separated from the falconer, to run amok. As the separation of the cogs from the designer robs the work of the Harrow of any meaning, so the separation of the falconer from the falcon, the separation of God from the universe, causes chaos and meaningless destruction:

Mere anarchy is loosed upon the world,
The blood-dimmed tide is loosed, and everywhere
The ceremony of innocence is drowned. (4-6)

In an image similar to Yeats' widening gyre whose center cannot hold, contemporary American songwriter Bob Dylan updates the flaming wheel of punishment to which Ixion and Lear were once affixed. In the twentieth century we cannot be satisfied with being tied to a flaming wheel and set rolling. The wheel itself must be blown apart.

This wheel's on fire,
Rolling down the road,
Best notify my next of kin,
This wheel shall explode.
("This Wheel's on Fire," words by Bob Dylan, Music
by Rick Danko)

Even modern art seems to have embraced the concept of a mechanistic universe that is in the process of tearing itself apart. On March 17, 1960, Swiss kinetic artist Jean Tinguely presented a show in the garden of the Museum of

Modern Art in New York City entitled "Homage to New York." The piece de resistance of the show was a mechanical construct designed to begin tearing itself apart as soon as its electric motor was plugged in (Tomkins, 167-87). Interestingly, the Apparatus in "In the Penal Colony" is powered by electric batteries, possibly because electromagnetic forces governed the universe according to much of early twentieth century science. The universal engine may be powered by a variety of fuels. Since Tinguely's show an entire sub-genre of kinetic art devoted to self-destructive machinery has emerged. Perhaps the artists working in this field are simply engaged in the oldest of artistic and scientific pursuits--creating simulations of the universe.

* * * * *

The primary focus of this paper has been the image of a man with his head struck off by a wheel, an image that has persisted in human culture for thousands of years. The image may have originated with the ancient Aryans who conquered many peoples, and whose conquests resulted in new systems of mythology in the conquered lands, systems which combined features of the religions of both conqueror and conquered. Most significant of these syncretistic religions were the "Golden Age" mythologies of ancient India and

Greece. In these mythologies the image of a man's head being struck off by a wheel seems to derive from the source of the Aryan's military superiority, the two-wheeled horse-driven war-chariot. The idea of a head being struck off by a wheel is implied by the act of throwing oneself under a chariot, as the followers of the Indian god Jagganatha are reported to have thrown themselves under the wheels of chariots bearing the image of Jagannatha in ritual procession. The Greek myth of Ixion seems to have similar origins. A powerful male god, Zeus, binds Ixion to a wheel of fire and sets him spinning in the sky as punishment for his attempt to seduce Zeus' wife. If we accept Robert Graves' argument that the myth of Ixion was developed to explain the origin of a European custom of rolling men attached to burning wheels downhill on midsummer's day, then we can also see that the myth of Ixion is also based on an image implying decapitation by a wheel: The head of one of these sacrificial victims would be struck off by contact with the ground at the point where it extended beyond the circumference of the wheel to which the victim was tied. The validity of this decapitation hypothesis is reinforced by the speech of the fool who advises Lear to let go of a wheel rolling downhill "lest it break thy neck." (Remember that Shakespeare encourages this comparison of Lear to Ixion by having Lear describe himself as being "bound on a wheel of fire.")

The Christian replacement for the human sacrifices bound to flaming wheels on midsummer's day (June 24) was the feast of St. John the Baptist, the most memorable victim of decapitation in the Bible. If we picture the platter on which John's head was served to Salome as being round, then, again, we have the image of a decapitated head in association with a wheel or circle. In fact the most appropriate day of the year for the limitation of the male by the female is midsummer's day, because on midsummer's day the power of the male sun (remember the Greek and Indian male sun gods) is limited by the yearly cycle or circle of the female earth. (We can best visualize this symbolic limitation if we imagine the solar deity as a beam or ray cut off by the circle of the earth.) By midsummer's day in each yearly cycle of the earth the sun has been "cut off" at its highest point of extension into the nighttime skies of the northern hemisphere. (Midsummer's day always immediately follows the summer solstice, the day on which the sun annually makes its most extended appearance.)

The analogy of the male destroyed by the female certainly holds true for John the Baptist who is decapitated at the behest of Salome and her mother (Mark 6.19-28; Matthew 14.1-11). (Remember that Chronos gets the sickle that he uses to castrate his father Uranus from his mother Ge (Hesoid, quoted in Morford, 37-38). In the beheading of John and the castration of Uranus the punisher is male but

the power behind the punishment is female. Pagan and early Christian agree, on midsummer's day the male will be decapitated by the circle of the earth mother. The control of the wheel or circle of death by a male god in the deaths of Ixion and of Jagganatha's followers occurs because of a superimposed dominance of male warrior gods over ancient ceremonies originally presided over by earth-mother deities. As in the case of John--whose execution is ordered by a man, Herodias, unable to resist the power of a female, Salome--the ultimate source of the power of the wheel to destroy Ixion and Jagganatha's followers is the feminine power of the circle of the earth mother. As John the Baptist's execution, though ordered by a man, is really the work of women so the ultimate source behind the power of the wheel to destroy Ixion and the followers of Jagganatha is the female power of the earth mother.

During the industrial revolution the usurpation by the male of the female image, the circle or wheel, was completed, and humanity was largely separated from the female qualities of nature. Man was left "in ignorance to view a small portion and think that all." The wheel grew teeth and became a metal cog; the circular form was taken over by the rationalist male principle, and the wheels within wheels of Eden became the wheels without wheels of abstraction and industry, the wheels of Albion's sons. With the development of the steam engine the wheel no longer had

to be linked to nature--to the horse or even to running water through the water-wheels of the early industrial revolution.

In Kafka's "Penal Colony" the "Apparatus," cogs and all, is constructed by a man, the former Commandant. The female principle has little power in the predominantly male world of the penal colony. The only activity ascribed to the women of the penal colony is the giving of sugar candy to the condemned men before execution, which, as the young officer remarks, only serves to make the men sick.

The meaningless mutilation and death of the young officer in "In the Penal Colony" exemplifies the fate of the individual in our male-dominated civilization--we have placed all our faith in a male god and in the Christian hope for a life in another world after death, as Voltaire observed in his introduction to "The Lisbon Earthquake." If this hope in Christianity proves an illusion, then we have nothing to fall back on, not even the comfort of the siren sighing of nature's circle of life and death, for we have left nature far behind. We have smashed and burned the hour-glass and the water wheel that raised water to the cisterns. We have abandoned our mother, the earth; when our father, God disappears, as he surely has, we are truly alone, subject to the unbearable despair of loneliness. Ultimately the cry of the son who becomes suicidal because of the absence or death of the father is the same as

Christ's on the cross--"Why hast thou forsaken me," (Matthew 27.46) an utterance that seems not so much a reproach for the father's cruelty, as simply the cry of a child who wants his father to watch his suffering.

In this light we see the voluntary sacrifice of the young officer in "In the Penal Colony" as a suicide committed in despair over the death of a father/God figure, the former commandant. The fate of Gerald Crich in D. H. Lawrence's Women in Love is remarkably similar to the death of the young officer in "In the Penal Colony." Like the young officer Gerald devotes himself, after the death of the father/father figure to the work of the father--in Gerald's case to the family mines; in the officer's case to the Apparatus. Also, both the young officer and Gerald devote themselves to machines, the officer to the apparatus of the former commandant, Gerald to mechanizing the mines. Gerald, in fact, becomes something of a mechanism himself, "with a million wheels and cogs and axles," in the eyes of his lover, Gudrun (458). Finally, both the young officer and Gerald surrender to despair over the deaths of their father/father figures and commit passive forms of suicide--the young officer submitting himself to the commandant's machine and Gerald submitting himself to the elements, to die of exposure. Gerald's suicide has little to do with his affair with Gudrun. The affair itself seems only a desperate attempt to forget the "ultimate experience of his

own nothingness" that Gerald feels after his father's death (330). When the affair ends, Gerald reverts to his previous state of despair and commits suicide.

In the popular culture of the 19th and early 20th centuries the dominant image of despair resolved by submission to the iron wheels of the father was death beneath the wheels of a steam-engine railway locomotive. We have already seen one example of this imagery in the song "Trouble in Mind," where the singer longs to lay his head "on some lonesome railroad line/And let that 2:19 [train] pacify [his] mind."

The steam engine locomotive is indeed the American juggernaut, or better, the modern juggernaut. A traditional American song, usually called either "the Longest Train," or "In the Pines," often contains a verse vividly describing decapitation by a train. Although the song is found primarily within the white tradition, it was also recorded by Black Texas/Louisiana blues singer/guitarist Huddie Ledbetter, better known as Leadbelly, as "Where did you Sleep Last Night?" His rendition goes:

My Husband was a hard working man
Killed a mile and a half from here
His head was found in a driver's wheel
And his body hasn't never been found.

This image of the head in the driver's wheel is simply the image of John the Baptist's head on a platter turned on its side.

Folklorist Judith McCulloch, who made a detailed study of the song, found versions of the decapitation verse in forty of the 118 variants of the song cluster that she examined (Cohen, 492). The verse indicates a violent relationship between man and machine similar to the relationship seen in Kafka's "In the Penal Colony." As in Kafka's story, where the officer's head is finally impaled on "a great iron spike," the target of the machine is a man's head. The driving wheel that separates the victim's head from his body in the song is like the "wheels of compulsion" in William Blake's Jerusalem, wheels of rationalism and industrialism that separate the rational mind from the spirit, wheels in conflict, not harmony:

...Wheel without Wheel, with cogs tyrannic
 Moving by compulsion each other: not as those in
 Eden: which
 Wheel within Wheel in freedom revolve in harmony &
 Peace"

In "In the Pines" the head becomes fixed to the wheel, the body is lost completely, and the result is death--as the Western obsession with rationalism and technology leads to the separation of our bodies from our minds, leaving us--like the mobile heads in Edgar Rice Burroughs' The Chessmen of Mars, who breed headless bodies to serve as both slaves and food--a race with a dangerously and suicidally ascendant intellectual component.

In Greek mythology Prometheus suffers virtually eternal torture for stealing the secret of fire from the gods. Man always pays a price in flesh for knowledge and technology. The day England's first railroad opened on September 15, 1830, a celebrating dignitary, who had been largely responsible for the financing of the railroad, was struck and killed by a locomotive, and the railroad became, from the day of its birth, the modern juggernaut (Cohen, 5; Jennings, 176-79). The suicide of Anna Karenina, who throws herself under a train near the end of Tolstoy's masterpiece, is the most memorable use of this image in European literature. Anna dies, as does Tess in Tess of the d'Urbervilles, because the social mechanism of her day must eliminate the threat of the sexually emancipated woman, and so must destroy the female body--threat to the domination of the male mind.

According to Norm Cohen, author of Long Steel Rail: the Railroad in American Folk Song, far more "trespassers" have been killed in train "accidents" than either railroad employees or passenger throughout the history of American railroading (334). This is strange considering a train, unlike most vehicles, must travel on a rigidly designated path (unless it jumps its tracks) and hence, one would think, could be easily avoided. Nevertheless our culture seems dominated by the nightmare image, popular in film, where a man wishing to escape an onrushing train runs

directly ahead of the train down the middle of a set of tracks, rather than jumping off to the side and safety. An element of suicidal masochism inheres in this image and in Cohen's statistics.

Woodie Guthrie, introducing his song "Walking Down the Railroad Line" during a 1940 series of recordings for The Library of Congress, described a common "accident" in which boys would get run over by trains after getting their feet caught between railroad ties.

A lot of the boys get their foot caught in between these ties, you know. Been a lot of them, you know, get run over that way.... One of the best friends that I ever had, lived right next door to me, Alan, about two doors up the street. His name was Miles Reynolds in Okema, Oklahoma. When he was about 17 years old he had to take the freight train in it and he fell down in between 'em and got run over" (Library of Congress 1940, side 4).

The element of religion and the possibility of suicidal masochism figure prominently in John Prine's song "Bruised Orange (Chain of Sorrow)" about an altar boy who is run over by a train:

I heard sirens
 On the train track
 Howl naked,
 Gettin nuder:
 An altar boy's
 Been hit
 By a local commuter
 Just from walking
 With his back turned
 To the train
 That was coming
 So slow.

These verses raise the question of suicidal intent on the part of the victim. Why can't the altar boy get out of the path of a train "coming so slow"? The song also hints at the absence of God, a fear that pervades conceptions of the modern mechanical universe, because an altar boy, attendant of God's mysteries, should surely be under the protection of the Deity. Why has the altar boy been transformed from the celebrant of God's mysteries at the altar, to the victim to those same mysteries--a human sacrifice and avatar of Christ? Why can he not be saved like the girl in "The English Mail Coach."

Paralleling this implication of God's unwillingness or inability to protect his own, is the singer's reaction to the event which reflects his impotence as well:

You can gaze out the window
 Get mad and get madder
 Throw your hands in the air
 Say, "What does it matter?"
 But it won't do no good
 To get angry
 So help me
 I know.
 For a heart stained in anger
 grows weak and grows bitter
 You become your own prisoner
 As you watch yourself
 Sit there
 Wrapped up in a trap
 Of your very own
 Chain of sorrow

The impotence of the survivors in this song reflects the impotence of the victims of Jagannatha and of other trains. Freud saw decapitation, implied in submission to

the wheels of Jagannatha and in laying one's head "on some lonesome railroad line," a form of castration--the ultimate submission of the son to the father, or of man to God ("Medusa's Head," in *Sexuality and the Psychology of Love*, 212). The wheels of the machine have become the castrating agents in our technological era, as the "Starry Wheels" of rationalist philosophy, "rending a way in Albions Loins" render England impotent in Blake's Jerusalem (Pl. 18.44). Remember that Newton, the rationalist most condemned by Blake, died a virgin.

In a passage which owes an obvious debt to the imagery of Blake, Gerald Crich in D. H. Lawrence's Women in Love, heir to a colliery and so inheritor of the machinery of industry, becomes himself "pure machine...with a million cogs and wheels and axles," and eventually commits suicide. Gerald's suicide takes a form of impotence--Gerald submits himself to the elements and dies of exposure. Dying of exposure is somehow the alternative form of suicide to throwing oneself beneath a wheel. Voluntary death by exposure represents a preference for voluntary impotence over voluntary castration. Gerald resembles the railroad hobo of American popular song who dies far from home in "a cold and lonesome boxcar," (Doc Watson, "Little Stream of Whiskey") in contrast to the reckless engineer of the Casey Jones type who, like certain worshippers of Jagannatha, seeks out a violent death. (See Cohen, Chapters 4, 5 & 8.)

As in the cases of the suicidal engineer and the self-sacrificing followers of Jagannatha, the wheels of an execution "Apparatus" play a significant part in a symbolic castration on the young officer in Kafka's "In the Penal Colony," whose head is ultimately pierced by a metal spike, at the end of a punishment that smacks of castration. Similarly, we have already seen there is the implication of decapitation in the image of the European midsummer's sacrifices rolling downhill tied to their wheels and in the Fool's description of Lear tied to a wheel rolling downhill in danger of breaking his neck. Decapitation is also implied in the suffocation of the horse in the Horse Sacrifice, and even in the hanging of Tess. In all these cases, as in the impalement of the young officer in "In the Penal Colony" the head is the target.

The comfort of having instant recourse to the wheels of the mechanical Juggernauts is so integral to our culture that it has become something of a joke. In an obviously tongue and cheek reference to the implication of suicide in Richard M. Jones' "Trouble in Mind," rock songwriter Warren Zevon in his song "Poor Poor Pitiful Me" laments the decline of the railroad because that decline entails the loss of a traditional and comforting option for someone contemplating suicide.

I laid my head
On the railroad track
Waiting on the Double E,
But the train don't run

By here no more,
Poor, poor pitiful me.

In a spoken introduction to his song "The Pause of Mr. Claus," Arlo Guthrie wryly describes the "last guy," as a man so down and out that he doesn't even have a street to lie down in so that a truck can run him over. The obsession with motor vehicle accidents is not a distortion found only in popular culture. Though many American's would rate the Vietnamese war as the most traumatic event in history of post-World War II America, nearly as many Americans (54,633) died in motor vehicle accidents in a single year--1970, as are commemorated as casualties of twenty years of war (57,939) on the Vietnamese War Memorial in Washington, D.C. (Statistical Abstracts, 84; Karnow, 2).

As Zevon's song and Guthrie's joke indicate, the train has been superseded by the internal combustion vehicle--car, truck or bus--as the latest incarnation of the vehicle of Jagannatha in America. In Japan, presently much more dependent on mass transit than America, significant numbers of people still commit suicide every year by throwing themselves in front of speeding trains. (It is an ironic reflection of the rapid changes brought about by technology, that the train, not long ago the primary American symbol of technological advancement, has become a symbol of nostalgia for a largely imaginary past, as in Zevon's song.)

Perhaps the most frightening recent vision of Jagannatha incarnated in a car was a recent (1988-89), seemingly innocuous, series of Volkswagen advertisements on American television. The ads show white-coated Volkswagen engineers and technicians lined up with German precision along an automobile test track, with a Volkswagen weaving around them or screeching to a stop directly in front of them. These ads represent the worship of a new incarnation of Jagannatha: Jagannatha the capitalist consumer. The engineers are all but saying: "If I have not built a perfect machine for my lord and master, the customer, then I do not deserve to live." Most sinister, in view of recent history, is the notion of Germans mindlessly lining up for potential mass mechanical extermination. That white-coated technicians are seen lining up seems a sinister revision of history, as if somehow Nazi engineers and doctors who created the machinery of the death camps, not Jews and Eastern Europeans, had stood in line to be victims of the Nazi factories of death. After all, Volkswagen did create machinery for the Nazis, and part of their name, "Volk," derives from the appellation for the German "Folk," that, according to Hitler, were the backbone of the Aryan race. (Volkswagen made the German equivalent of the American military Jeep.) Jagannatha, originally a Vedic Indian incarnation of an Aryan war god seems to be getting back to his roots in this Volkswagen ad.

* * * * *

Throughout history men have sought to discover a guiding spirit or intelligence in the universe, or behind the working of the universe. Ultimately the gods that man worshipped represented power--power over nature, power over men. The first anthropomorphic gods were probably fertility goddesses, representing woman's power, her ability to give birth and thus maintain the life of the tribal group. As humanity developed tools it soon became apparent that the most powerful force in the world was man in alliance with technology, and gods became anthropomorphic, often associated with the emblems of technology.

In this paper I have shown several incarnations of god wedded to technology. In the Horse Sacrifice, the horse is essentially treated as a god until the moment of its sacrifice. It is surrounded by the greatest men and horses in the kingdom and encouraged to go wherever it likes. But the horse that is the focus of the Horse Sacrifice also symbolizes the power of the technology that resulted from linking man and horse. (The centaurs, grandchildren of Ixion, are also symbols of this power.) Though the sacred horse did not carry an armed rider, it was surrounded by horses that did. The practice of determining the boundaries of the kingdom by the extent of the horse's roving was not

merely a ritual. The mounted men accompanying the horse were prepared to affirm these boundaries by force of arms if necessary. In this respect the Horse Sacrifice was essentially a war game. As the war chariot replaced the equestrian warrior as the superior form of military technology, at least on the plains of the world, the worship of the horse was largely superseded by the worship of chariot-driving male war gods like those who dominate the Greek and Aryan Indian pantheons. Even the Hebrew God is represented in this form in the Book of Ezekiel. Human beings tend to incarnate the superior military technology of their age into an anthropomorphic deity. Robert Oppenheimer, observing the explosion of the first atomic bomb to be tested, was reminded of the words of the Aryan Indian god Krishna in the Bhagavad-Gita, "I am become Death, the shatterer of worlds" (Jungk, 201). Indeed the possessors of superior military technology have always maintained a godlike power over other human beings. The power to control life is inherent in the power to end it.

As warrior gods become more powerful with the development of superior technology, they also became more distant. The man or woman who walked the earth gave way to the warrior on horseback, who in turn gave way to the chariot driver. First the horse's hooves, then the chariot wheel became the images of the God to which mankind must submit. God first appears in the horse, then in the wheel

of the horse-drawn chariot. In a sense God is technology, the creative power of the human mind linked, in the case of the chariot wheel, to a form of nature--the circle. At this point god is still linked to organic life--the chariot is linked to the horse. The most obvious model of the wheel in nature is the sun. This association of the chariot wheel with the sun (linking the most powerful technology of the time with the most powerful force in nature) resulted in the birth of the Greek and Vedic Indian chariot-driving solar gods.

Over time a strange thing happened to these gods--even as they became associated with increasingly powerful images technology, the real importance of the gods to mankind actually decreased and the human technologies utilized by the gods became the real objects of worship. The wheels of Jagannatha's chariot became more important than Jagannatha himself. The proof of the declining real power of the gods is the disappearance of the gods from the everyday world. The Greek gods were removed to Olympus. The God of Moses was found on a mountaintop and in Ezekiel He disappeared into the sky. As man discovered more and more about the natural world, and found no gods, even on the mountain tops, he permanently transported the gods to more distant realms, eventually settling them in the sky, or beyond the sky, where no man could go, as Zeus transported his father Chronos to the unreal realm of the "Isles of the Blessed."

Like Zeus we have transported our God to a place where he is essentially impotent. Part of the reason for this distancing of the gods was that men needed them less and less in their daily lives. Men discovered patterns in the natural world that could be studied and explained. If these explanations were only partially satisfactory, they could always be improved upon, by reflection and by trial and error, the early version of the scientific method, of Blake's hated Demonstration. Transferred knowledge and later stored knowledge, knowledge of the real world, became more important for human survival than untested religious assumptions, although religious assumptions never disappeared. At some point human beings realized that they were essentially on their own in this world. Gods might control the places beyond the sky or under the earth, they might control, in some unknown world, our souls before we are born or after we die; gods may have at one time established the physical laws of the universe, but here on earth we pretty much have to fend for ourselves. One of the primary functions of the gods was that their existence could be used to account for unknown phenomena. As mankind came to a rational understanding of more phenomena, gods became less and less necessary.

After the disappearance of God into the northern sky in Ezekiel, the next step in the evolution of the conception of God in the Western world came with the clockwork universe of

Keppler and Newton. No longer was God's presence necessary for the operation of the universe. God's laws--gravitation, thermodynamics, etc.--could account for all the events in a physical universe which did not need God's constant presence to operate. So God went from being distant, but still involved in workings of the universe, to being distant (possibly even dead) and responsible only for the creation of the universe and its laws. If He continues to exist at all, God is reduced to the status of a clockmaker observing his creation, a creation that never needs to be wound or repaired again, a kind of featherbedding Deity. The flight of our God to the edge of the universe is indicative of the decline of his power. The most powerful entities occupy the most desirable territory. Our God has been pushed from the succulent green earth to the barren mountaintops to the voids of space. Like Gerald Crich in Women in Love or the hobo in American popular song, God seems fated to freeze to death somewhere beyond the margin of the habitable world.

In truth it matters little to us here on earth what happens in these voids where God is presumed to live. Blake appropriately names the stars of the visible heavens the "Incrustations of Error." We can know very little about these regions because they are so inaccessible to us. In our own century the accepted scientific view of the origin, nature and possible fate of the universe seems to change at least every decade. Even virtual jokes like George Gamow's

steady-state hypothesis, postulating the constant creation of new matter throughout the universe, have to be taken seriously, but these speculations have little effect on our day to day lives. The fact that Tess in Tess of the d'Urbervilles does not understand that stars are suns like ours, not "worlds like ours" makes little difference. As the hero of P.G. Wodehouse's Leave it to P. Smith remarks a propos the usefulness of cosmological knowledge:

When I was a mere lad, Someone whose name I cannot recollect taught me which was Orion. Also Mars, Venus, and Jupiter. This thoroughly useless chunk of knowledge has, I am happy to say, long since passed from my mind. (169)

Even the fact that the earth revolves around the sun seems to have little relevance to everyday life, even in contemporary America. In a 1988 poll, 22% of Americans over eighteen who expressed an opinion stated that they believed that the sun goes around the earth (Miller).

Since the Renaissance it has become generally accepted that what happens beyond the sphere of the earth has little effect on us, that our fate lies not the stars but in ourselves and in our world.

At all times the focus of humanity has been the earth, but after the cosmological discoveries of Copernicus, Keppler, Galileo and Newton, Western man came to realize that the earth is not the focus of the universe. Instead, like Tess and Abraham in the beginning of Tess of the d'Urbervilles, we are standing on a tiny random fragment of

the universe staring out into the night skies at other tiny fragments. As astronomer Edward Harrison observes, "Adrift like shipwrecked mariners, in a vast and meaningless mechanistic universe, we are found clinging for life to the cosmic wreckage of ancient universes" (117). Thomas Hardy clearly felt that the solution to this cosmic isolation was a return to an earth-centered agricultural/pastoral existence, even as he recorded the final death throes of that way of life in England. Tess, through her various agricultural employments, represents this old, unconscious way of life linked to the earth-mother. But finally even that ancient temple of the mother, Stonehenge, whose primary function was to predict the annual triumph of mother earth over the male power of the sun on the summer solstice, cannot protect Tess or grant her asylum from the mundane power of the rationalist male-dominated society represented by the constables who arrest her.

Tolstoy, like Hardy, longed for a return to an earth-centered universe, while at the same time he acknowledged the arguments of science against such a possibility. Near the end of Anna Karenina, shortly after Anna's suicide, Levin, a character based on Tolstoy himself, presents a convincing argument that the non-earth-centered universe of science has little significance in the day-to-day existence of the average man.

Don't I know the stars don't move? he asked himself, looking at a bright planet that had

already shifted its position to the top branch of a birch tree. But in watching the movement of the stars I can't imagine to myself the rotation of the earth, so I'm right in saying that the stars are moving.

And would the astronomers have been able to understand and calculate anything if they had taken into account all the diverse and complicated movements of the earth? All their marvelous conclusions about the distances, weight, movements, and disturbances of the celestial bodies are based only on the apparent movement of the stars around a stationary earth, on the same movement that I see before me now and that was the same for millions of people in the course of centuries and has been and always will be the same, and can always be verified. (867)

Like Tolstoy's Levin we must assemble our own world from two sources: the ancient earth-centered universe and the "scientific" universe, in which the earth is just another random fragment of matter. Little wonder then if, like Levin, we have trouble finding our bearings. Thoreau observed that "a man needs only to be turned round once with his eyes shut in this world to be lost" (Walden, 231). We have all been turned round so many times by changes in religious and scientific beliefs it is a wonder we can stand at all.

As God grew more distant our link to him grew more tenuous. The great chain of being was stretched to the breaking point. Pope in his classic description of the chain in "An Essay on Man" depicted a perfect continuity, a plenum of beings and worlds, all dependent on each other, all locked into their place in God's plan:

Vast chain of being, which from God began,
 Natures ethereal, human angel, man,
 Beast, bird, fish, insect! what no eye can see
 No glass can reach! from Infinite to thee,
 From thee to Nothing!--On superior powers
 Were we to press, inferior might on ours:
 Or in the full creation leave a void,
 Where, one step broken, the great scale's
 destroyed:
 From Nature's chain whatever link you strike,
 Tenth or ten thousandth, breaks the chain alike.
 (Epistle 1.237-246)

While meant as sincere praise for God's plan, Pope's poem also hints at the fragility of the great chain--the loss of a single link brings down the whole chain. Voltaire was willing to settle for a less perfect chain. If Pope and Blake were in denial regarding the death of God, Voltaire had moved on to bargaining. He was willing to accept intermediary non-connecting voids in the makeup of the universe and hence great gaps in the chain of being, if only God would still exist.⁵

The universal chain is not, as some have thought, a regular gradation which connects all beings. There is, in all probability, an immense distance between man and beast, as well as between man and substances of a superior nature; there is likewise an infinity between God and all created beings whatever...

The chain is not in an absolute plenum; it has been demonstrated that the celestial bodies perform their revolutions in an unresisting medium. Every space is not filled. It follows then, that there is not a progression of bodies from an atom to the remote fixed star. There may of consequence be immense intervals between beings imbued with sensation, as well as between those that are not. We cannot then be certain, that man must be placed in one of these links joined to another by an uninterrupted connection. That all things are linked together means only that all things are regularly disposed of in their proper order. God is the cause and the regulator of that

order. Homer's Jupiter was the slave of destiny; but, according to more rational philosophy, God is the master of destiny." (Footnote to "The Lisbon Earthquake," 12-13)

This last sentence, describing a God envisioned in a "more rational philosophy," seems more an expression of a wishful thinking than of belief. Again we are reminded of Mill's dictum that in the age of weak beliefs "such belief as men have is much more determined by their wish to believe than by any mental appreciation of evidence."

Images of bondage and connection related to that great bond linking everything, the great chain of being, permeate the works mentioned in this paper. Lear is bound to his wheel of fire and to the torture rack of this world, tied to the natural circle of death and rebirth. Placed on a similar device of ritual torture and sacrifice the young officer in "The Penal Colony" does not need to be bound in position. Like Christ, he willingly assumes the position of pain in the great chain of being because he believes in the order of the chain and in the righteousness of the being behind it, the former commandant. The officer's fate belies his faith.

Other lowly manifestations of the great chain are the reins in "The English Mail Coach" and Tess. In "The English Mail Coach" the reins that De Quincey cannot wrest from the driver, which are fast as if in the grip of a statue, imply a determinate universe whose course man cannot alter. De Quincey proves that the universe is otherwise by averting

the accident with a shout. Man's ability to transmit information to others of his own kind may be the most important bond that can be forged between men.

In *Tess*, reins--the reins that Tess drops, causing the death of Prince, and the reins Alec uses when he scares Tess into kissing him so he will slow down his cart, as well as the reins of the horse Alec is riding when he abducts and seduces Tess--are vital links in the novel. Tess's dropping of the reins and Alec's willingness to take them up indicate not only the ascendancy of a new mercantile class over the aristocracy and the peasantry, but also show a new condition of the great chain of being--like Tess's reins the chain has fallen to the ground. When the strands that link us to the rest of creation are cut, we must either take them up in our own hands or someone will take them up for us, as Alec does for Tess. As De Quincey noted, to sleep or to feign sleep at the moment when action is called for is an inexcusable failure to accept individual responsibility and free will. Tess's history shows that such abdication of responsibility in the modern world is tantamount to suicide.

The "message" of *Tess* is that we must take hold of our own destiny or die. We cannot count on the Deity to determine our destiny, or we will end up, like Tess, the "sport" of the "President of the Immortals" (*Tess*, 330, Ch.59). Lear's flaw is the same as Tess's--throwing down the reins, in Lear's case the reins of his kingdom. Lear's

tragic mistake is his abdication of his powers and responsibilities, not his failure to judge his daughters' characters correctly. Shakespeare, Blake, Carlyle, De Quincey, and Hardy all carry the same message: Man must pull himself up by his own bootstraps; he must create his own universe. As Carlyle wrote in a letter to a friend, "We have too horrible a Practical Chaos around us; out of which every man is called by the birth of him to make a bit of Cosmos: that seems to me the real Poem for a man--especially at present" (Quoted in Jennings, 230).

The most striking image of bondage in Blake's Jerusalem is the chaining of Los' spectre to Los--the chaining of selfish rationalism to the poetic imagination. Los himself forges this chain because he knows that without logic and order poetry itself can become incoherent and meaningless. Although he attempted to recreate an uninterrupted continuum, or chain, of being in his system of worlds, Blake, in the chain linking Los and his Spectre, created a much more powerful image of a new chain of being. Blake's new chain did not link separate beings in the universe, but rather linked the imaginative and rational sides of the individual man, joining spirit to body, imagination to reality. Blake's problem, the problem of Western man since the beginning of the Renaissance, was the reconciliation of science and religion. The Protestant reformation intensified this problem by making it incumbent on every man

to come to his own understanding of Christianity. Once man had a choice between religions, between the Pope and Luther, he really had an infinity of choices. If there were ninety-five things wrong with the Catholic Church why not ninety-six or ninety-seven or two million? Once the mechanism of doubt was set spinning its centrifugal force threw off an infinite number of universes, one for each thinking man, because there are an infinite number of ways in which science and religion can be integrated. This fragmentation of the common universe was inevitable once it was left up to individuals to reconcile the physical and spiritual worlds, once the Catholic church stopped being catholic. In some ways Blake is the ultimate Protestant. He takes what he wants from the Bible, rejecting the virginity of Mary and Christ and the warlike nature of God in the Old Testament because they do not fit his system. It is perfectly in keeping with this individualistic Protestantism of Blake's that he never really explains the details of his reconciliation of spirit and science in Jerusalem or anywhere else. Imagination, the spirit of Christ, exists in every man and every man must reconcile the ideal and the real in his own mind, must build his own Golgonooza. Blake believes in the relationship between all matter and all beings in the universe, but he also believes that each man must develop his own vision of that relationship, as each rationalist or poet must steer his own chariot in the final

scene of Jerusalem. At the same time that he is attempting to restore the hierarchal system of the great chain of being, Blake is also promoting the equality of differing world views, and hence promoting individualism and ultimately a form of democracy.

Our final vision of the great chain of being is the rope the explorer in "In the Penal Colony" uses to drive away the soldier and the condemned man. The rope, which could be used to link the men on the island to the men in the boat, is instead used to keep the men on the island from getting into the boat. Here the original function of the chain of being is completely contravened. Not only does it no longer link beings, but is used for the opposite purpose--to keep beings separate. Instead of being a link between beings, the rope becomes a whip or a knout driving them apart. This force driving beings and things apart has become the primary force of the twentieth century.

Like the young officer in "In the Penal Colony" we long for our own destruction, and we take an active part in seeing that it comes to pass. All we ask is that our Father up above be in charge of our execution or, failing that, that he at least be watching.

We are like the workers at Gerald Crich's mines who, knowing that they will be ground down to nothing by Gerald's plan for further mechanization of the mines, still do not

resist his machines. We recognize the approach our own destruction and we run to embrace it.

There was a new world, a new order, strict, terrible, inhuman, but satisfying in its very destructiveness. The men were satisfied to belong to the great and wonderful machine, even whilst it destroyed them. It was what they wanted. It was the highest that man had produced, the most wonderful and superhuman. They were exalted by the belonging to this great and superhuman system which was beyond feeling or reason, something really godlike. Their hearts died within them, but their souls were satisfied. It was what they wanted. (223)

In American history and mythology the figure who epitomizes the worker embracing the destructive power of machinery is railroad engineer John Luther "Casey" Jones, who ran his Illinois Central Railroad fast passenger train, the Cannonball Express, into the caboose of another train at Vaughan, Mississippi, on April 29, 1900. Of significance here is not just the virtually suicidal carelessness of Jones, who apparently ran past several warning signals on his collision course with death and fame (Cohen, 136), but the fact that Jones became, almost instantly, an American mythic hero, the subject of innumerable stories and songs. Popular renditions of this "myth" subtly laud Jones' self-destructive tendency by associating it with America's obsession with goals and meeting "deadlines." Engraved on his present grave marker are words attributed to Jones in one version of the popular song "Casey Jones:" "I'm going to run her till she leaves the rail--or make it on time with

the southbound mail" (Cohen, 138). Gerald Crich's obsession with having his mines perfectly mechanized and up to date can likewise be linked to his suicidal tendencies.

The contemporary successor to Casey Jones in America is the young male victim of a car wreck. The deaths of reckless teenage boys in popular songs like "Dead Man's Curve" and "Tell Laura I Love Her" show a small part of America's obsession with mechanical destruction, with what poet Robert Bly called "the longing we all feel to die" ("The Teeth Mother Naked at Last," II.36). The reckless young man who dies behind the wheel of an automobile has come to be epitomized by actor James Dean who died behind the wheel in an automobile "accident" on September 30, 1955, not long after he made the movie Rebel Without a Cause, in which Dean's character takes part in a game of "chicken" which ends in the death of another teenager who plunges over a cliff in a stolen car.

Like the white-coated technicians in the Volkswagen ad we are happy to stand before the raging machine that threatens to mow us down. As D.H. Lawrence observed, we want it. The juggernaut now belongs to the West, not to the East where it was created. We have turned the god's name into a common noun and we have made the idea of the juggernaut our own. We are hypnotized, not by the siren song of nature, but by the buzz of machinery, by the mechanical pied piper of our own creation. Entranced by our

own creation we are unable or unwilling to escape the mechanical destruction that we can so clearly see coming. The spirit of our age is the longing for mechanical destruction, as seen in literature, popular song, jokes, and even in commercial advertising.

This longing for death, for apocalypse, is the blood red tide that Yeats saw engulfing the world, and the image of the red tide is the most recent of a series of images of encompassment or engulfment related to the sovereignty of a world-view over part or all of the globe of the earth. First the horse covered the earth, establishing the limits of the rule of man's reign in the ceremony of the Horse Sacrifice, and Nature, incarnated in the horse, was sovereign. Soon however, like Lear on the rack of the world, man's consciousness encompassed the world and man was sovereign over all. At this spiritual peak of the pagan world man became "the measure of all things," in the words of the Greek philosopher Protagoras (Quoted in Plato, 522).

When Christianity superseded Paganism little was changed. Christianity merely varied the final pagan formula: instead of man becoming God, God became man. Either way the greatest power in the universe was incarnated in man. William Blake, who believed that God could only be found in man, summarized this truth about Christ in "The Everlasting Gospel:"

Thou art a Man God is no more
Thy own humanity learn to adore

(in Poetry & Prose, K 71-72)

In fact man's superiority over God had been demonstrated much earlier in the Judeo-Christian tradition. In the First book of the Bible, in the famous wrestling match, Jacob had "Striven with God and...prevailed" (Genesis 32.39).

As the empires of the Christian European powers encompassed the globe, Christianity, for a while, became sovereign. Then, as Matthew Arnold noted in "Dover Beach," the "Sea of Faith" began "retreating" (21-26). Replacing the ebbing sea of faith is the mindless blood red tide of apocalypse, the apocalypse for which, for so long, we have longed and worked.

Since the time of the Lisbon Earthquake and before Western Civilization has been suffering from what French writer Rene Girard has described as "the sacrificial crisis" (Girard, Chapter 2). Quoting from a speech by Ulysses in Shakespeare's Troilus and Cressida, Girard evokes a familiar image, an earlier incarnation of Yeats' apocalyptic red floodtide:

. . . O when Degree is shaken
Which is the ladder to all high designs,
The enterprise is sick! How could communities,
Degrees in schools, and brotherhoods in cities,
Peaceful commerce from dividable shores
The primogenitive and due of birth,
Prerogative of age, crowns sceptres, laurels,
But by degree, stand in authentic place?
Take but degree away, untune that string,
And, hark, what discord follows! Each thing meets
In mere oppugnancy: the bounded waters
Should lift their bosoms higher than the shores,
And make a sop of all this solid globe.
(Quoted in Girard, 5-52)

In his analysis of Ulysses' speech, Girard observes that

it is not . . . differences but the loss of them that gives rise to violence and chaos, that inspires Ulysses' plaint. This loss forces men into a perpetual confrontation, one that strips them of their distinctive characteristics--in short of their "identities." . . . The metaphor of the floodtide that transforms the earth's surface to a muddy mass is frequently employed by Shakespeare to designate the undifferentiated state of the world that is also portrayed in Genesis and that we have attributed to the sacrificial crisis.

In this situation no one and nothing is spared; coherent thinking collapses and rational activities are abandoned. All associative forms are dissolved or become antagonistic; all values, spiritual or material, perish. (51)

The primary "difference" in relation to the wheel that has disappeared in the last several hundred years is the distinction between male and female. The power behind the wheel was once divided between the female and the male, between nature and technology. The horse (nature) pulled the wheeled chariot (technology). In the myth of Ixion, the wheel used by the male god, Zeus, to punish Ixion was taken from an annual ceremony celebrating the triumph of the circle of the earth mother over the male solar god on midsummer day, when men attached to burning wheels were rolled down hills to symbolize the annual decline of the sun from its zenith. In the Christian replacement for the ceremony of the burning wheel, the midsummer's day feast of St. John the Baptist, the behind-the-scenes influence of the female principle, of Salome and her mother, also plays its

part in the ritual sacrifice of a man by another man. (In the case of John the Baptist, as I have indicated, the wheel appears as the platter on which John's head is delivered to Salome.)

By the time of the Industrial Revolution the wheel had become a cog and its relationship to the female was in decline. As Blake observed, the old wheel linked to nature, "the water wheel/ That raises water into cisterns," was "broken and burned," replaced by the wheels of technology, "the Water-wheels of Newton . . . cruel Works of many Wheels."

In our own century the influence of women over the wheel seems to have disappeared entirely. In Kafka's penal colony the women can only give sugar candy to the victims of the father's many-wheeled machine of death. The construction and operation of the machine and the selection of its victims are entirely controlled by men.

The motive power derived from the living, feminine, world of nature has entirely disappeared from the most important wheeled vehicles of the twentieth century, the railway locomotive and the automobile. At first the natural power of the horse was absorbed by the machine as the locomotive became the "iron horse"; later the idea of a link between a vehicle and a living creature was eliminated entirely and the car became the "horseless carriage." It might be argued that the fuel for these new vehicles, coal

and oil, was still organic and therefore "natural," but coal and oil come from the death of nature, from plants and animals long dead. No chariot or coach or cart was ever pulled by a dead horse.

Another indication of the decline of the power of the feminine since the industrial revolution is the frequent substitution of women for men as sacrifices, as victims or potential victims of the wheel: the girl in "The English Mail Coach," Tess Derbyfield and Anna Karenina. These women represent just the most recent in a chain of female sacrificial victims extending back to Joan of Arc and including the centuries-long persecution of "witches" in Europe and America beginning in the mid-fifteenth century, the time of the early Renaissance, the beginning of the "modern" era. These ritual slaughters of women symbolize the suppression of the female on several fronts: the execution of Joan of Arc represents the suppression of the relationship of the female principle to the rise of nationalism, the execution of thousands of witches over a period of centuries represents a final suppression of the ancient religion of the Earth-mother goddess, and the deaths of Tess and of Anna Karenina represent attempts to suppress modern tendencies toward the sexual and economic emancipation of women.

As the power of the male in Western civilization has increased and the power of the female decreased, the primary

distinction between human beings, the distinction between the sexes, has become meaningless in terms of archetypal influence. All power has devolved upon the male. The result has been the sado-masochistic, self-destructive desire of Western civilization as a whole to try to please the father by throwing itself under the wheels of the father's machine.

Perhaps the only way to save our world and ourselves is to restore the balance--to restore the wheel of the yearly cycle of the female, of the earth--to rebuild the water wheel that raised water into cisterns.

Though, as I have shown, the male has come to dominate even the image of the circle, the true symbol of the male force is not the circle but the line, or better, the line segment. For instance, we can best visualize the contemporary Western view of history, the product of the Judaeo-Christian patriarchal tradition, as a line segment beginning at Creation and ending with the Apocalypse. This line segment representing history is itself simply a projection of the history of the life of any individual man, which begins at birth and ends at death, onto the universe. This projection of the fate, death, of the individual onto the universe has created the belief that we should consume the earth's resources, break and burn the wheel of nature, as quickly as possible before it is destroyed in a preordained cataclysm. Such a philosophy becomes self-

fulfilling. If we destroy the Earth, then life will end whether that end was ordained by God or not.

To combat the destructive power of this linear male force that yearns for the end, to save the earth, we need to restore the female portion of the power of the wheel, the force that perceives history as an endless cycling of the circle of the seasons of the year, a circle in which death is not a final end, but only a phase preceding rebirth. I believe that at least two forces are at work in the world today that might restore the female portion of the power of the wheel: the women's movement and the environmental movement. The women's movement, if it strives for true feminization of power and relationships, and not simply for the right of women to behave like men, might help restore female power to the wheel because the power of archetype embodied in the wheel of nature's cycle can only grow strong again if women grow strong.

Even more important for the restoration of the wheel of the earth-mother is the development of a powerful world-wide environmental movement. The consumption of our planet's natural resources and the resulting contamination of the air and water that life needs to exist may be the greatest threat to continued life on earth today.

Only through a transformation of the image through which we visualize ourselves and our universe can we transform ourselves and our universe. If man believes his

existence to be a line segment ending with his death then he will continue to do his best to bring about the end of the world, if only out of jealousy of the eternal existence seemingly vouchsafed the earth but denied him.

Perhaps, though, we can find an image which will reconcile our universe with the line segment and the circle. It has been hypothesized that in the Einsteinian universe a man travelling continuously in a straight line would, being bound by the gravity of the universe itself, eventually return to his starting place, describing a perfect circle. If such is the case then, in our universe, a long enough line segment becomes a circle, and somewhere "all the barrel-hoops are knit," and "all the serpent tails are bit," (Yeats, "there," 1-2). Perhaps, then, nothing can ever be lost or die and as the poet says:

'Whatever stands in a field or flood,
Bird, beast, fish or man,
Mare or stallion, cock or hen,
Stands in God's unchanging eye
In all the vigour of its blood'
(Yeats, "Tom the Lunatic," 13-17)

If men could believe this then perhaps, content with such a portion of immortality, they might be less jealous of the eternal wheel of the earth's seasons, and allow it to continue to spin.

ENDNOTES

1. I like to think that Ixion's flaming wheel became a planet or a comet, one of those celestial objects whose irregularity of motion, when compared to that of the fixed stars, disturbed humanity's complacent notion of the immutability of the heavens and eventually led to the revision of the view of man's central location in the universe.

This image of the burning wheel has been remarkably persistent. In John Ford's 1948 Film Fort Apache John Agar and Shirley Temple find the bodies of troopers who have been "spread-eagled" over wagon wheels and burned by renegade Indians. In 1971 in the north of Scotland I attended a midsummer's festival where old car and truck tires were set ablaze and rolled down a steep hill, an obvious survival of the ceremony described by Robert Graves.

2. Blake's cosmology also involved the mystical presence of the Divine emanating from the exterior, the farthest realm of Eternity, to the interior of the world (and by implication to the center of the self). This bit of Eternity detached from God and mystically appearing at the center of the world is Blake's version of the immortal human soul (here world soul), the spark of an exterior God that is found within as well:

The Vegetative Universe, opens like a flower from the Earths
center:

In which is Eternity. It expands in Stars to the Mundane
Shell

And there it meets Eternity again, both within and without
(Jerusalem, Pl. 13, 34-36).

In Blake's poetry, as in Christian theology, God is not only an external entity, but exists also at the heart of things. This essence of God at the infinitesimal center of the Earth accords with the ancient greek concept of a plenum, "a series of layers of concentric rings, First, the elements, then the planetary spheres massed round the earth as centre" (1887 Encyclopedia Britannica XXII, quoted in O.E.D.). This concept of a plenum was the basis of medieval Christian Cosmology, as well as the basis of Blake's cosmology.

3. Other writings by Carlyle make it clear that this was indeed the opinion of the author. In praising the nobility of work in his essay Past and Present, he again embraces the 'Worship of Sorrow.'

All work, even cotton-spinning, is noble; work is alone
noble: be that here said and asserted once more. And in like

manner too, all dignity is painful; a life of all gods figures itself to us as a Sublime Sadness, --earnestness of Infinite Battle against Infinite Labour. Our highest religion is named the 'Worship of Sorrow.' For the son of man there is no noble crown, well worn or even ill worn, but is a crown of thorns! (147)

4. The rending beak and claws of the falcon and Voltaire's beast also call to mind the steel teeth of Kafka's harrow and the pole that impales the horse Prince in Tess of the d'Urbervilles--all examples of the universe's power to penetrate and violate the individual, to cause pain and death--all incarnations of Christ's crown of thorns, all forms of what Carlyle embraced as the "Worship of Sorrow."

5. Cosmic voids have been a hot topic throughout the ages. Giordano Bruno wrote, "If a person would stretch out his hand beyond the convex sphere of heaven, the hand would occupy no position in space, nor any space, and in consequence would not exist. . . . Thus, let the surface be what it will, I must always put the question: what is beyond?" (From Bruno's Infinite Universe, quoted in Harris, 224.) Bruno's question implied an infinite universe could put a god marginalized to the edge of the universe an infinite distance away. (Bruno was burned at the stake by the Catholic Church in 1600.) It has become a standard science fiction convention that the voids between the stars and planets, especially when traversed at speeds greater than that of light, are treacherous, unbearable or even deadly.

Two of the best works dealing with the subject are Cordwainers Smith's short story "Scanners Live in Vain" and Kurt Vonnegut's novel The Sirens of Titan. In "Scanners Live in Vain" the voids of space cause "a terrible aching hunger for silence and for death"(372). To remain conscious in space while travelling, men called Scanners must have their nerves rewired and passed through electronic filters. The idea that men would have to turn themselves into machines to travel the cosmic voids seems Blakeian. (Discoveries about the Van Allen radiation belts surrounding the earth and deadly radiation in the solar wind that could threaten astronauts during certain periods of solar activity seem to validate the fears of the voids of space expressed by Blake and Voltaire.) In Vonnegut's Sirens of Titan the protagonist Winston Niles Rumford is caught in "an uncharted chrono-synclastic infundibulum two days out of Mars" and spread across time and space "in a distorted spiral with its origin in the Sun and its terminal in Betelgeuse"(13). Appropriately for a man who has experienced the void firsthand, Rumford becomes the founder of the "Church of God the Utterly Indifferent"(218).

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