

Adam, Eve, and Agriculture: The First Scientific Experiment

By

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Abstract:

Genesis offers little to no evidence for the traditional interpretation of humankind's fall into sin and evil. Rather it dramatizes the movement from hunter-gathering mixed economies to the beginnings of agricultural civilization, inaugurated by Eve's decision to test God's word and discover for herself and thereby gain for all humankind a method for knowing good from bad, right from wrong, true from false.

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The standard interpretation of Genesis holds that by coming to know good and evil mankind fell into a state of sin and womankind into something even worse; and we did so primarily because the first female like all her female progeny lacked right reason and good sense. Well, that interpretation is simply wrong, not because I find it disagreeable and unpleasant, but because it is not true to the text. However, so ingrained into our thinking has that misinterpretation become that even a remarkable woman scientist cannot bring herself to come right out and simply state that the interpretation is wrong. Lise Meitner writes correctly enough that “the Bible has contributed to the discrimination against women by the role it has assigned to Eve in Paradise. It is Eve who bears the chief blame for the sin against God’s commandment.” What I will contend is that Eve bears responsibility not for our fall into sin, but for inaugurating a revolutionary method of thinking that, after the creation of the world, resulted in the origin of human civilization.

The now familiar, authoritative interpretations that have accrued over the centuries have served to justify the arbitrary control ruling elites have exercised over the presumably sinful many and have successfully limited women’s and men’s potential in numerous endeavors throughout Christian civilization. However by situating the story where it properly belongs we might eliminate many of the interpretations which have no warrant in the narrative and thereby gain a better understanding of its more probable import.

We might start by recognizing that in fact the story of Adam and Eve meant

very little to the people who first inherited it. No book of Hebrew Scripture makes mention of an event in the garden which according to Milton's *Paradise Lost* is supposed to have brought "all our woe" into the world. And if, as traditionally taught, the sin of sexual desire played such an important role in tempting our first parents, how do we explain that sexual pleasure is celebrated throughout Hebrew Scripture and appears no less enjoyable nor any more guilt-ridden outside the garden than it was within it? Nor is there anything in the 613 commandments and prohibitions contained in Hebrew Scripture having to do with anything like a hereditary sin original to our being. Jesus' teachings also make no mention of an evil inherent in our nature.

If we would actually read the Bible in place of listening to what others tell us the Bible says, we will find that Genesis depicts no fall by which humankind dropped from a higher to a lower state of being. There was no ontological descent. The movement was horizontal and not vertical: Adam and Eve were simply displaced from the garden where food was abundantly available: "No more free lunch."

Fundamentalists who insist on the literal inerrancy of books like Genesis find that their interpretations are contradicted by modern geology, biology, cosmology, the books themselves and God knows what else. But there is considerable anthropological and archeological evidence to support the Genesis account of ancient history if we regard it from the perspective of what the people who composed it were truly familiar with and could in truth bear witness to. And if we do we will find that what it tells us is of no small importance. Genesis portrays

what Richard Leakey and Roger Lewin have called “the most significant event in the history of mankind”: the “invention of agriculture.” As the anthropologist, John Pfeiffer, put it, the “shift from hunting-gathering to agriculture” marks “the most radical development in [humankind’s] evolutionary record.” The agrarian revolution, or more correctly the evolution of agriculture, occurred independently in several places round the globe: in Meso-America, the Andes and Amazonia in the Western Hemisphere around 3500 B.C.E., in the far East by about 7500 B.C.E., but it first occurred in southwest Asia, in the Fertile Crescent and then greater Mesopotamia around 8500 B.C.E.--the area in and around modern Iraq which scholars take to be the area described in the Eden story. And the notion, similar to what we find in Genesis, that humankind enjoyed a better life before the advent of agriculture persisted into the time of Ovid (42 B.C.E.-18 C.E.) and well beyond. *Metamorphoses* notes that at one time “Earth, untroubled,/Unharried by hoe or plowshare, brought forth all/That men had need for, and those men were happy,/Gathering berries from the mountain sides,/Cherries or blackcaps, and the edible acorns. . . ./Earth unplowed, brought forth rich grain; the field,/Unfallowed, whitened with wheat.”

The story of Eden was thus transmitted in the same area and around the same time period that agriculture first evolved, from approximately the 10th through the 9th centuries B.C.E. in ancient Mesopotamia, and it reached its final form in settlements which had long ago selected and cultivated a variety of edible plants. But before humans began domesticating food and even long after, much of the plant life they encountered was not edible--only about .1% per acre in the wild

is edible as compared with 90% per cultivated acre. Moreover a lot of the fruits that looked tasty to the innocent eye could be poisonous, and anyone who didn't learn to discern good fruit from bad might surely die. So if we situate the Eden myth within the context and from the perspective of people acquainted with the benefits and hazards of gathering sustenance from the wild, a people also well acquainted with the difficulties of farming and the troubles of a civilized life, the story takes on a significance different from the tales of disobedience and sin we have come to know and accept.

The events portrayed in Genesis tell of humankind's emergence from a mixed economy of hunters, gatherers, and gardeners to a complex society including hunters, gatherers, gardeners, but now also farmers and herders. Moreover, just as the industrial revolution was made possible by a prior revolutionary shift in the way men regarded the world, so, according to Genesis, did Eve initiate a fundamental change in the way our ancestors looked at things which led to the advent of the agricultural way of life. It depicts what other sources confirm, that civilization, with all its advantages and difficulties, arose out of a particular kind of knowledge that humans originally acquired--a knowledge, in this instance, of how to plant and harvest food.

As Pfeiffer has noted, the "hunter-gatherers on the verge of agriculture," the "first farmers or proto-farmers seem to have been gardeners," living in or near "gardens containing a few fruit and nut trees," but growing in "apparent disorder" so that the gardens looked like "miniature versions or imitations of the . . . forests surrounding them." So although Adam lived in a garden that appeared hardly any

different from a natural forest, we might guess that he was not only a gardener—more likely he left the gardening to Eve--, but also a hunter--or if you prefer, he was envisioned by people who were hunters to be someone who knew how to hunt, if only for the reason that Adam could name all the birds of the sky and all the wild beasts. Modern city folk hardly know what they're eating because it comes to the table ground up or cut up in chunks, and when they go into the wild they know a bird from a beast, but they can't name very many without a wrapping label attached. Should they get seriously lost in the wild with no restaurant or grocery in sight, they would not have sufficient knowledge regarding which animals are easy to catch, which dangerous to stalk, which animals or plants might be inedible. In antiquity and well beyond, civilized men retained the ability to hunt and were extolled for their abilities as hunters. Nimrod was not only a king but “a mighty hunter” (Gen.10.9). So in his day Adam had to know, or to learn very quickly, not only about all the animals, but he and Eve also had to be acquainted with all the plants, particularly since they were going to be gathering their food from the wild and not be harvesting crops they had planted.

And what about Eve? What did she know? Obviously she knew how to gather fruit. No doubt one of the purposes of the legend is to justify the rule of men over women within the family (Gen. 3.16), but there is nothing to suggest, what so many commentators have proposed, that Eve was and all her daughters are more culpable because she ate from the forbidden tree first and seduced Adam into sin. Tertullien's remarks are typical: All women, he said, derive from Eve “the ignominy, I mean, of the first sin, and the odium (attaching to her as the cause) of

human perdition. . . . And do you not know that you are (each) an Eve? The sentence of God on this sex of yours lives in this age: the guilt must of necessity live too. *You* are the devil's gateway; *you* are the unsealer of that (forbidden) tree: you are the first deserter of the divine law."

But more significantly, the people of Hebrew scripture did not subsequently disparage their women the way theologians like Tertullien would. Rather they desired, loved, and praised them for everything from their sexuality (see esp. Songs of Solomon) to their intelligence and skillfulness; and when they did assign women an inferior social status, it was never justified on the assumption that the sentence of God rested on their sex. Milton was only one of many who assumed that Paradise would not have been lost had Adam not been so uxorious, yet the children of Israel voiced no such concern or opinion. Infatuation with one's wife comes highly recommended, even to the extent that newly married men were relieved of military service for one year so that they might dote on their wives. As we shall see, a good wife's skills and abilities were duly noted and celebrated, but perhaps the most significant point to note regarding God's supposed sentence on Eve and her daughters is that no such declaration can be found within Hebrew scripture. In fact Eve is mentioned nowhere outside of Genesis and is not referred to again until we get to The New Testament where she is faulted for having been deceived and then transgressing, and her supposed sins are cited as the reason why all women must be modest and submissive (see 2 Cor. 11.3 & 1 Tim. 2.13ff.). The idea that special guilt attached to every member of the female sex began as a Christian not a Hebrew myth, and from the first it was based on a deliberate misreading of

Genesis.

No doubt those who first told the story of Adam and Eve could more readily imagine Eve giving fruit to Adam because, according to the division of labor that existed within mixed economies, it was typically the women who did the foraging for food and brought it to the base settlement; and it was also the women who took the children with them and gave them firsthand knowledge of how to gather food from the wild while the men were off hunting, or later while they were busy farming. But what kind of fruit was it?--by which I mean not whether it was an apple, an apricot or a fig, but whether it was edible or inedible fruit. Everything within the story would seem to suggest that it was edible; even so, we can understand how the story of Adam and Eve was informed and shaped by the familiarity the people who first transmitted it had with inedible plants growing in the wild. After all, the Tree of Knowledge did not grow from seeds that humans had selected and planted.

Before humans first began domesticating plants about 10,000 years ago, they gathered all they ate from the wild, and they continued to do so long after they began tilling the soil; and just as Adam had to know every animal, so did Eve have to know every root, grass, shrub and tree. Not only were most all plants inedible, but many that appeared tempting to the eye could be poisonous. Some which appeared harmless because other animals fed off them could still be toxic to humans. Others which were edible might grow on trees inhabited by deadly serpents, and one had better look carefully before reaching out to pluck the fruit. The serpent after all was the craftiest of creatures. It could sneak up and be right

on top of you before you even noticed it. For the uninitiated, foraging for edible food was an activity fraught with considerably more dangers than farming or shopping at the bazaar. Pfeiffer again: Through “the process of trial-and-error learning,” many “people must have died mysteriously in remote times before dangerous plants were positively identified.” Obeying one’s parents or elders and not eating from plants they forbade you to eat from was obviously a lot safer than learning by trial and error what was and was not good to eat; still and all, despite its hazards and uncertainties, learning by trial and error, then as now, provides persons with abilities and independence no amount of obedience can supply; and that as we shall see is a lot of what Genesis dramatizes for us.

As we have been noting, the Tree of Knowledge of Good and Bad has traditionally been interpreted as a temptation and eating from it an act of disobedience for which Adam, Eve and all their decedents are punished. Milton for one wrote a whole epic of our first disobedience and the fruit of that forbidden tree with the stated intent of justifying the ways of God to man. William Blake thought God’s ways indefensible, and in poems like “The Poison Tree” and “The Human Abstract,” he described the fruit of the tree as a product God’s cruel deceit. Other commentaries having to do with original sin, sex, death, free will, and God’s mysterious ways are endless. But what if all the fruit then, even more than now, wasn’t so good to eat? In the next generation, Cain will cultivate fruit and offer it as a tribute to God, and we can presume that even though God did not particularly take to it, it was all good to eat; but Adam and Eve who were gathering fruit from the wild couldn’t afford to believe that it was all good to eat, and in fact God tells

them that it is not. If we try to see the story from the perspective of people who gathered a significant portion of their food from the wild, then the tree can be seen more as a possible danger rather than a temptation, God's prohibition not a purely arbitrary command, but a proper warning, and Eve's and Adam's eating of the fruit, not entirely an act of disobedience to God's seemingly arbitrary will, but a curious and maybe even careless decision. In other words, the original force and meaning of the story could very well have derived to a great extent from the warning every elder gave to every youngster in every society dependent on hunting and gathering. It served as an object lesson in terms that any child would have well understood regarding what happens if anyone ignores what their elders tell them and goes on their own to eat from the wild: Do it and you could die.

So what if anything did happen in the garden? Undeniably what did happen is that the eyes of Adam and Eve were opened; they became like God knowing good and bad. What is deniable is that the knowledge they acquired was of some great moral import.

The endless theories respecting what it is that Adam and Eve come to know reflect the fact that the Bible does not tell us what they come to know at the moment they eat the fruit from the tree. If it did there wouldn't be so many theories. There'd be only one: the correct and valid one. How many competing theories are there respecting the content of the Ten Commandments? If the specific things Adam and Eve came to know were important enough to reveal, we would expect Genesis would have spelled out what they learned just as Exodus enumerates God's commandments to the children of Israel.

Nevertheless Genesis does indeed offer a most important insight regarding human knowledge, but it does not come by way of detailing for us *what* Adam and Eve come to know, but *how* they come to know. It reveals that when Eve and Adam eat the fruit of the Tree of Knowledge they move not from ignorance to knowledge, but from knowledge given to knowledge acquired on one's own. Humankind's "fall" from God, its break from divine authority, comes with Eve's testing of God's word--with her decision to explore God's world on her own and thereby to discover for herself what is good and bad about it. In effect, civilization is inaugurated when one woman is no longer satisfied with simply accepting what she has learned from others, but seeks to discover and test *scientifically* whether what she has been told is actually true or not.

Thousands of years after Genesis, Galileo complained to Kepler that "philosophers of our University . . . believe that truth will be discovered . . . through the comparison of texts rather than through the study of the world or nature." This may not at first seem to be a very significant difference, and perhaps that is one reason why it took so long for men in the modern era to realize what Eve discovered thousands of years before, that reliable and valid knowledge can come only by experiencing for oneself what is good and bad, right and wrong.

Despite the difficulties and frequent dangers of trial and error research, there are many advantages to learning on one's own. One of the most important has to do with the difference between *knowing that* and *knowing how*. One may know that certain plants are poisonous because God, her husband or her mother told her so, but that kind of knowledge does not give the person the ability to discern

poisonous from edible plants, or if need be, knowledge about how to make plants grow that are nourishing and good to eat. Knowing that something is the case does not automatically imbue a person with know-how.

So, in the beginning, before the advent of literacy and with nothing around for Adam to read, with no signs tacked onto trees, God has to tell him that he should not eat from a specific tree. However, what is significant in the telling is what God does *not* reveal to Adam: God does not teach him how to tell good trees from bad. That is what Eve learns through the serpent because it is the serpent who intimates to her a different *way* of learning--a way which is indicated by the very name given to The Tree of Knowledge. The stem of the word for *know* in Hebrew, *yd'*, implies knowledge that is acquired through experience. Thus Hebrew Scripture uses the term in a now familiar application when it speaks of sexual relations in terms of “knowing” a woman, meaning *experiencing* a woman; and the phrase “tree of knowledge” also contains the same root: Compare Genesis 4.1: “the man knew [*yah-dah*] his wife” with Genesis 2.17: the tree of “knowledge” [*dah-aht*].

The word *knowledge* which appears in the phrase “tree of knowledge” specifically indicates knowledge of an experiential type. The Tree of Knowledge which Eve and Adam eat from stands for what we would now identify as practical, empirical knowledge. What they bequeath to all humankind is neither evil nor sinfulness, but an understanding of the significance of practical knowledge gained through experience. What Eve acquires is very much the same kind of knowledge that the ancient Greeks understood Prometheus to have given to humankind.

Before Prometheus gave “all the arts that mortals have,” humans “had eyes but saw no purpose; they had ears but did not hear.” They “handled all things in bewilderment and confusion [. . . ,] without intelligent calculation.” And among the things that they did not know was how to tell “the flowering of spring nor the summer with its crops” (from Aeschylus’ *Prometheus Unbound*). And we should recall that Prometheus was also punished by a jealous god for his transgression.

In the end we really aren’t told because it does not really matter what if anything Adam and Eve find out about the tree itself, whether what God told them about it was true or, as the serpent tells them, not quite so. What really matters is that Eve and Adam become like God by acquiring the skill needed to know things without having to be told; and if that’s the case, well then, they might as well leave God’s garden--“If that’s what you really want, you don’t need me anymore”--and start cultivating plants on their own--which in fact is what they do.

There are nevertheless good reasons why Genesis presents the adoption of agricultural economies as leading to greater hardship. Modern research does indeed bear out our nostalgia for a former existence. For hunting-gathering societies did not involve, as many often like to think, a life of continual misery and insecurity scabbling for meager amounts of food to fend off starvation. After all, the hunting-gathering way of life was good enough to sustain humans for three million years. Their life as described by Leakey and Lewin sounds a lot like paradise: “Childhood is carefree; adulthood is easygoing; and old age is relatively secure.” It is an idealized view no doubt, but then so was the ancient vision of paradise which in its luxuriance is hardly typical of the kind of conditions under which

humans first lived.

No doubt the removal from Eden reflected in part the nomadic life of hunter-gathers who regularly had to leave a particular area when the seasonal plant growth was diminished or exhausted or when grazing animals re-located or when population densities got so great that the available resources no longer sufficed to maintain increased population levels. Even with the adoption of village settlements, many of these early villages in Mesopotamia did not provide permanent habitation. Villagers or a group within the village regularly moved to new locales, as we find the people of Genesis doing. Such movement meant encountering novel vegetation over the next hill and new uncertainty in the fresh new valley as to which plants were edible and which poisonous. Nevertheless, it is clear that the move described in Genesis involved a permanent and revolutionary change: Adam and Eve will no longer live a carefree, easygoing, secure life in a luxuriant garden where so many good things to eat are there simply for the taking. Adam, the occasional hunter who left the gathering to Eve and may have pattered around with her in their garden, is transformed into Adam the farmer who now has to work by the sweat of his brow.

The first generation after the expulsion from paradise completes the transition to a sedentary agrarian economy: Cain is a farmer and Abel a shepherd. But the domestication of plants and animals did not, as we also often would like to think, bring about an easier way of life, as Pfeiffer for one has noted: “From the start agriculture was never as reliable as hunting-gathering Farming always represented a gamble with high stakes. . . . It increased . . . the danger of

widespread famine. . . . Insect pests, disease, and the vagaries of weather probably led to crop failures two to four times every decade or so.” Counter strategies required “building up abundant reserves” of food which meant that people now had to “work long and regular hours.” Working “long and hard and regularly . . . ran directly counter to . . . the old days when the wilderness offered all the food needed.” The vagaries of farming would become painfully evident in ancient Egypt as well as the need to adopt the counter strategy that Joseph recommends to Pharaoh, of building up abundant reserves; and in the beginning, Genesis forecasts the kind of misery and uncertainty that the post-Edenic, agrarian way of life would immediately bring:

Condemned be the soil. In toil you shall eat of it all the days of your life.
Thorns and thistles shall it bring forth for you.

When you till the soil, it shall not give up its strength to you.

[Men] work and toil [without] relief [on] soil which Yahweh . . . placed under a ban.

(3.17-8, 4.12, 5.29)

After humankind migrated from Eden, the curse of having to work long days and nights to sustain one’s family falls upon the daughters of Eve as well: “a good wife” Proverbs (10-31) tells us “does not eat the bread of idleness.” She “works

with willing hands.” She “rises while it is yet night and provides food for her household She considers a field and buys it,” and her “lamp does not go out at night.” Hardly a description, like that which Christianity has given us, of those foolish and inferior creatures whose ancestor first tempted mankind into sin. In the post-Edenic world, women equally along with men are burdened with hard work and the need to provide for the household, and they are apparently quite good at it.

And while Sophocles dramatized how the Thebans removed the plague the gods put on their land by sending king Oedipus into exile, Genesis, on the other hand, shows how Pharaoh was able to stave off mass starvation, not by propitiating his gods, but by taking the advice of Joseph, one of his prisoners. For better and for worse, what results from the knowledge Eve and Adam acquire is independence from divine authority, an independence that is manifested by the ability of their descendents to work productively within the world without always having to pray for help.

Like subsequent books of Hebrew Scripture, Genesis tells not of a fall into an evil state of being, but of humankind’s failure to successfully adapt to and make the best of novel cultural, social and political conditions. And modern archeological evidence does indeed confirm Genesis’ description of an earth that once seemed so good and plentiful now appearing to have been condemned and placed under a ban: Ancient skeletal remains reveal that the average height of hunter-gatherers in parts of the middle-east towards the end of the Ice Age (around 11,000 B.C.E.) were 5 feet ten for males and 5 feet 6 inches for females, whereas among the remains from farming communities around 4000 B.C.E. the average male is around 5'6" and the female 5'1". Studies of thousands of Amer-Indian remains show an increased mortality rate at every age with the adoption of agriculture. Apparently hunter-gatherers had a better-balanced diet of proteins,

vitamins and minerals as compared with the high-carbohydrate diets farmers favor.

It is also significant with respect to the domestication of plants that fruits were and are the least valuable food source. Archeological digs in and around the earliest village settlements show the remnants of an agriculture based on legumes (like peas and beans) and grains (like wheat and barley). These crops are rich in carbohydrates and contain some proteins. Fruits like dates were cultivated because dates can also provide a rich, long-term energy source, and they can be preserved and stored for long periods. A lot of fruits however are not at all rich in carbohydrates, and they cannot be preserved for any length of time before they begin to spoil. The forbidden food is a fruit most likely because many fruits were still largely gathered from the wild long after humans began cultivating more nourishing legumes and grains. Moreover, fruits remain or appear to be “wild and undomesticated” food sources even within highly developed agrarian societies because they are almost invariably eaten raw, right off the branch or bush without any preparation--no threshing, mashing, cooking, storing--other than perhaps peeling. One can also imagine that in terms of the flow of the narrative, it would have been too distracting if Eve had to take the time needed to prepare chick peas for herself and Adam: “What are you doing? Are you cooking the peas that God told us not to eat?” That just wouldn’t work!

What is also significant about Joseph in Egypt is not simply the kind of knowledge he possess, but that he possess innate abilities that God’s first creatures did not at first appear to possess. In retrospect we might say that when they eat from the Tree of Knowledge, Eve and Adam become like Joseph--they acquire for themselves and their descendants the God-like wisdom and discernment that is so evident in a man like Joseph; and then generations later, God gives to Joseph what he initially had not bequeathed to Adam and Eve.

The people who transmitted the story of Adam and Eve were not only very much aware of this great acceleration in thought and documented it for us, but they also understood the fundamental importance of language in the development of human societies, how it gives humans the ability to transmit knowledge and information within a given linguistic group and makes all kinds of technical and scientific achievements possible: “they have all one language; and this is only the beginning of what they will do; and nothing they propose to do will be impossible for them” (Gen. 11.6).

Augustine offered what would become the typical and predominant interpretation of the Eden story. He said that “human consciousness was repressed by the Fall.” Julian writing *Against the Galileans* believed it “absurd to think that God would withhold knowledge that would make [man’s] mind complete.” Of course it’s absurd, and we, like Julian, know full well who perpetrated the myth of God withholding knowledge from a fallen humanity with a repressed consciousness; and in addition we also know who wrote about God endowing with wisdom Joseph or Solomon or the women praised in Proverbs. Mankind’s consciousness was not repressed by any Fall. Just the opposite occurred in Paradise: a woman raised all of humankind’s consciousness to the possibilities that immediate knowledge of the world could bring.

G.E.R. Lloyd writing about *Greek Science After Aristotle* notes that “to reject authority in favor of first hand observation was the aim of the earliest Greek philosophers.” But the Greek philosophers weren’t the earliest men to aim in that direction. The rejection of authority in favor of first hand observation is precisely what Genesis dramatizes. It is an account of what has to be considered the first scientific revolution in human history, a revolt against authority which has characterized scientific inquiry ever since; and in its own way, Genesis can hold its

own with many of the moderns in advancing a philosophy of science. Thousands of years later humankind re-discovered what Genesis showed Eve and Adam coming to understand: the value of empirical knowledge. Rene Descartes put it this way in a book he titled *On Method*: “I thought the sciences found in books . . . do not approach so near to the truth as the simple reasoning which a man [or we might add, a woman] of common sense can quite naturally carry out respecting the things which come immediately before him.” Similarly Francis Bacon, sounding a lot like the serpent in the garden, wrote that he wished to lead men “to things themselves” so that “they may see for themselves”; and he called upon them to “cast themselves completely loose from received opinion,” and “to make trial for themselves” by seeking “knowledge at the fountain” (*The Great Instauration*).

It is however Galileo who is usually considered the father of modern, empirical science; and the radical nature of his approach, along with the trouble it would get him and others into, is clear from remarks he made in a letter to Benedetto Castelli: “I do not think it necessary,” Galileo wrote, “to believe that the same God who gave us our senses, our speech, our intellect, would have put aside the use of these, to teach us instead such things as with their help we could find out for ourselves.” And he certainly understood how liberating finding things out for ourselves could be, how, as he said, to want “people to deny their sense” is to “subject them to the rule of another.” In light of subsequent events in human history, we might look back at Genesis with the realization that even though God punishes Adam and Eve for disobeying him, he never withdraws from them the knowledge they have gained. Hans Reichenbach has remarked that “Galileo’s great achievement was that he resorted to the direct investigation of nature.” He was the first significant modern researcher to practice what Bacon and Descartes called for. Yet if what the Bible tells us has any truth to it different from what others have

assumed, well before Galileo, Descartes, or Bacon, Eve became the very first human being to ignore what she had been taught and with her own senses and intellect began the investigation of nature at its source. In so doing, she established the scientific method of inquiry that would inaugurate the beginnings of human civilization, a method which has continued to sustain and advance it ever since. No question that Eve was blamed and punished for what she did, as would many scientists throughout history who would also ignore authority and inquire into nature on their own. Yet, as we have noted, women are understood and represented throughout Hebrew Scripture as quite capable of taking their own initiative and wise and intelligent enough to succeed at what they attempt; so there should be no question as to why Genesis has a woman take the first step toward the most significant revolution in human history. The tremendous success of modern science is attributable to the emphasis it has placed on empirical knowledge. But apparently the ancients understood its superiority as well, for when Eve and Adam ignored what they were told and went to the thing itself to see and make trial for themselves, they did exactly what natural philosophers centuries later would recommend for the advancement of learning.

The realization that knowledge can best be gained not by accepting what others have said or written, even ignoring those writings said to be the word of God, but by seeing and reasoning for oneself respecting the things which come immediately before us helped to give prominence to the scientific way of thinking. But that revolution in thought was in fact but a re-discovery of the very insight the people of Mesopotamia bequeathed to humanity thousands of years before: that humans can acquire God-like knowledge by experiencing things for themselves. Their discovery corresponded with what was indeed the first scientific revolution which occurred in ancient Mesopotamia and which made the agrarian revolution

possible, just as what was in fact the second scientific revolution made industrialism possible. And what humankind has accomplished in science, technology, and thought in the centuries since its eyes were opened again has turned out to disturb the relationship between man and God even more profoundly than the first.