

Editor's Note: The author of the textbook below, which you are free to download and use in your own classes, is Professor Roger Conner Having taught minority and ESL community college students at the City Colleges of Chicago Harold Washington Community College and elsewhere for over thirty years, Professor Conner has also done yeoman's duty as a staff member for the FIPSE and NEH grant work housed on this web site and has been involved in practically every aspect of its production.

Faith and Reason

A Theme Based Great Books Centered Textbook

By Professor Emeritus Roger Conner
Harold Washington College

Introduction

Most school reading programs are carefully designed so that students are not presented with readings that are above their “grade level.” Therefore, unless you read a lot on your own, you may never be challenged to move to more difficult, fully adult writing. Furthermore, standardized reading tests carefully limit references only to that information that every person taking the test will be familiar with—the least common denominator.

But the reading that educated Americans encounter not only has a challenging vocabulary—writers for magazines like *Time* and *Newsweek* regularly use a vocabulary of 80,000 words—but it also expects you to recognize thousands of allusions—names, phrases, and ideas that have been famous for generations, many for 2,000 years or more.

Anyone who has watched *The Simpsons* knows that the writers expect viewers to recognize it when they imitate scenes from famous movies and TV shows (one critic found over 150 such allusions, and even a dozen or so references to Dickens, Hemingway, Homer [the other Homer], Melville, Poe, Shakespeare, Steinbeck, and Tennessee Williams). With *The Simpsons* viewers can enjoy the show even if they aren't familiar with this cultural vocabulary, though almost every show contains some. But everyone knows the little charge one gets recognizing a tune or the voice of a famous actor. It's the pleasure of being in on a joke.

With more serious writing, it's often difficult for readers to actually get the meaning if they do not recognize references to classic authors and ideas. But the pleasure of such recognition is even greater, because it makes one feel like an insider on a conversation that has been going on among many wise people for a long time. Some of the most famous phrases from this conversation can be found scattered throughout this book, along, of course, with passages from those authors. These canonical writings are paired with contemporary short prose pieces that show how writers today make use of this cultural vocabulary to strengthen their own thinking by situating it in this long tradition. Reading these writers will also provide practice in looking for those allusions and, hopefully, inspire readers to go to the encyclopedia (there is a good one on the Internet at http://en.wikipedia.org/wiki/Main_Page) even outside of class to discover the wealth of ideas that are our intellectual heritage.

The great seventeenth-century thinker René Descartes finding that schools had not given him everything he wanted, summed up his experience with simple eloquence:

I did not cease valuing the exercises which kept people busy in the schools. I knew that the languages one learns there are necessary for an understanding of ancient books, that the gracefulness of fables awakens the intellect, that the memorable actions of history raise the mind, and if one reads with discretion, help to form one's judgment, that reading all the good books is like a conversation with the most honest people of past centuries, who were their authors, even a carefully prepared dialogue in which they reveal to us only the best of their thoughts, that eloquence has incomparable power and beauty, that poetry has a most ravishing delicacy and softness, that mathematics has very skillful inventions which can go a long way toward satisfying the curious as well as facilitating all the arts and lessening the work of men, that the writings which deal with morals contain several lessons and a number of exhortations to virtue which are extremely useful, that theology teaches one how to reach heaven, that philosophy provides a way of speaking plausibly on all matters and makes one admired of those who are less scholarly, that jurisprudence, medicine, and the other sciences bring honor and riches to those who cultivate them, and finally that it is good to have examined all of them, even the most superstitious and false, in order to know their legitimate value and to guard against being wrong.

In order to focus that sense of participating in an ancient but still lively dialogue, this book centers on the question of *faith versus reason*. Wars have been fought over this issue, and the *reason* side is enshrined in our Constitution (First Amendment) in order to forestall such bloody conflicts. But the often virulent debate still goes on in many of our foremost public issues: abortion, school prayer, school dress, public posting of the Ten Commandments, and public displays at Christmas/Hanukkah, for example.

To put this debate in perspective requires a journey back in time about 2,500 years (along with Bill & Ted in their Excellent Adventure, if you've seen that wonderfully goofy movie in which two airhead history students, about to flunk their history course, are given the opportunity to travel back in time and meet and collect famous historical figures—among them Socrates). Actually it is Socrates' student Plato and his student Aristotle who set up the framework for our story. Plato thought that our ability to give quite different-looking things the same name—"chair," for example, as distinct from "couch" or "stool"—meant that our minds are in touch with an unseen world of ideas. Every chair we see, he believed, is just an imperfect copy of the "real" chair—the ideal chair we "see" with our minds. Somewhere in that "heaven" of ideal forms is also an ideal Good which we grasp intuitively (believing in it by *faith*) and strive to live up to in this imperfect world below.

Aristotle begged to differ. He did not believe that this world is all that chaotic. He believed our *reason* was capable of explaining where the things we see come from, how they are formed, and what purpose they serve. As we shall see, the influence of these thinkers on our culture has been profound. All the arguments we use on the controversial topics of today can be traced back through a long lineage of writers who, consciously or not, have been influenced by Plato and Aristotle. The great twentieth-century mathematician Alfred North Whitehead proclaimed that the European philosophical tradition "consists of a series of footnotes to Plato."

Table of Contents

The contents of this book are as follows:

- 1. *Aristotle's Children*, by Richard E. Rubenstein
- 2. *The Refectory*, by Henry Wadsworth Longfellow
- 3. *Dialogue of a Philosopher with a Jew and a Christian*, by Peter Abelard
- 4. *Letter to Cardinal Haimeric*, by St. Bernard of Clairvaux
- 5. *She Converted and Now Wants to Be a Rabbi*, by David Brooks
- 6. *Sonnet*, by John Donne
- 7. *An Essay on Man*, by Alexander Pope
- 8. *Candide*, by Voltaire
- 9. *Headlines You May See in 2005*, by Gersh Kuntzman
- 10. *The Antiquity of Man*, by Charles Lyell
- 11. *Evolution of a Dichotomy*, by Ron Grossman
- 12. *Faith Is a Fine Invention*, by Emily Dickinson
- 13. *"A Different Universe": You Are More Important Than a Quark*, by Keay Davidson
- 14. *Discourses*, by René Descartes

1

Our first reading selection outlines the exciting story of how the enormously important writings of Aristotle—“the master of those who know,” as the famous Renaissance Italian poet Dante called him—were nearly lost and then recovered.

Aristotle’s Children

**How Christians, Muslims, and Jews Rediscovered Ancient Wisdom
and Illuminated the Dark Ages**

By Richard E. Rubenstein

(Harcourt 2003 ISBN 0-15-100720-9)

<p>THERE ARE FEW stories more appealing than tales of ancient knowledge long lost, then astonishingly found. In the classic version, an unsuspecting discoverer uncovers buried tablets¹ while digging in a field, stumbles upon clay jars in a cave, or finds a dust-covered lamp or chest in the attic. Worthless junk, surely. On the verge of discarding it, however, the finder hesitates. What odd signs and symbols are these, etched² in the metal, inscribed³ in stone, or inked on rolls of stiffened parchment?⁴ Perhaps the musty old thing has some value after all. The innocent discoverer has no idea, of course, that these arcane⁵ markings embody the voices of a vanished world. Someone more knowledgeable will have to recognize the relic⁶ for what it is: an intellectual treasure far more precious than gold or jewels. A source of ancient wisdom and power. Yes—a potent talisman⁷ capable of conjuring⁸ up the past, altering the present, and disclosing the path to the future.</p>	<p>A dust-covered lamp—The classic story is, of course, “Aladdin” from <i>The Arabian Nights</i>. You can find the tale on the Web at: http://mfx.dasburo.com/an/a_night_29.html You can also see the Disney movie <i>Aladdin</i> if you haven’t already.</p>
<p>Could there be hidden in some long-forgotten storehouse a treasure trove of ancient knowledge—a body of learning so powerful and advanced that recovering it would revolutionize our thinking and transform our lives? From the standpoint of modern science, the notion is utter fantasy. We understand that scientific learning is cumulative, with each generation building on the work of its predecessors. We know a great deal more about the universe than our grandparents did, and their knowledge far outweighs that of their ancestors. Looking back, this implies a law of diminishing intellectual returns⁹—a regression¹⁰ in knowledge that, projected back a millennium or two leaves little room for the “secrets of the ancients.” Moreover, the old documents we do discover, like the Dead Sea Scrolls and the Gnostic Gospels, do not contain revolutionary truths. As fascinating as they are, they do not threaten to overthrow our worldview, transform our science, or provide us with new models of social or political or-</p>	<p>Dead Sea Scrolls—a collection of mostly parchment Hebrew manuscripts discovered in caves where they had lain hidden for 2,000 years. They shed light on Jewish history around the time of Jesus, but they contained nothing that changed our basic understanding of the period. Gnostic Gospels—a generally mystical form of Christianity in the second century. An important Gospel of John from that period was discovered around 1940. Its teachings, too, were in line with what was already known.</p>

Table of Contents

<p>ganization. Except in science fiction, one would not expect ancient writings to reveal a practical method of time travel, the secret of eternal youth, or even a cure for the common cold.</p>	
<p>Of course not, seeing that "hard" scientific knowledge is cumulative.¹¹ What one might expect to find in ancient manuscripts is non-cumulative knowledge, "soft" learning involving issues of faith, ethics, folk wisdom, and personal philosophy. When it comes to deciding how to live and die, many people find the stories and sayings of the Bible, the Bhagavad Gita,¹² the Koran,¹³ and other sacred books inspiring, although it is not at all certain how (or even whether) their truths can be proved. "Vanity of vanities, all is vanity"—"Love thy neighbor as thyself."—"God helps those who help themselves." Nowadays people call such thoughts "wisdom," although the ancients themselves would never think of separating ethical, religious, or philosophical knowledge from knowledge of the universe in general. But we have been taught to make precisely this separation. The split between knowledge and wisdom, between the provable, apparently objective truths of science and the intuitive, subjective truths of religion and personal philosophy is a hallmark of what people now call the modern perspective. Ancient wisdom is fine in its place, says the modernist gospel, but when it comes to understanding how <i>Homo sapiens</i> and the rest of the universe are constructed, how they evolved, and how they operate, we will not find much of this sort of learning before the Age of Reason.</p>	<p>Age of Reason, also called the Enlightenment—the period from 1687 (Newton's explanation of planetary motion) to 1789 (French Revolution). People began to put their faith in reason and progress now rather than religious revelation of a happy afterlife.</p>
<p>Yet the idea of lost knowledge haunts even the skeptical consciousness of a scientific age. Banished from respectable discourse, it reappears in the form of legends and folktales about secrets of the pyramids, chariots of the Gods, and powerful relics that guard their treasures against impure investigators. One of the most vivid versions of the myth is that recounted by science fiction writer Arthur C. Clarke, which Stanley Kubrick brought to the screen in his classic movie <i>2001: A Space Odyssey</i>. In that film, modern scientists discover an ancient artifact¹⁴—a black monolith¹⁵—buried on the Moon. Eventually they come to understand that the mysterious object is a bequest from an alien people, a gift planted on Luna eons¹⁶ ago by representatives of an advanced interstellar species. Although the object's discovery seems accidental, the astral visitors who buried it made sure that human beings would find it only when they were prepared to appreciate and use it—that is, ready to take the next step in their social evolution.</p>	<p>Powerful relics—You have perhaps seen the movie <i>Indiana Jones and the Raiders of the Lost Ark</i> in which Harrison Ford tries to beat Nazi searchers to the long-lost Ark of the Covenant containing the original Ten Commandments. The actual story of the travels of the Ark is almost as fascinating. You can read about it at http://www.newadvent.org/cathen/01721a.htm on the Internet.</p>
<p>Unimaginably ancient (Clarke envisions a similar monolith stimulating the original transformation from hominid to man), its real function is that of a "star-gate," a portal to the interplanetary future.</p>	

Table of Contents

<p>Our story, as I said, is not fantasy or science fiction, but the discovery it describes is far more like Arthur Clarke's monolith than the Dead Sea Scrolls. Once upon a time in the West, in Spain, to be exact, a collection of documents that had lain in darkness for more than one thousand years was brought to light, and the effects of the discovery were truly revolutionary. Aristotle's books were the medieval Christians' star-gate. For Europeans of the High Middle Ages, the dramatic reappearance of the Greek philosopher's lost works was an event so unprecedented and of such immense impact as to be either miraculous or diabolical, depending on one's point of view. The knowledge contained in these manuscripts was "hard" as well as "soft," and it was remarkably comprehensive. Some 3,000 pages of material ranging over the whole spectrum of learning, from biology and physics to logic, psychology, ethics, and political science, seemed to be a bequest from a superior civilization.</p>	<p>Aristotle (384-322 BC)—ancient Greek philosopher. This brilliant student of Plato wrote on every subject: science, ethics, politics, poetry, logic, religion. His writings are still used as a reference point in many of these fields today. High Middle Ages 1000-1300—Europe emerged from the "Dark Ages" of lawless chaos which followed the collapse of Roman authority. Cities, churches and centers of learning began to thrive.</p>
<p>Or I should say, from two superior civilizations. For Aristotle's books were not discovered written in Greek and stored in clay jars, but written in Arabic and housed in the libraries of the great universities at Baghdad, Cairo, Toledo, and Cordoba. After the fall of the Roman Empire and the collapse of order in Europe, the works of Aristotle and other Greek scientists became the intellectual property of the prosperous and enlightened Arab civilization that ruled the great southern crescent extending from Persia to Spain. As a result, when Western Europeans translated these works into Latin with the help of Muslim and Jewish scholars, they also translated the works of their leading Islamic and Jewish interpreters, world-class philosophers like Avicenna, Averroes, and Moses Maimonides.</p>	
<p>The result was stunning. It was as if one were to find preserved in an antique vessel not just the works of some ancient Einstein but interpretations, applications, and updates of the material by Einstein himself and other modern physicists. Because of these commentaries, Aristotle's work turned up in immediately usable and highly controversial form. For medieval Christians, reading his books for the first time was like finding a recipe for interstellar travel or a cure for AIDS inscribed on some ancient papyrus.¹⁷ It was the sort of knowledge that is quite capable of overthrowing an existing worldview, revolutionizing science, and providing its readers with new models of human organization.</p>	<p>Einstein—the most influential physicist since Newton. His theory of relativity changed people's way of thinking almost as profoundly as Newton's theory of gravity. In addition, his famous formula $e=mc^2$ showed that a small amount of matter could be converted into a huge amount of energy, pointing the way to atomic power.</p>
<p>For this reason, the reappearance of Aristotelian ideas in Europe had a transformative effect totally unlike that of any later discovery. It did not cause the far-reaching changes taking place in European society in the late Middle Ages: the increases in food production and trade, the development of cities, the spread</p>	<p>Latin West—During the Middle Ages, a simplified form of the ancient Roman languages continued to be used throughout Europe as a way for speakers from various</p>

Table of Contents

<p>of learning, and the growth of popular religious movements. The usefulness of Aristotle's methods and concepts (like that of Clarke's star-gate) depended upon the achievement of a certain level of technical and economic progress, the development of a certain cultural momentum, by the receiving society. Given this momentum, however, the discoveries had a slingshot effect, accelerating the pace and deepening the quality of scientific and philosophical inquiry. In the Latin West, Aristotle's recovered work was the key to further developments that would turn Europe from a remote, provincial region into the very heartland of an expansive global civilization.</p>	<p>parts of the continent to communicate with each other, continuing the unified culture we inherit called Western Civilization.</p>
<p>Imagine, more than four centuries before Francis Bacon and René Descartes proclaimed the Scientific Revolution, a recognizably modern perspective—rationalist, this-worldly, humanistic, and empirical—ignited cultural warfare throughout Western Europe, challenging traditional religious and social beliefs at their core. The struggle between faith and reason did not begin, as is so often supposed, with Copernicus's challenge to Earth-centered cosmology or with Galileo's trial by the Inquisition, but with the controversy over Aristotle's ideas during the twelfth and thirteenth centuries. For decades, specialists in medieval history have understood that the awakening of the West began during this "medieval renaissance." Many believe that the conflict among Christians over whether to accept or reject Aristotelian science marks a turning point—perhaps the turning point—in Western intellectual history.</p>	<p>Francis Bacon (1561-1626)—the father of the scientific method of rigorous observation and inductive reasoning (from facts to general laws). René Descartes (1596-1650)—the father of mathematical science. He wiped the slate of knowledge taken on faith or authority by beginning with the only certainty he knew: "I think, therefore I am." Copernicus (1473-1543)—Polish astronomer who proposed that the Sun is the center of the universe, not the Earth, as Aristotle and Ptolemy had taught. Galileo (1564-1642)—Italian scientist who saw through his telescope that the planets do indeed go around the Sun. The church made him deny his findings because they thought people would lose faith if they learned that the Earth was not the center of the universe.</p>
<p style="text-align: center;">. . . .</p>	
<p>Today we tend to think of science and orthodox¹⁸ religion as inherently¹⁹ and perpetually in conflict. One of our favorite stories is "Galileo versus the Inquisition"—a morality play in which the courageous, imaginative man of reason confronts his dogmatic,²⁰ black-robed persecutors. Yet, the church-run universities of the Middle Ages were vehemently²¹ opposed to this sort of ignorant obscurantism.²² As Galileo himself recognized, their turbulent, "Aristotelianized" schools of arts and theology were the seedbeds of scientific thought. Surprisingly (at least for those trained to believe that the age of faith was an age of darkness), the decisive contest between rationalist and traditionalist think-</p>	<p>Inquisition—After Martin Luther started the Protestant Reformation by publicly criticizing the abuses in the Catholic Church, the church responded by trying to restore order within its clergy and among its believers. The Inquisition was the office that investigated these abuses and disciplined clergy and believers. Outside of Spain, where the Inquisition was</p>

Table of Contents

<p>ing was not fought out in a confrontation between the medieval church and its opponents. It took place within the church, where forces favoring the new Aristotelian learning did battle with those opposing it.</p>	<p>used for political purposes, it had a reputation for careful justice. For a factual history, see http://www.bede.org.uk/inquisition.htm on the Internet.</p>
. . . .	
<p>Could Christian thinkers follow the teachings of the Greek sage²³ they called "the Philosopher" and follow Jesus Christ, too?</p>	
<p>For almost a century, the answer remained in doubt. Because of the threat they posed to established modes of thought, Aristotle's books of "natural philosophy" were originally considered too dangerous to be taught at European universities. Early in the thirteenth century they were banned, and some of their more wild-eyed proponents were burned as heretics.²⁴ As late as 1277, the church condemned a number of Aristotelian ideas being taught in the schools, including some propositions espoused by the century's greatest genius, Thomas Aquinas. In the end, however, the leaders of the church allowed Christian thinking to be transformed by the new worldview. With irreversible social changes remaking European society, they realized that the church would have to adapt to new currents of thought if it were to retain its position of intellectual and moral leadership. Far-sighted popes and bishops therefore took the fateful step that Islamic leaders had rejected. By marrying Christian theology to Aristotelian science, they committed the West to an ethic of rational inquiry that would generate a succession of "scientific revolutions, as well as unforeseen upheavals in social and religious thought."</p>	<p>Thomas Aquinas (1225-1274)—the most influential Catholic theologian. He tried to show that Aristotelian logic and faith were not opposed. Aquinas believed that since reason was given us by God, He intended that we should use it to clarify our perceptions of the world.</p>

VOCABULARY

- | | |
|--|---|
| <p>¹ tablet, writing on stone or clay.</p> <p>² etched, scratched into.</p> <p>³ inscribed, cut into.</p> <p>⁴ parchment, thin, scraped animal skin used for writing before the Arabs brought paper from China into Europe.</p> <p>⁵ arcane, obscure; secret.</p> <p>⁶ relic, a valuable object surviving from an ancient time.</p> <p>⁷ talisman, an object with magic power.</p> <p>⁸ conjure, make appear by magic.</p> | <p>⁹ law of diminishing returns, at some point in a project more effort does not yield worthwhile improvement.</p> <p>¹⁰ regression, going backward.</p> <p>¹¹ cumulative, new knowledge builds on previous results.</p> <p>¹² Bhagavad Gita, Hindu holy book.</p> <p>¹³ Koran, Moslem holy book.</p> <p>¹⁴ artifact, anything made by humans.</p> <p>¹⁵ monolith, something made from a large single piece of rock.</p> <p>¹⁶ eons, many ages.</p> |
|--|---|

Table of Contents

- ¹⁷ **papyrus** a kind of paper invented by ancient Egyptians made by flattening the stems of the papyrus reed.
- ¹⁸ **orthodox**, strictly traditional.
- ¹⁹ **inherently**, in their very nature.
- ²⁰ **dogmatic**, insisting on a single set of beliefs.
- ²¹ **vehemently**, with strong and vocal feeling.
- ²² **obscurantism**, intentionally making things hard to understand.
- ²³ **sage**, wise person (Aristotle, in this case).
- ²⁴ **heretics**, people who held beliefs contrary to the orthodox teachings of the church.

QUESTIONS

1. The author makes a distinction between hard knowledge and soft knowledge.
 - a. Explain this distinction.
 - b. Make a list of the courses you have taken up to this point and those you plan to take. Identify each as “hard” or “soft.” Explain your labels. Which kind do you prefer and why?
2. Outside of history of science courses, it is usual in math and science to read only the currently accepted theories and explanations of the world. Do you see any value in studying the early writers who made the original great discoveries in the “hard” sciences?
3. Many people distrust “hard” science because it seems to change its findings yearly while articles of religious faith, how people behave, and beliefs about how they should behave rarely change. How would a scientist explain why cumulative scientific knowledge is valuable even though the conclusions of science are always conditional on future study?
4. Were you aware of the importance of the Islamic Empire to the rekindling of intellectual life in Europe? There is an excellent video/DVD made by PBS called *Islam: Empire of Faith*. Watch this if you can rent it and visit the excellent illustrated web site http://www.nmhschool.org/tthornton/mehistorydatabase/umayyad_spain.htm, which shows the splendors and achievements of the Umayyad kingdom in medieval Spain. Google other web sites on the Umayyads and report your findings.
5. Search the Web for “Islam rationalism” to explain and make a judgment about the validity of Rubenstein’s statement that Islam chose not to incorporate rational analysis into its religion.
6. Read the ABC News Compass Roundtable at <http://www.abc.net.au/compass/s1027718.htm> on Faith and Reason. Write out a contribution of your own responding to one of the participants.

2

One of the early Christian writers who helped restore the fame of Aristotle was the twelfth-century monk Peter Abelard. His tragic love affair with Heloise, his brilliant student, has been the subject of many novels. When her uncle, a canon in the church, discovered that Heloise had secretly married Abelard, he arranged to have the man castrated. Heloise nevertheless gave birth to their son whom they named Astrolabe, after the scientific instrument which demonstrates the movements of the

Longfellow – The Refectory

planets. Abelard saw to it that Heloise was established as abbess, where she made a notable reputation. Their love letters, started ten years after their separation, are some of the most famous in history.

A moving poem written from Heloise's viewpoint by the eighteenth-century poet Alexander Pope can be sampled on the Web in many places. Just Google "alexander abelard text." The following verse play by the nineteenth-century American poet Henry Wadsworth Longfellow gives a vivid picture of the sometimes lax life in medieval monasteries and refers to another side of Abelard—the disciplined reformer. To supply interesting background, get a CD of Carl Orff's *Carmina Burana*—an evocation of medieval song, both sacred and profane—and play it while reading the poem!

THE REFECTORY

By Henry Wadsworth Longfellow (1807-1882)

*Gaudiolum*¹ of Monks at midnight. LUCIFER² disguised as a Friar.³

FRIAR PAUL *sings*.
Ave! color vini clari,
Dulcis potus, non amari,
Tua nos inebriari
Digneris potentia!⁴

FRIAR CUTHBERT.
Not so much noise, my worthy freres,⁵
You'll disturb the Abbot⁶ at his prayers.

¹ **Gaudiolum** a party. A refectory is a dining hall.
² **Lucifer** former angel driven out of heaven for rebellion against God. The Devil.
³ **Friar** men who join holy Roman Catholic orders, especially those who practice the vow of poverty.
⁴ **Translation:**
*Hail, Clear Wine,
Your power/potency grants us that we be inebriated, not loved.*
⁵ **freres**, brothers.

FRIAR PAUL *sings*.
O! quam placens in colore!
O! quam fragrans in odore!
O! quam sapidum in ore!
Dulce linguae vinculum!⁷

FRIAR CUTHBERT.
I should think your tongue had broken its chain!

FRIAR PAUL *sings*.
Felix venter quem intrabis!
Felix guttur quod rigabis!
Felix os quod tu lavabis!
Et beata labia!⁸

⁶ **Abbot**, Anselm. After being silenced for his "dangerous" Aristotelian analyses, he founded an abbey which he put Heloise in charge of.

⁷ **Translation** (supplied by John Thissen):
*Oh, how pleasing in color,
Oh, how fragrant in odor,
Oh, how tasty in the mouth is the sweet binder
(chain) of the tongue (speech).*

⁸ **Translation** (supplied by John Thissen):
*Happy the gut which you enter,
Happy the throat which you wet,
Happy the mouth which you wash,
And the blessed lips*

Longfellow – The Refectory

FRIAR CUTHBERT.

Peace! I say, peace!

Will you never cease!
You will rouse up the Abbot, I tell you
again!

FRIAR JOHN.

No danger! to-night he will let us alone,
As I happen to know he has guests of his
own.

FRIAR CUTHBERT.

Who are they?

FRIAR JOHN.

A German Prince and his train,
Who arrived here just before the rain.
There is with him a damsel fair to see,
As slender and graceful as a reed!
When she alighted from her steed,⁹
It seemed like a blossom blown from a
tree.

FRIAR CUTHBERT.

None of your pale-faced girls for me!
None of your damsels of high degree!

FRIAR JOHN.

Come, old fellow, drink down to your
peg!¹⁰

But do not drink any further, I beg!

FRIAR PAUL *sings*.

In the days of gold,
The days of old,

Crosier¹¹ of wood
And bishop of gold!¹²

FRIAR CUTHBERT.

What an infernal racket and riot!
Can you not drink your wine in quiet?
Why fill the convent with such scandals,
As if we were so many drunken Van-
dals?¹³

FRIAR PAUL *sings*.

Now we have changed
That law so good

To crosier of gold
And bishop of wood!¹⁴

FRIAR CUTHBERT.

Well, then, since you are in the mood
To give your noisy humors vent,
Sing and howl to your heart's content!

CHORUS OF MONKS.

Funde vinum, funde!
Tanquam sint fluminis undae,
Nec quaeras unde,
Sed fundas semper abunde!¹⁵

*But pour it always, abundantly!
May it be like a river's waves,
Don't ask where it comes from*

FRIAR JOHN.

⁹ **steed**, horse.

¹⁰ **peg**, penis.

¹¹ **Crosier**, the hooked staff of a sheep herder symbol of a bishop's office.

¹² **wood...gold**, the wood staff is a hypocritical symbol of poverty since the bishop is rich.

¹³ **Vandals**, Germanic tribes, driven from their native lands by the Huns, they captured Roman provinces in Spain and Africa, eventually looting Rome in 455.

¹⁴ **gold...wood**, Now the prestigious office of the bishop is occupied by an inferior man.

¹⁵ **Translation** (supplied by John Thissen):

Pour the wine, pour!

Longfellow – The Refectory

What is the name of yonder friar,
With an eye that glows like a coal of fire,
And such a black mass of tangled hair?

FRIAR PAUL.
He who is sitting there,
With a rollicking,
Devil may care,
Free and easy look and air,
As if he were used to such feasting and
frolicking?

FRIAR JOHN.
The same.

FRIAR PAUL.
He's a stranger. You had better ask his
name,
And where he is going and whence he
came.

FRIAR JOHN.
Hallo! Sir Friar!

FRIAR PAUL.
You must raise your voice a little higher,
He does not seem to hear what you say.
Now, try again! He is looking this way.

FRIAR JOHN.
Hallo! Sir Friar,
We wish to inquire
Whence you came, and where you are go-
ing,
And anything else that is worth the know-
ing.
So be so good as to open your head.

LUCIFER.
I am a Frenchman born and bred,
Going on a pilgrimage to Rome.
My home
Is the convent of St. Gildas de Rhuys,¹⁶

Of which, very like, you never have heard.

MONKS.
Never a word.

LUCIFER.
You must know, then, it is in the diocese
Called the Diocese of Vannes,
In the province of Brittany.
From the gray rocks of Morbihan

It overlooks the angry sea;
The very sea-shore where,
In his great despair,
Abbot Abelard walked to and fro,
Filling the night with woe,

And wailing aloud to the merciless seas
The name of his sweet Heloise,
Whilst overhead
The convent windows gleamed as red
As the fiery eyes of the monks within,
Who with jovial din
Gave themselves up to all kinds of sin!
Ha! that is a convent! that is an abbey!
Over the doors,
None of your death-heads carved in wood,
None of your Saints looking pious and
good,
None of your Patriarchs old and shabby!
But the heads and tusks of boars,
And the cells¹⁷
Hung all round with the fells¹⁸
Of the fallow-deer.

And then what cheer!
What jolly, fat friars,
Sitting round the great, roaring fires,
Roaring louder than they,
With their strong wines,
And their concubines,

for a book severely rebuking the English kings and the
clergy for laziness and selling pardons.

¹⁶ **St. Gildas**, the first British historian, a famous priest of
his time, having founded many churches in Ireland and
an abbey at Rhuys, in Brittany, France. He is famous

¹⁷ **cell**, small private room in a convent for a monk or nun
to live in.

¹⁸ **fell** (noun), a hill.

Longfellow – The Refectory

And never a bell,
With its swagger and swell,
Calling you up with a start of affright
In the dead of night,

To send you grumbling down dark stairs,
To mumble your prayers;
But the cheery crow

Of cocks in the yard below,
After daybreak, an hour or so,
And the barking of deep-mouthed hounds,
These are the sounds
That, instead of bells, salute the ear.
And then all day
Up and away
Through the forest, hunting the deer!
Ah, my friends, I'm afraid that here
You are a little too pious, a little too tame,
And the more is the shame.
'T is the greatest folly
Not to be jolly;
That's what I think!
Come, drink, drink,
Drink, and die game!

MONKS.
And your Abbot What's-his-name?

LUCIFER.
Abelard!

MONKS.
Did he drink hard?

LUCIFER.
Oh, no! Not he!
He was a dry old fellow,
Without juice enough to get thoroughly
mellow.

There he stood,
Lowering at us in sullen mood,
As if he had come into Brittany
Just to reform our brotherhood!

A roar of laughter.

But you see
It never would do!
For some of us knew a thing or two,
In the Abbey of St. Gildas de Rhuy's!
For instance, the great ado
With old Fulbert's niece,
The young and lovely Heloise.

FRIAR JOHN.
Stop there, if you please,
Till we drink so the fair Heloise.

ALL, drinking and shouting.
Heloise! Heloise!

The Chapel-bell tolls.

LUCIFER, *starting.*
What is that bell for! Are you such asses
As to keep up the fashion of midnight
masses?

FRIAR CUTHBERT.
It is only a poor unfortunate brother,
Who is gifted with most miraculous pow-
ers
Of getting up at all sorts of hours,
And, by way of penance and Christian
meekness,
Of creeping silently out of his cell
To take a pull at that hideous bell;
So that all monks who are lying awake
May murmur some kind of prayer for his
sake,
And adapted to his peculiar weakness!

FRIAR JOHN.
From frailty and fall—

ALL.
Good Lord, deliver us all!

FRIAR CUTHBERT.

Longfellow – The Refectory

And before the bell for matins¹⁹ sounds,
He takes his lantern, and goes the rounds,
Flashing it into our sleepy eyes,
Merely to say it is time to arise.
But enough of that. Go on, if you please,
With your story about St. Gildas de Rhuy.

LUCIFER.

Well, it finally came to pass
That, half in fun and half in malice,
One Sunday at Mass
We put some poison into the chalice.²⁰

But, either by accident or design,
Peter Abelard kept away
From the chapel that day,
And a poor young friar, who in his stead
Drank the sacramental²¹ wine,
Fell on the steps of the altar, dead!
But look! do you see at the window there
That face, with a look of grief and despair,
That ghastly face, as of one in pain?

MONKS.
Who? where?

LUCIFER.
As I spoke, it vanished away again.
with his disciples.

FRIAR CUTHBERT.
It is that nefarious²²

Siebold the Refectorarius,
That fellow is always playing the scout,
Creeping and peeping and prowling about;

And then he regales
The Abbot with scandalous tales.

LUCIFER.

A spy in the convent? One of the brothers
Telling scandalous tales of the others?
Out upon him, the lazy loon!
I would put a stop to that pretty soon,
In a way he should rue²³ it.

MONKS.
How shall we do it!

LUCIFER.

Do you, brother Paul,
Creep under the window, close to the wall,
And open it suddenly when I call.
Then seize the villain by the hair,
And hold him there,
And punish him soundly, once for all.

FRIAR CUTHBERT.
As Saint Dunstan of old,
We are told,
Once caught the Devil by the nose!²⁴

LUCIFER.
Ha! ha! that story is very clever,
But has no foundation whatsoever.
Quick! for I see his face again
Glaring in at the window-pane;
Now! now! and do not spare your blows.

FRIAR PAUL *opens the window suddenly,*
and seizes SIEBALD.
They beat him.

FRIAR SIEBALD.
Help! help! are you going to slay me?

¹⁹ **matins**, The offices or hours gradually became established as set times for prayers during the day as had been practiced by the Jews and are still practiced by Roman Catholic religious orders and Moslem believers. Matins is said before daybreak.

²⁰ **chalice**, the cup used in Christian religious services which reenact the last supper of Christ

²¹ **sacramental**, sacred.

²² **nefarious**, evil, wicked.

²³ **rue**, be sorry for.

²⁴ **St. Dunstan**, a principal figure in the reform of the monasteries in England. After many political reversals, he became archbishop of Canterbury in 960. The story of his vision of the Devil originated later, but one can see why it irritates Lucifer.

Longfellow – The Refectory

FRIAR PAUL.
That will teach you again to betray me!

FRIAR SIEBALD.
Mercy! mercy!

FRIAR PAUL, *shouting and beating*.
Rumpas bellorum lorum
Vim confer amorum
Morum verorum rorum
Tu plena polorum!²⁵

LUCIFER.
Who stands in the doorway yonder,
Stretching out his trembling hand,
Just as Abelard used to stand,
The flash of his keen, black eyes
Forerunning the thunder?

THE MONKS, *in confusion*.
The Abbot! the Abbot!

FRIAR CUTHBERT.
And what is the wonder!
He seems to have taken you by surprise.

FRIAR FRANCIS.
Hide the great flagon²⁶
From the eyes of the dragon!

FRIAR CUTHBERT.
Pull the brown hood over your face!
This will bring us into disgrace!

ABBOT.
What means this revel and carouse?²⁷
Is this a tavern and drinking-house?
Are you Christian monks, or heathen dev-
ils,
To pollute this convent²⁸ with your revels?

²⁵ Translation:

²⁶ **flagon**, a quart-size wine bottle, usually with a handle and spout.

²⁷ **revel, carouse**, both mean “drunken party.”

²⁸ **convent**, a religious community of nuns or monks.

Were Peter Damian²⁹ still upon earth,
To be shocked by such ungodly mirth,
He would write your names, with pen of
gall,³⁰

In his Book of Gomorrah,³¹ one and all!
Away, you drunkards! to your cells,
And pray till you hear the matin-bells;
You, Brother Francis, and you, Brother
Paul!

And as a penance³² mark each prayer
With the scourge³³ upon your shoulders
bare;
Nothing atones³⁴ for such a sin

But the blood that follows the discipline.
And you, Brother Cuthbert, come with me
Alone into the sacristy;³⁵
You, who should be a guide to your broth-
ers,

And are ten times worse than all the oth-
ers,
For you I've a draught³⁶ that has long been
brewing,

You shall do a penance worth the doing!
Away to your prayers, then, one and all!
I wonder the very convent wall
Does not crumble and crush you in its fall!

²⁹ **Peter Damian**, another famous church reformer of the eleventh century.

³⁰ **gall**, bitterness.

³¹ **Gomorrah**, a town famous in the Old Testament for being destroyed by God for its sinfulness, along with its sister in sin, Sodom.

³² **penance**, punishment.

³³ **scourge**, whipping.

³⁴ **atones**, makes up for.

Longfellow – The Refectory

³⁵ **sacristy**, the dressing room for priests just off the altar space of a church.

³⁶ **draught**, draft—drink (as in draft beer).

QUESTIONS

1. Do some research on “monastic life” and “monastic reform” on the Internet. Abelard became the abbot of St. Gilford in 1125, where his life was indeed threatened. To what extent does the scene described here seem historically accurate?
2. In terms of the history that you read, what does the visit of the German prince show about the role of abbeys in the Middle Ages?
3. Why do you think Lucifer left the convent of Gt. Gildas? What does he hope to accomplish here?
4. Do some research on “monastic life” and “convent life.” (Tip: type these phrases into Google, read some of the “hits,” and then click on “images” to get a mental picture.) Try to imagine yourself leading such a life. What might attract you to it? What might deter you?
5. In your research on monasticism, see what you can find out about that practice in religions other than Christianity.
6. The theme of these readings is “faith versus reason.” What rational arguments might Abelard have given them to get them to change their behavior? If we assume that at least some of the friars in this play consider themselves to be faithful followers of Christ, how might they have answered his reasons?

3

Dialogue of a Philosopher with a Jew and a Christian

By Peter Abelard (1079-1142)

Translated by Pierre J. Payer

Published by the Pontifical Institute of Medieval Studies
Toronto 1979 (p. 99)

CHRISTIAN: [I]t is not proper for us who are completely occupied in the search for truth to wrangle together after the manner of children or with rude shouting. And if something is conceded without due consideration, it is not proper for one who is intent on teaching or learning to take occasion from this to inflict embarrassment, where it should even be allowed to concede falsity sometimes for the sake of argument.	Here Abelard sets out the ground rules for scholastic inquiry.
2	
PHILOSOPHER: You know that only the desire of such comparisons drew me here, and we were all of us assembled with this intention.	
3	
CHRISTIAN: As far as I see, we are now actually making our way towards the goal and summit of all disciplines. What you call ethics, that is, moral discipline, we are accustomed to call divinity. Clearly, our name	The first step in scholastic inquiry is a definition of terms.

Longfellow – The Refectory

<p>arises from what it is aimed at comprehending, that is, God, yours from those things through which it is attained there, that is, from good moral actions which you call virtues.</p>	
<p>4</p>	
<p>PHILOSOPHER: I agree that what you say is clear. and I give my wholehearted approval to your new usage. For, because you judge the point of arrival more worthy than the means of arrival and the arrival more blessed than the journey, yours is the naming of higher things and from the very etymology¹ of the term, as from "divining,"² it more immediately draws the reader. If it is as preeminent³ on the force of evidence as the name suggests, I think that no discipline⁴ is comparable to it. So now, if it is agreeable, we wish you to outline a summary of the true ethics,⁵ and what we must contemplate⁶ through this discipline, and when it is reached, where its goal is realized.</p>	<p>When it comes to morals, secular philosophy is concerned with the "journey"—how we live. Religion is concerned with the goal—joining God in the heavenly Kingdom.</p>
<p>5</p>	
<p>CHRISTIAN: I think that a complete summary of this discipline is brought together in this: it should disclose where the supreme good is and by what route we are to arrive there.</p>	<p>"The supreme good" is what Plato was seeking.</p>
<p>6</p>	
<p>PHILOSOPHER: It is surely most satisfying that a summary of such a great matter is expressed in so few words, and the goal of the whole of ethics is so precisely summed up. Indeed, this statement of the goal immediately draws the hearer to itself and recommends the study of this discipline, so that the teachings of all the arts become worthless in comparison with it. For to the degree that the supreme good, in whose enjoyment true beatitude⁷ rests, is more excellent than all others, undoubtedly its study excels all others by far in usefulness as well as in worth. In fact, the studies of the other arts remain far below the supreme good, nor do they touch the height of beatitude; and there is no profit apparent in them except insofar as they serve this highest philosophy, like ladies-in-waiting who busy themselves around their mistress. For what value is there in the study of grammar or dialectic⁸ or the other arts for the investigation of man's true beatitude? All lie far below this eminence⁹ and are unable to raise themselves to such a height. But they do treat of certain ways of speaking or they are concerned with the natures of things as if preparing steps towards this height. since we must speak of it. and through the natures of things we are given examples or analogies.¹⁰ The result is that through them we get in touch with the mistress as if we had been introduced by her ladies-in-waiting, possessing the approach, indeed, thanks to them, whereas it is in her that we obtain rest and our fatigue comes to an end.</p>	<p>The Christian is saying that we know right from wrong directly by revelation. The Philosopher is saying that we need reason to test the validity of the revelation and to understand in a practical way how to become moral people.</p>
<p>7</p>	
<p>CHRISTIAN: I am glad that you have so carefully touched upon the excellence of this philosophy and have distinguished it from the other arts. I understand from this that you are deeply occupied in its study.</p>	
<p>8</p>	

Longfellow – The Refectory

<p>PHILOSOPHER: I say "properly" occupied. In fact. this alone is the discipline of natural law which, being concerned with moral precepts,¹⁰ is all the more suited to philosophers the more it is evident that they use this law and adhere to reasons, as your own teacher¹² recalls, saying: "For Jews demand 'signs' and Greeks look for 'wisdom.'" Surely, the Jews alone, since they are animals and sensual and are imbued with no philosophy whereby they are able to discuss reasoned arguments, are moved to faith only by the miracles of external deeds, as if it were the case that it belongs to God alone to effect¹³ these things and that no illusion could be produced in them by demons. The magicians in Egypt taught them, and Christ in particular instructed you, how stupid it is to accept this. Warning them about the false prophets of anti-Christ. He¹⁴ declared that such great miracles would be worked for the seduction of men "as to mislead even the chosen if that were possible."</p>	<p>Paul was the founder of Christianity as a religion. He came from Greek-speaking Tarsus. For his fascinating story, see http://www.sullivan-county.com/news/paul/paul.htm or http://en.wikipedia.org/wiki/Paul_of_Tarsus. This may sound anti-Jewish, and Jews were persecuted and killed by Christians. But Abelard was one who argued against such persecutions.</p>
<p style="text-align: center;">9</p> <p>Therefore, as if it were foolishness to seek these signs, the aforesaid Apostle reminds us of the opposite when he added, "And the Greeks look for wisdom," that is, they require reasons from preachers, which are the sure instruments of wisdom. Consequently, your preaching, that is, the Christian preaching, is most highly commended because it was able to convert to the faith those who were well grounded in and rich in reasons, namely, those who were imbued¹⁵ with the study of all the liberal arts and armed with reasons. Indeed, they were not only investigators in these studies, but also inventors, and from their fonts¹⁶ rivers flowed into the whole world. This is why we now have particular confidence in your discipline seeing that, the stronger and more established it has already grown, the more capable it is in rational debate.</p>	<p>Abelard seems to twist Paul's words to mean that he used reason to convert the non-Jews. Actually, Paul said neither approach was valid—only direct revelation like his own of Christ as a personal savior.</p>
<p style="text-align: center;">10</p> <p>CHRISTIAN: Yes indeed, after the conversion of such great philosophers, neither you nor your posterity¹⁷ can be in doubt about our faith; and there does not now seem to be any need for such a conflict as this. For why would you believe everything on their authority in the secular disciplines but not be moved to the faith by their example, saying with the Prophet:¹⁸ "For we are no better than our fathers."</p>	<p>The Christian cleverly argues that the Philosopher should accept the simple revelation of morals since earlier great reasoners came to this conclusion.</p>
<p style="text-align: center;">11</p> <p>PHILOSOPHER: We do not accede to their authority in such a manner that we refuse to submit their words to rational scrutiny before we give our assent. Otherwise we would stop philosophizing if, for instance, neglecting the examination of reasons, we were to make greater use of arguments from authority. These are understood to be devoid of intellectual creativity and totally separated from the matter itself, resting on opinion rather than on truth. Moreover, we should not believe that our ancestors were led to the confession of your faith so much by reason as that they were dragged by force, as your own histories agree. In fact, before the conversion to your faith of emperors¹⁹ or princes through</p>	<p>This is the key paragraph. Abelard rejects not only the unanalyzed acceptance of the authority of the church, but he rejects the unquestioned authority of the ancient philosophers like Plato and Aristotle as well. His point is not to set up pagan philosophy</p>

Longfellow – The Refectory

<p>miracles, as you say, your preaching won over few or no wise men, although the people could then be easily torn from the most obvious errors of idolatry²⁰ and converted to any cult of the one God. Whence your own Paul, on the occasion of his invective²¹ against the Athenians, prudently says at the beginning, "Men of Athens, I see that in every respect you are superstitious, etc." For by then the knowledge of natural law and of divine worship had disappeared and a multitude of those in error had entirely destroyed or oppressed the few who were wise.²² But to speak from our conscience and to give its due to the not unimportant fruit of Christian preaching, we do not doubt that through it idolatry was then largely destroyed in the world.</p>	<p>against Christianity, but to set reasoned faith against naïve faith. It was this that got him in trouble with the church authorities, who were worried as Paul had been about keeping the church together.</p>
<p>12</p>	
<p>CHRISTIAN: Add that it is also clear that natural law was revived and the perfect discipline of morals, on which alone you say you base yourself and which you believe suffices for salvation, was handed on by him alone; and whoever were instructed by him as by true wisdom, that is the wisdom of God, must be called true philosophers.</p>	<p>The Christian points out that even if it is admitted that man can save himself through reason, that way to virtue is shown to people by God.</p>
<p>13</p>	
<p>PHILOSOPHER: And would that you could²³ clearly prove what you say and that through the supreme wisdom itself which you call in Greek <i>logos</i>²⁴ and in Latin <i>verbum Dei</i>,²⁵ you might show yourselves true logicians and armed with reasons to go with your words! You should not presume that I will allege²⁶ as an excuse that saying of your Gregory, that miserable refuge: "Faith has no merit for which human reason offers proof." Because your people are not able to discuss the faith which they affirm, they immediately take up this phrase of Gregory as solace²⁷ for their lack of skill. Indeed, in their opinion what else does this mean but that we should assent²⁸ to the faith on the grounds of any sort of preaching, whether stupid or reasonable? For if, through fear of losing merit, faith rules out all rational discussion and there is no room for judgment in the discussion of what ought to be believed, but instant assent must be given to what is preached whatever the errors sown by this preaching, acceptance has no point because there is no room for rational refutation where the use of reason is not permitted. Let an idolater say of stone or wood or any creature, "Here is the true God, creator of heaven and earth," or let him preach any clear abomination:²⁹ who would be able to refute him, if there is to be no rational discussion of the faith? He will immediately use against his critic, particularly if the critic is a Christian, what was already said: "Faith has no merit. etc." The Christian will straightway be thrown into confusion by his own defense, saying as he does that his reasons ought to have absolutely no hearing in matters such as these—where the Christian absolutely forbids that they be introduced, neither can he justifiably attack anyone on a matter of faith by adducing³⁰ reasons, since he permits no one to attack him with reasons. . . .</p>	<p>St. Gregory was a strong opponent of Abelard's attempt to put Aristotle's logical analysis of causes in place of Plato's direct grasp of The Good.</p> <p>The Philosopher points out the logical fallacy and consequent danger in defending a faith based solely on revelation by saying that this leaves no means of distinguishing between valid revelation and false prophets.</p>
<p>14</p>	

Longfellow – The Refectory

<p>Christ, whom you call Truth itself, to make you secure, added at the end of an apt parable: "Ask, and you will receive. Seek, and you will find. Knock, and it will be opened to you. For the one who asks, receives: and the one who seeks, finds: and to him who knocks, it will be opened." As I recall, when commenting on these words in one of his writings entitled <i>On Mercy</i>, Augustine³¹ says, "Ask by praying, seek by disputation, knock by requesting," Whence, in the second Book of <i>On Order</i>, placing the art of disputation before the other disciplines as if it alone has knowledge or makes knowers, he recommends it in these words: "The discipline of disciplines which they call 'dialectic.'³² This teaches both how to teach and how to learn. In it reason exhibits itself, and it alone knows what it is and what it wants, It not only wants to make us knowers but is able to do so."</p>	<p>St. Augustine was responsible for applying Plato's ideas of another world more real than this one to Christianity. Aristotle, a student of Plato, emphasized the study of this world through logical analysis. The Philosopher ingeniously quotes his opposite, Augustine, to support his faith in Aristotelian dialectic.</p>
<p>15</p>	
<p>Likewise, in the second Book of <i>On Christian Doctrine</i>, showing that it is absolutely necessary for the reading of Scripture, he says: "There remain those institutions which do not pertain to the corporeal senses but to the reason, where the sciences of disputation³³ and number hold sway." The science of disputation is of great value for understanding and solving all sorts of questions that appear in sacred literature. However, in this connection the love of controversy is to be avoided, as well as a certain puerile ostentation in deceiving an adversary. There are, moreover, many false conclusions of the reasoning process called sophisms, and frequently they so imitate true conclusions that they mislead not only those who are slow but also the ingenious when they do not pay close attention. As I see it, the Scripture condemns this kind of captious conclusion in that place where it is said, "He that speaketh sophistically is hateful."</p>	<p>The aim of dialectic disputation is not to "win," but to arrive at truth by exposing all points of view.</p>
<p>16</p>	
<p>CHRISTIAN: Certainly, no one in his senses would forbid rational investigation and discussion of our faith, nor is there any reasonable assenting to what is doubtful before having a rational basis for doing so. For example, when reason believes in something doubtful, surely it does so by what you call an argument. In fact, in every discipline controversy arises in regard to the written word as well as in regard to the opinions expressed, and in any disputation the giving of a reason is firmer than a display of authority. The question of what is really the truth is not an issue for the building up of the faith, but rather it is a question of what can be held by opinion: and many questions arise concerning the words of the authority itself, so that judgment must be rendered on them before it is rendered by means of them. After reasonable judgment has been rendered, even if the solution is not rationally conclusive but appears so, no further question remains since there is no doubt left.</p>	<p>Here Abelard brings the disputation to its desired end. The Christian admits that reason has a role to play in solidifying faith.</p>
<p>17</p>	
<p>Certainly, with you there is all the less cause for an appeal to authority the more you use the support of reason and the less you acknowledge the authority of Scripture. Indeed, no one can be shown the truth except on the basis of what he already admits, nor is he to be refuted except</p>	<p>This is a very important principle of argument. To convince an opponent, you must show how your view</p>

Longfellow – The Refectory

<p>on the basis of what he accepts: but it is one thing to enter into conflict with you and another to do so among ourselves. What Gregory or our other teachers or even Christ himself or Moses said, we knew did not yet pertain to you, in the sense that through their words you would be compelled to the faith. Among ourselves who accept these they have a place. But above all the faith must sometimes be built up or defended by reasons. Of these reasons—I recall against those who deny that the faith must be subject to rational investigation—the second <i>Book of Christian Theology</i> fully discourses with the power of reasons as well as with the authority of Scripture, and it does successfully refute opponents. Now, if it is agreeable, let us return to our plan.</p>	<p>can be reconciled with what that person already believes. Reason and logic must take off from a foundation of faith.</p>
--	---

VOCABULARY

¹ **etymology**, the history of a word as it came from other languages.

² **divining**, guessing, predicting.

³ **preeminent**, outstanding.

⁴ **discipline**, subject of systematic study.

⁵ **ethics**, the systematic study of right and wrong action.

⁶ **contemplate**, look at, study.

⁷ **beatitude**, blessed happiness.

⁸ **dialectic**, discussion pro and con.

⁹ **eminence**, a high point.

¹⁰ **analogy**, a comparison made to explain a complex situation, like his use of ladies-in-waiting to show the relation between the other arts and ethics.

¹¹ **moral precepts**, individual rules of right and wrong behavior which the discipline of ethics organizes into a system.

¹² **your own teacher**, the apostle Paul.

¹³ **effect**, when the verb is spelled with an “e” it means “cause or start something.”

¹⁴ **he**, Christ.

¹⁵ **imbued**, completely filled with and inspired by.

¹⁶ **fonts**, springs, fountains.

¹⁷ **posterity**, descendants.

¹⁸ **Prophet**, Elijah.

¹⁹ **emperor**, Constantine, a pagan emperor, who in 312 AD saw a sign representing Christ with the message “In hoc signo” before a decisive battle outside Rome. When he won the battle after painting Christ’s sign on his soldiers’ shields, he converted to Christianity.

²⁰ **idolatry**, the worship of animals or statues as gods.

²¹ **invective**, harsh words of criticism.

²² **by then . . .**, Abelard probably had no access to the facts of ancient history. The schools founded by Plato and Aristotle in the fourth century BC were not closed until 529 AD, and then by the Christian Emperor Justinian.

²³ **would that you could**, “it would be better if you could.”

²⁴ **logos**, “the word.”

²⁵ **verbum Dei**, “the word of God.”

²⁶ **allege**, claim.

²⁷ **solace**, comfort.

²⁸ **assent**, agree.

²⁹ **abomination**, horrible thing.

³⁰ **adducing**, bringing up.

Longfellow – The Refectory

³¹ **Augustine** (354-386 AD), one of the most influential of early Church Founders. His *Confessions* still make stimulating reading.

³² **dialectic**, the technique of debate made famous by Socrates (reported by Plato) and widely used, as here, in the Middle Ages.

³³ **disputation**, referring here to logic, which as Abelard rightly says, is allied to mathematics. The *Organon*, Aristotle's books on logic, were his best-known works at this time.

Longfellow – The Refectory

QUESTIONS

1. In paragraph 6 the Philosopher extravagantly praises the Christian's simple description of the difficult subject of ethics. Considering the fact that Anselm was an enormously popular teacher who so annoyed his superiors in the church that one of his books was burned and he was driven out of a number of teaching positions, decide whether the author is being sarcastic here. If you think so, explain how the humor works. If you think not, explain why he would praise his opponent's view.
2. In these passages Abelard maps the conflict between faith and reason in regard to ethical behavior. Think about how you yourself choose between right and wrong actions. How much does your decision come from your religion (if any)? How much does it come from parents or early caregivers? How much does it come from the social network of your peer group? Other sources? Give examples to illustrate your answer.
3. The characters in this dialogue point out ways in which both people who live by faith and people who live by reason can be misled. Summarize these observations in your own words.

St. Bernard – Letter about Abelard

4

It was said that the brilliant Abelard never lost an argument, but he was politically defeated more than once. His book on theology was formally condemned and burned, his life (as we have seen) was threatened, he was “exiled” to a desert section of France, and he was expelled from several teaching positions. Finally he was hounded by the politically powerful abbot Bernard of Clairvaux, and was condemned by the pope and forced to retire and stop writing and teaching. Bernard strongly believed in salvation by faith in the unsearchable grace of God. His belief was that Abelard’s analytical approach to religion raised too many doubts in the minds of believers, and this was a particularly difficult time for the church when the pope was forced to flee to France, leaving Rome in the hands of an illegitimate anti-pope. Bernard was active in getting the pope restored to Rome, and it is understandable that he wanted to forestall any further splits among the faithful. The following letter is part of Bernard’s campaign to silence Abelard.

Letter to Cardinal Haimeric

By St. Bernard of Clairvaux (1090-1153)

<p>To his most intimate friend, the illustrious Haimeric, Cardinal and Chancellor of the Holy Roman Church, that he may show good things before God and man, from Bernard, Abbot of Clairvaux.</p>	
<p>“As we have heard so have we found” the books and maxims¹ of Peter Abelard. I have noted his words and marked his enigmas,² and I have found them to be “mysteries of iniquity.” Our theologian assails³ law in the words of the law. He casts what is holy before dogs, and pearls before swine. He corrupts the faith of simple people and sullies⁴ the purity of the Church. As the poet says: <i>Quo semel est imbuta recens servabit odorem testa diu</i>. His book has passed through fire, and he has now been brought into a place of repose. Now the enemy of the Church rests in the Church; the persecutor of the faith, in the bosom of the faith. He has been wasted as water poured forth. “Never may he thrive who has defiled⁵ his father's bed.” He has defiled the Church; he has infected with his own blight⁶ the minds of simple people.</p>	<p>Quo...diu—A quotation from the classical Roman poet Horace: “The jar will preserve the odor of what was kept in it when it was new.”</p> <p>His book...repose—from Psalm 66. He is referring to the fact that Abelard’s book had been publicly burned, but now he has been offered refuge in the prestigious abbey at Cluny.</p> <p>Never...bed.— from Genesis. Reuben had sex with his father’s concubine and so lost</p>

VOCABULARY

¹maxims, wise sayings.

²enigmas, puzzles.

³assails, attacks.

⁴sullies, makes dirty.

⁵defiled, polluted

⁶blight, disease.

St. Bernard – Letter about Abelard

<p>He tries to explore with his reason what the devout⁷ mind grasps at once with a vigorous faith. Faith believes, it does not dispute. But this man, apparently holding God suspect, will not believe anything until he has first examined it with his reason. When the Prophet says, “Unless you believe, you shall not understand,” this man decries⁸ willing faith as levity,⁹ misusing that testimony of Solomon: “He that is hasty to believe is light of head.” Let him therefore blame the Blessed Virgin Mary for quickly believing the angel when he announced to her that she should conceive and bring forth a son. Let him also blame him who, while on the verge of death, believed those words of One who was also dying: “This day thou shalt be with me in Paradise.” And let him praise the hard hearts of those to whom it was said, “O foolish and slow of heart to believe in all things which the prophets have spoken,” and commend the slowness of him to whom it was said, “And behold, thou shalt be dumb and shall not speak because thou hast not believed my words.”</p>	<p>his rightful inheritance.</p> <p>Faith...dispute– Bernard’s most famous saying. On the other side was a famous quotation by Anselm, Abelard’s teacher. He described the rational, dialectic approach as “faith in search of understanding.</p> <p>O foolish...spoken– said by an angel at Jesus’ tomb who had not believed the women who had gone there earlier and found it empty.</p> <p>And behold...words– said to Zacharias when he found unreasonable the angel’s prophecy that his aged wife, Elisabeth, would become pregnant.</p>
<p>So that this letter shall not be too long, I will only say a little about very much. This most excellent doctor put degrees and grades in the Trinity like Arius; with Pelagius he prefers free will at the expense of grace, and with Nestorius he divides Christ by denying to the human nature he assumed association with the Trinity.</p>	<p>Put...Trinity– Wars were fought over the interpretation of the Trinity—Father, Son, and Holy Spirit. Emphasizing the three persons, as Arius did, seemed too much like pagan polytheism; Emphasizing the oneness of them, as Nestorius did, seemed to deny the humanity of Jesus.</p>
<p>But in all this he boasts that he is a perfect fount of knowledge for the cardinals and clerics of the Curia;¹⁰ that his books and sayings have found their way into the hands and hearts of the Romans; and he summons to the protection of his errors the very men by whom he ought to be judged and condemned.... My Nicholas,¹¹ and yours too, can tell you better by word of mouth, all the rest which he has seen and heard.</p>	<p>Perfect fount of knowledge– Abelard believed he had reconciled the views of the Trinity by an Aristotle-like analysis of what we mean when we say one thing is “the same” as another—things can be “the same” in several ways. So one and the same God can have</p>

⁷ **devout**, deeply religious.

⁸ **decries**, loudly criticizes.

⁹ **levity**, light-hearted amusement.

¹⁰ **Curia**, the governing body of the Roman Catholic Church at the Vatican.

¹¹ **Nicholas**, the person who delivered this letter.

St. Bernard – Letter about Abelard

	separate aspects.
--	-------------------

QUESTIONS

1. Describe the differences between the techniques Bernard uses to try to persuade his hearers and the techniques Abelard uses.
2. Both authors used sarcasm. Find examples in Bernard.
3. What contemporary social and political issues today divide people along the lines of religious faith versus reason? Explain.
4. Reformers who have a strong faith in the rightness of their cause are often highly intolerant. Many of the schisms and inquisitions of the Roman Catholic Church attest to this. Think of more recent political as well as religious examples. Do some research if necessary, and describe them.

5

She Converted and Now Wants to Be a Rabbi

He’s a Jew Who Wants to Sleep Late on Saturdays

by David Brooks

Newsweek, December 15, 1997: Society/Living, “Room Crusaders”

<p>I can’t say I wasn’t warned. For centuries the Jewish sages¹ have been admonishing their young men not to marry outside the faith. But I’ve never paid much attention to their teaching, and 11 years ago I married a Unitarian. Two years after that I got my just deserts; my wife converted to Judaism. Really converted. Now she is studying in hopes of becoming a rabbi.² This just shows you God must exist. Only he would go to such extraordinary lengths to get me dragged to synagogue³ on Saturday mornings. But it also makes my family something of a case study. America is a country divided between the secular⁴ and the devout⁵ and suddenly the frictions between the two are replicated⁶ right in my own home.</p>	<p>Unitarian—a church that started during the Enlightenment through the application of skeptical reasoning to Christianity. Unitarians reject the divinity of Jesus and believe that all people will be saved. The church is noted for its liberal social philosophy, including diversity. Saturday—One of the Ten Commandments that Moses got from God was to rest on the seventh day of the week, as God had after finishing the creation. For Jews this is Saturday, for Christians, Sunday.</p>
<p>My wife and I are perpetually⁷ negotiating the level of our family’s religious observance. My idea that the kids would enjoy having a Christmas tree was among the first notions to go. Then pork products were banished⁸ from the house. Every few weeks my wife will suggest another step toward full observance, and what is striking at these moments is how weak the arguments are on my secular side. Her faith is a resolute force, my secularism is a marshmallowy object.</p>	<p>Christmas tree—Although this German custom comes from old pagan (non-Christian) worship and many secular Jewish families enjoy it, conservatives consider it too closely associated with Christianity. Pork—Jewish religious law forbids the eating of meat from pigs.</p>
<p>It wasn’t always this way. For most of the past two centuries the secularists have been the assertive and ascendant⁹ ones. The French revolutionaries dismissed religion as mere super-</p>	<p>French revolutionaries—those who deposed the king and stripped all the nobility of their titles, power, and often their lives,</p>

VOCABULARY

- ¹sages, wise people.
- ²rabbi, Jewish religious leader.
- ³synagogue, Jewish place of worship.
- ⁴secular non-religious.
- ⁵devout very religious.
- ⁶replicated duplicated.
- ⁷perpetually constantly forever.
- ⁸banished, ordered removed.
- ⁹ascendant, in power.

David Brooks – She Converted

<p>stitution that clouds the mind. The Marxists saw it as the opiate¹⁰ of the people. These people would have had a hundred reasons to give my wife on why we shouldn't allow religious ritual to spread in our home. But today their antireligious claims seem vainglorious.¹¹ The armies of progress set up a series of secular creeds—socialism, Freudianism, rationalism, New Ageism—that promised to pierce the mysteries of life. All of them now lie in ruins. We secularists are suffering a crisis of confidence while the ranks¹² of the religiously devout unexpectedly increase. For the first time in 200 years, the number of Orthodox Jews¹³ is growing.</p>	<p>starting in 1789. If you haven't read Charles Dickens' <i>A Tale of Two Cities</i> or seen a movie version, do so. It is a thrilling story of this tumultuous time.</p> <p>Marxists—followers of Karl Marx, the founder of communism, which abolished the aristocracy based on wealthy ownership of businesses.</p> <p>Freudianism—the theories of Freud, the founder of psychoanalysis, who established that people's conscious reason was not usually in control of their subconscious (especially sexual) emotions.</p> <p>New Ageism—a variety of contemporary beliefs (neither scientific nor religious) about how to predict and control people's health and destinies.</p>
<p>Secularists used to scoff at people who in the age of scientific progress needed the religious "crutch." But even secularism is now infused¹⁴ with spiritualism, albeit¹⁵ of a cloudy sort. You can't fall down in a bookstore these days without bumping your head on a book with the word "soul" in the title. A trip to the mall has suddenly become a spiritual StairMaster¹⁶ session: by selecting the right organic coffee, the Shaker-inspired cabinet and the environmentally attuned cosmetic, we firm up our metaphysical¹⁷ selves. Whenever I eat some Rain Forest Crunch I realize my ice cream has a cleaner conscience than I do.</p>	<p>Shaker-inspired cabinet—The Shakers were a communal religious group famous for celibacy and a strong work ethic. The work which created their furniture, simple but hand-crafted with the utmost care, was a spiritual obligation. There are many pictures of this furniture on the Web.</p> <p>Rain Forest Crunch—Saving the "jungles" of South America and Southeast Asia is an important environmental issue. Advertisers sometimes try to promote their ordinary products by suggesting that they believe in such causes.</p>
<p>Baby-boomer¹⁸ spiritualism is always aflight, never settling anywhere. Too often, it is a sentimental vagueness that never requires something of a person he wouldn't want to do anyway, that sidesteps the really tough issues, like death and evil. With this sort of spiritualism of the great-hearted self, nonob-</p>	<p>Not...Sabbath—The seventh day of rest should be kept in a way that does not require others to work for you.</p>

¹⁰ **opiate**, like the drug opium that causes users not to care about how badly life is treating them.

¹¹ **vainglorious**, empty pride.

¹² **ranks**, memberships.

¹³ **Orthodox Jews**, Jews who strictly follow the rules of Jewish life, both religions and traditional.

¹⁴ **infused**, filled throughout.

¹⁵ **albeit**, although.

¹⁶ **StairMaster**, brand name of an exercise machine.

¹⁷ **metaphysical**, philosophical or spiritual.

¹⁸ **baby boomer**, the large generation of people born after the soldiers returned from World War II and all began having kids at the same time (1946-1964).

David Brooks – She Converted

<p>servant America acknowledged the reality of the transcendent realm.¹⁹ We’re playing on organized religion’s turf. But our well-meaning intuitions are really no match when confronted with an organized religion that places God outside the self, that has a complex and authoritative theology,²⁰ that makes demands. My wife comes at me with the Torah²¹ and the long tradition of Jewish law admonishing us not to shop on the Sabbath. What am I supposed to say, that as long as I buy only natural fibers our souls will remain pristine?²²</p>	
<p>The one vibrant secular creed²³ is the creed of diversity. The ideal today is that we should lead our lives amid diverse cultures and people. But religious observance inevitably²⁴ involves some sectarianism. In order to get away from the vulgarity²⁵ of popular culture, millions of evangelical Christians have constructed their own separate culture. The Jewish school we send our kids to is aggressively antiracist, but it is not diverse. The strongest argument against organized religion is that it limits you; many Jews gave up religious observance precisely so they could integrate with the American mainstream.</p>	<p>Evangelical Christians— strictly conservative Protestants who believe the Bible literally, and feel called to witness their faith in public.</p>
<p>For the devout, diversity and pluralism²⁶ may be important, but other things are more important. One of them is fulfilling the covenant with God, obeying the injunction²⁷ in Deuteronomy to diligently pass the covenant on to the children. And you can’t do that if Judaism is reduced to a smorgasbord²⁸ helping as part of some multicultural approach to life. To explore in depth you have to sacrifice breadth. To build community you have to accept boundaries.</p>	<p>The Covenant—the Law of God given to Moses on stone tablets, specifically the Ten Commandments described in the biblical Book of Genesis and repeated in the Book of Deuteronomy. Remember also the Ark of the Covenant that we read about in the previous article, “Aristotle’s Children.”</p>
<p>Some writers believe that America is experiencing another Great Awakening. If so, we may be in for more religion than anyone now predicts. Religion is certainly playing a bigger role in my home than I ever would have expected, and so far I can’t say it’s for the worse. Anyway I’m looking on the bright side. If my son grows up and marries a shiksa,²⁹ I hope at least he marries one who wants to be a rabbi.</p>	<p>Great Awakening—an intense and widespread religious revival. At least three of these have occurred in the U.S., about one every hundred years. Can’t say...worse—an intentional double negative meaning: “It IS for the BETTER.”</p>

¹⁹ **transcendent realm**, a universe of unseen reality like that which Plato described.

²⁰ **theology**, a systematic set of religious beliefs.

²¹ **Torah**, the first five books of the Jewish (and Christian) Bible.

²² **pristine**, pure.

²³ **creed**, from the Latin “credere” = to believe; hence a set of beliefs accepted on faith.

²⁴ **inevitably**, unavoidably.

²⁵ **vulgarity**, bad taste.

²⁶ **pluralism**, accepting of many kinds of people, as in our national motto “*e pluribus unum*”—one out of many.

²⁷ **injunction**, command.

²⁸ **smorgasbord**, the Swedish version of a buffet with a variety of food laid out for people to help themselves to.

David Brooks – She Converted

²⁹ **shiksa**, a Yiddish (German-Hebrew) word meaning a non-Jewish woman.

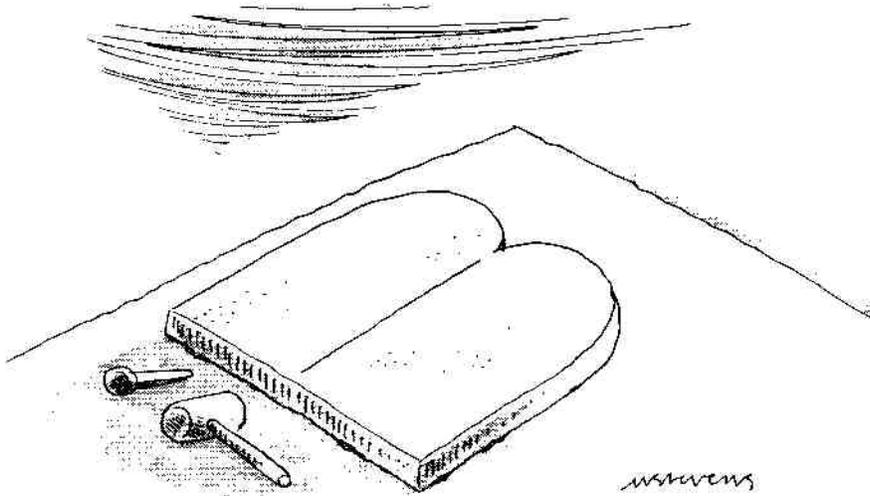
QUESTIONS

1. “Irony” means having things turn out very differently than expected and emphasizing these surprises, usually in a humorous way. Describe all the ironies you can find in the first paragraph.
2. Brooks is writing for a well-educated audience and freely makes use of allusions to Western intellectual history that he expects all readers to recognize. We will be reading selections from most of these writers. It is a good idea now, however, to get a quick introduction to them. Consult an encyclopedia to answer the following questions briefly.
 - a) Who were the leading philosophers of the French Revolution? Outline some of their major beliefs with regard to faith and reason.
 - b) What were the major beliefs of Karl Marx? Why did he see religion as a political threat to his views?
 - c) When and what were the Great Awakenings?
5. Explain the point Brooks is making ironically with his trips to the bookstore and the mall and eating cereal.
6. What do you think Mrs. Brooks hopes to accomplish for their children by establishing in their consciousness a *background* of rules and rites of Judaism? Has this new background had an effect on Mr. Brooks also? Explain.
7. Give examples of the vibrant “creed of diversity” as it is practiced today. Is it based on faith or reason? Explain.
8. Brooks mentions some rules of orthodox Judaism. If you are a practicing member of this or another religion, describe some of the rules that faith demands. If you are not, explain why you think some people are willing to follow such restrictive rules and why you would not (or would) be willing to do so if you were a believer.

WRITING TOPIC

Using examples from your own experience, tell advantages and disadvantages of the “cult of diversity.”

David Brooks – She Converted

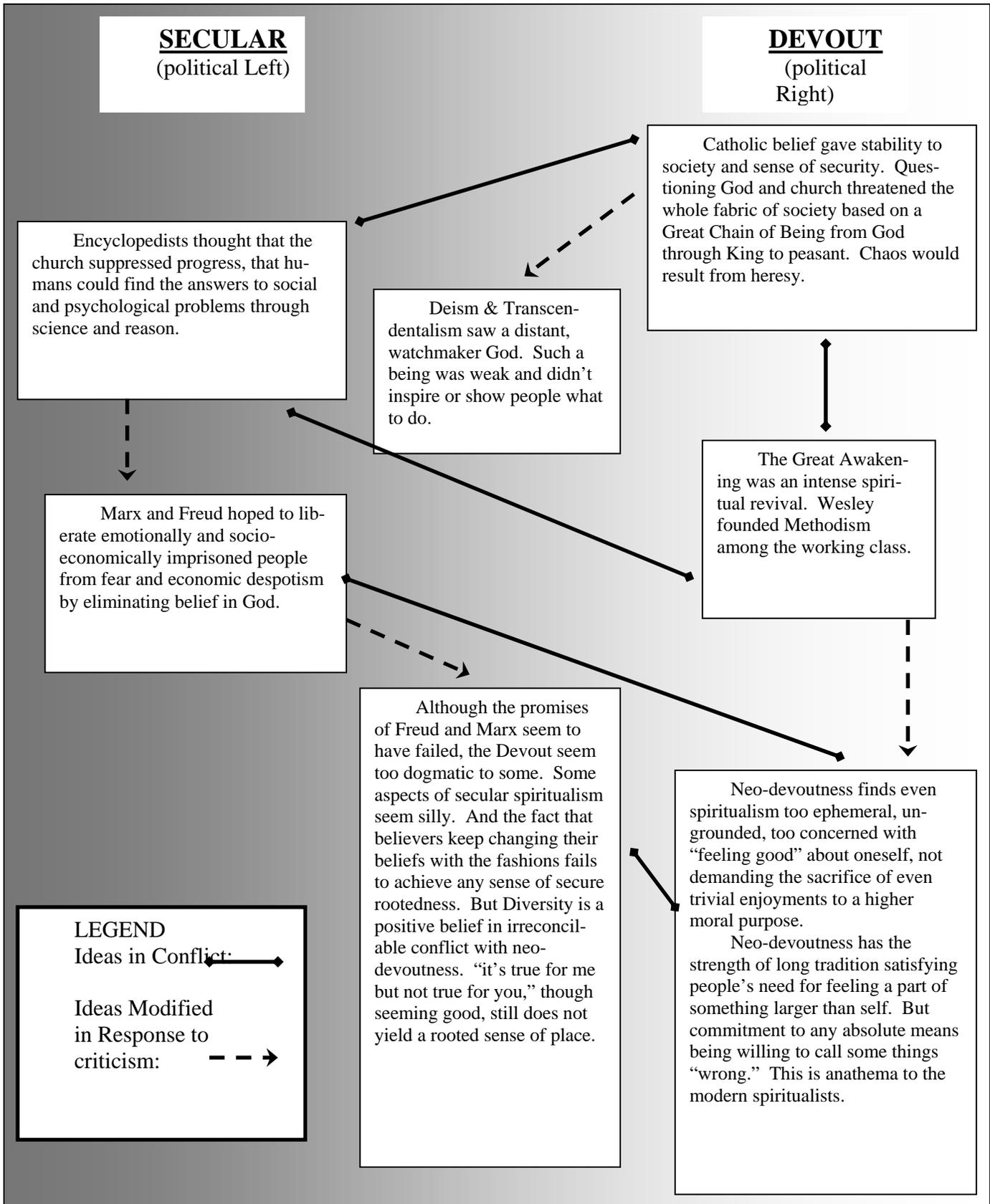


THE TEN COMMANDMENTS DO-IT-YOURSELF KIT

DEMONSTRATION: BACKGROUND MAP FOR “SHE CONVERTED”

Below is a very sketchy background map of the intellectual-spiritual issues in Western thought over the last 400 years, showing roughly where Brooks’ allusions fit in as the pendulum has swung between the devout and the secular. Now that you have researched some of these people and names, locate their territories on this map and try to get a feel for why people living their lives out against the background of one set of beliefs and traditions might have felt the need to change in a different direction.

David Brooks - She Converted



Donne – Batter My Heart

6

John Donne, our next author, like Abelard, had a life made difficult (though not as disastrous) by early love but ended as a renowned churchman. He, too, earned the wrath of an employer whose daughter he secretly married and who had him and his associates jailed. The men were later reconciled, but after his wife's death the tone of Donne's poems changed. The early ones, which had been celebrated for their complex wit and had often been about love (some graphically sexual), turned somber. He had, in fact, changed his profession from politics to priesthood. Donne had been raised as a Catholic and had even suffered persecution for his faith at the hands of Queen Elizabeth. But he converted to Anglicanism partly because he felt the Catholic Church was not accommodating the new scientific discoveries about the universe. This was illustrated in the celebrated case of Galileo, whom the church forced to recant his observations leading the conclusion that the Sun, not the Earth, was the center of the universe. (You can see and read this document at <http://www.law.umkc.edu/faculty/projects/ftrials/galileo/recantation.html>. See if you can figure out what language the original was written in and why that language was used.)

Donne was one of a group of seventeenth-century poets (a little younger than Shakespeare) who were dubbed "Metaphysical Poets" because their writings were intellectual, paradoxical, and witty rather than sentimental and conventional. Part of their energy comes from the fact that their comparisons and images link together things that are very unlike each other.

Sonnet

By John Donne (1572-1631)

Donne – Batter My Heart

<p>Batter my heart, three person'd God;¹ for, you As yet but knocke, breathe, shine, and seeke to mend; That I may rise, and stand, o'erthrow mee, and bend Your force, to breake, blowe, burn and make me new. I, like an usurpt² towne, to another due, Labour to admit you, but Oh, to no end,³ Reason, your viceroy⁴ in mee, mee should defend, But is captiv'd, and proves weake or untrue,</p> <p>Yet dearely I love you, and would be lov'd faine,⁵ But am betroth'd unto your enemye, Divorce mee, untie, or breake that knot againe, Take mee to you, imprison mee, for I Except⁶ you enthrall⁷ mee, never shall be free, Nor ever chaste, except you ravish⁸ mee.</p>	<p>Sonnet—a strict poetic form originating in Italy in the thirteenth century. Typically both rhyme scheme and subject change after the eighth line.</p> <p>I...you—The people of a town might want their former ruler back, and so invent ways to sneak him and his soldiers through the gates. See the classic movie <i>High Noon</i>.</p> <p>Spelling—You will notice that Donne plays fast and loose with silent e's on the ends of words. English spelling was not fixed until Dr. Johnson wrote (by himself) the first complete English dictionary in 1755.</p>
--	--

QUESTIONS

1. A paradox is something that seems self-contradictory. Find the two paradoxes in this poem. What truths lie behind their contradictions?
2. Does Donne see a conflict between reason and faith? Explain.
3. Read some other poems by Donne and other Metaphysical Poets like Andrew Marvell and George Herbert. Eighteenth-century critics (like Dr. Johnson) disliked their farfetched imagery and their intellectual, unemotional tone. What do you think?

7

After centuries of intense religious feelings, a reaction set in as the rise of scientific rationalism meshed with people's weariness of religious wars which, with concomitant disease and starvation, had cut Germany's population by a third. People had perceived God as one that needed to be wrestled with as Donne was doing in the poem above, or as Jacob had done with one of God's angels in

VOCABULARY

- ¹ **three person'd God**, a reference to the Trinity.
- ² **usurped**, taken over illegally.
- ³ **to no end**, with no result.
- ⁴ **viceroy**, deputy king (*roy* = *roi*, French for "king").
- ⁵ **fain**, gladly.
- ⁶ **except**, unless.
- ⁷ **enthrall**, make a slave of *or* excite and fascinate.
- ⁸ **ravish**, rape *or* overcome with sensuous delight.

Donne – Batter My Heart

the Book of Genesis. As Europe settled into a period of relative peace, the perception of God changed to a rational creator who ran a well-regulated universe in which everyone and everything had an appointed place. The heart of this mechanical system was the concept of the Great Chain of Being. According to this widely held picture, God was at the top. Linked to him were the descending orders of angels. Human souls were in the middle, with the king at the top—God’s viceroy—followed by the descending orders of nobility. Under them, the merchants, tradesmen, servants, and peasants followed in strict social order. Finally came the species of animals, plants, and rocks. When every part of this machine performs its appointed function in its appointed place, the reward for everyone is a peaceful society. Anyone who tries to rebel, however, or even rise above the social position which has been ordained, becomes the weakest link in the chain and threatens the whole society with chaos.

This philosophy was brilliantly summed up in the poem written by the most popular English poet of the eighteenth century, Alexander Pope. Not only does he describe this well-ordered universe, but he describes it in the tightly controlled verse form known as “heroic couplets.” As you will see, this consists of rhyming pairs of ten-syllable lines.

An Essay on Man

by Alexander Pope (1688-1744)

I. **Say first**, of God above, or Man below,
What can we reason, but from what we know?
Of Man, what see we but his station here,
From which to reason, or to which refer?
Through worlds unnumber'd, though the God be known,
'Tis¹ ours to trace him only in our own.
He who through vast immensity can pierce,
See worlds on worlds compose one universe,
Observe how system into system runs,
What other planets circle other suns,
What varied being peoples² every star,
May tell why Heaven has made us as we are.
But of this frame the bearings, and the ties,
The strong connexions, nice dependencies.
Gradations just,³ has thy pervading soul
Look'd through? or can a part contain the whole?
Is **the great chain**, that draws all to agree,⁴
And drawn, supports, upheld by God, or thee?

Say first—This is a nod to the traditional way of starting an epic poem. Homer, Virgil, and Milton all started by an appeal to a god or God to inspire them so that god would be speaking through the poet. Here, however, he is inviting the human reader to enter into a dialogue with him.

He...may tell—This is the first indication that Pope is challenging a reader who he thinks is too proud of humankind’s achievements through reason. The idea here is “If you can see all those other solar systems that may be out there, then you may have the authority to explain how and why we humans operate.”

The great chain—The Great Chain of Being described in the introduction above provides a sense of spiritual, as well as social security and stability.

VOCABULARY

¹ **'Tis**, contraction for “it is.”

² **peoples**, as a verb, “people” means “supply with people.”

³ **gradations just**, making precise spaces between each higher form of being and the one below it.

⁴ **agree**, function together.

Donne – Batter My Heart

<p>II. Presumptuous Man! the reason wouldst thou find, Why form'd so weak, so little, and so blind? First, if thou canst, the harder reason guess, Why form'd no weaker, blinder, and no less? Ask of thy mother earth, why oaks are made Taller or stronger than the weeds they shade? Or ask of yonder argent⁵ fields above, Why Jove's⁶ satellites are less than Jove?</p>	<p>Wouldst—We have seen already that present-tense verbs used to end in -th rather than -s when the subject is “he,” “she,” or “it.” When the subject was “thou” or “you” the ending was -st.</p>
<p>Of systems possible, if 'tis confess'd That Wisdom infinite must form the best, Where all must full or not coherent be, And all that rises, rise in due degree; Then, in the scale of reasoning life, 'tis plain, There must be, somewhere, such a rank as Man: And all the question (wrangle e'er so long) Is only this, if God has placed him wrong?</p>	<p>Wisdom...be—This was the basis for what became the theory of evolution, except it was supposed that God created (or at least planned) it all at once instead of evolving it over eons. We still speak of some species being “higher” than others. And if there are orders of angels “above” humankind, then there has to be something like us in the middle, and we are it.</p>
<p>Respecting Man, whatever wrong we call, May, must be right, as relative to all. In human works, though labour'd on with pain, A thousand movements scarce one purpose gain; In God's, one single can its end produce; Yet serves to second, too, some other use. So Man, who here seems principal alone, Perhaps acts second to some sphere unknown, Touches some wheel, or verges⁷ to some goal; 'Tis but a part we see, and not a whole.</p>	

⁵ **argent**, silvery—i.e., the moon and stars.

⁶ **Jove's**, the Greek name for the god Jupiter. So, in this case, the planet Jupiter.

⁷ **verges**, tends toward.

Donne – Batter My Heart

<p>When the proud steed⁸ shall know why Man restrains His fiery course, or drives him o'er⁹ the plains; When the dull ox, why now he breaks the clod, Is now a victim, and now¹⁰ Egypt's god: Then shall man's pride and dullness comprehend His actions', passions', being's use and end; Why doing, suffering, check'd,¹¹ impell'd; and why This hour a slave, the next a deity.¹²</p>	<p>When...then—In this long sentence Pope is making a comparison between the condition of the animal we use for purposes they do not understand and humans, who are used by God for purposes we do not understand.</p>
<p>Then say not Man's imperfect, Heaven in fault; Say rather, Man's as perfect as he ought, His knowledge measured to his state and place; His time a moment, and a point his space. If to be perfect in a certain sphere, What matter,¹³ soon or late, or here or there? The blest¹⁴ to-day is as completely so, As who¹⁵ began a thousand years ago.</p>	
<p>III. Heaven from all creatures hides the book of Fate, All but the page prescribed, their present state: From brutes what men, from men what spirits know: Or who could suffer being here below? The lamb thy riot¹⁶ dooms to bleed to-day, Had he¹⁷ thy reason, would he skip and play? Pleased to the last, he crops the flowery food, And licks the hand just raised to shed his blood. Oh blindness to the future! kindly given, That each may fill the circle mark'd by Heaven: Who sees with equal eye, as God of all, A hero perish, or a sparrow fall, Atoms or systems into ruin hurl'd, And now a bubble burst, and now a world.</p>	<p>From...know—The strict heroic couplet form often pressures poets to use unusual constructions that make demands on the readers. Unpacking such sentences, however, releases their power and delight. The “from” here refers to men hiding the fates of animals <i>from</i> them and, in the same way, angels hiding humans' fate from them.</p>

⁸ **steed**, horse.

⁹ **o're**, contraction of “over.”

¹⁰ **now...now...now**, at one time...at another time...at another time.

¹¹ **checked**, stopped.

¹² **deity**, a god.

¹³ **what matter**, what does it matter if....

¹⁴ **blest**, blessed person.

¹⁵ **who**, the person who....

¹⁶ **riot**, wild party.

¹⁷ **had he**, if he had.

Donne – Batter My Heart

<p>Hope humbly then; with trembling pinions¹⁸ soar; Wait the great teacher, Death; and God adore. What future bliss, He gives not thee to know, But gives that hope to be thy blessing now. Hope springs eternal in the human breast: Man never Is, but always To be blest: The soul, uneasy and confined from home, Rests and expatiates¹⁹ in a life to come.</p>	
<p>Lo, the poor Indian! whose untutor'd mind Sees God in clouds, or hears him in the wind; His soul, proud science never taught to stray Far as the solar walk,²⁰ or milky-way; Yet simple nature to his hope has given, Behind the cloud-topp'd hill, an humbler heaven; Some safer world in depth of woods embraced, Some happier island in the watery waste,²¹ Where slaves once more their native land behold, No fiends torment, no Christians thirst for gold. To be,²² contents his natural desire, He asks no angel's wing, no seraph's fire; But thinks, admitted to that equal sky, His faithful dog shall bear him company.</p>	<p>The poor Indian—At this time Europeans were fascinated by the Native Americans, about whom they knew very little but imagined much. A popular stereotype was the “noble savage”—a people uncorrupted by the greed and social pretensions of Western civilization.</p> <p>Seraph—As fixed in the writings of St. Tomas, there are nine orders of angels, of which the seraphim are closest to God. One of these touched the lips of the prophet Isaiah with a burning coal.</p>

¹⁸ **pinions**, wings.

¹⁹ **expatiates**, talk about at considerable length.

²⁰ **solar walk**, solar system with planets forming paths (or “walks”) around the Sun.

²¹ **watery waste**, the ocean.

²² **to be**, just existing, as in Hamlet’s famous soliloquy: “To be or not to be, that is the question.”

Donne – Batter My Heart

<p>IV. Go, wiser thou! and in thy scale of sense, Weigh thy opinion against Providence; Call imperfection what thou fanciest²³ such, Say, here he gives too little, there too much: Destroy all creatures for thy sport or gust,²⁴ Yet cry, If Man's unhappy, God's unjust: If Man alone engross²⁵ not Heaven's high care, Alone made perfect here, immortal there: Snatch from his hand the balance and the rod,²⁶ Re-judge his justice, be the God of God. In pride, in reasoning pride, our error lies; All quit their sphere, and rush into the skies. Pride still is aiming at the blest abodes, Men would be angels, angels would be gods. Aspiring to be gods, if angels fell, Aspiring to be angels, men rebel: And who but²⁷ wishes to invert the laws Of ORDER, sins against the Eternal Cause.</p>	<p>Go, wiser thou—sarcasm again. You, readers, consider that you are superior to the Indians in intellect, but you do not use your reason to realize that your killing animals is no more unjust than God's making an individual unhappy for the good of the whole. If...care—Pope accuses humans of unwarranted pride in supposing that we are the only thing God has to think about. All quit...skies—Everyone would like to be better off, be best, in fact, but that just cannot happen. Aspiring...rebel—Christian tradition says that the angel Lucifer led a revolt against God and was sent to hell. If men lead rebellions against their king, the result will be equally disastrous.</p>
...	
<p>VIII. See, through this air, this ocean, and this earth, All matter quick,²⁸ and bursting into birth: Above, how high progressive life may go! Around, how wide! how deep extend below! Vast chain of being! which from God began, Natures ethereal,²⁹ human, angel, man, Beast, bird, fish, insect, what no eye can see, No glass³⁰ can reach; from Infinite to Thee, From Thee to Nothing.—On superior powers Were we to press,³¹ inferior might on ours: Or in the full creation leave a void,³² Where, one step broken, the great scale's destroy'd: From Nature's chain whatever link you strike, Tenth, or ten thousandth, breaks the chain alike.</p>	

²³ **fanciest**, fancy, that is, imagine as a whim.

²⁴ **gust**, a shortening of “gustatory,” good-tasting.

²⁵ **engross**, completely occupy.

²⁶ **the balance and the rod**, the scales of justice and the rod of punishment.

²⁷ **but**, even only (wishes).

²⁸ **quick**, alive.

²⁹ **ethereal**, heavenly.

³⁰ **glass**, telescope.

³¹ **press**, push, shove.

³² **void**, an empty space; a missing link.

Donne – Batter My Heart

<p>And, if each system in gradation roll Alike essential to th' amazing whole, The least confusion but in one, not all That system only, but the whole must fall. Let earth, unbalanced, from her orbit fly, Planets and suns run lawless through the sky; Let ruling angels from their spheres be hurl'd, Being on being wreck'd, and world on world; Heaven's whole foundations to their centre nod,³³ And Nature trembles to the throne of God. All this dread³⁴ order break--for whom? for thee? Vile worm!--oh madness! pride! impiety!</p>	
<p>...</p> <p>X. Cease then, nor Order imperfection name: Our proper bliss depends on what we blame. Know thy own point: this kind, this due degree Of blindness, weakness, Heaven bestows on thee. Submit--in this, or any other sphere, Secure to be as bless'd as thou canst bear: Safe in the hand of one disposing Power, Or in the natal, or the mortal hour. All Nature is but Art, unknown to thee; All chance, direction, which thou canst not see; All discord, harmony not understood; All partial evil, universal good: And, spite of pride, in erring reason's spite, One truth is clear, WHATEVER IS, IS RIGHT.</p>	<p>Nor...name—Again, normal word order is reversed for the rhyme: “and do not call what is really <i>order</i> by the name of <i>imperfection</i>.”</p> <p>Secure...bear—The good part about accepting a less exalted position in life than you might want is that it won't be more than you can handle.</p>

QUESTIONS

1. The beliefs about God described in this poem are called “deism.” Look up the term in an encyclopedia. Point out as many ways as you can in which this set of beliefs differs from traditional religions.
2. Pope says the only things we can know about God are what we can reason from what we know. How would he explain why he believes in God at all? Look up the phrase “intelligent design” in the online encyclopedia “Wikipedia” (<http://en.wikipedia.org>) or other resource. Would Pope have approved of the doctrine of “intelligent design”? Would David Brooks (the author of “She Converted”) have approved of it?
3. How do you like the verse form of the heroic couplet?
4. Pope gives a rather detailed description of the mechanics of the universe as it was known by educated people of his time. So far as you can tell, has the picture of the physical universe given us by scientists changed significantly since this poem was written about 300 years ago? Are you surprised? Why or why not?

³³ **nod**, bend, as if about to fall.

³⁴ **dread**, greatly revered; awe-inspiring.

Donne – Batter My Heart

5. The reasoning starts with an important clause beginning, “If ‘tis confess’d.” This kind of reasoning which starts from agreed-upon principles and uses logical steps to reach concrete conclusions is called “deductive.” Reread that paragraph. How convincing do you find this chain of reasoning and its conclusions? Why?
6. Pope is dealing with the ancient question of why a good God, if he is all-powerful, permits evil in the world. Explain in your own words how he answers that question.
7. The reasoning of the Great Chain of Being was often invoked to support the divine right of kings. Look up this phrase if you need to and then explain in your own words how the argument runs. (Also look at the very short and amusing poem of that name by Edgar Allan Poe, at <http://www.eapoe.org/works/poems/drkingsa.htm>.)
8. The French revolutionaries (whom we met in David Brooks’ article “She Converted”) were rebelling against the ideals of Pope’s universe—everyone keeping his place in society under the king, God’s viceroy. Find out what happened after the revolution, commonly called the “Reign of Terror.” To what extent did this aftermath fulfill Pope’s predictions about what would happen if the Chain were broken?

8

Voltaire - Candide

You have seen the Enlightenment referred to, and you have read a bit about this eighteenth-century movement of rationalism in the marginal notes. Now we are going to read part of a very famous story by one of the most important writers of this movement, the French philosopher Francoise-Marie Arouet, better known as Voltaire. In his younger days, Voltaire was a party animal who at the same time wrote several successful plays. He was also quick-witted and insolent, a trait which earned him more than one beating and a couple of imprisonments. The French king finally had him exiled to England, where he was impressed by the degree of religious toleration, the high level of scientific progress, and philosophical rationalism. Upon his return to France, Voltaire targeted the political and religious intolerance that persisted there. The following passage from his most popular work illustrates how effectively he satirized the establishment. But it is worth noting that, near the end of his life, he used some of his large fortune to provide refuge to victims of church and state.

Candide

By Voltaire (1694-1778)

Chapter 1 - How Candide Was Brought Up in a Magnificent Castle and How He Was Driven Thence¹

<p>In the country of Westphalia, in the castle of the most noble Baron of Thunder-ten-tronckh, lived a youth whom Nature had endowed with a most sweet disposition. His face was the true index of his mind. He had a solid judgment joined to the most unaffected² simplicity; and hence, I presume, he had his name of Candide.³ The old servants of the house suspected him to have been the son of the Baron's sister, by a very good sort of a gentleman of the neighborhood, whom that young lady refused to marry, because he could produce no more than threescore⁴ and eleven quarterings in his arms; the rest of the genealogical tree⁵ belonging to the family having been lost through the injuries of time.</p>	<p>Quarterings in his arms—The familiar emblems on shields originally used to identify knights in battle, like the numbers used in sports today. Later their arrangement showed the ancestry of a noble. Although Voltaire is exaggerating for comic effect, a later Empress of Hungary did have 29 quarterings.</p>
<p>The Baron was one of the most powerful lords in Westphalia, for his castle had not only a gate, but even windows, and his great hall was hung with tapestry.⁶ He used to hunt with his mastiffs⁷ and spaniels instead of greyhounds; his groom⁸ served him for huntsman; and the parson of the parish officiated as his grand almoner.⁹ He was called "My Lord" by all his people, and he never</p>	<p>The details here show his pretentiousness. His people are so poor that their houses don't have windows. He cannot afford good hunting dogs, and his servants</p>

VOCABULARY

¹thence, from there.

²unaffected, without affectation; not hypocritical.

³Candide, the hero's name is based on the word "candid" meaning honest.

⁴score, twenty.

⁵genealogical tree, family history.

⁶tapestry, large rugs with scenes woven into them to be hung on walls.

⁷mastiff, a dog noted for its strength, not speed.

⁸groom, a person hired to take care of horses.

⁹almoner, an official whose job it was to give alms to the poor—like a modern social worker.

Voltaire - Candide

told a story but everyone laughed at it.	must do double duty.
My Lady Baroness, who weighed three hundred and fifty pounds, consequently was a person of no small consideration; and then she did the honors of the house with a dignity that commanded universal respect. Her daughter was about seventeen years of age, fresh-colored, comely, ¹⁰ plump, and desirable. The Baron's son seemed to be a youth in every respect worthy of the father he sprung from. Pangloss, ¹¹ the preceptor, ¹² was the oracle ¹³ of the family, and little Candide listened to his instructions with all the simplicity natural to his age and disposition.	The Baron's...sprung from —Notice the irony.
Master Pangloss taught the metaphysico-theologico-cosmolonigology. He could prove to admiration that there is no effect without a cause; and, that in this best of all possible worlds , the Baron's castle was the most magnificent of all castles, and My Lady the best of all possible baronesses.	The best...worlds —Remember the last lines of Pope's "Essay on Man": "Whatever is is right."
"It is demonstrable," said he, "that things cannot be otherwise than as they are; for as all things have been created for some end, ¹⁴ they must necessarily be created for the best end. Observe, for instance, the nose is formed for spectacles, therefore we wear spectacles. The legs are visibly designed for stockings, accordingly we wear stockings. Stones were made to be hewn and to construct castles, therefore My Lord has a magnificent castle; for the greatest baron in the province ought to be the best lodged. Swine ¹⁵ were intended to be eaten, therefore we eat pork all the year round: and they, who assert that everything is right, do not express themselves correctly; they should say that everything is best."	
Candide listened attentively and believed implicitly, for he thought Miss Cunegund excessively handsome, though he never had the courage to tell her so. He concluded that next to the happiness of being Baron of Thunder-ten-tronckh, the next was that of being Miss Cunegund, the next that of seeing her every day, and the last that of hearing the doctrine of Master Pangloss, the greatest philosopher of the whole province, and consequently of the whole world.	
One day when Miss Cunegund went to take a walk in a little neighboring wood which was called a park, she saw, through the	Sufficing reason —Scientific, inductive reasoning looks at

¹⁰ comely, attractive.

¹¹ Pangloss, Voltaire made up this name from Greek/Latin roots: *pan* = "everything," *glossa* = "explanation of something difficult."

¹² preceptor, teacher, tutor.

¹³ oracle, an inspired source of wisdom and infallible advice.

¹⁴ end, purpose. This was actually one component of Aristotle's description of things: "What purpose does it serve?"

¹⁵ swine, pigs.

Voltaire - Candide

<p>bushes, the sage Doctor Pangloss giving a lecture in experimental philosophy to her mother's chambermaid, a little brown wench,¹⁶ very pretty, and very tractable.¹⁷ As Miss Cunegund had a great disposition¹⁸ for the sciences, she observed with the utmost attention the experiments which were repeated before her eyes; she perfectly well understood the force of the doctor's reasoning upon causes and effects. She retired greatly flurried,¹⁹ quite pensive²⁰ and filled with the desire of knowledge, imagining that she might be a sufficing reason for young Candide, and he for her.</p>	<p>many effects and constructs a theory about what would suffice (be enough) to cause them.</p>
<p>On her way back she happened to meet the young man; she blushed, he blushed also; she wished him a good morning in a flattering tone, he returned the salute,²¹ without knowing what he said. The next day, as they were rising from dinner, Cunegund and Candide slipped behind the screen. The miss dropped her handkerchief, the young man picked it up. She innocently took hold of his hand, and he as innocently kissed hers with a warmth, a sensibility, a grace—all very particular; their lips met; their eyes sparkled; their knees trembled; their hands strayed. The Baron chanced to come by; he beheld the cause and effect, and, without hesitation, saluted Candide with some notable kicks on the breech and drove him out of doors. The lovely Miss Cunegund fainted away, and, as soon as she came to herself, the Baroness boxed her ears. Thus a general consternation²² was spread over this most magnificent and most agreeable of all possible castles.</p>	
<p>...</p>	
<p><i>[Near frozen, without money, and starving, Candide is tricked into joining the Bulgarian army. Not understanding that he is being forced to serve, one morning he simply walks away, believing that every person has the natural right to walk wherever his legs will take him. He is caught, court-martialed, and beaten till all the skin is off his back, but is pardoned by the King who happens to be riding by at that moment. When his injuries heal, he is put back into the line of a battle that is about to take place between the Bulgarian king and the king of the "Abarians."]</i></p>	
<p>...</p>	

¹⁶ **wench**, a girl or woman, especially lower class.

¹⁷ **tractable**, easily led.

¹⁸ **disposition**, talent and interest.

¹⁹ **flurried**, embarrassed, flustered.

²⁰ **pensive**, thoughtful.

²¹ **salute**, salutation; greeting.

²² **consternation**, feeling unpleasantly surprised.

Chapter 3: How Candide Escaped from the Bulgarians and What Befell Him²³ Afterward

<p>Never was anything so gallant, so well accoutred,²⁴ so brilliant, and so finely disposed as the two armies. The trumpets, fifes, hautboys,²⁵ drums, and cannon made such harmony as never was heard in Hell itself. The entertainment began by a discharge of cannon, which, in the twinkling of an eye, laid flat about 6,000 men on each side. The musket bullets swept away, out of the best of all possible worlds, nine or ten thousand scoundrels that infested its surface. The bayonet was next the sufficient reason of the deaths of several thousands. The whole might amount to thirty thousand souls. Candide trembled like a philosopher, and concealed himself as well as he could during this heroic butchery.</p>	
<p>At length, while the two kings were causing Te Deums to be sung in their camps, Candide took a resolution to go and reason somewhere else upon causes and effects. After passing over heaps of dead or dying men, the first place he came to was a neighboring village, in the Abarian territories, which had been burned to the ground by the Bulgarians, agreeably²⁶ to the laws of war. Here lay a number of old men covered with wounds, who beheld their wives dying with their throats cut, and hugging their children to their breasts, all stained with blood. There several young virgins, whose bodies had been ripped open, after they had satisfied the natural necessities of the Bulgarian heroes, breathed their last; while others, half-burned in the flames, begged to be dispatched out of the world. The ground about them was covered with the brains, arms, and legs of dead men.</p>	<p>Te Deum (Laudamus)—These are the opening words (“We praise you Lord”) of one of the oldest Catholic hymns, dating back to the fourth century, set to music by many famous composers, and still in regular use. Voltaire sees the irony of the king praising God for the killing of all the soldiers.</p>
<p>Candide made all the haste he could to another village, which belonged to the Bulgarians, and there he found the heroic Abares had enacted the same tragedy. Thence continuing to walk over palpitating²⁷ limbs, or through ruined buildings, at length he arrived beyond the theater of war, with a little provision²⁸ in his budget,²⁹ and Miss Cunegund's image in his heart. When he arrived in Holland his provision failed him; but having heard that the inhabitants of that country were all rich and Christians, he made</p>	

²³ **befell him**, happened to him.

²⁴ **accoutered**, fitted out with uniforms and equipment.

²⁵ **hautboys** (from the French, meaning “high woodwinds”), oboes.

²⁶ **agreeably**, in conformance with.

²⁷ **palpitating**, pulsing.

²⁸ **provision**, food.

²⁹ **budget**, a small bag or backpack.

Voltaire - Candide

<p>himself sure of being treated by them in the same manner as the Baron's castle, before he had been driven thence through the power of Miss Cunegund's bright eyes.</p>	
<p>He asked charity of several grave-looking people, who one and all answered him, that if he continued to follow this trade they would have him sent to the house of correction, where he should be taught to get his bread.</p>	
<p>He next addressed himself to a person who had just come from haranguing³⁰ a numerous assembly for a whole hour on the subject of charity. The orator, squinting at him under his broad-brimmed hat, asked him sternly, what brought him thither and whether he was for the good old cause?</p>	<p>Broad-brimmed hat—typical of the Calvinists (the good old cause) who believed in predestination—that each soul is known by God in advance to be saved or damned.</p>
<p>"Sir," said Candide, in a submissive manner, "I conceive there can be no effect without a cause; everything is necessarily concatenated³¹ and arranged for the best. It was necessary that I should be banished from the presence of Miss Cunegund; that I should afterwards run the gauntlet;³² and it is necessary I should beg my bread, till I am able to get it. All this could not have been otherwise."</p>	
<p>"Hark ye, friend," said the orator, "do you hold the Pope to be Antichrist?"³³ "Truly, I never heard anything about it," said Candide, "but whether he is or not, I am in want of something to eat." "Thou deservest not to eat or to drink," replied the orator, "wretch, monster, that thou art! hence! avoid my sight, nor ever come near me again while thou livest."</p>	<p>Hold the Pope to be Antichrist—Although the Netherlands had a good record of religious tolerance for the time, it did not extend to Catholics because of their long war for independence from Catholic Spain.</p>
<p>The orator's wife happened to put her head out of the window at that instant, when, seeing a man who doubted whether the Pope was Antichrist, she discharged upon his head a utensil full of water. Good heavens, to what excess does religious zeal³⁴ transport³⁵ womankind!</p>	
<p>A man who had never been christened, an honest Anabaptist named James, was witness to the cruel and ignominious³⁶ treat-</p>	<p>Anabaptist—a Protestant movement that emphasized social re-</p>

³⁰ **haranguing**, lecturing people aggressively.

³¹ **concatenated**, joined like a chain—the Great Chain of Being.

³² **run the gauntlet**, a form of torture in which the victim must run between two lines of men, all of whom beat him or throw things at him when he passes. It often resulted in death.

³³ **Antichrist**, the personification of evil who, according to some Christians, will appear near the end of the world, setting himself up against Jesus to win souls for Satan.

³⁴ **zeal**, energetic enthusiasm.

³⁵ **transport**, get carried away.

³⁶ **ignominious**, humiliating.

Voltaire - Candide

<p>ment showed to one of his brethren, to a rational, two-footed, unfledged³⁷ being. Moved with pity he carried him to his own house, caused him to be cleaned, gave him meat and drink, and made him a present of two florins,³⁸ at the same time proposing to instruct him in his own trade of weaving Persian silks, which are fabricated³⁹ in Holland.</p>	<p>form and pacifism. They believed that people should be baptized only by choice as adults.</p>
<p>Candide, penetrated with so much goodness, threw himself at his feet, crying, "Now I am convinced that my Master Pangloss told me truth when he said that everything was for the best in this world; for I am infinitely more affected⁴⁰ with your extraordinary generosity than with the inhumanity of that gentleman in the black cloak and his wife."</p>	

Chapter 4: How Candide Found His Old Master Pangloss Again and What Happened to Him

<p>The next day, as Candide was walking out, he met a beggar all covered with scabs, his eyes sunk in his head, the end of his nose eaten off, his mouth drawn on one side, his teeth as black as a cloak, snuffling and coughing most violently, and every time he attempted to spit out dropped a tooth.</p>	
<p>Candide, divided between compassion and horror, but giving way to the former, bestowed on this shocking figure the two florins which the honest Anabaptist, James, had just before given to him. The specter⁴¹ looked at him very earnestly, shed tears and threw his arms about his neck. Candide started back aghast.</p> <p>"Alas!" said the one wretch to the other, "don't you know dear Pangloss?"</p> <p>"What do I hear? Is it you, my dear master! you I behold in this piteous plight?⁴² What dreadful misfortune has befallen you? What has made you leave the most magnificent and delightful of all castles? What has become of Miss Cunegund, the mirror of young ladies, and Nature's masterpiece?"</p>	<p>Mirror of young ladies—This was a common expression for centuries to praise someone's good looks. Today we might say, "She was the picture of loveliness." The mirror apparently reflected the Platonic ideal of beauty when she looked into it.</p>
<p>"Oh, Lord!" cried Pangloss, "I am so weak I cannot stand,"</p>	

³⁷ **unfledged**, of a bird, one that has not yet developed wing feathers. Hence, "not yet adult."

³⁸ **florin**, the main coin in Europe at the time. Maybe something like a dollar today.

³⁹ **fabricated**, made.

⁴⁰ **affected**, moved with emotion.

⁴¹ **specter**, ghost.

⁴² **plight**, bad situation.

⁴³ **stable**, a garage for horses.

<p>upon which Candide instantly led him to the Anabaptist's stable,⁴³ and procured him something to eat.</p> <p>As soon as Pangloss had a little refreshed himself, Candide began to repeat his inquiries concerning Miss Cunegund.</p> <p>"She is dead," replied the other.</p> <p>"Dead!" cried Candide, and immediately fainted away; his friend restored him by the help of a little bad vinegar, which he found by chance in the stable.</p> <p>Candide opened his eyes, and again repeated: "Dead! is Miss Cunegund dead? Ah, where is the best of worlds now? But of what illness did she die? Was it of grief on seeing her father kick me out of his magnificent castle?"</p>	
<p>"No," replied Pangloss, "her body was ripped open by the Bulgarian soldiers, after they had subjected her to as much cruelty as a damsel⁴⁴ could survive; they knocked the Baron, her father, on the head for attempting to defend her; My Lady, her mother, was cut in pieces; my poor pupil was served just in the same manner as his sister; and as for the castle, they have not left one stone upon another; they have destroyed all the ducks, and sheep, the barns, and the trees; but we have had our revenge, for the Abares have done the very same thing in a neighboring barony, which belonged to a Bulgarian lord."</p>	
<p>At hearing this, Candide fainted away a second time, but, not withstanding,⁴⁵ having come to himself again, he said all that it became him to say; he inquired into the cause and effect, as well as into the sufficing reason that had reduced Pangloss to so miserable a condition.</p> <p>"Alas," replied the preceptor, "it was love; love, the comfort of the human species; love, the preserver of the universe; the soul of all sensible beings; love! tender love!"</p> <p>"Alas," cried Candide, "I have had some knowledge of love myself, this sovereign of hearts, this soul of souls; yet it never cost me more than a kiss and twenty kicks on the backside. But how could this beautiful cause produce in you so hideous an effect?"</p>	

⁴⁴ damsel, young woman.

⁴⁵ notwithstanding, in spite of all that.

<p>Pangloss made answer in these terms: "O my dear Candide, you must remember Pacquette, that pretty wench, who waited on our noble Baroness; in her arms I tasted the pleasures of Paradise, which produced these Hell torments with which you see me devoured. She was infected with an ailment, and perhaps has since died of it; she received this present of a learned Franciscan,⁴⁶ who derived it from the fountainhead;⁴⁷ he was indebted for it to an old countess, who had it of a captain of horse,⁴⁸ who had it of a marchioness,⁴⁹ who had it of a page,⁵⁰ the page had it of a Jesuit, who, during his novitiate,⁵¹ had it in a direct line from one of the fellow adventurers of Christopher Columbus; for my part I shall give it to nobody, I am a dying man." "O sage Pangloss," cried Candide, "what a strange genealogy is this! Is not the devil the root of it?""</p>	<p>Jesuit—The Society of Jesus, founded by St. Ignatius, was one of the first Christian religious orders to leave the corrupt monasteries and live by teaching and receiving charity. Is not...at all—the argument of faith versus reason.</p>
<p>"Not at all," replied the great man, "it was a thing unavoidable, a necessary ingredient in the best of worlds; for if Columbus had not caught in an island in America this disease, which contaminates the source of generation, and frequently impedes propagation itself, and is evidently opposed to the great end of nature, we should have had neither chocolate nor cochineal.⁵² It is also to be observed, that, even to the present time, in this continent of ours, this malady,⁵³ like our religious controversies, is peculiar to ourselves. The Turks, the Indians,⁵⁴ the Persians, the Chinese, the Siamese, and the Japanese are entirely unacquainted with it; but there is a sufficing reason for them to know it in a few centuries. In the meantime, it is making prodigious havoc⁵⁵ among us, especially in those armies composed of well disciplined hirelings,⁵⁶ who determine the fate of nations; for we may safely affirm, that, when an army of thirty thousand men engages another equal in size, there are about twenty thousand infected with syphilis on each side."</p>	<p>If Columbus...disease— The origin of syphilis is debated. But there is some evidence that Native Americans had a form of the disease to which Europeans did not have immunity. The disease did spread from Naples shortly after the return of Columbus's men in a form much more deadly than that of today.</p>

⁴⁶ **Franciscan**, a monk belonging to the religious order founded by St. Francis.

⁴⁷ **fountainhead**, the ultimate source—in this case, presumably, the head of the friar's order.

⁴⁸ **horse**, cavalry.

⁴⁹ **marchioness**, a fairly high-ranking noblewoman.

⁵⁰ **page**, a personal servant.

⁵¹ **novitiate**, training period.

⁵² **cochineal**, a scarlet dye made by crushing an insect native to Mexico.

⁵³ **malady**, sickness.

⁵⁴ **Indians**, natives of India.

⁵⁵ **prodigious havoc**, great destruction.

⁵⁶ **hirelings**, mercenary soldiers hired to fight for a country not their own. This was a common practice in those days. The British hired German soldiers to fight us in the Revolutionary War.

<p>"Very surprising, indeed," said Candide, "but you must get cured."</p> <p>"Lord help me, how can I?" said Pangloss. "My dear friend, I have not a penny in the world; and you know one cannot be bled or have an enema without money."</p> <p>This last speech had its effect on Candide; he flew to the charitable Anabaptist, James; he flung himself at his feet, and gave him so striking a picture of the miserable condition of his friend that the good man without any further hesitation agreed to take Dr. Pangloss into his house, and to pay for his cure. The cure was effected⁵⁷ with only the loss of one eye and an ear. As he wrote a good hand,⁵⁸ and understood accounts tolerably well, the Anabaptist made him his bookkeeper. At the expiration of two months, being obliged by some mercantile⁵⁹ affairs to go to Lisbon he took the two philosophers with him in the same ship; Pangloss, during the course of the voyage, explained to him how everything was so constituted that it could not be better. James did not quite agree with him on this point.</p>	<p>Be bled—a common treatment for almost any disease from ancient Egyptian times up through much of the nineteenth century, as was purging. It is an example of the danger of deductive reasoning, for there was never any evidence that removing “bad blood” cured anything, and probably killed some. On the other hand, few real cures were known.</p>
<p>"Men," said he "must, in some things, have deviated from their original innocence; for they were not born wolves, and yet they worry one another like those beasts of prey. God never gave them twenty-four pounders⁶⁰ nor bayonets, and yet they have made cannon and bayonets to destroy one another. To this account I might add not only bankruptcies, but the law which seizes on the effects of bankrupts, only to cheat the creditors."</p> <p>"All this was indispensably necessary," replied the one-eyed doctor, "for private misfortunes are public benefits; so that the more private misfortunes there are, the greater is the general good."</p>	<p>But the law...creditors— The goods of the person who has gone bankrupt are not given to the person who lent the money, but taken by the government.</p>
<p>While he was arguing in this manner, the sky was overcast, the winds blew from the four quarters of the compass, and the ship was assailed by a most terrible tempest, within sight of the port of Lisbon.</p>	

Chapter 5: A Tempest, a Shipwreck, an Earthquake, and What Else Befell Dr. Pangloss, Candide, and James, the Anabaptist

One half of the passengers, weakened and half-dead with the	
---	--

⁵⁷ **effected**, done, performed. “Effect” (with an “e”) is normally a noun. When it’s used as a verb, this is what it means.

⁵⁸ **a good hand**, that is, his handwriting was clear.

⁵⁹ **mercantile**, business of merchants.

⁶⁰ **twenty-four pounders**, cannons firing 24-pound balls.

Voltaire - Candide

<p>inconceivable anxiety and sickness which the rolling of a vessel at sea occasions through the whole human frame, were lost to all sense of the danger that surrounded them. The others made loud outcries, or betook themselves to their prayers; the sails were blown into shreds, and the masts were brought by the board. The vessel was a total wreck. Everyone was busily employed, but nobody could be either heard or obeyed. The Anabaptist, being upon deck, lent a helping hand as well as the rest, when a brutish sailor gave him a blow and laid him speechless; but, not withstanding, with the violence of the blow the tar⁶¹ himself tumbled headforemost overboard, and fell upon a piece of the broken mast, which he immediately grasped.</p>	
<p>Honest James, forgetting the injury he had so lately received from him, flew to his assistance, and, with great difficulty, hauled him in again, but, not withstanding, in the attempt, was, by a sudden jerk of the ship, thrown overboard himself, in sight of the very fellow whom he had risked his life to save and who took not the least notice of him in this distress. Candide, who beheld all that passed and saw his benefactor⁶² one moment rising above water, and the next swallowed up by the merciless waves, was preparing to jump after him, but was prevented by the philosopher Pangloss, who demonstrated to him that the roadstead⁶³ of Lisbon had been made on purpose for the Anabaptist to be drowned there. While he was proving his argument <i>a priori</i>,⁶⁴ the ship foundered, and the whole crew perished, except Pangloss, Candide, and the sailor who had been the means of drowning the good Anabaptist. The villain swam ashore; but Pangloss and Candide reached the land upon a plank.</p>	
<p>As soon as they had recovered from their surprise and fatigue they walked towards Lisbon; with what little money they had left they thought to save themselves from starving after having escaped drowning.</p>	
<p>Scarcely had they ceased to lament the loss of their benefactor and set foot in the city, when they perceived that the earth trembled under their feet, and the sea, swelling and foaming in the harbor, was dashing in pieces the vessels that were riding at anchor. Large sheets of flames and cinders covered the streets and public places; the houses tottered, and were tumbled topsy-turvy⁶⁵ even</p>	<p>The earth trembled— On All-Saints Day, 1755, the great Lisbon earthquake, the first in modern Europe and one of the worst in history, actually killed 100,000 people. It gave Voltaire</p>

⁶¹ **tar**, British word for “sailor.”

⁶² **benefactor**, a person who gives important help to another.

⁶³ **roadstead**, harbor.

⁶⁴ ***a priori***, from first principles. That is, by the same deductive reasoning Pangloss always uses.

⁶⁵ **topsy-turvy**, this way and that, even upside down.

Voltaire - Candide

<p>to their foundations, which were themselves destroyed, and thirty thousand inhabitants of both sexes, young and old, were buried beneath the ruins</p>	<p>a starting point for writing <i>Candide</i>.</p>
<p>The sailor, whistling and swearing, cried, "Damn it, there's something to be got here." "What can be the sufficing reason of this phenomenon?" said Pangloss. "It is certainly the day of judgment," said Candide. The sailor, defying death in the pursuit of plunder,⁶⁶ rushed into the midst of the ruin, where he found some money, with which he got drunk, and, after he had slept himself sober he purchased the favors of the first good-natured wench that came in his way, amidst the ruins of demolished houses and the groans of half-buried and expiring⁶⁷ persons.</p>	<p>The day of judgment—Some Christian traditions predict that when Christ returns to earth, there will be dire calamities before the dead are raised and sorted into the saved and the damned and the earth is destroyed.</p>
<p>Pangloss pulled him by the sleeve. "Friend," said he, "this is not right, you trespass against the universal reason, and have mistaken your time." "Death and zounds!"⁶⁸ answered the other, "I am a sailor and was born at Batavia,⁶⁹ and have trampled four times upon the crucifix in as many voyages to Japan; you have come to a good hand with your universal reason."</p>	<p>Trampled ...Japan—Although the Japanese leaders expelled and even killed early Christian missionaries, they welcomed trade with Portugal in the sixteenth and seventeenth centuries.</p>
<p>In the meantime, Candide, who had been wounded by some pieces of stone that fell from the houses, lay stretched in the street, almost covered with rubbish. "For God's sake," said he to Pangloss, "get me a little wine and oil! I am dying." "This concussion of the earth is no new thing," said Pangloss, "the city of Lima in South America experienced the same last year; the same cause, the same effects; there is certainly a train of sulphur all the way underground from Lima</p>	<p>This...Lisbon—The Lisbon earthquake, in addition to causing some rethinking about God's role in the world, also started the scientific study of earthquakes—seismology. But again Pangloss leaps to a cause without connecting evidence.</p>

⁶⁶ **plunder**, looting.

⁶⁷ **expiring**, dying.

⁶⁸ **zounds**, short for "by God's (i.e., Christ's) wounds. A common oath of the time.

⁶⁹ **Batavia** (now Jakarta, Indonesia), a center of the Dutch imperial trade.

<p>to Lisbon."</p> <p>"Nothing is more probable," said Candide; "but for the love of God a little oil and wine."</p>	
<p>"Probable!" replied the philosopher, "I maintain that the thing is demonstrable."</p> <p>Candide fainted away, and Pangloss fetched⁷⁰ him some water from a neighboring spring. The next day, in searching among the ruins, they found some eatables with which they repaired their exhausted strength. After this they assisted the inhabitants in relieving the distressed and wounded. Some, whom they had humanely assisted, gave them as good a dinner as could be expected under such terrible circumstances. The repast,⁷¹ indeed, was mournful, and the company moistened their bread with their tears; but Pangloss endeavored to comfort them under this affliction by affirming that things could not be otherwise that they were.</p>	
<p>"For," said he, "all this is for the very best end, for if there is a volcano at Lisbon it could be in no other spot; and it is impossible but things should be as they are, for everything is for the best."</p>	
<p>By the side of the preceptor sat a little man dressed in black, who was one of the familiars⁷² of the Inquisition. This person, taking him up with great complaisance,⁷³ said, "Possibly, my good sir, you do not believe in original sin; for, if everything is best, there could have been no such thing as the fall or punishment of man."</p> <p>Your Excellency will pardon me," answered Pangloss, still more politely; "for the fall of man and the curse consequent thereupon⁷⁴ necessarily entered into the system of the best of worlds."</p>	<p>The fall...man— This is a reference to the Garden of Eden from which Adam and Eve were expelled for having disobeyed God's command not to eat the fruit of the knowledge of good and evil.</p>

⁷⁰ **fetch**, got and brought.

⁷¹ **repast**, dinner.

⁷² **familiars**, lay citizens who cooperated with the inquisition—spies, one might call them, although the position was one of considerable prestige.

⁷³ **complaisance**, agreeable.

⁷⁴ **consequent thereupon**, following necessarily—specifically that men would have to work and women would have to bear children.

<p>"That is as much as to say, sir," rejoined the familiar, "you do not believe in free will."</p> <p>"Your Excellency will be so good as to excuse me," said Pangloss, "free will is consistent with absolute necessity; for it was necessary we should be free, for in that the will-</p>	
<p>Pangloss was in the midst of his proposition, when the familiar beckoned to his attendant to help him to a glass of port wine.</p>	

Chapter 6: How the Portuguese Made a Superb Auto-Da-Fe to Prevent Any Future Earthquakes, and How Candide Underwent Public Flagellation

<<Bruce: The text seems to be missing here.>>

<p>After the earthquake, which had destroyed the city of Lisbon, the sages of that country considered it more effectual to preserve the kingdom from the calamities of an earthquake, than to entertain the people with an auto-da-fe, it was therefore resolved at the University of Coimbra, that the burnt by a slow fire, and with great ceremony, to prevent future earthquakes.</p>	<p>St. Dominic presiding over an auto-da-fe—by Berruguete Outside of Spain and Portugal, the Office of the Inquisition was concerned with unifying the Catholic Church by pressuring Catholics to follow the church's teaching. Against the pope's wishes, however, Isabella and Ferdinand of Spain established their own Spanish Inquisition which also had political aims. About 10,000 Jews and Moslems (left over from the Islamic occupation) were burned alive. Although 120,000 Christians were investigated also, only 1,000-2,000 of them were executed over the 400-year course of the Spanish and Portuguese Inquisitions. However, the practice was carried on in Mexico until its independence.</p> <p>"Auto-da-fe" means "act of faith" and was an act of public penance and humiliation, attended by many onlookers, unless the victims persisted in their heresy, in which case they would be tortured or even executed.</p>
<p>In consequence thereof they had seized the bacon of a larded pullet they were eating; and secured Dr. Pangloss, and his pupil Candide, speaking his mind, and the other for seeming to have said. They were conducted to separate apartments, extremely cool, where they were never incommoded⁷⁶ with the sun. Eight days afterwards they were each dressed in a sanbenito, and their heads were adorned with paper mitres. The mitre⁷⁷ and sanbenito worn by Candide were painted with flames reversed and with devils that had neither tails nor claws; but Dr. Pangloss's devils had both tails and claws, and his flames were upright. In these habits they marched in procession, and heard a very pathetic⁷⁸ sermon, which was followed by an anthem,⁷⁹ accompanied by bagpipes. Candide was flogged to some tune, while the anthem was being sung; the Biscayan and the two men who would not eat bacon</p>	<p>Sanbenito—a short cloak with mocking symbols of fire and crosses to proclaim the sin of the victim. See picture at http://www.personal.psu.edu/users/m/z/mzk108/sanbinito.htm</p>

⁷⁵ **utter**, complete.
⁷⁶ **incommoded**, bothered by (ironic, of course).
⁷⁷ **mitre**, bishop's hat (mocking the wearer).
⁷⁸ **pathetic**, emotional, especially designed to arouse pity.
⁷⁹ **anthem**, religious song.

Voltaire - Candide

were burned, and Pangloss was hanged, which is not a common custom at these solemnities. ⁸⁰ The same day there was another earthquake, which made most dreadful havoc.	
Candide, amazed, terrified, confounded, ⁸¹ astonished, all bloody, and trembling from head to foot, said to himself, "If this is the best of all possible worlds, what are the others? If I had only been whipped, I could have put up with it, as I did among the Bulgarians; but, notwithstanding, oh my dear Pangloss! my beloved master! thou greatest of philosophers! that ever I should live to see thee hanged, without knowing for what! O my dear Anabaptist, thou best of men, that it should be thy fate to be drowned in the very harbor! O Miss Cunegund, you mirror of young ladies! that it should be your fate to have your body ripped open!"	
He was making the best of his way from the place where he had been preached to, whipped, absolved ⁸² and blessed, when he was accosted ⁸³ by an old woman, who said to him, "Take courage, child, and follow me."	

⁸² **absolved**, pardoned.

⁸³ **accosted**, stopped, called out to.

QUESTIONS

1. When Pangloss “proves” that the Baron’s castle is the best of all castles and the Baroness is the best of all baronesses, do you think he sincerely believes this, or is he just flattering his employer? Explain.
2. In chapter 1 Pangloss talks about the reasons that noses, legs, stones, and swine were made. Of course, this is a satire on the idea that God made everything in the universe specifically for our use. Describe exactly the flaw in Pangloss’s reasoning.
3. The device of using an inexperienced young person as the hero of a story is a common one. Two very well-known examples are Twain’s *Huckleberry Finn* and Salinger’s *Catcher in the Rye*. Describe the effect of seeing the adult world through the boy’s eyes. For what purpose is Voltaire using this effect? If you know either *Huckleberry Finn* or *Catcher in the Rye*, or if you know another book or movie (*A Christmas Story* is one) that uses this same technique, tell how that author used the innocent young person’s perspective.
4. Find and explain the ironies of the instruction Cunegund receives by watching Pangloss “teaching” the chambermaid.
5. How honest is the “honest Anabaptist”? Consider what he does for a living.

⁸⁰ **solemnities**, serious celebrations.

⁸¹ **confounded**, totally confused.

6. You may have noticed a striking contrast between the breezy tone and cheerful irony of this writing and some of the truly horrible details it describes. If it were a movie, today we should probably call it a “black comedy.” How do you like this combination? What purpose do you think Voltaire hoped it would achieve in his readers? Can you think of some movies that use this technique? (*Fargo* is one example.)
7. We live in an era of serious concern about AIDS. What perspective does this passage give you on sexually transmitted diseases?
8. At the end of chapter 4, Pangloss makes a logical leap from saying that individual misfortunes may be unfortunate results of achieving a greater good, to saying that the more individual misfortunes there are, the greater will be the public good. The first proposition was used by communist governments to excuse killing millions of people in the second half of the twentieth century. But it is also used to justify companies’ laying off workers and dumping pension plans. Explain their logic. Would any corporate manager (privately) go the next step to Pangloss’s conclusion? Explain.
9. The passage is full of ironies—cases where something happens that seems deliberately to contradict one’s expectations or where Voltaire says the opposite of what he clearly means, often with humorous intent. Find two or three of these places, explain why they are ironic, and tell what Voltaire hopes to accomplish by his ironies. A few years ago a young man, Jedediah Purdy, wrote a book (*For Common Things*) in which he maintained that we have a culture of irony that prevents us from confronting, or even enjoying, serious things. He uses many TV shows—especially *Seinfeld*—as examples. Can you think of other examples? Do you agree with Purdy?
10. What beliefs does Voltaire have about the character of human beings? Morality? God? Give examples to support your view.

9

The name “Voltaire” may not seem like a household word to you, but the following column illustrates how even sports writers assume that their readers at least recognize the names of Great Authors.

A little background is needed for this column, which is supplied here by courtesy of Chris Doyle:

“An incident happened in Detroit where the home basketball team, the Pistons, were playing the Indiana Pacers. A couple of players, including the Pacers’ Ron Artest, were involved in a shoving match. As the players were separated, Artest was hit by a beer thrown from the stands. He went into the crowd, followed by some teammates, and fought with fans. Artest, with two of his teammates, ended up not only getting suspended for the rest of the season but getting charged by the police.

“Allen Iverson has made almost as many headlines for scrapes with the law as he has for his play. In high school he was a superstar in both football and basketball, but in his senior year he was involved in a race riot at a bowling alley where he was throwing chairs around and ended up in jail. He has fought with teammates, argued with coaches, gotten arrested for marijuana possession, been accused of pistol whipping someone that he thought was fooling around with his wife, suggested that practice was unnecessary, recorded a gangsta rap album, and is generally considered a ball hog on the court. He sports cornrows and tattoos all over his body. In his defense, he is usually one of the smallest players on the court and takes a beating but comes back every time. He was exonerated

Headlines You May See

of the pistol whipping charge, pardoned for the chair throwing incident, and has not been in much trouble lately.”

Headlines You May See in 2005

by Gersh Kuntzman

December 28, 2004

Section: Society

Edition: Newsweek Web Exclusive

Any Web columnist can give you a look back at The Year That Was, 2004. But this column has always prided itself on having a vision of the future. As such, we revisit our tired old canard¹ of giving you a preview of the stories that will be making news next year.

NBA Unveils New Marketing Approach Will Deemphasize Violence, Promote Nerdiness

by Gersh Kuntzman

SPRINGFIELD, Mass.²— Several months after some of its top stars leapt into the grandstand to pummel fans, the National Basketball Association has unveiled a new ad campaign to downplay its players' "street cred" [ibility] in favor of good sportsmanship, intellect, and sensitivity.

The league was apparently stung by criticism that its prior ad campaign—"NBA: Bring Yo' Gun"—promoted top players as incorrigible³ thugs, violent drug dealers, and shameless ball hogs.

The new series of ads—called "The NBA Today: The Thinking Man's Game"—will spotlight the league's less-heralded,⁴ but no-less-vital nerd legends of tomorrow.

"Meet Luke Walton," says the narrator in the first ad. "A first-year forward for the Lakers, he majored in French literature at Arizona University. On the court, he's all air. But off the court,

VOCABULARY

¹**canard**, cliché, over-used saying—in this case an “overused” type of column.

² **SPRINGFIELD, Mass.**, this is a parody or spoof of a news item, so it begins with the city from which the report would be filed, as news stories usually do.

³ **incorrigible**, people who cannot be rehabilitated.

⁴ **heralded**, widely announced or advertised.

Headlines You May See

it's **Voltaire**." The commercial features images of Walton taking his famous jump shot interspersed with him picking lavender⁵ near a monastery in the south of France.

The ads will also avoid showing menacing Chinese-character tattoos or any part of Allen Iverson. Instead, fans will be treated to the new look of the NBA, embodied by Walton's new tattoo: a portrait of Thomas Jefferson over the preamble to the Constitution.

⁵ **lavender**, the flower of a shrub used since ancient times for perfume, suggestive of gentility.

QUESTIONS

1. In what ways are the writings and aims of Voltaire and Kuntzman similar? In what ways different?
2. Why would the pictures of Walton near a monastery in France and of the Jefferson tattoo be particularly appropriate to this ad campaign?

WRITING TOPIC

Modern Americans are very image conscious. Start with a couple of print ads or TV commercials, perhaps one you like and one you don't. Describe them in such detail that the readers will be able to picture them fully in their minds' eyes. Use them to illustrate how you think public images have their effect and whether you think these effects are good or bad.

Lyell – Antiquity of Man

The French Revolution of 1789 was widely viewed as the triumph of rationalism over the superstitious intolerance of the Christian church and the arbitrary power of the divine right of kings. But Europeans were vastly disillusioned when the idealistic revolution turned into the Reign of Terror, with tens of thousands executed by the guillotine. Later mismanagement led to the complete collapse of the Revolution and the welcoming of the dictator Napoleon. Both the optimism of Alexander Pope's well-run universe and the pride in man's reason exhibited by Voltaire's contempt for church and state suffered a severe blow, and many people returned to the familiar values and beliefs of religion.

Europeans began to discover new animals and plants from other parts of the world and other levels of physical scale through the optics of the telescope and microscope. They also dug into the earth, exploring caves and blasting canals. As they did so, they began to puzzle over the rock layers and the fossils that they contained. The age of the earth—6,000 years, according to some who counted the generations since Eve recorded in the Bible—and the age of the “dragon” fossils became a source of dispute between those who used science and those who took the biblical record on faith. It became clear that lower layers of rock, containing only small sea creatures, had been laid down at the bottoms of ancient seas. Layers on top of those, containing skeletons of animals similar but different from those of modern animals, had been at the bottoms of more recent seas. There seemed to be, then, a progression over time from simpler to more complex plants and animals.

But how much time? People had little evidence of old species dying out and new ones coming into existence during the thousands of years of recorded history. The “progressionists” explained that the 6,000 years must have been punctuated by several horrific disasters, like Noah's flood, that wiped out one set of species, allowing for another set to be created. Our next author, Charles Lyell, believed from geological evidence that changes in and on the earth take place at a uniformly slow pace over periods of millions, not thousands, of years. This gives species of plants and animals plenty of time to die off and come into being gradually. This set the stage for Darwin's theory of evolution—or “transmutation” as it is called here—by which small changes, inherited over many generations, eventually cause a special group of one species to change so much that it becomes a new species. By this calculation, our species is millions of years old, not 6,000.

So the stage was also set for the drama which continues today of the conflict between the fundamentalist Christians, who still hold to the literal history presented in the Bible, and the rationalists, who accept the findings of radiocarbon dating and DNA analysis that place the separation of humans from apes at 5 million years ago and the development of modern humans at 150,000 years ago.

Darwin himself foresaw the problem he would have getting his rational explanation of human origin accepted by the majority of Europeans who would feel their faith threatened by evolution, so he downplayed its implications about the origin of humans. It was left to Lyell, a good friend of his, to urge Darwin to publish his book, *The Origin of Species*, and to clarify it for English readers.

The Antiquity of Man **by Charles Lyell (1830-1875)**

Lyell – Antiquity of Man

Chapter 20: Theories of Progression and Transmutation

<p>If transmutation,¹ when thus tested, has decidedly the advantage over progression² and yet is comparatively in disfavour, we may reasonably suspect that its reception is retarded, not so much by its own inherent demerits, as by some apprehended consequences which it is supposed to involve and which run counter to our preconceived opinions.</p>	<p>Some apprehended consequences—This is a delicate reference to the idea that that the creation of humans was an act wholly separate from the creation of the other species of animals.</p>
---	---

Theory of Progression

<p>In treating of this question, I shall begin with the doctrine of progression, a concise statement of which, so far as it relates to the animal kingdom, was thus given twelve years ago by Professor Sedgwick, in the preface to his "Discourse on the Studies of the University of Cambridge."</p> <p>"There are traces," he says, "among the old deposits of the earth of an organic progression among the successive forms of life. They are to be seen in the absence of mammalia in the older, and their very rare appearance in the newer Secondary groups; in the diffusion of warm-blooded quadrupeds (frequently of unknown genera³) in the older Tertiary system, and in their great abundance (and frequently of known genera) in the upper portions of the same series; and lastly, in the recent appearance of Man on the surface of the earth."</p>	<p>Old deposits of the earth—Until the eighteenth century, no one tried to make sense out of the layers obvious in many rock formations, having faith that these were just God's inscrutable will. But German and Italian geologists showed that later rocks usually lay on top of earlier ones, suggesting that these layers had been laid down on the bottom of successive oceans, with the oldest at the bottom.</p>
<p>"This historical development," continues the same author, of the forms and functions of organic life during successive epochs,⁴ "seems to mark a gradual evolution of creative power, manifested by a gradual ascent towards a higher type of being." "But the elevation of the fauna⁵ of successive periods was not made by transmutation, but by creative additions; and it is by watching these additions that we get some insight into Nature's true historical progress, and learn that there was a time when Cephalopoda were the highest types of animal life, the primates of this world; that Fishes next took the lead, then Reptiles; and that during the secondary period they were anatomically⁶ raised far above any forms of the reptile class now living in the world.</p>	<p>Transmutations— The question for which Darwin was to give the scientific explanation was: "How do new species arise?" One can either say, "By new creations in successive ages," or one can say, "By gradual changes in existing species in adapting to changing environment until they are transmuted into new species."</p>

VOCABULARY

¹**transmutation**, gradual evolution.

²**progression**, the sudden appearance or creation of "higher" species without any connection to "lower" ones.

³**genera**, plural of "genus," the term used to group species together. Thus the genus of bears is *Ursa*, one species of which is the brown bear, *arctos*, known to science as *Ursus arctos*. The polar bear is *Ursus maritimus*.

⁴**epochs**, even longer periods than "ages."

⁵**fauna**, animals.

⁶**anatomically**, by their bone structure.

Lyell – Antiquity of Man

<p>Mammals were added next, until Nature became what she now is, by the addition of Man." (Professor Sedgwick's "Discourse on the Studies of the University of Cambridge" Preface to 5th edition pages 44, 154, 216, 1850.)</p>	
<p>Although in the half century which has elapsed between the time of Lamarck and the publication of the above summary, new discoveries have caused geologists to assign a higher antiquity both to Man and the oldest fossil mammalia, fish, and reptiles than formerly, yet the generalisation, as laid down by the Woodwardian Professor, as to progression, still holds good in all essential particulars.</p>	<p>Lamarck—An early French evolutionist who believed that individuals transformed their species toward higher forms by inheriting adaptive structures.</p>
<p style="text-align: center;">.....</p>	
<p>It would be an easy task to multiply objections to the theory now under consideration;⁷ but from this I refrain, as I regard it not only as a useful, but rather in the present state of science as an indispensable hypothesis, and one which though destined hereafter to undergo many and great modifications will never be overthrown.</p>	
<p>It may be thought almost paradoxical⁸ that writers who are most in favour of transmutation (Mr. C. Darwin and Dr. J. Hooker, for example) are nevertheless among those who are most cautious, and one would say timid, in their mode of espousing⁹ the doctrine of progression; while, on the other hand, the most zealous¹⁰ advocates of progression are oftener than not very vehement¹¹ opponents of transmutation. We might have anticipated a contrary leaning on the part of both, for to what does the theory of progression point? It supposes a gradual elevation in grade of the vertebrate type in the course of ages from the most simple ichthyic¹² form to that of the placental¹³ mammalia and the coming upon the stage last in the order of time of the most anthropomorphous¹⁴ mammalia, followed by the human race--this last thus appearing as an integral part¹⁵ of the same continuous series of acts of development, one link in the same chain, the crowning operation as it were of one and the same series of manifestations of creative power.</p>	<p>One link in the same chain—another example of the influence of the "Great Chain of Being" idea which we saw in Pope's "Essay on Man." Manifestations of creative power— The progressive appearance of new and "higher" species may be seen as new creations by God or as evolutions from "lower" forms pushed by natural forces. Dangers ...transmutation— the "dangerous" idea that the human species evolved from the ape species—that our ancestors were monkeys.</p>
<p>If the dangers apprehended from transmutation arise from the too intimate connection which it tends to establish between the human and merely animal natures, it might have been expected that the progressive development of organisation, instinct, and intelligence might</p>	<p>Data...extreme— The idea that the age of fossils could be judged from the rock layers in which they</p>

⁷ **theory now under consideration**, that is, the transmutation of one species into a new one.

⁸ **paradoxical**, a logical contradiction of what is expected.

⁹ **espousing**, advocating (as if engaged to be married to).

¹⁰ **zealous**, fanatically enthusiastic.

¹¹ **vehement**, very strong.

¹² **ichthyic**, fish.

¹³ **placental**, born with a placenta—live bearing mammals.

¹⁴ **anthropomorphous**, like people—that is, apes.

¹⁵ **integral part**, necessary part.

Lyell – Antiquity of Man

<p>have been unpopular, as likely to pioneer the way for the reception of the less favoured doctrine.¹⁶ But the true explanation of the seeming anomaly¹⁷ is this, that no one can believe in transmutation who is not profoundly convinced that all we know in palaeontology is as nothing compared with what we have yet to learn, and they who regard the record as so fragmentary, and our acquaintance with the fragments which are extant as so rudimentary, are apt to be astounded at the confidence placed by the progressionists in data which must be defective in the extreme. But exactly in proportion as the completeness of the record and our knowledge of it are overrated, in that same degree are many progressionists unconscious of the goal towards which they are drifting. Their faith in the fullness of the annals leads them to regard all breaks in the series of organic existence, or in the sequence of the fossiliferous rocks, as proofs of original chasms¹⁸ and leaps in the course of nature--signs of the intermittent¹⁹ action of the creational force, or of catastrophes which devastated the habitable surface. They do not doubt that there is a continuity of plan, but they believe that it exists in the Divine mind alone, and they are therefore without apprehension²⁰ that any facts will be discovered which would imply a material connection between the outgoing organisms and the incoming ones.</p>	<p>were found was new at this time, and fossil collection was, as Lyell suspects, very incomplete, with many rock layers apparently empty of life. This led the progressionists (or creationists, as we would say) to see periods during which God could have created whole new batches of "progressed"—higher—species, such as humans.</p>
---	---

Chapter 21: On the Origin of Species by Variation and Natural Selection

<p>For many years after the promulgation²¹ of Lamarck's doctrine of progressive development, geologists were much occupied with the question whether the past changes in the animate and inanimate world were brought about by sudden and paroxysmal²² action, or gradually and continuously, by causes differing neither in kind nor degree from those now in operation.</p>	
<p>The anonymous author of "The Vestiges of Creation" published in 1844 a treatise, written in a clear and attractive style, which made the English public familiar with the leading views of Lamarck on transmutation and progression, but brought no new facts or original line of argument to support those views, or to combat the principal objections which the scientific world entertained against them.</p>	
<p>No decided step in this direction was made until the publication in 1858 of two papers, one by Mr. Darwin and another by Mr. Wallace, fol-</p>	

¹⁶ **less favoured doctrine**, i.e., transmutation—the belief that higher species evolve from lower ones by natural processes.

¹⁷ **anomaly**, something out of place, unexpected; paradox.

¹⁸ **chasms**, deep, empty cracks.

¹⁹ **intermittent**, with breaks in between; not continuous.

²⁰ **apprehension**, concern.

²¹ **promulgation**, making public.

²² **paroxysmal**, sudden, violent action.

Lyell – Antiquity of Man

<p>lowed in 1859 by Mr. Darwin's celebrated work on "The Origin of Species by Means of Natural Selection; or, the Preservation of Favoured Races"²³ in the Struggle for Life." The author of this treatise had for twenty previous years strongly inclined to believe that variation and the ordinary laws of reproduction were among the secondary causes always employed by the Author²⁴ of nature, in the introduction from time to time of new species into the world, and he had devoted himself patiently to the collecting of facts and making of experiments in zoology and botany, with a view of testing the soundness of the theory of transmutation.²⁵ Part of the manuscript of his projected work was read to Dr. Hooker as early as 1844 and some of the principal results were communicated to me on several occasions. Dr. Hooker and I had repeatedly urged him to publish without delay, but in vain, as he was always unwilling to interrupt the course of his investigations; until at length Mr. Alfred R. Wallace, who had been engaged for years in collecting and studying the animals of the East Indian archipelago,²⁶ thought out independently for himself one of the most novel and important of Mr. Darwin's theories. This he embodied in an essay "On the Tendency of Varieties to depart indefinitely from the original Type." It was written at Ternate in February 1858, and sent to Mr. Darwin with a request that it might be shown to me if thought sufficiently novel and interesting. Dr. Hooker and I were of opinion that it should be immediately printed, and we succeeded in persuading Mr. Darwin to allow one of the manuscript chapters of his "Origin of Species," entitled "On the Tendency of Species to form Varieties, and on the Perpetuation of Species and Varieties by natural Means of Selection," to appear at the same time. (See "Proceedings of the Linnaean Society" 1858.)</p>	<p>Depart...Type—It is difficult to realize today that at that time it was assumed that each species was fixed and could change only superficially. The theory of evolution depended on the evidence that Wallace and Darwin found of great variations within species that had developed on populations on separate islands in Indonesia and the Galapagos.</p>
<p>By reference to these memoirs it will be seen that both writers begin by applying to the animal and vegetable worlds the Malthusian doctrine of population, or its tendency to increase in a geometrical ratio,²⁷ while food can only be made to augment²⁸ even locally in an arithmetical one. There being therefore no room or means of subsistence for a large proportion of the plants and animals which are born into the world, a great number must annually perish. Hence there is a constant struggle for existence among the individuals which represent each species and the vast majority can never reach the adult state, to say nothing of the multitudes of ova²⁹ and seeds which are never hatched or allowed to germinate.³⁰ Of birds it is</p>	<p>Malthusian doctrine—Thomas Malthus was a mathematician and social scientist whose pessimistic views of population growth had huge social impact in justifying poor treatment of "unfit" poor people and efforts to limit population growth.</p>

²³ **races**, species and subspecies.

²⁴ **Author**, God, but the Deist's "watchmaker" God seen in Pope's "Essay on Man" who does not intervene personally in nature once he set the mechanics going.

²⁵ **transmutation**, or "evolution" as we now say.

²⁶ **archipelago**, group of islands, specifically, here, Malaysia and Indonesia.

²⁷ **geometrical ratio**, 1, 2, 4, 8, 16, 32, 64, 128... compared with an **arithmetical** one of 1, 2, 3, 4, 5, 6, 7, 8...

²⁸ **augment**, increase.

²⁹ **ova**, eggs, Latin plural of "ovum."

³⁰ **germinate**, begin to grow.

Lyell – Antiquity of Man

<p>estimated that the number of those which die every year equals the aggregate³¹ number by which the species to which they respectively belong is on the average permanently represented.</p>	
<p>The trial of strength which must decide what individuals are to survive and what to succumb³² occurs in the season when the means of subsistence are fewest, or enemies most numerous, or when the individuals are enfeebled by climate or other causes; and it is then that those varieties which have any, even the slightest, advantage over others come off victorious. They may often owe their safety to what would seem to a casual observer a trifling³³ difference, such as a darker or lighter shade of colour rendering them less visible to a species which preys upon³⁴ them, or sometimes to attributes³⁵ more obviously advantageous, such as greater cunning or superior powers of flight or swiftness of foot. These peculiar qualities and faculties, bodily and instinctive, may enable them to outlive their less favoured rivals, and being transmitted by the force of inheritance to their offspring will constitute new races, or what Mr. Darwin calls "incipient³⁶ species." If one variety, being in other respects just equal to its competitors, happens to be more prolific,³⁷ some of its offspring will stand a greater chance of being among those which will escape destruction, and their descendants, being in like manner very fertile, will continue to multiply at the expense of all less prolific varieties.</p>	<p>Transmitted... inheritance—This is the key to Darwinism. Chance mutations can be passed on to succeeding generations. If they are big enough to make a difference in survival, then they may define an entirely new species.</p>
<p>As breeders of domestic animals, when they choose certain varieties in preference to others to breed from, speak technically of their method as that of "selecting," Mr. Darwin calls the combination of natural causes, which may enable certain varieties of wild animals or plants to prevail over others of the same species, "natural selection."</p>	
<p>A breeder finds that a new race of cattle with short horns or without horns may be formed in the course of several generations by choosing varieties having the most stunted horns as his stock from which to breed; so nature, by altering in the course of ages, the conditions of life, the geographical features of a country, its climate, the associated plants and animals, and consequently the food and enemies of a species and its mode of life, may be said, by this means to select certain varieties best adapted for the new state of things. Such new races may often supplant³⁸ the original type from which they have diverged, although that type may have been perpetuated without modification for countless anterior³⁹ ages in the same region, so long as it was in harmony with the surrounding conditions then prevailing.</p>	

³¹ **aggregate**, grand total.

³² **succumb**, die.

³³ **trifling**, small, insignificant.

³⁴ **preys upon**, attacks and eats.

³⁵ **attributes**, qualities, characteristics.

³⁶ **incipient**, just beginning; in the early stages.

³⁷ **prolific**, having more children.

³⁸ **supplant**, take the place of.

³⁹ **anterior**, previous.

Lyell – Antiquity of Man

<p>Lamarck, when speculating on the origin of the long neck of the giraffe, imagined that quadruped to have stretched himself up in order to reach the boughs of lofty trees, until by continued efforts and longing to reach higher he obtained an elongated neck. Mr. Darwin and Mr. Wallace simply suppose that, in a season of scarcity, a longer-necked variety, having the advantage in this respect over most of the herd, as being able to browse on foliage out of their reach, survived them and transmitted its peculiarity of cervical⁴⁰ conformation to its successors.</p>	
<p>By the multiplying of slight modifications in the course of thousands of generations and by the handing down of the newly-acquired peculiarities by inheritance, a greater and greater divergence from the original standard is supposed to be effected, until what may be called a new species, or in a greater lapse of time a new genus will be the result.</p>	
<p>Every naturalist admits that there is a general tendency in animals and plants to vary; but it is usually taken for granted, though he have no means of proving the assumption to be true, that there are certain limits beyond which each species cannot pass under any circumstances or in any number of generations. Mr. Darwin and Mr. Wallace say that the opposite hypothesis, which assumes that every species is capable of varying indefinitely from its original type, is not a whit⁴¹ more arbitrary, and has this manifest⁴² claim to be preferred, that it will account for a multitude of phenomena which the ordinary theory is incapable of explaining.</p>	
<p>We have no right, they say, to assume, should we find that a variable species can no longer be made to vary in a certain direction, that it has reached the utmost limit to which it might under more favourable conditions or if more time were allowed be made to diverge from the parent type.</p>	
<p>.....</p>	
<p>The competition of races and species, observes Mr. Darwin, is always most severe between those which are most closely allied and which fill nearly the same place in the economy of nature. Hence when the conditions of existence are modified the original stock runs great risk of being superseded⁴³ by some one of its modified offshoots. The new race or species may not be absolutely superior in the sum of its powers and endowments to the parent stock, and may even be more simple in structure and of a lower grade of intelligence, as well as of organisation, provided on the whole it happens to have some slight advantage over its rivals. Progression, therefore, is not a necessary accompaniment of variation and natural selection, though when a higher organisation happens to be coincident with superior fitness to new conditions, the new species will have greater power and a greater chance of permanently maintaining and extending its ground. One of the principal claims of Mr. Darwin's theory to</p>	<p>Progression... variation—This is a departure from the Great Chain of Being idea that God has created lower orders that lead up to humans in a straight line. Because of the importance of variation through chance, religious leaders condemned Darwin. Monads— Lamarck's theory was that as species evolved up the evolutionary ladder</p>

⁴⁰ cervical, neck.

⁴¹ whit, bit.

⁴² manifest, obvious.

⁴³ superseded, replaced.

Lyell – Antiquity of Man

<p>acceptance is that it enables us to dispense with a law of progression as a necessary accompaniment of variation. It will account equally well for what is called degradation, or a retrograde⁴⁴ movement towards a simpler structure, and does not require Lamarck's continual creation of monads; for this was a necessary part of his system, in order to explain how, after the progressive power had been at work for myriads of ages, there were as many beings of the simplest structure in existence as ever.</p>	<p>der, they left “empty” spaces beneath them which were filled by simpler species making the same climb. The bottom rung of simplest creatures was replenished by the “spontaneous generation” of these “monads” from decaying muck.</p>
<p>Mr. Darwin argues, and with no small success, that all true classification in zoology and botany is in fact genealogical, and that community of descent is the hidden bond which naturalists have been unconsciously seeking, while they often imagined that they were looking for some unknown plan of creation.</p>	<p>All true... genealogical—The first biologists were concerned with classifying plants and animals according to Aristotle’s system. The idea that species change was new. Looking at where each species came from showed a different set of relationships than looking at the structural similarities that might reveal God’s plan.</p>
<p>.....</p>	
<p>To many, this doctrine of "natural selection," or "the preservation of favoured races in the struggle for life," seems so simple, when once clearly stated, and so consonant⁴⁵ with known facts and received principles, that they have difficulty in conceiving how it can constitute a great step in the progress of science. Such is often the case with important discoveries, but in order to assure ourselves that the doctrine was by no means obvious, we have only to refer back to the writings of skilful naturalists who attempted in the earlier part of the nineteenth century to theorise on this subject, before the invention of this new method of explaining how certain forms are supplanted by new ones and in what manner these last are selected out of innumerable varieties and rendered⁴⁶ permanent.</p>	

QUESTIONS

1. Explain why most people could accept the progressionist theory of the appearance of new species (including humans), but could not accept the transmutationist (evolutionist) theory.

⁴⁴ **retrograde**, backward.

⁴⁵ **consonant**, in agreement.

⁴⁶ **rendered**, made.

Lyell – Antiquity of Man

2. What evidence can you find in this selection that Lyell and other evolutionary writers would accept a deist religion. (Refer to the explanations of deism given with Pope’s “Essay on Man” and/or consult an encyclopedia.)
3. Explain why the age of the earth is crucial to understanding how humans came into being.
4. Look up the histories of known catastrophes that have had a major impact on life forms on the planet. (Try the *Science News* web site: http://www.sciencenews.org/pages/sn_arc97/75th/rm_essay.htm.) Why were modern evolutionary scientists reluctant to admit the evidence and impact of these facts?

WRITING TOPIC

1. Although many species have died out over the millennia, the topic that continues to intrigue people most is why it happened to the dinosaurs. Do a little research on this. Describe briefly three theories as to why dinosaurs disappeared, including one espoused by those creationists who have faith in the Bible as literal history. Conclude with your reasons for choosing one theory as the most likely one.

Chicago Tribune – Evolution of a Dichotomy

We have seen in our selection by Pope that in the eighteenth century there developed the idea of a “clock maker” God—one that assembled the incredibly complex machinery of the universe at the beginning, wound it up, and then let it go. Something like this idea has returned as a philosophy called “intelligent design.” It seizes on a difficulty that Darwin foresaw in his theory to question the scientific validity of evolution entirely, insisting that random changes could not have produced the complex, orderly interactions that make up the organisms we see around us. Creationists are hoping to use the arguments of intelligent design to put an alternative to evolution into schools and textbooks. This is because the teaching of the Bible’s version of creation is prohibited by the Constitutional amendment which says that the government cannot impose any particular religion.

Evolution of a Dichotomy Blame Evil on the Great Designer

By Ron Grossman

Tribune staff reporter, June 26, 2005

<p>Scientifically speaking, there's no great novelty to the theory of Intelligent Design, the Bible Belt's¹ latest alternative to Darwin. The greatest of the medieval theologians, St. Thomas Aquinas, taught that the order we see all around us proved God's existence. But Intelligent Design does frame with renewed clarity a philosophical question that has haunted humans ever since they developed a capacity for wonderment: Why does evil exist? If the universe is governed by a benevolent power—call it God or the dialectic or Mother Nature or whatever—why are we tormented by disease, famine, cruelty and war?</p>	<p>St. Thomas Aquinas—We have met this name before in the excerpt from “Aristotle’s Children.” He believed that since reason was given us by God, He intended us to use it to clarify our perceptions of the world.</p>
<p>Intelligent Design envisions a universe in which impeccable² logic reigns.³ Evolution is predicated⁴ on blind chance. Darwin reasoned that many a litter or seed pod contains oddballs whose differences give them a leg up⁵ in coping with their environment. They prevail over siblings, and from those myriad⁶ small changes the infinite variety of living creatures evolve, from amoebas⁷ to modern man. Especially in this country, churchgoers can be troubled by that picture.</p>	

VOCABULARY

¹ **Bible Belt**, a term coined by the journalist H.L. Mencken, famous for his savage criticisms of American culture, the majority of whose members he dubbed the “booboisie.” He disparagingly called Middle America “the Bible Belt” because he believed the majority of its residents were fundamentalist Christians.

² **impeccable**, perfect.

³ **reigns**, holds complete power. From the Latin word *rex* for “king.”

⁴ **predicated**, founded.

⁵ **give a leg up**, give an advantage.

⁶ **myriad**, millions. Originally this was the ancient Greek word for 10,000—for them a very large number.

⁷ **amoebas**, a kind of one-celled animal.

Chicago Tribune – Evolution of a Dichotomy

<p>In England, Darwin's homeland, and in Europe, even the more conservative denominations⁸ have long since made peace with evolution. But the idea that apes and men have a common ancestry still troubles a broad swath of Middle America, where people take a simple and straightforward piety⁹ to Sunday services. To them, evolution bespeaks a godless world and, by extension, a world without ethical moorings.¹⁰ The creator of the Old Testament account goes about his work logically, making land for Adam to stand on, adding a companion in Eve, and giving them food to eat. With parallel rigor,¹¹ Jehovah establishes ethical limits, all those "thou shalt not" injunctions of the books of Exodus and Deuteronomy. But if the cosmos¹² is the product of accident and chance, wouldn't "good" and "bad" be arbitrary?¹³</p>	<p>"Thou shalt not" injunctions—most importantly the Ten Commandments—the covenant that Brooks talked about in the previous article "She Converted."</p>
<p>Some believers think they've found a way out of that ethical cul-de-sac¹⁴ via a hole they perceive in evolutionary theory. Virtually no scientists agree with them, but for the moment, let's look at it from their perspective. Intelligent Design's partisans¹⁵ argue that life is too complex to be the product of accident intersecting with environmental advantage. Humans depend upon dozens of organs, each made up of numerous smaller systems, all of which have to mesh perfectly. There wouldn't have been enough time, even in the billions of years the universe has been around, for all of that to evolve by trial and error, Darwin's opponents argue. Therefore, there must have been a blueprint for life—and thus a designer to bring a cosmic T-square and triangle to it.</p>	
<p>On an intuitive level, Intelligent Design has a certain appeal. Recall a gorgeous sunset over a bucolic¹⁶ landscape. Beholding the scene, it's hard to resist thinking that such beauty must have been created for humans to take pleasure in. Think of little kids squealing with delight as they go down a slide. Could it be only happenstance¹⁷ that a playground's potential so perfectly coincides with a child's sense of fun?</p>	
<p>Now consider a more problematic example, say, a cancer</p>	

⁸ **denominations**, specific branches of Christianity—Presbyterian, Methodist, Roman Catholic, etc.

⁹ **piety**, sincere and unquestioning religious belief.

¹⁰ **moorings**, places to tie up boats. The metaphor implies a fixed place of security.

¹¹ **rigor**, strictness.

¹² **cosmos**, universe.

¹³ **arbitrary**, making no difference.

¹⁴ **cul-de-sac**, a street that is blocked at one end (French for "bottom of a sack").

¹⁵ **partisans**, people who take sides.

¹⁶ **bucolic**, of the countryside.

¹⁷ **happenstance**, chance.

Chicago Tribune – Evolution of a Dichotomy

<p>ward in a children's hospital. If the world is the product of a blueprint, then it must have contained the specs¹⁸ for suffering no less than it did pleasure.</p>	
<p>In at least 21 states, legislators and school board members have demanded that Intelligent Design have a place in the science curriculum. Before a judge nixed¹⁹ the project, a suburban-Atlanta board of education required biology textbooks to have a sticker affixed, cautioning: "This textbook contains material on evolution. Evolution is a theory, not a fact, regarding the origin of living things. This material should be approached with an open mind, studied carefully and critically considered."</p>	
<p style="text-align: center;">Disclaimer on Sunday</p>	
<p>Yet if the same cosmic plan produced not just joy but pain, shouldn't Sunday school books carry a disclaimer: "Caution, studying Intelligent Design can lead to moral relativism."</p>	
<p>Intelligent Design's sponsors are careful not to spell out exactly who or what it might be. They know that if their pet theory were overtly²⁰ associated with the biblical God, the constitutional provision for separation of church and state would deny their ideas access to public schools. For rhetorical simplicity, let's here dub the cosmic planner the "Designer" and assign he/she/it the pronoun "he." If the Designer created not just sunsets but also infants starving in Sudan, what kind of example is he to hold up to schoolchildren? Thinking about the horrors the Designer committed, impressionable young people might conclude that they are similarly unbound by any ethical limits.</p>	<p>Starving in Sudan—Sudan is the country south of Egypt. Its Arab dictator is accused of refusing relief for the non-Arab farmers in the western state of Darfur even after a treaty brought peace with the south after a decade of civil war atrocities. Politics exacerbates the continuing drought and insect plagues that cause starvation.</p>
<p>In fact, that's a vexing²¹ question for all streams of religious thought, but especially for monotheistic²² ones. Polytheistic systems can slide by the problem. The ancient Greek pantheon²³ had lots of gods, depicted by Homer as a divine and dysfunctional family. Some of the Olympians favor one group of humans, the Greeks, while other gods side with the Trojans. So the escalation of earthly disputes into war, and the suffering it brings even to non-combatants, is hardly surprising. It goes with the territory of being human.</p>	<p>Homer—the earliest author in Western culture. Stories of the Greeks' war with Troy began to come together as two main collections of songs in the eighth century BC. They were probably written down about 100 years later as <i>The Iliad</i> and <i>The Odyssey</i>. The story—unfortunately without the crucially important influence of the gods—</p>

¹⁸ **specs**, short for specifications—detailed features.

¹⁹ **nixed**, stopped. From the German *nichts*, meaning “nothing.”

²⁰ **overtly**, obviously.

²¹ **vexing**, frustrating.

²² **monotheistic**, believing in only one god.

²³ **pantheon**, roster of all the gods, from the Greek roots *pan-*, “all,” and *theos*, “god.”

Chicago Tribune – Evolution of a Dichotomy

	can be seen in the recent movie <i>Troy</i> starring Brad Pitt.
Dual Gods Duel	
<p>The ancient Persians²⁴ confronted the problem of evil head-on. They posited the existence of two gods.²⁵ One is a god of good, the other is a god of evil. The world is a kind of playing field where the two gods struggle for supremacy, the battle now going one way, then the other. Humans are caught in the middle, which is why our lives are a mixture of pleasure and pain. That Persian dualism so neatly corresponds to experience that the Romans almost adopted it when they went shopping for a faith to replace the polytheism they'd inherited from the Greeks. But in the end, the Romans converted to Christianity, a monotheism with the built-in problems of a one-god universe.</p>	
<p>Preachers of monotheistic faiths sometimes explain evil's existence by shifting the burden to mankind. Their arguments are usually variations on a theme: We each create our own hell. Roughly, the thesis is that God created a good universe, but humans muck it up with their misdeeds. Now, I am willing to accept my share of the blame, according to that formula. I suspect others can too. Many adults recognize how often they have screwed up, and thus we could understand evil that befalls us as being the product of our own shortcomings.</p>	
<p>But come back to the example of infants with terminal diseases. What possible misdeeds could they have committed in their foreshortened lives to warrant such painful punishments? French writer Albert Camus posed that question in his novel "The Plague." It is the story of a town subject to a devastating epidemic, a kind of rerun of the Black Death of earlier times. At first, the local priest explains the experience as divine retribution for sin. But after witnessing a child's death, Father Paneloux can't hold on to that easy argument.</p>	
<p>"No, we should go forward, groping our way through the darkness, stumbling perhaps at times, and try to do what good lays in our power," he says in a revised sermon. Beyond that, he can only urge that Christians must trust that, in some mysterious way, a benevolent God hovers over the universe where they suffer.</p>	
<p>Intelligent Design, though, takes away that option. In an attempt to rid the universe of Darwinian accident, it winds up ridding it, as well, of divine mystery. Its very logic leaves no metaphysical wiggle room—ironically, since its sponsors are</p>	

²⁴ **Persians**, the inhabitants of the land now called Iran. Civilizations first arose in this area about 3000 BC.

²⁵ **Zoroaster**, reformed the polytheistic Persian religions between 1200 and 600 BC.

Chicago Tribune – Evolution of a Dichotomy

otherwise highly vocal Christians.	
Jehovah Is Jealous	
They honor the Old Testament, whose creator is far from a coolly detached Designer. Jehovah makes no secret of his personality traits. "For I, the Lord, your God, am a jealous God," he says. The Old Testament creator knows that his awesome power can paralyze humans with fear. After destroying his first creation with a flood, he put rainbows in the sky, so Noah's heirs wouldn't cringe with every raindrop. Those nuances have made the Bible a perennial best seller, an ethical chapbook upon which generations of children have been raised.	
But this newfangled notion of a Designer who lays it out, once and forever, with no possible revisions, who utters not one word of explanation, who drafted a blueprint, and by his silence says: Take it or leave it? That's not the kind of creator I want my children and now my grandchildren to learn about. When it comes to taking religion out of the public schools, it could make the ACLU seem like pikers.	

Copyright © 2005, Chicago Tribune

QUESTIONS

1. Do some research on the Web to see what percentage of Americans reject evolution. Sort out the reasons for people's rejection of Darwinism. What were you taught in high school about evolution or intelligent design? Did what you were taught affect your thinking on the subject?
2. The sticker on the book points out that evolution is just a theory. However, there are theories and then there are theories. Here is an example of the way scientific theory changes: The astronomer Ptolemy in the second century synthesized Greek thought and observations to promulgate the theory that the Earth is the center of a system of clear spheres holding the Sun, Moon, planets, and stars, all of which revolve around it. Copernicus in about 1500, after having studied Plato, came up with a simpler theory that the Sun, not the Earth, was the center of the universe. This theory was accepted until it was shown that the Sun itself is just a minor star.

Here is an example of how faith-based theories change. It is over the nature of the Christian Trinity—God the father, the Son, and Holy Spirit—which we encountered in the selection by St. Bernard. One theory was that Christ was created by God in time; another that Christ was eternal with and equal to God who has one nature but three persons; another, that Christ is simply one aspect of God; still another, that Christ was born human and adopted by God as he grew up; and still others that Christ himself has two natures, human and divine, or one.

What is the difference in the ways these two kinds of theories—reason-based and faith-based—are adopted and abandoned by the public?

Chicago Tribune – Evolution of a Dichotomy

3. Compare the views of the intelligent design people to those of the deists of the Enlightenment as you discovered them in answering a previous question on the Lyell selection. Describe any differences that you find.
4. In concluding that, if there is an intelligent designer of the cosmos, he must have designed all the evil that exists in the world, Grossman commits a logical trick based on an assumption stated in the first paragraph and thus easily overlooked. What is it? (Think of Grossman's analogy of a builder who has a blueprint for a large, complex building. What could go wrong?)
5. Do you agree that teaching intelligent design as an alternative to Darwin's evolution by chance variation constitutes bringing religion into the school? Consider the question of whether intelligent design is a matter of reason or of faith.
6. Can you trust everything you read? Look up the religion of the ancient Persians, before and after Zoroaster, who, the author says, described two gods, one good, one evil. How accurate is this statement?

WRITING TOPIC

1. Watch the movie *Inherit the Wind* and search the Web for other examples of conflict over teaching "evolution" or "creationism." Describe the reasonable arguments of both sides against the other. Point out an element of faith which each side is accepting. Conclude with your view on how the origin of humans should be taught.
2. Write an essay describing what you would teach (or have taught) your children about the biblical story of creation. (If you come from a culture that practices another religion, describe and use that creation story.) Assuming they may hear or have heard about Darwin, intelligent design, and biblical literalism, either in school or from schoolmates, be sure to mention how you would advise them to react to views other than yours.
3. The author says, "But if the cosmos¹ is the product of accident and chance, wouldn't 'good' and 'bad' be arbitrary?" Is this true? If people do not believe in a law-giving god of any kind, how do they decide between right and wrong, in your opinion? If most people feel the choice is arbitrary, what might the consequences be for our society?

¹ cosmos, universe.

12

Faith Is a Fine Invention

by Emily Dickinson (1830-1886)

Faith is a fine invention
For gentlemen who see;
But microscopes are prudent
In an emergency!

QUESTIONS

1. Explain the irony of calling faith “an invention.”
2. What contrast does Dickinson suggest between “seeing” as “gentlemen” do and “seeing” as scientists do?
3. Mary Baker Eddy, a contemporary of Emily Dickinson, founded a healing method based on Christian scripture rather than science. Look up the history of Christian Science. Also look up New Age healing. (You may remember that David Brooks in a previous selection mentioned New Age phenomena as examples of spiritualism lite.) A person like Richard Dawkins (see previous article) would probably call these programs of non-scientific medicine “superstition.” Would Emily Dickinson agree with him? How would you draw the line between superstition and faith when faced with scientific alternative explanations?

13

“A Different Universe”: You Are More Important Than a Quark

By Keay Davidson

New York Times, June 19, 2005

<p>EVERY child knows how to learn what makes a toy work: bust it open. In that sense, we're all born reductionists, whose philosophy holds that anything can be explained by breaking it into its component parts. By analyzing them, one discovers how the parts act together to produce larger phenomena. If you crack open a windup clock, you can examine its gears to see what makes it tick.</p>	
<p>Some people resent reductionism because it sweeps away many mysteries. Behind spooky phenomena, reductionists have shown, are the ordinary ticktocks of nature's machinery, the concealed ropes and pulleys of cosmic-scale Penn and Teller¹ tricks. Indeed, reductionism has reinforced the old philosophical suspicion that there is something vaguely unreal about "reality": as the Greek philosopher Democritus² said, it's all just atoms and the void. To a hyper-reductionist, the invisibly small microworld is more "real" than everything else. Bigger objects—cats, toasters, people, the sun, galactic³ superclusters—are just second-order consequences. The atoms or quarks or leptons⁴ (or "strings,"⁵ if you follow the latest trendy theories) are what count, while you and I are just ephemera.⁶</p>	<p>Ordinary... machinery—Notice the echo of the "watch maker God" of the deism of the enlightenment.</p>
<p>It's a disilluioning view, but so far it has yielded undeniable benefits. By breaking matter into atoms, subatomic particles and subatomic forces, and by disassembling⁷ living</p>	

VOCABULARY

- ¹ **Penna and Teller**, a widely performing comedy duo who specialize in violent and spooky illusions, often revealing how they are done to reinforce people's skepticism.
- ² **Democritus**, Greek philosopher who, in 400 BC, first suggested that all we perceive—colors, shapes, smells, sounds—are illusions created by various combinations of atoms, rather as a rainbow is created by refractions from myriad drops of water.
- ³ **galactic**, having to do with galaxies—enormous groups of stars.
- ⁴ **quarks or leptons**, subatomic particles.
- ⁵ **strings**, the theory that the basic element of matter may be minute bits whose vibrations make them appear as constituent parts of atoms. It explains the possibility of a gravitational particle.
- ⁶ **ephemera** (always plural), things that have only temporary interest or usefulness, then pass away.
- ⁷ **disassembling**, taking apart.

NY Times – A Different Universe

<p>organisms into such discrete⁸ elements as cells, genes, enzymes⁹ and so forth, scientists have learned much about how nature works, and how we can make it do our bidding.</p>	
<p>Inevitably, reductionism has been overused. Not everything can be reduced to cosmic¹⁰ nuts and bolts. In the emerging sciences of the 21st century, many researchers are dusting off¹¹ an old saying: "The whole is more than the sum of its parts."</p>	
<p>A recent example: many molecular biologists once thought the chemical information stored on DNA coded for the full complexity of living organisms. But a few years ago, the Human Genome Project¹² revealed people have far too few genes (not many more than a roundworm) to account for the kaleidoscopic¹³ complexity of the human body. By itself, it appears, DNA cannot explain it any more than you can infer¹⁴ the United States Constitution from the traffic laws of Topeka. Somehow, biologists propose, higher-level "organizational" or "emergent" principles switch on at larger sizes, such as on the scale of proteins.¹⁵</p>	
<p>Even physicists, wizards of the nonliving realm, are talking about emergent properties. Their change of heart is not easy, though, as Robert B. Laughlin, who received a Nobel Prize in Physics, shows us in his important, brain-tickling new book, "A Different Universe." Like the blacksmith¹⁶ to whom everything resembles a nail, some physicists spent decades trying to explain everything in terms of particles; thus, gravity was attributed to a hypothetical "graviton." In recent decades, though, a few physicists have won acclaim¹⁷ for experiments with antireductionist implications.¹⁸ One example is a bizarre¹⁹</p>	<p>Blacksmith... nail—A blacksmith sitting on a throne with his trophies, including a nail and the king (by Rini, <i>New Yorker</i> 3/08/99).</p>

⁸ **discrete**, separate. Not to be confused with the more familiar word "discreet," meaning "careful."

⁹ **enzymes**, complex chemicals that control reactions within cells and within the body.

¹⁰ **cosmic**, having to do with the universe. "Cosmos" is another name for "universe."

¹¹ **dusting off**, looking at again, as one might dust off an old photo that has lain unlooked at for years.

¹² **Human Genome Project**, a government-funded project which has mapped the genes of the human chromosome that pass all hereditary information from one couple to the next generation.

¹³ **kaleidoscopic**, having many, various, seemingly random patterns, like the views through a child's kaleidoscope.

¹⁴ **infer**, conclude by logical extension.

¹⁵ **proteins**, very large molecules that have several vital functions in all organisms.

¹⁶ **blacksmith**, a craftsman who hammers hot steel into shapes such as horseshoes, cooking utensils, and decorative objects.

¹⁷ **acclaim**, praise.

¹⁸ **implications**, a conclusion that can be drawn from something indirectly.

¹⁹ **bizarre**, weird.

NY Times – A Different Universe

<p>laboratory phenomenon called superfluidity, in which liquefied helium²⁰ crawls vertically out of its beaker like the gelatinous²¹ monster in "The Blob."²²</p>	
<p>Laughlin, who teaches at Stanford University, illuminates emergent principles through a charming analogy: the paintings of Renoir and Monet. Up close the paintings look like "daubs of paint," nothing more. Yet when we step back from the canvases, we see fields of flowers. "The imperfection of the individual brush strokes tells us that the essence of the painting is its organization. Similarly"—Laughlin adds in a most unexpected segue—"the ability of certain metals to expel magnetic fields exactly when they are refrigerated to ultralow temperatures strikes us as interesting because the individual atoms out of which the metal is made cannot do this."</p>	
<p>A major step toward recognition of emergent phenomena was a discovery about electrical conductivity in 1980 by the German physicist Klaus von Klitzing. To understand its significance, be aware of its historical context: in the nineteenth century Edwin Hall had discovered principles of electrical conductivity usually called the Hall effect, and for a century afterward electrical conduction had been understood as simple Newtonian motion of electrons in a metal.</p>	<p>Newtonian—Sir Isaac Newton was the discoverer of gravity. It was this discovery that explained what keeps the planets circling around the Sun. His Laws of Motion suggest that, if you know the position and motion of every particle in the universe at a given time, you could predict all future events precisely just as you might predict how billiard balls will move on a table.</p>
<p>Von Klitzing found a totally unexpected phenomenon—that Hall conductivity in strong magnetic fields and ultralow temperatures changes in a precise, stepwise fashion as the field strength is varied. What identifies the effect as emergent is its precision and the fact that it disappears in small samples. The Nobel Prize in Physics awarded to him in 1985 specifically cites this work. Laughlin and two colleagues shared the 1998 prize for their studies of a similar phenomenon, one even more bizarre than von Klitzing's, "unanticipated by any theory and not analogous²³ to anything previously known in nature," as Laughlin writes.</p>	

²⁰ **liquefied helium**, even a gas like helium can be changed to a liquid state if it gets cold enough. In the case of helium, "cold enough" means -450 degrees Fahrenheit.

²¹ **gelatinous**, like gelatin, gooey.

²² **"The Blob,"** Steve McQueen's first major role was in this 1958 sci-fi movie, now a cult classic. You can find information on almost any movie at <http://www.imdb.org>. Once you find your movie, click on the hyperlink "External Reviews." Once there, if you find "Rotten Tomatoes" you can see at a glance the reactions of the most important critics.

²³ **analogous**, similar in a point-by-point way.

NY Times – A Different Universe

<p>Talk of emergence makes many scientists nervous. The word, after all, has been co-opted²⁴ by all kinds of people who have bowdlerized²⁵ it, along with once precise terms like "holistic"²⁶ and "paradigm," for trivial purposes. More pertinent, emergence seems to defy common sense, just as the notion of the sphericity²⁷ of the earth once did. There are no emergent principles in money, for example: 100 million pennies equals \$1 million, not an emergent \$2 million. To our primate²⁸ brains, the whole is the sum of its parts. But when I once griped about the counterintuitiveness of quantum physics,²⁹ a scientist at the University of Illinois replied dryly,³⁰ "Common sense is a poor guide to the nature of reality."</p>	<p>Paradigm—A word originally used to describe the tables of Latin and Greek grammatical forms, it has been adopted by scientists to describe whole systems of viewing evidence. The Enlightenment saw a "paradigm shift" from accepting authority to demanding logical reasons. The term is now loosely used to describe almost any system no matter how small.</p>
<p>Laughlin's thesis is intriguing,³¹ if not completely persuasive. I can't help wondering if hard-core reductionists will eventually explain emergent phenomena in reductionist terms; they've pulled rabbits out of hats³² before. Still, his thesis³³ reminds us of the great value of something most physicists assume they can live without: philosophy. Behind the seemingly concrete principles, practices and instruments of any laboratory, there are certain philosophical assumptions, often unexamined. In the 19th century physicists were hypnotized by the myth of the cosmic ether, an invisible medium through which light rippled, as waves ripple across a pond. In 1905, Albert Einstein, then a young patent clerk, awakened them. Likewise, Laughlin says, physicists face a philosophical "crisis" over emergence, "a confrontation between reductionist and emergent principles that continues today." In the history of science, philosophical crises often precede scientific revolutions.</p>	<p>Albert Einstein... awakened them—Aristotle believed that a fifth element, named aether, obviously invisible, must fill up what seems to be empty space since "nature abhors a vacuum." When in the nineteenth century light was thought to have only the characteristic of waves, it seemed they would have to be waves in <i>something</i>—and ether must be it. Einstein's discovery that the speed of light must be constant made the simplistic wave theory unnecessary.</p>
<p style="text-align: center;">This year is the 100th anniversary of Einstein's revolution.</p>	<p>Metaphor—an imaginative comparison. Much of our</p>

²⁴ **co-opted**, taken over for other than its intended purposes.

²⁵ **Bowdlerized**, to remove detailed, upsetting parts of something. The name comes from an editor of Shakespeare for families who removed sexual and other references considered unsuitable for children.

²⁶ **holistic**, as a philosophical term coined in the 1920s, this refers to the position that wholes cannot be understood simply as a collection of parts. There is a practice of medicine called holistic based on the belief that all aspects of a person, not just the physical ones, should be considered in treatment.

²⁷ **sphericity**, shaped like a sphere or ball.

²⁸ **primate**, the biological classification that includes apes, and humans.

²⁹ **quantum physics**, Newton's laws do not operate at the subatomic level. Where we once thought of electrons spinning around the nucleus of an atom, for example, an electron operates more like a cloud in which it is impossible to "locate" a particle precisely and whose energy can jump from one state to another without going through states in between. This behavior has given rise to the popular phrase "quantum leap."

³⁰ **dryly**, with ironic obviousness.

³¹ **intriguing**, very interesting.

³² **pulled rabbits out of hats**, produced something surprising the way the classic magic tricks are done.

³³ **thesis**, an explanation in the form of a proposition to be tested.

NY Times – A Different Universe

<p>In Laughlin's view, another physics revolution is coming. He mocks³⁴ speculations in the 1990's about an imminent end of science: "We live not at the end of discovery but at the end of Reductionism, a time in which the false ideology of human mastery of all things through microscopics is being swept away by events and reason." To invoke a familiar metaphor, physicists have fruitfully spent the last century trying to map every twig, acorn and bird's nest in the trees. Now it's time to step back and see the forest.</p>	<p>language consists of "dead" metaphors. "Prices are through the roof" is an example of a dying metaphor, comparing rising prices with something that explodes out of the top of a house, but we rarely picture the literal part of the comparison any more. Others are completely dead. "Sorry, I got carried away" does not call up a picture of anyone carrying me.</p>
<p style="text-align: center;">Keay Davidson, a science writer for the <i>San Francisco Chronicle</i>, is the author of <i>Carl Sagan: A Life</i>.</p>	

QUESTIONS

1. Explain in simple terms what is meant by "emergent" behavior. Describe. Look back at Pope's "Essay on Man." To what extent would proponents of emergence in science agree with Pope? What might they not accept?
2. Describe a mysterious experience which gave you a thrill or chill, but which you later found out was easily explained. Describe another about which you never found out the cause and which you still feel may have a supernatural cause. (If you have never had an inexplicable experience, describe another mysterious experience which you later found the cause of.)
3. Scientists tell us that matter is mostly empty space between atoms and molecules. Are you willing to accept the picture of "solid" things as not being so solid as they seem? Why or why not?
4. The subjective experience of colors and smells is one of those things that are not susceptible to reductionist explanation. Do you think that what you see as red is the same as another person's experience of the same color? Why or why not? Do you agree with the author that probably scientists will someday be able to explain how we experience colors and smells?
5. List some superstitions you kind of believe in even though your rational mind tells you they are not true. Why do you think you believe in them? If you have none, list some your friends believe in. Why do you think they believe them?

WRITING TOPIC

"Reductionism" is a common process in our reasoning. It allows for clear and precise explanations of things, but, as this article points out, it has the danger of oversimplifying situations. One important area of reductionist thinking is in economics. Traditional economic models reduce us all to all to predictable rational consuming machines, which means that we spend our money rationally to maximize its *utility*. Of course, "utility" here has a broad range of meanings beyond just "necessary" and "useful." It includes also things that give us pleasure and satisfaction. It is also part of a broader philosophy of *Utilitarianism* which

³⁴ **mocks**, makes fun of.

NY Times – A Different Universe

says that all our actions are motivated by how we see their utility to ourselves. This seems to be at odds with the morality of Christianity and other faiths that require thinking about the welfare of others and, specifically, giving to the poor and returning good for evil. Using examples from your own experience, explain either how apparently unselfish or self-destructive behavior can be “reduced” to utilitarian motives, or where the motives come from that prompt such behavior.

14

Our next author is one of the most outstanding thinkers of modern times. (By “modern times” here we mean since the Renaissance, a movement fueled by a desire to first imitate and then surpass the learning of the ancient Greek and Roman writers. The Renaissance, or “rebirth,” traveled slowly northward in Europe, starting about 1350 in Italy.) René Descartes is one of the founders of modern science and mathematics.

Discourses

By René Descartes (1596-1650)

Part One

<p>The most widely shared thing in the world is good sense, for everyone thinks he is so well provided with it that even those who are the most difficult to satisfy in everything else do not usually desire to have more good sense than they have. In this matter it is not likely that everyone is wrong. But this is rather a testimony¹ to the fact that the power of judging well and distinguishing what is true from what is false, which is really what we call good sense or reason, is naturally equal in all men, and thus the diversity of our opinions does not arise because some people are more reasonable than others, but only because we conduct our thoughts by different routes and do not consider the same things. For it is not enough to have a good mind. The main thing is to apply it well. The greatest minds are capable of the greatest vices as well as the greatest virtues, and those who proceed only very slowly, if they always stay on the right road, are capable of advancing a great deal further than those who rush along and wander away from it.</p>	
<p>As for myself, I have never presumed that my mind was anything more perfect than the ordinary mind. I have often even wished that I could have thoughts as quick, an imagination as clear and distinct, or a memory as ample and actively involved as some other people. And I know of no qualities other than these which serve to perfect the mind. As far as reason, or sense, is concerned, given that it is the only thing which makes us human and distinguishes us from animals, I like to believe that it is entirely complete in each person, following in this the common opinion of philosophers, who say that differences of more and less should occur only between accidental characteristics and not at all between the forms or essential natures of individuals of the same species.</p>	
<p>But I am not afraid to state that since my youth I think I have been</p>	

¹ **testimony**, statement in support of the truth of something. Look up the etymology of this word (its Latin origin) for an interesting surprise.

Descartes - Discourses

<p>very fortunate to find myself on certain roads which have led me to considerations and maxims out of which I have created a method by which, it seems to me, I have a way of gradually increasing my knowledge, raising it little by little to the highest point which the mediocrity of my mind and the short length of my life can allow it to attain. For I have already harvested such fruit from this method that, even though, in judging myself, I always try to lean towards the side of distrust rather than to that of presumption and although, when I look with a philosopher's eye on the various actions and enterprises of all men, there are hardly any which do not seem to me vain and useless, I cannot help deriving extreme satisfaction from the progress which I think I have already made in my research into the truth and in conceiving such hopes for the future that, if among the occupations of men, simply as men, there is one which is surely good and important, I venture to think it's the one I have chosen.</p>	
<p>However, it could be the case that I am wrong and that perhaps what I have taken for gold and diamonds is only a little copper and glass. I know how much we are subject to making mistakes in what touches ourselves and also how much we should beware of the judgments of our friends when they favor us. But I will be only too happy to make known in this discourse what roads I have followed and to reveal my life, as if in a picture, so that each person can judge it. Learning from common talk the opinions people have of this discourse may be a new way of teaching me, something I will add to those which I habitually use.</p>	
<p>Thus, my design here is not to teach the method which everyone should follow in order to reason well, but only to reveal the ways in which I have tried to conduct my own reasoning. Those who take it upon themselves to give precepts must consider themselves more skillful than those to whom they give them, and if they are missing something, then they are culpable. But since I intend this text only as a history, or, if you prefer, a fable, in which, among some examples which you can imitate, you will, in addition, perhaps find several others which you will have reason not to follow, I hope that it will be useful to some people, without harming anyone, and that everyone will find my frankness agreeable.</p>	

Part Four

<p>I don't know if I should share with you the first meditations which I made there, for they are so metaphysical and so out of the ordinary that they will perhaps not be to everyone's taste. However, in order that people may be able to judge if the foundations which I set are sufficiently strong, I find myself in some way compelled to speak of them. For a long time previously I had noticed that where morals are concerned it is necessary sometimes to follow opinions which one knows are extremely uncertain as if they are indubitable.... But since</p>	
---	--

Descartes - Discourses

<p>at that time I wanted only to carry out research into the truth, I thought I must do the opposite and reject as absolutely false everything about which I could imagine the least doubt, in order to see if there would be anything totally indisputable remaining after that in my belief.</p>	
<p>Thus, because our senses deceive us sometimes, I was willing to assume that there was nothing which existed the way our senses present it to us. And because there are men who make mistakes in reasoning, even concerning the most simple matters of geometry, and who create para-logisms, and because I judged that I was subject to error just as much as anyone else, I rejected as false all the reasons which I had taken earlier as proofs. Finally, considering that all the same thoughts which we have when awake can also come to us when we are asleep, without there being truth in any of them at the time, I determined to pretend that everything which had ever entered my mind was no more true than the illusions of my dreams.</p>	
<p>But immediately afterwards I noticed that, while I wished in this way to think everything was false, it was necessary that I—who was doing the thinking—had to be something. Noticing that this truth—I think, therefore I am—was so firm and so sure that all the most extravagant assumptions of the skeptics would not be able to weaken it, I judged that I could accept it without scruple as the first principle of the philosophy I was looking for.</p>	
<p>Then I examined with attention what I was, and I saw that I could pretend that I had no body and that the world and the place where I was did not exist, but that, in spite of this, I could not pretend that I did not exist. By contrast, in the very act of thinking about doubting the truth of other things, it very clearly and certainly followed that I existed; whereas, if I had once stopped thinking, even though all the other things which I had imagined were real, I would have no reason to believe that I existed. From that I recognized that I was a substance whose essence or nature is only thinking, a substance which had no need of any location and did not depend on any material thing, so that this “I,” that is to say, the soul, by which I am what I am, is entirely distinct from the body and is even easier to know than the body, and that, even if the body were no longer there, the soul could not help being everything it is.</p>	
<p>After that, I considered in general what is necessary for a proposition to be true and certain, for since I had just found one idea which I knew to be true and certain, I thought that I ought also to understand what this certitude consisted of. And having noticed that in the sentence "I think; therefore, I am" there is nothing at all to assure me that I am speaking the truth, other than that I see very clearly that in order to think it is necessary to exist, I judged that I could take as a general rule the point that the things which we conceive very clearly and very distinctly are all true. But that left the single difficulty of properly noticing which things are the ones we conceive distinctly.</p>	

Descartes - Discourses

<p>After that, I reflected on the fact that I had doubts and that, as a result, my being was not completely perfect, for I saw clearly that it was a greater perfection to know than to doubt. I realized that I should seek out where I had learned to think of something more perfect than I was. And I concluded that obviously this must be something with a nature which was, in effect, more perfect.</p>	
<p>As for the thoughts which I had of several other things outside of me, like the sky, the earth, light, heat, and a thousand others, I was not worried about knowing where they came from, because I didn't notice anything in them which seemed to me to make them superior to myself. Thus, I was able to think that, if they were true, that was because of their dependence on my nature, in so far as they had some perfection and, if they were not true, I held them from nothing, that is to say, that they were in me because I had some defect.</p>	
<p>But that could not be the same with the idea of a being more perfect than mine. For to hold that idea from nothing would be manifestly impossible. And because it is no less unacceptable that something more perfect should be a consequence of and dependent on something less perfect than that something should come from nothing, I could not derive this idea from myself. Thus, I concluded that the idea had been put in me by a nature which was truly more perfect than I was, even one which contained in itself all the perfections about which I could have some idea, that is to say, to explain myself in a single phrase, a nature which was God.</p>	
<p>To this I added the fact that, since I know about some perfections which I do not have, I was not the only being which existed (here I will freely use, if you will permit me, the language of the schools). But it must of necessity be the case that there was some other more perfect being, on whom I depended and from whom I had acquired all that I had. For if I had been alone and independent of everything else, so that I derived every idea, however little, which I shared of the perfect being from myself, I would have been able to have from myself, for the same reason, all the additional perfections which I knew I lacked, and thus be myself infinite, eternal, immutable, all knowing, all powerful, and finally have all the perfections which I could observe as present in God.</p>	
<p>For, following the reasoning which I have just made, to know the nature of God, to the extent that my reasoning is able to do that, I only had to think about of all the things of which I had some idea within me and consider whether it was a sign of perfection to possess them or not. And I was confident that none of those ideas which indicated some imperfection were in God, but that all the others were there, since I perceived that doubt, inconstancy, sadness, and similar things could not be in God, in view of the fact that I myself would have been very pleased to be free of them.</p>	
<p>Then, in addition, I had ideas about several sensible and corporeal</p>	

<p>things. For although I supposed that I was asleep and that everything which I saw or imagined was false, nonetheless I could not deny that the ideas had truly been in my thoughts. But because I had already recognized in me very clearly that intelligent nature is distinct from corporeal nature, when I considered that all composite natures indicate dependency and that dependency is manifestly a defect, I judged from this that God's perfection could not consist of being composed of two natures, and that thus He was not, but that if there were some bodies in the world or even some intelligences or other natures which were not completely perfect, their being had to depend on God's power, in such a way as they could not subsist for a single moment without Him.</p>	
<p>After that I wanted to look for other truths, and I proposed to myself the subject matter of geometricians, which I understood as a continuous body or a space extended indefinitely in length, width, and height or depth, divisible into various parts, which could have various figures and sizes and be moved or transposed in all sorts of ways, for the geometricians assume all that in their subject matter. I glanced through some of their simplest proofs, and having observed that this grand certainty which all the world attributes to them is founded only on the fact that they plan these proofs clearly, following the rule which I have so often stated, I notice also that there is nothing at all in their proofs which assures me of the existence of their objects. So, for example, I do see that, if we assume a triangle, it must be the case that its three angles are equal to two right angles, but, in spite of that, I don't see anything which assures me that there is a triangle in the world. But, by contrast, once I returned to an examination of the idea which I had of a perfect being, I found that that being contains the idea of existence in the same way as the fact the three angles of a triangle are equal to two right angles is contained in the idea of a triangle, or that in a sphere all the parts are equidistant from the centre, or something even more evident, and that, as a result, it is at just as certain that God, this perfect being, is or exists as any geometric proof can be.</p>	
<p>But the reason there are several people who persuade themselves that there are difficulties in understanding this and even knowing what their soul is, as well, is that they never raise their minds above matters of sense experience and that they are so accustomed not to consider anything except by imagining it, which is a way of thinking in particular of material things, so that everything which is not imaginable seems to them unintelligible. This point is obvious enough in the fact that even the philosophers in the schools maintain the axiom that there is nothing in the understanding which has not first of all been in the senses. But it is certain that the ideas of God and the soul have never been present in sense experience. It seemed to me that those who want to use their imagination to understand these things are acting just as if they want to use their eyes to hear sounds or smell odors, except that there is still this difference, that the sense of sight provides us no less</p>	

Descartes - Discourses

<p>assurance of the truth of what it sees than do the sense of smell or hearing; whereas, neither our imagination nor our senses can assure us of anything unless our understanding intercedes.</p>	
<p>.....</p>	
<p>For, finally, whether we are awake or asleep, <i>we should never allow ourselves to be persuaded except by the evidence of our reason.</i> And people should note that I say of our reason and not of our imagination or of our senses, since even though we see the sun very clearly, we should not for that reason judge that it is only the size which we see, and we can easily imagine distinctly the head of a lion mounted on the body of goat, without having to conclude, because of that, there is a chimera in the world: for reason does not dictate to us that what we see or imagine in this way is true, but it does dictate to us that all our ideas or notions must have some foundation in truth, for it would not be possible that God, who is completely perfect and totally truthful, put them in us without that.</p>	

QUESTIONS

1. In the previous article “A Different Universe” the author talked about “reductionism.” Explain the statement: “Descartes was the ultimate reductionist.”
2. Scientists pooh-pooh the claims of astrology, although a number of national leaders and business executives consult it in timing their decisions. Scientists reject astrology because they can see no causal relation between the position of the planets and events on Earth (even though the gravitational effects, at least, of these bodies on one another are measurable). Using Descartes’ logic about the relation of God to physical events, explain, whether you believe it or not, how the position of the planets might describe human personalities, moods, and interactions, even though they do not cause them. The position of Christian churches toward astrology has been and is various. Explain why Christians theologians might or might not accept astrology.