

CHAPTER SIX
WHY IT IS GOOD THAT EVIL IS IN THE WORLD:
THE RISK EQUATION

**“After this judgment, they shall
frighten them and make them scream
because they have shown this
(knowledge of secret things) to those
who dwell on earth.”
Ethiopian Book of Enoch**

Philosophers have always preferred prudence to risk taking with few exceptions. John Rawls is the perfect example of the modern American aversion to risk taking (1), and there are few philosophers like Friedrich Nietzsche who argue for the overriding value of risk (2). If the cosmos is a dynamic system, however, risk would be the sought for Summum Bonum of the classic philosophers. Risk, which leads to oscillating maintenance and development, is the built-in expression of a dynamic system.

For sentient beings, risk is a complex concept, as Sagoff has well-analyzed and as I have applied to many policy ethics question (3,4,5). The Risk Equation is a useful one to consider. The Equation, simply, is that the probability of risk (the gambling odds, if you will) plus the severity of negative consequences if the risk taken is lost plus the degree of control the individual has about taking the risk (freedom) equals the full understanding and the adequate perception of risk. Many risk are frustrating because we take them without knowing we are taking them, something that happens all too often in contemporary public health policy, or because we have little control over whether to take them or not. Mad Cow Disease (transmissible spongiform encephalopathy) in Britain was a risk that the British population took without adequate knowledge and with false assurances from the health and policy experts (6). In fact, crucial information was withheld from the public by the government and the special committee it had set up to investigate this variant TSE. The committee had documented information that a number of citizens had developed this vTSE or vCJD (the arbitrary name given to TSE's expression of clinical symptoms in the human species as compared to vBSE, the name

given to TSE's expression in cattle). The public policy was not to reveal this information. Fortunately (I will argue ethically), one of the members of the committee, while faxing the data on the human cases, happened to dial the wrong fax number, and a private citizen received this censored information over his fax machine. The citizen called the press, and the health policy which was unethical was forced to change to a health policy that was more ethical. What the prior policy had meant for the British people was that they were taking a gamble whose odds were not well-known at all and on which there was a wide range of expert disagreement. The World Health Organization experience with the Fore in New Guinea (who had a form of TSE called kuru) indicated that the odds could be very high for an entire population if an efficient route of transmission were present. Now that it is documented that TSE is blood-transmissible, such an efficient route is present in the British population if sufficient transmission through the beef supply has occurred. The second part of the Risk Equation indicates the extreme severity for vTSE. In humans, Creutzfeldt-Jakob disease (CJD) is always fatal, and progressively destroys the brain. There is no treatment, only palliative care which can do little to lessen the disastrous progression of symptoms. To make matters worse, this disease can wait years before symptoms begin to show, sometimes as long as 20 or 30 years. It is hard, then, to estimate the severity for the entire population exposed in the early stages of exposure. Not just individuals, but entire populations, can be forced to live under a cloud of uncertainty and fear for a third of a lifespan. Testing is not currently available to determine whether this disease is present, which makes screening and prevention even more difficult. Also, vTSE can be vertically transmitted from mother to fetus, and infect a new generation as well.

The final part of the Risk Equation, personal control over exposure to risk, is not much brighter. With such a slow-acting and non-testable pathogen, it is so difficult to recognize risk that controlling risk taking is very problematic. When the pathogen is transmitted by means of essential routes, such as blood supply and beef products supply, it may be impossible to control exposure. I learned that lesson early on in vTSE. Here in the US, I assumed we were relatively safe at the beginning, at least from the risk of British beef cuts. But I quickly learned that the bee pollen tablets one of my daughters gave to her children as an herbal medication were made in England and consisted of bee

pollen in a medium of bone meal. The bone meal could have come from ground-up bones of British cattle who had vTSE. Later, rose-growers were advised to take care using bone meal for their rose gardens, since transmission was possible. Recently, news reports, after years of silence, finally told the public that our FDA had not protected our vaccines (and likely also medications) from contamination with beef serum which could still be imported from countries affected with vTSE. Common childhood vaccines could contain risk of vTSE, similar to the risk found with Human Growth Hormone batches given to children with various forms of dwarfism some years ago. Then, good epidemiology and health policy quickly confirmed the contamination of all three worldwide HGH batches, took the hormone off the market except for use in a lethal form of dwarfism, and rapidly developed a synthetic growth hormone that was safe. There still was a discussion among experts about whether to inform the parents of children who had been inoculated with HGH, but the public was eventually involved in the health policy decisions.

If we compare the HGH policy decisions with current health policy concerning vTSE or, for example, West Nile Virus, we will find a deteriorated public health situation, with policy based on disinformation and reassurance, and plans that basically place the problem in the hands of individuals who do not have the power to implement the unrealistic plans (7). With WNV, the citizen is told to avoid being bitten by mosquitoes and to remove all standing water from property. The average citizen would wish to avoid bites, but there is really no way to actually do that. The average citizen cannot remake the face of the earth so that no low areas, swamps, creeks, ponds, hedgerows or other habitat is removed. Yet that is the state of public health policy.

When the individual now looks at the full Risk Equation, there is sufficient justification for concluding that the risk is very high indeed, and perhaps unacceptable. Risk perception that vTSEs or even the current state of public health policy is highly dangerous is a rational perception based on that Risk Equation. We would be irrational to place the risk as very low or as acceptable.

The examples I have given are of natural evils in the cosmos, sometimes combined with human evils caused by unethical decisions in public health policy. The Problem of Good and Evil has to deal with both natural and human evils, and neither are easily resolved in a monotheistic system by appeal to free will or by an appeal to complexity in

the cosmos (8,9). The Problem of Good and Evil is also not easily resolved in a nontheistic system, but the ethical issues are different. To begin this analysis, I want to look at the risks taken by beings in the old texts I have used as a tool to approach the philosophic problem. How such beings are perceived as taking risks may throw some light on the subject.

One of the major risk takers in all history was the mythological Eve, a woman. Adam was right in *Paradise Lost* to call it a bold deed that she had dared presume, but the historical evaluation has been that it was an unethical deed and that the risk taking was evil. However, Adam joined her in that risk, knowing the severity of the consequences but not appreciating what great odds were against the two of them. In Milton's work, it is Adam who takes the noble risk because of love of Eve, not willing to leave her alone in her risk taking (10). But in the Book of Adam and Eve, it is actually Eve who, thinking Adam has died of grief in the cave, asks God to bring him back to life or, if not willing to raise him from the seeming dead, to make her die too: "But if Thou wilt not give him life, then take me, even me, like him; that we both may die the same day" (11). She sees herself as one with Adam, as in Milton Adam had seen himself as one with Eve. At one point in the long tale of woe after expulsion from the garden and acclimation to a new world, Adam attempts suicide by throwing himself from a mountain, and Eve, saying "all that he did to himself was through me," then also throws herself after him. In the Pseudepigrapha and Apocrypha, Adam is not angry with Eve for the risk she took, though he regrets their transgression. He is upset with the punishment she bears of having children in great pain, and during her delivery of the twins Cain and Luluwa, asks God to have mercy on her and save her from the pain. In Milton's fictional interpretation of the myth, Adam does become angry with Eve for what has happened, blaming the frailty of her sex and femaleness for the severe consequences which have befallen them. He explicitly criticizes her curiosity and risk taking at that point: "Unwary, and too desirous, as before, So now of what thou know'st not..." (12). Still, he is committed to her even if he had wished an all-masculine world, but he does attempt to infantilize her as God had kept both of them children in the garden before Lucifer taught them to eat the fruit and know ethics. He evaluates risk taking as a bad thing and does not realize that it has actually produced all that he later finds so wonderful and inspiring.

It is interesting that Eve, on the other hand, does not actually express regret at her risk taking itself, only at the consequences of losing the gamble. There is a difference between her approach and Adam's in both texts, but more extreme in Milton's work, where the process of demonization has not allowed as clear a look at what actually occurred in the garden. The Books of Adam and Eve are no paean, though, to risk taking. Also running through them, though expressed more by God's commands than by the thinking of Adam and Eve, is the devaluing of risk and the retreat to a static, ascetic, apart-from-the-world existence. The Books substitute a mountain cave retreat for the Garden of Eden (The Cave of Treasures), and emphasize staying safely on the mountain rather than risking going into the plains where the sons of Cain and The Watchers are constructing a vibrant, risky, developing society. The Adamic ideal has returned to the stagnation of the garden, but it is doomed to failure because Eve's risk taking has set in motion a dynamic human system. Even with the coming flood, it is clear that human beings will never again be static beings isolated in a controlled environment like a garden.

Applying the Risk Equation to Eve's decision, what would be the conclusion? The risk probabilities were very high for her action. Even with Lucifer's tutelage, opposing the God was high-risk. Lucifer knew how high the risk was, but his options were limited, having already chosen for opposition. Eve had been informed that the risk was death, and the probability of that occurring should have been measured by her as very high. Adam was equally aware of the high risk. Yet both took it, and not because they were helpless in the face of Lucifer's urgings and arguments, but because something in their nature was risk taking and expressed itself with the almost-inevitability of system's formation. Neither could argue that they did not understand the risk, though neither accepted that it was a 100% risk. The human nature described in the garden story is one of willingness to take a very high risk even when the odds are greatly against success. In acting as they did, Adam and Eve were the true precursors of the traders of The Hanseatic League in the Medieval period, whose motto was: "It is necessary to sail; it is not necessary to survive." Human nature has not changed all that much. We are an open, dynamic system, and risk is built in as a value.

Looking at the second part of the Risk Equation, the severity of the bad consequences was extremely high. Death was the likely consequence. Angering a controlling being with the power of a god can be predicted to produce many awful punishments, and those consequences would not be taken lightly. In looking at this second part, though, we must also include the good consequences that might result from the risk taking as well. It is not enough to simply know the bad consequences. Risk assessment has to include all consequences. The desired consequences were the capacity to know good and evil and to become like the gods, in other words, to develop freely and completely. Humans would no longer be slaves to accidents and chance, but could take some part in their future and take some actions to fulfill their needs and interests. They could express themselves by interacting with the world partly on their terms. They would be part of an ethically-competent class of beings that had accountability to themselves and others. The old interpretations want to argue that Adam and Eve had already been given free will, but this is a weak argument. Up until the teaching by Lucifer, neither had ever expressed a freely-made decision, but listened for instructions from their creator and followed them. They may have had the potential for free will, but it was only a potential and not likely to be expressed in the garden. One argument is that a test was set for them, but there had been no indication they would ever act independently or develop into beings who would think about the fruit of the tree and whether they wished the knowledge of good and evil. Lucifer was the required (and unwelcomed by God) catalyst for that development. Nor is the argument that stating one is giving one's creation free will a compelling argument, if one does not act in ways to foster the exercise of such free will. The god of the garden did not act to foster free will, but to suppress it through threats of punishment and fear. It was Lucifer who fostered the growth and development of free will, and one of the consequences of his risk-taking action was that human beings developed their capacity for evaluating and choosing, developed knowledge of good and evil. There is little acceptance or support for free will if the results of exercising it are extreme punishment and rejection, if the coercion against its expression is so severe. In such a situation, being "given" or granted free will is an illusion and a trap for punishment for not conforming to the orders or wishes of the most powerful force. In current terms, we would not call that freedom if the powerful force was an autocrat or a totalitarian society that had no

independent measure of justice or the good apart from the commands of the autocrat or the state. Once an independent measure is established, we can then talk about good and evil, and whether one's choice was good or evil. Punishment for evil choices then becomes potentially just. In our justice system, finding a person guilty of serious crimes has to meet the same standard, knowing and appreciating the difference between right and wrong. But we are now talking about a full knowledge of good and evil, exactly what Adam and Eve were prohibited from having until Lucifer made the argument that they needed such knowledge to fully develop.

That leads to the third part of the Risk Equation, control of taking the risks. Did Adam and Eve have real control of the choice to take the risk? No one physically coerced them into taking the risk. They were both aware that there was a risk with this particular tree. Their innate learning program did give them the potential for being in control of the decision. They had had no prior experience in acting in control of choices, and they were developmentally more children than adults, but they had not been given the opportunity to learn through small choices how to exercise that function of their nature. As a result, they had to face a crucial decision with severe consequences and the odds against them, without a background in learning how to use Risk Equations. Their first choice was the ultimate important choice. Their perception was limited, their assessment incomplete, but I think an argument can be successfully made that they made the right choice. Eve (and Lucifer) was the parent of science, of ethics, of development of a full human nature. The Gnostics were right to emphasize her importance, though perhaps a bit too exuberant, and with Light-Eves, Spirit-Woman and Zoe/Eve crowding the Garden as a substitute for Lucifer's instruction -- an eroticized (rape, forced and unnatural sex acts, defilement) substitute for ethical choice (13). Our learning program expanded beyond most animal species, and while it contains the risks of chaos, it also contains the achievements and awesome functions of chaos. It recognizes the goods and evils inherent in a dynamic system, both natural and human, and creates ideas and methods for trying to palliate the evils and increase the goods. It may achieve Russell's wish for acknowledging the horror of evil without the need to falsely personify evil or to be cruel and irrational to beings or objects that slip into evil expressions (14). It is more compassionate and more effective than irrational failures like personification or reification. For nontheists, it is a working

resolution of the Problem of Good and Evil on the sentient human level because it explains free will in terms of a causally-understood and developmental learning program transacting with a complex open system which contains it. It avoids the trap of utopias and the unjustified sacrifice of individuals for the illusory goal of perfection at the communal, environmental, or ideological levels. For monotheists, it could be a working resolution, but only if the myths of God and Lucifer are reconciled into accepting Father and Eldest Son. The Bogomil/Cathar heresy may have glimpsed a truth about ethics (15).

Lucifer was the first risk taker in this mythic tradition, the trail blazer for ethics and freedom in a complex system. There were no models before him, no one to instruct him in activating reason and decision making. The odds were overwhelmingly against him, with the risk probability numbers extremely high. There had never been an attempt at opposition or disagreement. Given such high risk numbers, it is amazing that he came so close to succeeding. All the old texts make it a close battle and indicate Lucifer's power has not yet been completely broken, that there is still some remote possibility that he might succeed. The risk numbers may not have meant much to him, since he may have seen the choice as a forced choice, with opposition inevitable if he wished to maintain integrity and a free mind. His courage in facing those odds is remarkable, and only in Milton does he back away from a potential destructive battle with Gabriel in the Garden after watching God weigh the balance scales to see whom probability has favored. In the actual texts, the decision to oppose is made without counting the probability of success or failure as an important factor. Lucifer will continue in opposition because he sees it as the only option open to him.

The severity of the consequences could have been expected, but not known explicitly. To challenge the celestial court and lose meant exile, imprisonment, punishment and eternal condemnation for the opposition. What was risked was also very important. Lucifer was the first of the celestial beings, the right-hand man of the ruler, the most beautiful and most powerful other than the ruler, the brightest. Lucifer had much to lose by his decision and actions. That he was joined by a third of the celestial forces indicates the cause had some merit, if we give a literal reading to the old texts. That he made his choice shortly after creation and alone, as the Scholastics interpreted the texts and added to them, indicates that in his mind the cause had considerable merit (16). Either way, the

decision should not be immediately or lightly dismissed as evil. Lucifer was called arrogant and full of deadly pride, but that is a characterization by the winner of the conflict and is part of the unethical demonizing process so common in human history. Other reasons for the decision to oppose can be found in the text if they are looked for. Lucifer wished to be part of a society of equals, or at least equal himself, and his merit indicated that was not arrogance or pomp. It is a natural feeling that any sentient being could relate to, and is based partly on a prerequisite for ethics, self-love. The accurate understanding of what one is and can do, and the joy at this capacity, the ability to be compassionate to one's self and to accept with pride one's nature are all basic values of a well-functioning organism. Lucifer also wished to develop rather than remain the same, and to do that based on his own natural abilities rather than a *deus ex machina* solution to existence. I've argued that is a basic part of any dynamic system, and again defines well-functioning, itself a value statement that is also an empirical statement. Lucifer's reasons were the foundation for complexity and openness in the cosmos, of sufficient importance to rationally justify taking high risks to try and achieve those goals. The risk taking increased his value rather than decreasing it as a description of false pride, arrogance and sin. His actions indicated no other option could meet his need for self-respect and growth, and that fundamental need of a sentient being is so important that it outweighs the severity of the consequences of failure. In many ways, Lucifer had no other choice if he wished to remain Lucifer. To abase, reject and/or destroy one's self is not an ethical choice, unless there are extreme instances of self-sacrifice that might justify it for the saving of loved ones, nation, or dream. Even then, it is a sacrifice that requires strong justification, because abasement, self-rejection and destruction are ripples of evil that may submerge the good of the intended end.

Lucifer's choices would be limited by his natural values, values important to a cosmic system, but he would still be free in the sense of determining if those values required the specific action. He would not act in a random way (something close to a psychosis actually), but in a way that had causes that were organized by his sentient executive function, a function that was also not random (totally chaotic) but organized in a way that was capable of being understood at some level. To again argue that he had free will and was alone accountable for his decisions, therefore absolving God of any evil

consequences from the actions, is a weak argument. In *The Devil and the Good Lord*, John Paul Sartre puts it succinctly: “We should all praise the Lord for giving us hands. Then, if you hold a key in your hands, that cannot be wicked... But as for what the hand does with the key, the Lord declines responsibility, that doesn’t concern Him at all, the poor fellow. Yes, Lord, you are completely innocent; how can You conceive Nothingness, You who are fullness itself? Your presence is light, and changes all into light; how are You to know the twilight of my heart?” (17). His antihero Goetz plans to conduct a bloodbath and knows that the Lord will cry, when it is all over, that that “wasn’t at all what He wanted.” But he questions whether that is really what the Lord wants: “And Your infinite understanding? How can it enter into my arguments without shattering them? Hatred and weakness, violence, death, displeasure, all that proceeds from man alone; it is my only empire and I am alone within it; what happens within me is attributable to me alone.” But Goetz is too clever to stop there: “On the Day of Judgment, silence, shut lips, I am far too proud, I shall let myself be damned without uttering a word. But doesn’t it embarrass You a little, Lord, a very little, to have damned the man who does your work for you?”

Lucifer could make the same argument to the monotheists who attempt to cling to an all-good, omniscient and omnipotent god. Why, then, does Lucifer exist? To bring complexity or diversity into the cosmos? And if existing for such a reason, why is Lucifer damned for doing the Lord’s work? The resolution of the Problem of Good and Evil, as with Eve, requires the acceptance of Lucifer as ethical, even if only in the sense of the lesser of two “evils.” But in the real cosmos, rationally, the lesser of two “evils” is naturally the good. What else can it be? Those who wish to acknowledge the horrors of some natural and human evils will again recoil at such a suggestion, since it defines away what human reason and compassion/emotion wish to evaluate as unacceptable, as too high a price to pay. Yet it is the price, and the price for stagnation may be even higher. If the complexity argument works at all, it must include honor and ethical respect for Lucifer, and must reestablish his position in the celestial court. The nontheist must follow the same line of argument and embrace what Lucifer stands for. A dynamic cosmic system and sentient beings within that system will produce the experiencing of evil, of real suffering. With growth and understanding of systems mechanisms, some of that evil

may be removed and some lessened, but it would be irrational to expect of a complex system what it cannot achieve. Even within the strictly human realm, we know from human history that utopian or overly ambitious attempts to remove human evil from the world have generally created more cruelty and evil than has been eliminated, and we are fortunate when we have achieved a balance. As a Catholic cardinal once said, saints belong in heaven because they are hell on earth.

The last risk takers I want to look at are The Watchers, those strange beings half-forgotten by religious people. The name Watchers appears only once in the Old Testament, in the Book of Daniel. Apocryphal works such as the Book of Jubilees and the Testament of Reuben also mention The Watchers by name, and the Qumran Damascus Rule says The Watchers fell because they “walked in the stubbornness of their heart” (18). The Ethiopian Kebra Nagast tells a Watchers story, and the Ethiopian Book of Enoch gives the fullest account.

In The Book of Jubilees, these Watcher angels descend to earth to instruct humans and lead them in righteousness as well as judge fairly. After arriving on Earth, however, The Watchers are so taken with the daughters of men that they interbreed. Their leaders are here called Belial and Mastema. The Watchers offspring are Nephthalim, incorrectly translated into English as giants but generally meaning those exceptional beings related to beings who descended to Earth. God intervenes because he does not approve of what is happening, The Watchers are bound in the depths, and their offspring are manipulated into warring with each other by God, thus destroying themselves. The spirits of the dead Nephthalim still do evil, so God also binds them in darkness, whereupon Mastema complains that he no longer has the resources to enforce his will upon men. Recognizing Mastema’s predicament for some reason, God agrees to allow one-tenth of the spirits to remain free on Earth (19).

In the Testament of Reuben, The Watchers are seduced by the women. Because they are not corporeal beings, The Watchers here cannot themselves interbreed with human women directly, but appear to women while the women have intercourse with the men, and somehow introduce their DNA, causing the women to give birth to alien life-forms in a form of reproductive technology that remains a mystery. The concept is, however, interesting (20).

The Kebra Negast story has a childish innocence about it on the part of The Watchers, but also a sense of the omniscient God's malevolence: "There were certain angels with whom God was wroth (He the Knower of hearts knew them), for they reviled Adam, saying: 'God hath shown love to him and hath set us to minister unto him... He hath created him in His own image... 'My son, My firstborn, My beloved.'" (21) These angels know that Adam has sinned, and ask permission to tell the ruler what Adam has done. God, however refuses to throw away that which he has fashioned or have his work badly evaluated. The ruler tells them that Adam was tested and they were not. Eagerly, the angels ask to be tested as well, praising God and declaring that they will not transgress "for we are spiritual beings for life." God tells them he is willing to test them (although he knows they will fail already), but warns that if they fail, the consequences will be hellfire and damnation. The Watchers naively take up the challenge and go to Earth willingly. There the same pattern as the other books is repeated. They become enamoured with women, teach men things they are not supposed to know, produce great heroes and generally advance civilization, along with its attendant risk and chaos. God then feels justified in putting them in chains and imprisoning them in Sheol until the day of judgment. Most of their offspring are destroyed in the global flood.

The Ethiopian Book of Enoch focuses on The Watchers coming to Earth, interbreeding, and worst of all, revealing the knowledge of "all the secrets of the angels, all the oppressive deeds of the Satans, as well as all their most occult powers...the things which are secret" (22). The ruler feels The Watchers have led others astray, so plans are made to destroy their beloved ones, their offspring, by flood and by catching them in nets to throw them into crevices of the abyss. The Watchers will have no haven forever, their place being the prison house of the angels where they will be detained for eternity. One of their leaders is bound hand and foot, taken to a pit in the desert, with his face covered so he may not see the light again, then stoned with sharp rocks that cover him from view. Enoch finds some of The Watchers hanging on the second level of heaven, and tries to intercede for them, but God will have none of it. They are doomed for educating human beings and for showing them how to oppose the celestial authority.

Enoch says there were 200 leaders of The Watchers who somehow broke their vow and went down to Earth. One of their leaders, Semyaz, asks them all to take a binding

oath that they will all act in accord and will all be responsible, in the event they should fail. He does not want to take the risk alone. All agree to the oath and go to Earth with the specific intention of interbreeding with the human women. Specific leaders teach the humans metallurgy, the arts, warfare, science, agriculture -- again helping human beings create civilization. This is not acceptable to the celestial ruler.

In some versions of *The Watchers*, these beings understand the risk probabilities. Certainly Semyaz does so very well, and agrees to lead them only if they pledge loyalty and responsibility for their own decisions. The childlike angels of the Kebra Nagast do not know the risk probabilities and go innocently to their doom, unaware of how stacked the odds are against them. The Watchers are as brave and determined as Lucifer despite the high risks of opposing the ruler, being opposers or satans. They have had Lucifer's example of how dangerous this undertaking is, yet they are willing to take such high risks. Even the childlike angels are warned that this is risky, but their nature seems to propel them into taking the test, despite the risk. Semyaz has the most clear-headed understanding of the probability numbers, but is still willing to be a risk taker provided the risk is spread equally across all *The Watchers* and not assumed only by him. Part of the nature of these complex beings seems to be risk taking, which is consistent with that high percent of them who followed Lucifer in taking the first risk. In this, they are not unlike human beings and may represent the persistent pattern of risk taking across levels of organization and complexity.

The value of risk taking as part of complex, dynamic systems and the cosmos explains partly why these beings would all be willing to assess the severe consequences of a decision as insufficient to prevent the decision from being made. In Chapter Ten, I will detail some of the cruel consequences that follow from the free and valuable decisions these celestial and human beings make. They are very severe consequences, quite brutal and unnecessarily cruel, in fact. But apparently the value of risk taking for certain goals outweighs the severity of these consequences in the risk assessment. The Watchers placed sufficient value on educating human beings and helping them develop into full members of the ethical and celestial community that they were willing to run the extreme risk. They were the catalysts for our present civilization, if we hear the mythic stories, and *The Watchers* stories only repeat the theme of the Lucifer story. There are also

touching lines in the Apocrypha and Pseudepigrapha that show the close emotional ties between The Watchers, Watcher/human offspring, and humans. These beings are referred to as beloveds, as children with their mothers and fathers, as elect ones. The bonds are real and deep. We are speaking of genuine love.

Could lust or corporeal sex be the main reason for taking such a risk? Some of the texts would portray it that way, and would devalue corporeal sex and the interbreeding of two forms of beings. But most of the texts imply that The Watchers came to Earth, not for crude orgies, but to administer, educate and dispense justice. That they also imparted advanced knowledge seems to have been their downfall. It was the bringing of civilization as compared to the mountain ascetic retreat where nothing developed that seems to have been the values conflict. Again, The Watchers symbolized open and dynamic systems, a cosmos of chaos theory with its embedded organization, and the freedom to grow and change. Some Eastern myths will see that tension as the natural expression of reality, and will evaluate both avatars and daemons who represent that tension as doing the ethical work of the cosmic system (23).

The Watchers in most of the stories freely chose to go to Earth with missions seen as ethical. It was only when their activities disturbed the ruler that they were labeled as unethical and condemned. Initiative and free thought or action are punished within this mythic tradition, yet again and again those very things are chosen and fought for. I should not concentrate only on the monotheistic old texts, because the same pattern can be seen in most Indo-European texts in the classic world. It can also be seen in Mayan, Incan and Aztec traditions where a static natural order must be maintained. Levi-Strauss often speaks generally of patterns of unchanging cosmic order and the felt need to correct any imbalance in that static order (24).

For the monotheists, the Problem of Good and Evil represented in The Watchers is a very thorny one. The intentions of the miscreants were ethical, often supported by the god, or set up almost as a trap (test). The actual activities of these beings did not appear to be so terribly sinful, except in terms of violating a static order. The wholesale destruction of most of the human species and the chaining in darkness of The Watchers seems excessive and arbitrary, and the rejection of the interbred offspring also seems without merit, since they are referred to as great men of old, heroes. Does the insistence

on maintaining a static order support such judgment? If we use the argument from choosing complexity, don't The Watchers have a legitimate complaint that they are the ones advancing complexity? How can their actions in a complex cosmos be so ideal that no unethical/evil effects will flow from them? Does such a demand not run counter to the nature of complex systems? Can and should beings be damned based on a contrary-to-fact standard? We are led slowly to the same conclusion as before. The arguments from complexity will work for monotheists only if The Watchers are given ethical status and their activities supported.

For nontheists, an understanding of general systems theory, hierarchy theory or complexity would require approval of the mission of The Watchers and how that mission was generally fulfilled. Their risk taking and catalytic function would be applauded, not punished. What would need to be opposed would be the static program of a lifeless cosmos.

The only other argument raised to resolve the Problem of Good and Evil is the contemporary argument based on a monotheistic god being defined as a god of love who can try to give sympathy and solace after the occurrence of evil, but somehow cannot prevent the occurrence of evil or chooses not to because love implies his noninterference (25). This argument also contains an optimistic belief that things are working out for the best, or will work out for the best, and may be linked to liberation theology and social action on this planet as the focus of religion. I will deal with this argument also in Chapter Ten.

What I hope to have established so far is that risk taking is part of the nature of a dynamic cosmic system, as it is the nature of any complex system. The very concept of risk taking implies that there may be failures and unwanted effects, or prices to pay. This is sometimes called trade-offs in dynamic systems, but that term may imply too economic a characterization, as may the sense of a price to pay. It might be better to see this facet of systems as the oscillating balance within levels of the system, and how various actions contribute to the dynamic balance. Even that term, however, has cultural baggage that I would not want to accept. It is associated with the "perfect" balance of nature (a feature that does not exist in any complex system), as the "ideal" balanced ecosystem that goes on forever without change or further development (a description of ecosystems that is a

fantasy), as the unchanging and benign balance of Mother Nature, as the perfectionist clockwork universe of a nondynamic physics, as the “steady-state” balance of a misunderstood systems theory (26,27). Such concepts get in the way of appreciating what a complex system actually is, but they are ingrained parts of our culture and difficult to dispense with. For want of an uncontaminated term, I prefer to use the concept of controlled-state balance (28).

Because systems only achieve a controlled-state, they are both open to development and to the failures and unwanted side effects we may call evil. In a general sense, it is good that evil is in the world or cosmos because it implies the existence of such complex systems. Those systems are of sufficient value that the features of them that human beings would prefer did not exist must be accepted as part of what they are. That acceptance does not mean we would not try to tinker with systems to eliminate failures and side effects as long as the tinkering did not produce even worse failures and side effects. It does not mean that we must deny the pain and suffering of such natural and human evils, diminish it, as Russell so eloquently described when talking of the suffering of the little girl in *The Brothers Karamazov* (29). He is correct that any theory which denies the girl’s suffering or diminishes its importance, whether in the name of a monotheistic god or in the name of a state political ideology, supports an evil that may be even greater -- that of fooling ourselves, considering the child automatically expendable, and excusing unnecessary cruelty.

At the same time, however, we should not fall into an utopian trap in our thinking, falsely believing that we can have dynamic systems without accepting the nature of those systems. There are even practical things we can do to make such systems more responsive to our needs and interests, as part of those systems. We can ameliorate some of the harshness of feedback mechanisms, although that must be done carefully and with understanding of systems dynamics. There are, for example, alternatives to Malthusian mechanisms for damping overpopulation, and we need not be limited to starvation and pestilence as the only mechanisms. We know there is an inverse correlation between rising standard of living and birth rate. As countries achieve a certain level in the standard of living, the birth rate begins to decline. The negative feedback mechanisms do have a time lag, and this makes their use problematic, but not impossible. Will we then

achieve an utopian living standard and birth rate? No, because there are certain consequences that come with a rising standard of living, and that involve issues of pollution and resource use.

Enki and the Sumerians had a more sophisticated and more scientific understanding of population control, a brilliant insight if one considers that the ancient world did not have an overpopulation problem. In *The Meaning of the Flood*, Enki opposes Enlil who sent the flood to destroy humans: "...how is it -- how could you -- without talking it through, send the flood? Punish the one who commits the crime; punish the evil-doer alone! ...Instead of your bringing on the flood: let lions rise up and cut the people low. Instead of your bringing on the flood: let the world rise up and cut the people low. Instead of your bringing on the flood: let famine be set up to throw down the land. Instead of your bringing on the flood: let plague rise up and strike down the people. I, I did not unconceal the secret of the great gods." Enki manages to save humanity by these means, setting "life and death in a kind of balancing act." (30)

Or take the example of pathogen control. We have the means (at least for a brief time more) to use medications to stay ahead of pathogens that attack our physical organism. Use of such medications gives relief from physical suffering and death. At the same time, within the biotic system, the pathogens have evolved methods of circumventing such techniques as antibiotics. Multiple resistance to such medications has been growing for twenty years and is approaching a critical point. Built into the use of the medications is the failure eventually of the method. This reality requires that we have other methods in the pipeline to employ when current methods fail, and the human/microbe interaction is very much like a hamster on a treadmill. To stop or stagnate is to guarantee failure.

That is a crucial point often missed by Luddites and Friends of the Earth types. To do nothing, within a dynamic system, is to do a very major something. It is to allow the developing status quo to continue to its end, which may not be an end that meets either human or systems interests and functions. In the most extreme case, to do nothing could occur in a completely static environment which approximates death or lifelessness. That might easily be a description of the cosmos before Lucifer transacted with it, of the potential of the human species before Lucifer, Eve and The Watchers did, in fact, do something. Intervention and risk taking are components of this choice for a dynamic

system, important value features. They are also components of the system itself, as mechanisms up and down its levels function to intervene and risk in order to continue the controlled-state oscillations of the system. Risk and intervention are cosmic values, objective in the sense that they are part of a dynamic cosmos, a reflection of the nature of that cosmos. They are there to be discovered by ethical theories, not subjective, not culturally or historically relative, not ideological, not process-consensus -- but natural and therefore objective.

Lucifer, Eve and The Watchers risked by choice and by objective nature because they are dynamic systems within the dynamic system of the cosmos. Risk defines them, and defines them as ethical beings. What they oppose is an unrealistic picture or concept of reality. There is an awesomeness and rightness about their decisions and actions, a self-developing rather than self-destructing nature to them that demands respect.

**“One god -- let him be slaughtered, so the gods
will be purified, immersing. Into his flesh and
blood Nintu will mix clay so god and human
are mixed -- lumped together in clay! We will
hear the kettledrum for the rest of time! In the
flesh of that god is spirit: signs of it will
proclaim it in the living so there will be no
forgetting that this spirit exists!”**

God and Humankind Mixed, Sumerian Poem