# 北京师范大学

# 研究生公共英语

## 《学术英语读译》课程教材

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## Unit 1

### Getting and Spending: A Cross-Cultural View of Economics

1 Every society produces, distributes, and uses goods and services. Therefore, every society has an economy, a system that manages the process of production, distribution, consumption, or use. The people of every culture learn specific economic behaviors. They have certain motivations and make certain economic choices that their society has taught them.

2 Formal economics states that people make rational economic choices that result in their well-being and profit. It studies the production and consumption of goods in an industrialized market economy. It assumes that the economy runs on rational choices such as those a businessperson makes: Should the firm cut down or expand its production in a certain situation? Should it purchase a new machine or hire more laborers? Where should it locate its plant? Will it manufacture shoes or gloves? How much will be spent on advertising its product? All these decisions are assumed to be rational, that is, based on the desire to make the greatest possible profit from limited resources.

3 Formal economics also assumes that individuals as well as businesses act rationally in making decisions about how to spend their incomes. Individuals may have many desires, but they usually have only limited income to fulfill those desires. Therefore, decisions about how to spend that income—whether to buy a car, give the children a private school education, place a down payment on a house, or take a vacation—must be weighed rationally before they are made. Decisions about how to spend time are similarly weighed. Should one spend one's leisure time with one's family, in a second job, or back in school studying for an advanced degree to improve one's future economic chances?

4 Formal economics focuses on the Western industrial market economy. However, its key assumptions about rational decision making, limited resources, and the importance of profit do not apply to all societies. For example, in some traditional societies economic choices are made as the result of a different value system from that common in the United States. For instance, in hunting and gathering societies such as that of the Kung of south-central Africa, people have not been trained to desire many material goods. Therefore, they do not have to work all day every day to fulfill their needs; they can get enough food and other essentials and still have plenty of leisure time left over. From our point of view, people who do not use their leisure time to further their work and profit are "lazy." But not everyone feels the need for more possessions and services—more "stuff"—than they already have.

5 In our society, high social status or respect is closely tied to the possession or

consumption of certain “brand name” goods and services. For example, all cars serve the same basic function of transportation; however, certain cars known to be expensive have more prestige than do other cars that may be just as useful. In addition, we are willing to pay extra for those services that our cars automatically perform for us: automatic windows, automatic trunk openers, automatic gear shifts. In other societies, such prestige may not be associated with the display of goods but rather with generosity in giving goods away to others. People who own and display much more than others may be thought stingy and may lose rather than gain prestige.

6 In the United States, we generally place economic priorities above social ones. In some societies, however, social relations have a higher priority than economic ones. For example, in many Asian countries, a businessperson will leave his or her work to show hospitality to a guest even if it means the loss of a day’s income. The more traditional a society is, the more it is expected that friends, relatives, and neighbors will help each other financially in time of need with a formal contract for paying back the loan. Furthermore, in many non-Western cultures, even those whose standard of living is quite low, people will go into debt for social or religious ceremonies such as a feast or a funeral.

7 In non-industrial societies few aspects of behavior are purely economic. Most activity has a mixed social, ceremonial, or moral aspect to it, as well as having an economic one. For example, the Ponape people of the South Pacific often hold huge feasts at which the host serves the pig and beer and the guests bring such prestigious foods as yams and breadfruit. These feasts have an important economic purpose. They provide a way for extra food to be distributed around the village without shaming those farmers whose crops are inferior. They also permit food to be eaten that would otherwise be wasted, since the Ponape do not have refrigeration or other means for preserving food. But, these feasts also serve important social purposes. They bring people together and allow them to gain prestige by acting modestly about their contributions; at these Ponape feasts, one gains prestige not only by bringing extra food but by praising the contributions of others as better than one’s own. The social aspects of the Ponape feasts may be hidden from outsiders, but they are understood and respected by the members of the Ponape culture.

8 Other aspects of the economy that may differ greatly from one culture to another are the basic unit of production, the sexual division of labor, and the degree of specialization of labor. In agricultural societies, the unit of production is most frequently the extended family that consists of several generations of relatives. The specialization of labor is usually by sex and age only. The men perform all tasks related to farming, whereas the women perform all the work related to house-keeping, gardening, and child care. Social and economic activities are usually integrated in such societies, and often decisions that appear to be economically “irrational” have a

hidden meaning in terms of the culture's beliefs or values.

9 On the other hand, in industrial societies, the unit of production is usually a business firm outside the family structure that is motivated almost entirely by economic interests. Typically there is a high degree of specialization of labor: Workers may belong to different unions depending on the different type of job they perform within an industry, or a company may have a dozen vice-presidents, each with a narrow area of responsibility.

## *Background and Culture Notes*


*Let me tell you*

**Ponape**, now known as **Pohnpei** "upon (pohn) a stone altar (pei)," is an island that belongs to the Federated States of Micronesia (FSM). The islanders of Pohnpei have a reputation as being the most welcoming of outsiders among residents of the island group. Pohnpei contains a wealth of biodiversity. It is also one of the wettest places on Earth with annual recorded rainfall exceeding 7,600 millimeters (300 in) each year in certain mountainous locations.

## Exercises

### *Learn about the text*

**I. Read the text and complete the following outline.**

Summary Outlines

Paragraph [1]: The economy is a system for managing the process of (1)_____,

_____, and _____.

Paragraphs [2]&[3]: Formal economics is based on the idea that people make thoughtful economic choices.

Example a: A businessman may decide to (2)_____

Example b: An individual may decide to (3)_____

Paragraphs [4]&[5]: Western industrial societies and some traditional societies have different economic values.

a. Western people work (4) _____

b. In Western society, respect is (5)_____.

c. Traditional people may/may not desire/display (6)_____

Paragraphs [6]&[7]: A central idea of these paragraphs is that (7)_____ _____..

Example a: Some people will go in debt for a marriage or a funeral.

Example b: A person may close his business to (8)_____

Example c: A couple may marry for love (9)_____

In most traditional, economic activities also (10)_____..

Paragraphs [8]&[9]: Traditional and industrial economies differ from each other in several ways.

Traditional a: (11) _____

b: There is little (12)_____ of work.

c: (13) _____

Industrial a: Production is mostly through business firms interested in (14)__.

b: (15)_____

(Adopted from Joan Young Gregg. *Communication and Culture: A Reading-writing Text*. 北京：中国水利水电出版社，1999. )

## Unit 2

### *Grand Pursuit: The Story of Economic Genius* by Sylvia Nasar—Economic theorists as heroes for our time? Nasar makes the case.

by Roger Lowenstein

1. It is a dubious hour to proclaim the triumph (much less the genius) of the “dismal

science." Western economies are a wreck, the U.S. is suffering 9.1% unemployment, and Europe is teetering on the abyss of default. The economics profession bears no small measure of blame—first for inventing or adopting modern risk management, which failed so spectacularly during the financial crisis, and second for believing that central bankers had unlocked the key to managing growth. In the U.S., politicians have been reenacting a tired budget deficit debate from the 1930s. Whatever economics we may have learned, we seem determined to forget.

2. Yet to proclaim a triumph is precisely what Sylvia Nasar, author of the acclaimed *A Beautiful Mind*, sets out to do. Nasar has written a compelling history of modern economics, a story of the theorists as well as of their theories. *Grand Pursuit* retraces much of the same ground as Robert L. Heilbroner's 1953 classic *The Worldly Philosophers* — which is to say, Nasar gives us Karl and Jenny Marx in their crowded London flat, Joseph Schumpeter, and, of course, John Maynard Keynes. Nasar is more idiosyncratic in her choice of subjects; she omits Adam Smith almost entirely. _____ (1) _____ Similarly, Nasar glosses over the Great Depression but lingers on the less familiar crisis in post-WWI Vienna because Schumpeter happened to be there and was enlisted by the Socialist government to help stave off mass starvation and communist rebellion, none of which interfered with his conspicuous pursuit of women and thoroughbred horses.

3. Nasar's story is centered in London, and its appeal is enhanced by the inclusion of literary masters such as Charles Dickens, who was, she points out, obsessed by the great Victorian issue of eradicating poverty. Although not quite framed in these terms, Nasar's narrative encompasses, I think, two motifs. The first is how economists came to decipher that capitalism is, ultimately, an engine of progress rather than despair. To focus on just one sequence within this theme, she starts with the reverend Thomas Robert Malthus and his dire thesis that the sex drive condemns the masses to live at the edge of starvation.

4. Marx is similarly pessimistic, if for different reasons. He sees society and the Industrial Revolution, rather than nature, as the agent of human misery. "Poverty was not, of course, new," Nasar writes, which the would-be revolutionary readily

acknowledged. _____ (2) _____. Marx's explanation was that the competition for profits impels factory owners to steadily reduce wages, leading to a downward spiral in living standards. That the émigré Marx never bothered to visit an actual factory, or even to learn English well, is one of the human failings Nasar engagingly brings to the surface. The great revolutionary was too busy holding forth at cafés, soused in an atmosphere of "wet woolens and warm beer," to notice that living standards were rising. Marx comes off badly, yet his conclusion that society offered the masses little hope (short of revolution) was widely accepted. Only in a novel such as *Great Expectations* might the orphan Pip vault to the middle class; for the real life masses, such advancement was "the stuff of pure fantasy."

5. This is Nasar's setup for Alfred Marshall, who, though trained as a mathematician, was inspired by both Dickens and Marx to study how companies actually operated. "He did not doubt that the chief cause of poverty was low wages, but what caused wages to be low?" Marshall, who began his work in the 1860s, noticed a dynamic that Marx hadn't: "Competition forced owners and managers to constantly make small changes to improve their products, manufacturing techniques," and so forth. Over time, the improvements wrought greater productivity and higher wages. _____(3)_____. The historian Arnold J. Toynbee later called it "the first great hope which (wage analysis) opens out to the laborer."

6. I have lingered on Nasar's treatment of Marx and Marshall to give a sense of the vividness of her story. Her second motif, though she doesn't frame it explicitly, concerns the evolution of the role of government: the great upheaval that was the welfare state, the struggle to regulate—with or without gold—the money supply, and the parallel effort to control booms and busts. The latter is especially relevant today; thus, eminences from Keynes to the American Irving Fisher inquire whether panics and slumps are "generated by the economic system" or are "random shocks that originated outside the economy."

7. Neither Nasar's topics nor her characters conform to a neat, linear organization. Economics has no agreed-upon catechism, and Nasar has written the book she chose to write, not a book that a conventional reading of history demands. Curiously, she

includes a fine portrait of the young Milton Friedman as a New Deal bureaucrat, but not of the later free-market apostle who achieved influence and fame. _____(4)_____. "The fear that using mathematics would cause other languages to wither turned out to be overblown," she asserts. If anything, they were under-blown. Formula-derived economic models, embraced by economists with utter certainty, helped to foster the financial crisis and other modern traumas. Perhaps inevitably in a broad survey, some of Nasar's transitions are abrupt, but overall *Grand Pursuit* is artfully rendered and a delight to read.

8. The question is whether Nasar's subjects truly deserve her laudatory subtitle, *The Story of Economic Genius*. To Nasar, economic history is a story of intellectual progress, albeit with some fairly nasty bumps: "Economic calamities"—she specifies the Great Depression—"have always triggered crisis of confidence but they have not come close to wiping out the cumulative gains in average living standards." Extending her gaze to India, China, and other developing nations, she observes, "Since WWII, history has been dominated by the escape of more and more of the world's population from abject poverty." _____ (5) _____. To put it bluntly, railroads weren't developed by economists, and it is unclear whether Marshall et al. enabled such progress or merely explained it.

9. Nasar would have us believe that the present crisis has not even nicked the busts in her economists' pantheon. It is certainly true, as she notes, that the Great Recession of 2008 and 2009 "did not reverse the prior gains in productivity and income" and that (so far) "there was no second Great Depression." But this a debate she could have wrestled with more, especially the assertion that "governments achieved some success in managing their economies." With Europe in disarray, the last word on managing economies has yet to be writ. _____ (6) _____. All the same, their authors would profit from consulting *Grand Pursuit*.

## *Background and Culture Notes*

*Let me tell you*

1. **Sylvia Nasar**, born in 1947, is a German-born American economist and author. In 1998, she published A Beautiful Mind, a biography of Nobel Prize-winning economist and mathematician John Forbes Nash, Jr. The book is a detailed description of many aspects of Nash's life, and a close examination of his personality and motivations, and gives an interesting perspective on the stresses placed on personal and professional relationships by severe mental illness. The book won the 1998 National Book Critics Circle Award for biography, was nominated for the Pulitzer Prize for biography, and was shortlisted for the Rhône-Poulenc Prize in 1999.

2. **Roger Lowenstein**, born in 1955, is an American financial journalist and writer. He graduated from Cornell University and reported for *The Wall Street Journal* for more than a decade, including two years writing its "Heard on the Street" column, 1989 to 1991. He is a regular book reviewer for *The New York Times* and has written a number of major articles and cover stories for *The New York Times Magazine*.

## Exercises

***Learn about the text***

I. ***In the text, the numbers refer to some missing sentences. Read the context through and decide where the sentences below should go***.

a. The significance of this idea for human progress cannot be overstated.
b. On the other hand, she reclaims the lesser-known Beatrice Webb, a richly interesting and path-breaking Victorian who founded the London School of Economics and sold none other than Winston Churchill on the need for a welfare state.
c. One suspects that future economics textbooks will warrant some revisions.
d. And she is too forgiving of the modern academy's enslavement to the computer.

e. But the juxtaposition of poverty amid rising wealth made poverty seem "manmade, almost gratuitous."
f. Such arguments seem to conflate economic progress with economic thinking.

II. ***When an article combines information from many sources, it is sometimes difficult to determine the source of an individual piece of information. In this article it is especially difficult to determine if individual statements are those of the author or are based on the work of the experts cited. Following is a list of statements made in the article. Indicate if each one has been made by the author or one of his sources.***

Example: Lowenstein Nasar is very idiosyncratic in her choice of subject.

_____ 1. Schumpeter was very interested women and horses.

_____ 2. The sex drive condemns the masses to live at the edge of starvation.

_____ 3. Charles Dickens was obsessed by the issue of eradicating poverty.

_____ 4. Marx views society and the Industrial Revolution as the agent of human society.

_____ 5. Factory owners' competition for profits led to a downward spiral in living standards.

_____ 6. Competition forced owners and managers to constantly make small changes to improve their products and techniques.

_____ 7. Economics has no agreed-upon catechism.

_____ 8. The Great Recession of 2008 and 2009 was no second Great Depression

_____ 9. Economic history is a story of intellectual progress despite some nasty bumps.

_____ 10. The idea that improvements wrought greater productivity and higher wages is the first great hope which wage analysis opens out to the laborer.

**Unit 3**

## On Plagiarism

### In the wake of recent scandals some distinctions are in order

by Richard A. Posner

1. Recently two popular historians were discovered to have lifted passages from other historians' books. They identified the sources in footnotes, but they failed to place quotation marks around the purloined passages. Both historians were quickly buried under an avalanche of criticism. The scandal will soon be forgotten, but it leaves in its wake the questions "What is 'plagiarism'?" and "Why is it reprobated?" These are important questions. The label "plagiarist" can ruin a writer, destroy a scholarly career, blast a politician's chances for election, and cause the expulsion of a student from a college or university. New computer search programs, though they may in the long run deter plagiarism, will in the short run lead to the discovery of more cases of it.

2. We must distinguish in the first place between a plagiarist and a copyright infringer. They are both copycats, but the latter is trying to appropriate revenues generated by property that belongs to someone else—namely, the holder of the copyright on the work that the infringer has copied. A pirated edition of a current bestseller is a good example of copyright infringement. There is no copyright infringement, however, if the "stolen" intellectual property is in the public domain (in which case it is not property at all), or if the purpose is not appropriation of the copyright holder's revenue. The doctrine of "fair use" permits brief passages from a book to be quoted in a book review or a critical essay; and the parodist of a copyrighted work is permitted to copy as much of that work as is necessary to enable readers to recognize the new work as a parody. A writer may, for that matter, quote a passage from another writer just to liven up the narrative; but to do so without quotation marks—to pass off another writer's writing as one's own—is more like fraud than like fair use.

3. "Plagiarism," in the broadest sense of this ambiguous term, is simply unacknowledged copying, whether of copyrighted or uncopyrighted work. (Indeed, it might be of uncopyrightable work—for example, of an idea.) If I reprint *Hamlet* under my own name, I am a plagiarist but not an infringer. Shakespeare himself was a formidable plagiarist in the broad sense in which I'm using the word. The famous description in *Antony and Cleopatra* of Cleopatra on her royal barge is taken almost verbatim from a translation of Plutarch's life of Mark Antony: "on either side of her, pretty, fair boys appareled as painters do set forth the god Cupid, with little fans in their hands, with which they fanned wind upon her" becomes "on each side her / Stood pretty dimpled boys, like smiling Cupids, / With divers-colour'd fans, whose

wind did seem / To glow the delicate cheeks which they did cool." (Notice how Shakespeare improved upon the original.) In *The Waste Land*, T. S. Eliot "stole" the famous opening of Shakespeare's barge passage, "The barge she sat in, like a burnish'd throne, / Burn'd on the water" becoming "The Chair she sat in, like a burnished throne, / Glowed on the marble."

4. Mention of Shakespeare brings to mind that *West Side Story* is just one of the links in a chain of plagiarisms that began with Ovid's Pyramus and Thisbe and continued with the forgotten Arthur Brooke's *The Tragical History of Romeus and Juliet*, which was plundered heavily by Shakespeare. Milton in *Paradise Lost* plagiarized Genesis, as did Thomas Mann in *Joseph and His Brothers*. Examples are not limited to writing. One from painting is Ēdouard Manet, whose works from the 1860s "quote" extensively from Raphael, Titian, Velásquez, Rembrandt, and others, of course without express acknowledgment.

5. If these are examples of plagiarism, then we want more plagiarism. They show that not all unacknowledged copying is "plagiarism" in the pejorative sense. Although there is no formal acknowledgment of copying in my examples, neither is there any likelihood of deception. And the copier has added value to the original—this is not slavish copying. Plagiarism is also innocent when no value is attached to originality; so judges, who try to conceal originality and pretend that their decisions are foreordained, "steal" freely from one another without attribution or any ill will.

6. But all that can be said in defense of a writer who, merely to spice up his work, incorporates passages from another writer without acknowledgment is that the readability of his work might be impaired if he had to interrupt a fast-paced narrative to confess that "a predecessor of mine, ___, has said what I want to say next better than I can, so rather than paraphrase him, I give you the following passage, indented and in quotation marks, from his book ___." And not even that much can be said in defense of the writer who plagiarizes out of sheer laziness or forgetfulness, the latter being the standard defense when one is confronted with proof of one's plagiarism.

7. Because a footnote does not signal verbatim incorporation of material from the source footnoted, all that can be said in defense of the historians with whom I began is that they made it easier for their plagiarism to be discovered. This is relevant to how severely they should be criticized, because one of the reasons academic plagiarism is so strongly reprobated is that it is normally very difficult to detect. (In contrast, Eliot and Manet *wanted* their audience to recognize their borrowings.) This is true of the student's plagiarized term paper, and to a lesser extent of the professor's plagiarized scholarly article. These are particularly grave forms of fraud, because they may lead the reader to take steps, such as giving the student a good grade or voting to promote

the professor, that he would not take if he knew the truth. But readers of popular histories are not professional historians, and most don't care a straw how original the historian is. The public wants a good read, a good show, and the fact that a book or a play may be the work of many hands—as, in truth, most art and entertainment are—is of no consequence to it. The harm is not to the reader but to those writers whose work does not glitter with stolen gold.

***Background and Culture Notes***


*Let me tell you*

1. **Plutarch** was a Greek biographer and essayist living in the early roman imperial period. He wrote works on a variety of matters mainly philosophical and moral, but is best known for his *Parallel Lives*, a work that comprises of paired biographies of famous Greeks and Romans arranged together so that each Greek life compliments its Roman companion.
2. **T. S. Eliot** was a British essayist, publisher, playwright, literary and social critic, and "one of the twentieth century's major poets". In October 1922, Eliot published *The Waste Land*. The poem is known for its obscure nature—its slippage between satire and prophecy; its abrupt changes of speaker, location, and time. This structural complexity is one of the reasons why the poem has become a touchstone of modern literature, a poetic counterpart to a novel published in the same year, James Joyce's *Ulysses*.
3. **Pyramus and Thisbē** are a pair of ill-fated lovers in the city of Babylon who occupy connected houses/walls, forbidden by their parents to be wed, because of their parents' rivalry. Their story forms part of Ovid's *Metamorphoses*. The story has since been retold by many authors, including Shakespeare. The tragedy of Romeo and Juliet ultimately sprang from Ovid's story. As in Pyramus and Thisbē, the mistaken belief in one lover's death leads to consecutive suicides.

## Unit 4

### Why A Liberal Arts Education Matters?

by Susan M. Di Biase

1. Most college students, and parents of college students, believe the goal of college is to secure a practical education that will lead to a first real job. They know that today's job market is competitive and uncertain. Their investment of money and time and effort to gain an education needs to pay off.

2. Of course, most people do need to earn a living for themselves and their families. But isn't getting a college education about more than just survival? Those of us who support the liberal arts and sciences say it is. We urge students to ask themselves two questions:

- Am I preparing myself for my first job or for my whole career?
- Am I educating myself only for work or also for life?

3. Those students who aspire to higher goals may be interested in learning more about why the liberal arts education matter. First of all, what are the liberal arts?

**What is liberal arts education?**

4. The term "liberal education" was first used in classical Greek and Roman times. It was chosen to emphasize the fact that education was not available for the many people in those societies who were held in slavery, but only for those who were free. The reference to liberty was included in the term because people who were educated started out free, and became freer as their education progressed. The Greeks and Romans recognized that education arms a person to confront the influence of others critically. Such a person is less easily manipulated and deceived. Still today, in order to form a more perfect union, we need citizens who are informed, discerning, and morally courageous. Liberal education forms the basis of every democratic society.

5. In *The Republic*, the Greek philosopher Plato explained how a well-rounded education should include the study of astronomy, mathematics, music and poetry. Of course our fields of knowledge have grown "astronomically" since his day, but his basic message underlies the tradition of liberal arts education. Plato taught his students to appreciate logic and order, ideals and beauty. Later teachers included the study of the growing fields of science and the burgeoning wealth of literature. They broadened the study of societies, governments, and history. But the main purpose of traditional liberal arts education stayed the same. It was designed to develop one's critical faculty, so necessary to the pursuit of wisdom and virtue. Isn't this aim still relevant today?

**Relevance of liberal arts education in today's world**

6. Some people argue that wisdom and virtue are much less important than job training. They are not sure it benefits young people in this world to have ideals they feel passionately about, to have broad interests that excite and consume them, and to have an awareness of the joys and sorrows of people who live far away, or next door. This may be too much to ask, they argue, of the ordinary person struggling to make a living. It is better to focus on learning some specific set of skills, because then at least one has a chance of getting a job.

7. Does a broad, idealistic, liberating education also prepare a person to be valuable to a company? Many business leaders say it does. They argue that the job market has changed. Workers no longer stay at one company doing the same job until retirement. Technology drives change at such a pace that in less than 5 years, most facts college students learn are out of date. Business recruiters are looking for graduates who are inventive and flexible enough to learn new skills. Many students and parents worry about the short-term: preparing for the first real job. Most corporate executives, however, value an education that prepares one for a lifetime of imaginative and productive work. Indeed, business leaders know that survival in today's unstable job market depends upon the intellectual discipline that only a liberal education can offer.

**Strengths for employment**

8. Education in the arts, sciences, and humanities develops in students three types of skills that employers prize above all others. These are reasoning skills, communication skills, and social skills.

*Reasoning skills*

9. Educators know that graduates must have strong reasoning and problem-solving abilities to succeed in today's workplace. Graduates must be able to think logically and critically to solve problems on the job. They must also be imaginative. Employers appreciate graduates who have learned to be enthusiastic about learning, who are willing to develop new skills and try new methods and technologies. A liberal arts education is valuable because it teaches students to ask questions that matter, to weigh conflicting evidences, to appreciate the complexity of situations, and to develop logical, convincing arguments for solutions.

10. A student who studies the liberal arts chooses to learn something about a lot of different fields: the arts, the sciences, the humanities. This develops the ability to see

connections among very different ideas and very different approaches to studying the world. Study in the liberal arts trains the brain to be flexible: to think logically, yes, but metaphorically as well. Scientists now know that new linkages in the brain (called synapses) are actually formed when the brain is being used in new ways. The student develops the ability to analyze, or break ideas into parts, and to synthesize, to bring parts together to make a whole. These are considered the most difficult intellectual skills, and the person who has developed them gains a wider perspective and greater mental agility.

*Communication skills*

11. Such intellectual agility also develops the student's ability to organize and communicate thoughts. Employers search for graduates who are able to communicate ideas clearly and coherently, who can be articulate and persuasive in proposing new ideas. Communication skills divide those who move up the career ladder from those who stagnate. Although many people can master the technical skills of a job, very few have the communication skills needed to present a truly professional image in speech and writing.

*Social skills*

12. Finally, employers want to hire people who have strong social skills, people who cooperate well with others. Having studied literature, history, and the social sciences, such people appreciate the variety of humanity. They treat people who are unlike them with respect and understanding. They are sensitive to cultural and economic differences. People with strong social skills are idealistic enough to strive for cooperation and fairness. They can inspire a team with enthusiasm. They make better leaders, and better citizens.

**Strengths for living**

13. These broad skills in reasoning and communication form the basis for success in one's personal aspirations as well. Emphasizing the utility of education for job training creates a false dichotomy between work and the rest of life. Our capitalistic society overemphasizes people's roles as producers and consumers of material goods. Overlooked are our roles as citizens and voters, spouses and parents, Girl Scout troop leaders, soccer coaches, church choir members, and neighbors. Liberal arts education encourages students to consider their eventual roles in working for the good of

individuals and of the community. It encourages students to consider which values they would like to express through a good and decent life. It encourages students to view their experiences in the larger context of history and social change. This gives young people a greater sense of purpose in life. This sense, often missing from the lives of young people today, is that of feeling involved in the great effort at civilization and moral progress, which began before we were born and will continue long after we die.

14. One of the saddest results of narrowing the goal of education is that it causes students to overlook the lifelong rewards of a broad education in the arts, sciences, and humanities. Chief among these is the joy of learning. Learning something about a lot of subjects leads to a greater curiosity about the natural world and how it is represented and understood. It infuses it with greater meaning and joy. Watching children play on a bright spring day calls to mind a poem by William Blake. Seeing a magnificent bridge spanning an ancient river leads to a reflection on the years it took the waters to carve the streambed, and the years it took human beings to learn enough to build the bridge. Education is like a Fountain of Youth: it allows people to see the world with the wisdom of the ages, but with minds that are forever curious, forever young.

15. The best thing about a broad, thorough, liberal education is that it can never be taken away. Students sometimes ask, “Why do we have to study chemistry (or history, or foreign languages) when we will never use this stuff again?” The answer is very simple. One may never use chemical formulas again, but studying chemical formulas makes one’s brain work better. One sees connections more quickly. One’s thoughts are organized more clearly. It’s like sweeping the cobwebs out of your head. Teachers have known for centuries that studying different subjects trains the mind to work in different ways: analytically, synthetically, creatively, logically, metaphorically. And now, scientists know that studying different subjects actually change the biochemical structure of the brain, forming new connections that make it more limber and agile. One is changed forever, and this is the greatest gift. Liberal arts education enriches life in ways that can’t be measured in terms of money, and that begs to be handed down.

## *Background and Culture Notes*


*Let me tell you*

4. **Liberal arts education**, as opposed to professional or technical educations, proposes the primary purpose of an education is to provide students with general knowledge in various subjects such as the arts, humanities, natural sciences, and social sciences.

5. ***The Republic*** is a Socratic dialogue written by Plato around 380 BCE concerning the definition of justice, the order of the just city-state and the character of the just man. The dramatic date of the dialogue has been much debated and though it must take place sometime during the Peloponnesian War. It is Plato's best-known work and has proven to be one of the most intellectually and historically influential works of philosophy and political theory. In it, Socrates along with various Athenians and foreigners discuss the meaning of justice. The participants also discuss the theory of forms, the immortality of the soul, and the roles of the philosopher and of poetry in society.

6. **Plato** (428/427 BCE-348/347 BCE) was a classical philosopher and one of the most influential thinkers in Western philosophy. He, together with his mentor, Socrates, and his students, Aristotle, helped to lay the foundations of Western philosophy. Plato was also a writer of many philosophical dialogues and founder of the Academy in Athens, the first institution of higher learning in the western world. At the heart of Plato's philosophy is his theory of Forms, or Ideas. Plato thought what we see in the physical world is a dim reflection of the true ideal thing. The material world as it seems to us is not the real world, but only an image or copy of the real world. This idea is best illustrated in the Allegory of the Cave.

**Unit 5**

## Aspirin: The Oldest New Wonder Drug

***The drug invented 100 years ago could cure arthritis and headaches. New research suggests it may work on cancers and on Alzheimer's. Should you be*** *taking it?*

by Jerry Adler & Anne Underwood

1. It was created to ease the pain of arthritis, by a German chemist whose father was being done in by the treatments available at the end of 19th century. Aspirin relieved Enrico Caruso's headaches, and was one of the only drugs that could ease Kafka's existential angst. Since the early 1980s, it has been approved for preventing second heart attacks as well as strokes, and, since 1997, in treating heart attacks as they happen. But millions of people, who didn't care to wait for a first heart attack before availing themselves of aspirin's benefit, have begun taking daily doses on their own. And in the last five years, tantalizing research has suggested a role for aspirin in preventing diseases as feared as colon cancer, prostate cancer and Alzheimer's. "Aspirin was the wonder drug of the 20th century, and I think it will also be the wonder drug of the 21st century," says Dr. Charles Henekens, an authority on preventive medicine at the University of Miami. It has many people wondering: should everyone be taking it? Should I?

2. In one sense, aspirin—acetylsalicylic acid—is as old as medicine itself; Hippocrates used a chemical precursor, extracted from willow bark, to treat headaches and fever. But it is also uniquely suited to the 21st century, and not just because it makes hangovers more bearable. Aspirin does one basic thing in the body: it interferes with the synthesis of prostaglandins, which help control the body's response to injuries and infections. Prostaglandins act on the nervous system to help transmit pain, they signal blood platelets to form clots and they promote inflammation, an intense, localized activation of the immune system. These are vital functions, but they were more central to human survival at a time when the biggest threats came from wild animals and acute bacterial infection. Today, when people routinely live into their 70s and 80s, pain is more likely to be a chronic condition than necessarily a warning of an injury that must be heeded. Blood clots are the proximate cause of heart attacks, and researchers now view inflammation as a likely culprit in atherosclerosis, Alzheimer's and even cancer. Aspirin, which prevents blood clots and suppresses inflammation,

holds out obvious promise as a preventive.

3. Millions of people seem to think so. About 26 million Americans take aspirin regularly for their hearts—up from 6.8 million in 1997. The aspirin manufacturers are obliging them with a proliferation of "low dose" aspirin tablets (typically 81 milligrams, or a quarter of one standard 325mg tablet), which now represent nearly 23% of the total market. In 2000, McNeil Pharmaceuticals, a subsidiary of Johnson & Johnson, acquired St. Joseph aspirin, a moribund brand of what was once called "baby aspirin"—a term that fell into disfavor after doctors found that aspirin could cause a rare brain disorder in children. Repositioned as an adult low-dose brand, St. Joseph is being aggressively advertised for cardiovascular health. Bayer, the leading aspirin brand, now comes in strengths varying from 81 to 500 milligrams, in tablets, caplets and gel caps, variously coated or buffered with antacids. In January it introduced Bayer Women's Aspirin Plus Calcium, meant to strengthen women's bones along with their hearts. And the message has gotten out. "When I speak at medical meetings," says Dr. Alfred O. Berg, chair of the U.S. Preventive Services Task Force, an independent committee that advises the federal government, "I ask the audience to raise their hands if they're on aspirin, and I'm surprised at how many do."

4. If all you cared about was avoiding heart disease—disregarding the possible risks—you could make a case for almost all men and women above a certain age to take a low dose of aspirin daily. The seminal study, by Henekens in the 1980s, followed 22,000 male doctors, half of whom took a 325mg aspirin every other day, the other half a placebo. The aspirin subjects showed such a huge reduction in heart attacks—44%—that an experiment planned for 10 years was cut short after five. Three studies since then have confirmed this finding in both men and women. But there are other ways to die. Aspirin, although millions of people take it every day, is not completely safe. By interfering with clotting it also increases the risks of hemorrhage, especially into the gastric tract, where it can be fatal, and the brain—causing a relatively uncommon, but frequently devastating, form of stroke.

5. Earlier this year Berg's task force, after surveying the existing studies, made a significant recommendation on daily aspirin use. Weighing the dangers against the cardiovascular benefits, it calculated that aspirin should be considered for use by anyone with at least a 3% risk of a heart attack over the next five years. Individual patients can calculate their risk on the Web at one of several free sites, including

www.med-decisions.com, run by the University of North Carolina medical school. The site factors in age, systolic blood pressure (the upper number), the ratio of total cholesterol to high-density lipoproteins and risk factors such as smoking and diabetes (but, interestingly, not weight or body mass). A 48-year-old man with normal blood pressure (120/80), moderately elevated total cholesterol (202) and very good HDL (54) has a 2% risk of having a heart attack in the next five years—just below the threshold identified by Berg. By the task force's standards, he's not a candidate for aspirin.

6. But the task force considered only the reduction in heart disease, and researchers are piling up studies looking at aspirin in relation to every possible condition in which inflammation may play a part. Take Alzheimer's. A major risk factor is serious head trauma. Such an injury "begins a process of inflammation," says Tuffs University neuroscientist James Joseph, leading to speculation that anti-inflammatory drugs might exert a protective effect. Studies have found a reduction in risk for people who take relatively large doses of anti-inflammatory for arthritis, but researchers are still trying to figure out which ones work best

7. Other studies correlate aspirin use with lowered incidence of various cancers, including colorectal and esophageal. That makes sense, too, says Dr. John Baron of Dartmouth Medical School, who points out that "prostaglandins appear to play an important role in carcinogenesis." Almost all these studies, though, are epidemiological, looking back at people who were taking aspirin for some other purpose. Baron did one of the only controlled experiments to test aspirin against a placebo, and found that patients on a daily low-dose aspirin regimen had a 19% reduction in colorectal adenomas, a kind of polyp that can progress to cancer. Does Baron think he should be taking aspirin?

8. Not, he says, without talking to his doctor about it first. And, he adds, that goes for everyone else as well.

***Background and Culture Notes***

*Let me tell you*

**1. Enrico Caruso** (1873-1921) the world most celebrated Italian tenor of his time. He suffered a great pain in his last time. During the last 48 hours he continually moaned, "Calore . . . dolore . . . calore . . . dolore!" (heat, pain). Caruso's suffering finally ended on the morning of Aug 2, 1921, shortly after nine o'clock."

**2. Alzheimer's** (pronounced *AHLZ-hi-merz*) is an illness caused by the decay of the brain, which affects some older people, making them forget things and lose the ability to care for themselves. The disease was first described in 1906 by German physician Dr. Alois Alzheimer. Although the disease was once considered rare, research has shown that it is the leading cause of dementia.

3. **Charles Henekens,** M.D., epidemiologist, Professor of Medicine, Harvard Medical School, and Chief, Division of Preventive Medicine, Brigham and Women's Hospital, Boston, MA. As the director of the Physicians' Health Study, he conducted the large long-term study which demonstrated conclusively that aspirin did reduce the chance of a first heart attack in middle-age men.

4. **Hippocrates** (4460?-337 BC?) a Greek doctor who is considered to be the man who began the study of medicine.

## Unit 6

### Who was the First Scientist?

By William Harris

1. The word "scientist" entered the English language in 1834. That's when Cambridge University historian and philosopher William Whewell coined the term to describe someone who studies the structure and behavior of the physical and natural world through observation and experiment. You could make the argument, then, that the first modern scientist was someone like Charles Darwin or Michael Faraday, two iconic figures who also happened to be Whewell's contemporaries. But even if the term didn't exist before the 1830s, people who embodied its principles did.

2. To find the very first scientist, we must travel back in time even further. We could go back to the most ancient of the ancient Greeks, all the way back to Thales of

Miletus, who lived from about 624 B.C. to about 545 B.C. By many accounts, Thales achieved much in both science and mathematics, yet he left no written record and may have been, like Homer, a celebrated figure who received credit for many great achievements but who may never have existed at all.

3. We could consider other ancient Greeks as well, such as Euclid (the father of geometry) or Ptolemy (the misguided astronomer who put Earth at the center of the cosmos). But all of these men, although great thinkers, relied on making arguments instead of running experiments to prove or disprove hypotheses.

4. Some scholars believe that modern science had its origins in an impressive class of Arabic mathematicians and philosophers working in the Middle East decades before the European Renaissance began. This group included al-Khwarizmi, Ibn Sina, al-Biruni and Ibn al-Haytham. In fact, many experts recognize Ibn al-Haytham, who lived in present-day Iraq between 965 and 1039 A.D., as the first scientist. He invented the pinhole camera, discovered the laws of refraction and studied a number of natural phenomena, such as rainbows and eclipses. And yet it remains unclear whether his scientific method was truly modern or more like Ptolemy and his Greek predecessors. It's also not clear whether he had emerged from the mysticism still prevalent at the time.

5. It's almost impossible to determine when the influence of mysticism had faded completely among scientists. What are easier to identify are the characteristics of a modern scientist. According to author Brian Clegg, a modern scientist must recognize the importance of experiment, embrace mathematics as a fundamental tool, consider information without bias and understand the need to communicate. In other words, he or she must be unshackled by religious dogma and willing to observe, react and think objectively. Clearly, many individuals doing scientific work in the 17$^{th}$ century—Christiaan Huygens, Robert Hooke, Isaac Newton—satisfied most of these requirements. But to find the first scientist with these characteristics, you have to travel to the Renaissance, to the mid-16$^{th}$ century.

6. You probably think of Galileo Galilei at the mention of Renaissance science, and rightfully so. He overturned Aristotle's ideas on motion and began to explain such complex concepts as force, inertia and acceleration. He built one of the first telescopes and used it to study the cosmos. What he saw through the lenses of his device removed Earth from the center of the universe and put it in its proper place. In

all his work, Galileo stressed the need for observation and experimentation. And yet Galileo owes much to another seminal figure born 20 years earlier.

7. His name was William Gilbert, a rather obscure figure in the history of science. Along with Galileo, Gilbert had been busy practicing the scientific method in his work and setting an example for his peers after the first decade of the 17th century had past. Here's what John Gribbin had to say about Gilbert and Galileo in his 2002 book *The Scientists*:

> Although Galileo is one of the towering figures in science, known by name to every educated person today, and Gilbert is less well-known than he deserves, Gilbert had the earlier birth date and, chronologically speaking at least, deserves the title of first scientist.

8. Gilbert was born in 1544 to a prominent local family and attended Cambridge University between 1558 and 1569. Eventually, he settled in London and embarked on a successful career as a physician, attending to both Queen Elizabeth I and, upon her death in 1603, to King James I.

9. It was Gilbert's investigations into the nature of magnetism, however, that may make him the first modern scientist. This work culminated in *De Magnete, Magneticisque Corporibus, et de Magno Magnete Tellure* ("*On the Magnet, Magnetic Bodies, and the Great Magnet of the Earth*"), the first significant book about physical science published in England. In the book's preface, Gilbert described the need for "sure experiments and demonstrated arguments" instead of "conjectures and the opinions of philosophical speculators." He also discussed the need to conduct experiments "carefully, skillfully and deftly, not heedlessly and bunglingly."

10. The scientist followed his own advice. Gilbert's book recounted his investigations in so much detail that another person could replicate his work and verify his results. This research led to many important discoveries about magnetism. The learned fellow also turned his inquisitive mind to the heavens.

11. Gilbert directly influenced Galileo. The famous Italian scientist read *De Magnete* and repeated many of its experiments. It's easy to imagine Galileo poring over the book and nodding in affirmation at Gilbert's ideas about experimentation and observation—ideas that Galileo himself would apply in his groundbreaking work. Is it any wonder Galileo proclaimed Gilbert to be the founder of the scientific method? This endorsement alone may be enough to substantiate the claim that William Gilbert

was the first modern scientist.

***Background and Culture Notes***


*Let me tell you*

1. **William Gilbert** was an English physician, physicist and natural philosopher. He passionately rejected both the prevailing Aristotelian philosophy and the Scholastic method of university teaching. He is credited as one of the originators of the term "electricity." He is regarded by some as the father of electrical engineering or electricity and magnetism.

2. ***De Magnete, Magneticisque Corporibus, et de Magno Magnete Tellure*** (*On the Magnet and Magnetic Bodies, and on That Great Magnet the Earth*) is a scientific work published in 1600 by the English physician and scientist William Gilbert and his partner Aaron Dowling. A highly influential and successful book, it exerted an immediate influence on many contemporary writers, including Francis Godwin and Mark Ridley.

**Unit 7**

**The Mind of New England**

by Vernon Louis Parrington

1. The New England renaissance was tardy in appearing and of brief duration, yet in the few years of its extraordinary vigor it imparted a stimulus to American life that its historians have not greatly exaggerated. We are now far enough from it to see that it was the last flowering of a tree that was dying at the roots, but in the tumultuous thirties it seemed to be a new birth of the native New England mind, opening on new

worlds and great adventures. Though its prophecies might be little heeded at its own fireside, and unheard in the vast stretches of the West where men were clearing and building after quite different plans than the Concord architects were drawing. Its significance in the development of American idealism—the ethical imprint it stamped on American culture—endured long after it had spent its force. It was the last and in certain aspects the most brilliant of the several attempts to domesticate in America the romantic thought of revolutionary Europe; and with its passing, civilization in this western world fell into the hands of another breed of men to fashion as they saw fit.

2. The revolutions in thought that lie between the 18th century with its aristocratic rationalism that conceived of human nature as evil, and the 19th century with its middle-class economics that conceived of human nature as acquisitive, are more clearly defined in New England and more sharply differentiated, than elsewhere in America. The flood of romantic speculation with its humanitarian emphasis on the potential excellence of man and the equality of human rights, that in Europe had diffused itself widely, in Massachusetts flowed into narrow channels prepared by Puritan discipline, and swept away habits of thought that had dominated New England for 200 years. The intensity of the Puritan nature, once it embraced the new conceptions, imparted to them an intellectual and emotional unity that serves to explain the creativeness of the New England renaissance, as it serves to explain its failure to spread widely beyond the confines of Massachusetts. Appearing a generation later than in Virginia, it drew its inspiration more largely from Germany than from France; it was intellectual and ethical rather than political and economic; and in consequence it held little in common with the Physiocratic agrarianism of Jefferson. The latter was sufficiently native to American Economics to appeal to the common man from Maine to Georgia; the former was native only to New England Puritanism. Its idealism appealed only to rare souls, disciplined by speculation and trained in ethical values, men of strong character and fine distinction who counted for much more than numbers.

3. After all it is the ethical note that marks the Puritan. That New England has run so different a course from other parts of America has been due chiefly to its desire to serve God even though it might be serving self. Its material life has always been plentifully seasoned with the salt of religion. It sat under the teachings of an austere ethics, as it lived under the compulsions of a narrow economics; and the result was the

development of a middle class distinct from that of the West where the desire to get on was less hampered by the desire to get to heaven. The outstanding social figures in early New England were the minister and the merchant; and these twin authorities—joined after the revolution by the rising profession of the law—ruled in patriarchal fashion the inarticulate mass of the yeomanry. From these traditional leaders the policy of New England received a twofold bent: a bent to the ethical and a bent to the practical. The two have rarely fused in a harmonious and fruitful life, but for the most part have dwelt side by side under a covenant of noninterference, the character of current social ideals taking its impress from one or the other as it gained a temporary ascendancy. In the 300 years of New England history the minister has enjoyed two periods of intellectual ascendancy: the first during the early days of the theocracy, then the commonwealth was ruled by the laws of God and John Calvin; and the second, between the years 1830 and 1850, when John Calvin was finally put aside and New England was in the way of being remodeled in accordance with the plans of God alone. Between these brief periods of ethical enthusiasm lies the main history of New England, a history that counts for little in our intellectual and aesthetic development, but that meant much and ill to the cramped minds of her sons.

4. This long stretch, arid and unlovely, was dominated wholly by the merchant. Its parsimonious thrift, relieved by few generous impulses, was hostile to all change and to the romance that is bred of change. There was no rapid inflow of settlers to bring fresh energy and expansion. The exuberant growth of other parts of America was never shared by rural New England, and in consequence the harvest of unearned increment was rarely reaped from her sterile acres. Except in the shipping towns there was little economic development. On its secluded little farms New England was living a narrow parochial life, scooping up its mind in a rigid theological system and disciplining its character by a self-denying ordinance. Public affairs were managed by the squire, for the minister was too busy defending John Calvin against the Armenians to have a care for much except morality and dogma. The renaissance became of necessity, therefore, a movement of liberalism—a vehement protest against the torpor of the dogmatist whose mind was shut up in a dead system. It was a sudden reawakening of the ethical passion of Puritanism that had slept for two centuries; a vision of a new heaven and a new earth that it proposed to take by storm. It proposed to rid the mind of New England of its decadent loyalties—the nightmare dreams of

Calvinism that debased human nature, and the counting-house dreams of Federalism that conceived of man as an exploitative animal. It had discovered anew the beauty of righteousness, and in the name of righteousness it proposed to throw off the old tyrannies and create a society wherein the mind should be free and the soul enjoy its religion. The battle against Calvinism was only preliminary to greater battles which constituted the intellectual revolution that marked the renaissance.

5. It was the New England minister and the spiritual heirs of the minister—a group of intellectuals and reformers more notable than New England had before bred—that gave to the movement its pronounced ethical quality. It was freedom for individual righteousness that they sought; not freedom for intellectual Epicureanism, for romance, for aesthetic or pagan beauty. The transcendentalists and reformers had little time to amuse themselves with such things. They were too eager for the coming of the kingdom to dawdle over fiction or patronize the playhouse. They had been bred from their youth up on printer's ink; they came of a race that had long respected the printed page. Literary men by inheritance, they esteemed themselves stewards of a great cause. In rejecting their fathers' hell they became the more zealous to make a heaven of this world; and although the more practical Yankee was skeptical of their plans and would not suffer them to turn Boston into a transcendental Utopia, they succeeded in making such a stir as New England had never before known. For a brief time, at least, liberal ideas found a welcome in homes where they had hitherto been strangers; for a brief time the intellectual and not the merchant dominated New England.

## ***Background and Culture Notes***


1. **Vernon Louis Parrington** was a literary historian and teacher who greatly influenced U. S. historical and literary thought. He grew up in Emporia, Kan., and was educated at the college of Emporia and Harvard University. He reappraised U. S.

literary history in *Main Currents in American Thought* (1927), *The Beginnings of Critical Realism in America* (1930). Being a Jeffersonian liberal, he objected to aestheticism and pedantry, emphasized economic influences, and defined literature as any writing successfully presenting important ideas and experiments. Other works: *The Connecticut Wits* (1926); *Sinclair Lewis, Our Own Diogenes* (1927).

2. **John Calvin** was a theologian, ecclesiastical statesman and one of the most important Protestant Reformers of the 16th century. The theological, ecclesiastical and political ideas that he advanced in many publications, a model church that he created and directed in the city of Geneva, and the assistance he provided to the political and intellectual leaders of several countries profoundly influenced the development of Protestantism in many parts of Europe and in North America. Works include: *Institutes of the Christian Religion* (1536); *Instruction in Faith* (1537), *Commentary on Romans* (1539), *Psychopannychia* (1542), and *Short Treatise on the Lord's Supper* (1545).

3. **Federalism** is a mode of political organization that unites separate states or other policies within an overarching political system in such a way as to allow each to maintain its own fundamental political integrity. Federal systems do this by requiring that basic policies be made and implemented through negotiation in some form, so that all the members can share in making and executing decisions. The political principles that animate federal systems emphasize the primacy of bargaining and negotiated coordination among several power centers; they stress the virtues of dispersed power centers as a means for safeguarding individual and local liberties.

4. **Renaissance** refers to a period of intense cultural excitement dawned in Italy in the 1300s, ushering Europe out of the darkness of the Middle Ages. During this rebirth, scholars revived an interest in classical manuscripts from ancient Greece and Rome. Under the influence of these ancient manuscripts, Europeans began to reject their former view that the world was merely a place to prepare for life after death. Although still religious, Renaissance Europeans no longer considered the church the center of their social universe. Now they began to place a higher value on active life in this world, including political and social responsibilities. Taking a new delight in art and literature, people of the Renaissance also cultivated personal skills in such areas as athletics, music, etc. The word "renaissance" also refers to any similar revival.

5. **New England** is a region in northeastern United States, including the States of Maine, New Hampshire, Vermont, Massachusetts, Rhode Island and Connecticut. The region was named by Capt. John Smith, who explored its shores in 1614 for some London merchants. New England was soon settled by English Puritans. During the $17^{th}$ century the high esteem for an educated clergy and enlightened leadership encourage the development of public schools as well as such institutions of higher learning as Harvard (1636) and Yale (1701).