**Unit One**

**Section C Vocabulary and Structure**

**1~5 ABDCB 6~10 DADCB 11~15 DABCD**

**16~20 CACDA**

**PART II LISTENING**

**Dictation**

**What We Know about Language**

Many things about language are mystery and will remain so. However, we now do know something about it. First, we know that all human beings have a language of some sort. No human race anywhere on the earth is so backward that it has no language of its own at all. Second, there is no such thing as a primitive language. There are many people whose cultures are undeveloped, but the languages they speak are by no means primitive. In all the languages existing in the world today, there are complexities that must have been developed for years. Third, we know that all languages are perfectly adequate. Each is a perfect means of expressing its culture. And finally, we know that language changes over time, which is natural and normal if a language is to survive. The language, which remains unchanged, is nothing but dead.

**Sections A-C**

**1~5 ABCDD 6~10 ABDAC 11~15ADACB**

**16~20 ABACA 21~25 BAABC**

**PART III READING**

**Section A Read and Summarize (null)**

**Section B Reading in Depth**

**Passage 1**

**1-5 DABAC**

Key spots in the Text:

[1] Read the first paragraph and focus on: From the standpoint of a traditional educator, this outcome indicated that schooling and failed to help students think about ecosystems and extinction, major scientific ideas.

[2] Read the second paragraph and focus on: The college students had cultivated the ability to ask questions, the cornerstone of critical thinking.

[3] Read the third paragraph and focus on: We found that when we taught participants to ask "What if?" and "How can?" questions that nobody present would know the answer to and that would spark exploration, they engaged in better inquiry at the next exhibit --- asking more questions, performing more experiments and making better interpretations of their results.

[4] Read the fourth paragraph and focus on: Informal learning environments tolerate failure better than schools.

[5] Read the fourth paragraph and focus on: But people must acquire this skill somewhere.

**Passage 2**

**6-10 DDBAC**

6. To work the correct answer out of the four options, the reader is advisable to read the first sentence of Paragraph 2, Paragraph 5 and Paragraph 6.

7. To work the correct answer out of the four options, please read Paragraph 3.

8. To work the correct answer out of the four options, read Freeman’s remarks in Paragraph 5.

9 For this question, please read the last sentence of Paragraph 6 and understand the message around.  
10. The writer’s attitude is revealed in the last sentence of the last paragraph.

**Passage 3**

**11-15 ADBAB**

11. To work the correct answer out of the four options, read the second and the third sentences of Paragraph 1.

12. The answer to this question lies in the last three sentences of Paragraph 2.  
13. Read the fourth sentence of Paragraph 3 and understand the message around it.

14. For this question, refer to the last but one sentence of Paragraph 3.

15. Read the last paragraph and focus on “For Bill's future space ambitions to have any chance, he needs to impress the new generation of wealthy space-loving investors. To do that, he needs to ace this first trial and, at 54 years old, he needs to do it fast” .

**Section C Matching**

**1 G 2 F 3 M 4 D 5 G 6 O 7 K 8 H 9 B 10 P**

Key spots in the Text:

[1]They are taught to be compliant and deferential to adults.

[2] American parents want similar things for their children, the Pew report and past research have found: for them to be healthy and happy, honest and ethical, caring and compassionate.

[3]While bullying is parents: greatest concern over all, nearly half of low-income parents worry their child will get shot, compared with one-fifth of high-income parents. They are more worried about their children being depressed or anxious.

[4] The class differences m child rearing are growing, researchers say -- a symptom of widening inequality with far-reaching consequences.

[5]There are benefits to both approaches Working-class children are happier, more independent, while less and are closer with family members,

[6]People used to live near people of different income levels; neighborhoods are now more segregated by income.

[7]Discipline techniques vary by education level: 8% of those with a postgraduate degree say they often spank their children, compared with 22% of those with a high school degree or less.

[8]Will parents be damaging children if they have one fewer organized activity? No, I really doubt it.

[9]There are usually two parents, who spend a lot of time reading to children and worrying about their anxiety levels and hectic schedules.

[10]shrink. In the past decade, even as income inequality has grown, some of the socioeconomic differences in parenting, like reading to children and going to libraries, have narrowed.

**UNIT 2**

**Section C Vocabulary and Structure**

**1~5 BDCBA 6~10 CDBCA 11~15 ADCDB**

**16~20 CBDBA**

**PART II LISTENING**

**Dictation**

**Characteristics of a Good Reader**

To improve your reading habits, you must understand the characteristics of a good reader. First, the good reader usually reads rapidly. Of course he does not read every piece of material at the same rate. But whether he is reading a newspaper or a chapter in a physics text, his reading rate is relatively fast. He has learned to read for ideas rather than words one at a time. Next, the good reader can recognize and understand general ideas and specific details. Thus he is able to comprehend the material, with a minimum of effort and a maximum of interest. Finally, the good reader has had his command of several special skills, which he can apply to reading problems as they occur. For the college student the most helpful of these skills include making use of various aids to understanding that most textbooks provide and skim reading for a general survey.

**Sections A-C**

**1~5 ACBBD 6~10 BACDB 11~15 ADABC**

**16~20 BDADB 21~25 BCDDB**

**PART III READING**

**Section A Read and Summarize (null)**

**Section B Reading in Depth**

**Passage 1**

1-5 B C D D A

Key spots in the Text:

[1] Read the first paragraph and the second paragraph and focus on: But insurance will be cold comfort following the failure on October 31st of VSS Enterprise, resulting in the death of one pilot and the severe injury to another; the accident in California will cast a long shadow over the future of space tourism.

[2] Read the third paragraph and focus on: Virgin Galactic had, prior to this week’s accident, seemed closet to starting regular flights.

[3] Read the fifth paragraph and focus on: The 2004 Commercial Space Launch Amendments Act, intended to encourage private space vehicles and services.

[4] Read the fifth paragraph and focus on: That means that the FAA could suspend Virgin Galactic’s license to fly. It could also insist on checking private manned spacecraft as thoroughly as it does commercial aircraft

[5] Read the fifth paragraph and focus on: There is no doubt that spaceflight entails risks, and to pioneer a new mode of travel is to face those risks, and to reduce them with the benefit of hard-won experience.

**Passage 2**

**6-10 C D C A D**

Key spots in the Text:

[6] Read the first paragraph and focus on: To put that in context, since its debut on NASDAQ in May, Facebook has lost value nearly equal to Yahoo, AOL, Zynga, Yelp, Pandora, Open Table, Groupon, LinkedIn, and Angie’s List combined, plus that of the bulk of the publicly traded newspaper industry.

[7] Read the second paragraph and focus on: Worse still, all the crises that emerged when the company debuted---overpriced shares, poor corporate governance, huge challenges to the core business, and a damaged brand---remain today

[8] Read the third paragraph and focus on: Start with the valuation. To justify a stock price close to the lower end of the projected range in the IPO, say $ 28 a share, Facebook’s future growth would have needed to match that of Google seven years earlier.

[9] Globally read the fifth paragraph and focus on: it hasn’t yet figured out how to advertise effectively on mobile devices

[10] Read the sixth paragraph and focus on: Not only does that threaten to rub off on users, it’s bad for recruitment and retention of talented hackers, who are the lifeblood of Zuckerberg’s creation.

**Passage 3**

**11-15 C C B A C**

Key spots in the Text:

[11] Read the first paragraph and focus on: Though I’m still not keen on the design of the Kindle, it is a vast improvement on its predecessor and certainly tolerable.

[12] Read the second paragraph and focus on: I have to admit that the implementation is so smooth that most Kindle users won't care at all that their ebooks can’t be moved to other devices.

[13] Read the third paragraph and focus on: The ebook trend is nowhere near peaking.

[14] Read the fourth paragraph and focus on: There are some who prefer printed books.

[15] Read the sixth paragraph and focus on: There is scope for smaller print runs of lavishly designed printed books and bookshops aimed at book lovers, rather than the Stieg Larsson-reading masses.

**Section C Matching**

1-5 F K D B I 6-10 J E H L G

Key spots in the Text:

[1] California, for instance, appears to benefit most from daylight saving time---perhaps because its relatively mild weather encourages people to stay outdoors later.

[2] A 2008 study concluded that, at least in Sweden, heart attack risks go up in the days just after the spring time change. “The most likely explanation to our findings is disturbed sleep and disruption of biological rhythms,” one expert told National Geographic News via email.

[3] The researchers found that the practice reduced lighting and electricity consumption in the evening but increased energy use in the dark mornings---wiping out the evening gains.

[4] Germany was the first state to adopt the time changes, to reduce artificial lighting and thereby save coal for the war effort.

[5] But others warn of ill effects. Till Roenneberg, a university professor in Munich, Germany, said his studies show that our circadian body clocks---set by light and darkness---never adjust to gaining an “extra” hour of sunlight to the end of the day during daylight saving time.

[6] One reason so many people in the developed world are chronically overtired, he said, is that they suffer from “social jet lag”.

[7] That figure suggests that daylight saving time reduces annual U.S. electricity consumption by 0.03 percent and overall energy consumption by 0.02 percent. While those percentages seem small, they could represent significant savings because of the nation's enormous total energy use.

[8] For decades advocates of daylight savings have argued that, energy savings or no, daylight saving time boosts health by encouraging active lifestyles---a claim Wolff and colleagues are currently putting to the test.

[9] In the U.K., for instance, the Lighter Later movement---part of 10:10, a group advocating cutting carbon emissions---argues for a sort of extreme daylight savings.

[10] And daylight savings’ energy gains in the U.S. largely depend on your location in relation to the Mason-Dixon Line, Wolff said.

**UNIT 3**

**Section C Vocabulary and Structure**

**1~5 CADCC 6~10 DBBCA 11~15 DADBA**

**16~20 CDBAD**

**PART II LISTENING**

**Dictation**

**Salmon**

Every year millions of salmon swim from the ocean, into the mouths of rivers, and then steadily up the rivers. Passing through waters, around rocks and waterfalls, the fish finally reach their original streams or lakes. They dig out nests in the riverbed and lay their eggs. Then, exhausted by their journey, the parent-salmon die. They have finished the task the nature has given them. Months or years later, the young fish start their trip to the ocean. They live in the salt water for two to seven years until they too are ready to swim back to reproduce. Their life cycle helps man provide himself with a basic food - fish. When the adults-salmon gather at the river mouth for their annual trip, they are in the best possible condition. And nearly every harbor has its salmon-fishing fleet ready to catch thousands for markets.

**Sections A-C**

**1~5 CBACC 6~10 ADBAD 11~15 BBADC**

**16~20 BBACC 21~25 ABCAB**

**PART III READING**

**Section A Read and Summarize (null)**

**Section B Reading in Depth**

**Passage 1**

**1-5 B D C A C**

Key spots in the Text:

[1] Read the first paragraph and focus on:We live today indebted to McCardell, Cashin, Hawes, Wilkins, and Maxwell, and other women who liberated American fashion from the confines of Parisian design. Independence came in tying, wrapping, storing, harmonizing, and rationalizing that wardrobe. These designers established the modern dress code.

[2] Read the second paragraph and focus on: Designer sportswear was not modeled on that of Europe, as “modern art’’ would later be; it was genuinely invented and developed in America.

[3] Read the second paragraph and focus on:Ease of care was most important: summer dresses and outfits, in particular, were chiefly cotton, readily capable of being washed and pressed at home.

[4] Read the third paragraph and focus on: Designer sportswear would have to be verified by a standard other than that of pure beauty; the emulation of a designer’s life in designer sportswear was a crude version of this relationship.

[5] Read the fourth paragraph and focus on: They were the pioneers of gender equity, in their useful, adaptable clothing, which was both made for the masses and capable of self-expression.

**Passage 2**

**6-10 A B D C A**

Key spots in the Text:

[6] Read the second paragraph and focus on: their digital gear sets this new group apart, even from their tech-savvy Millennial elders. They want to be constantly connected and available in a way even their older siblings don’t quite get.

[7] Read the fourth paragraph and focus on: “The technology is the easiest way to see it, but it’s also a mind-set, and the mind-set goes with the little ‘I’, which I’m talking to stand for ‘individualized’,” Rosen says. “Everything is defined and individualized to ‘me’.”

[8] Read the seventh paragraph and focus on: Rosen says portability is key. They are inseparable from their wireless devices, which allow them to text as well as talk, so they can be constantly connected-even in class, where cellphones are supposedly banned.

[9] Read the eighth paragraph and focus on: But findings show teens survive distractions much better than we would predict by their age and their brain development.

[10] Read the ninth paragraph and focus on: Rosen says, the educational system has to change significantly

**Passage 3**

**11-15 C D A C A**

Key spots in the Text:

[11] Read the second paragraph and focus on: saying that the world’s population may have to switch almost completely to a vegetarian diet over the next 40 years to avoid catastrophic shortages.

[12] Read the third paragraph and focus on: Adopting a vegetarian diet is one option to increase the amount of water available to grow more food in an increasingly climate-unstable world, the scientists said.

[13] Read the fourth paragraph and focus on: the fact that per capita food production continues to increase

[14] Read the sixth paragraph and focus on: Competition for water between food production and other uses will intensify pressure on essential resources, the scientists said.

[15] Read the ninth paragraph and focus on: the best way for countries to protect millions of farmers from food insecurity in sub-Saharan Africa and south Asia was to help them invest in small pumps and simple technology.

**Section C Matching**

1 C 2 B 3 D 4 F 5 I 6 E 7 K 8 H 9 G 10 J

Key spots in the Text:

[1] Throughout the journey, they'd marveled at the simplicity of the European road signs, which were easy to use even though neither of them spoke Spanish.

[2] In 2001, he put on an outfit that looked like the ones Caltrans highway workers wore, climbed up onto a freeway gantry; The sign stayed up for nine months without anyone noticing what he’d done; when the story leaked to the press and Caltrans finally cottoned on, the agency left the sign up for eight more years.

[3] As the automobile took off, the world found it needed traffic engineers, and it was these men and women who were the first to think seriously about sign systems. America put national standards for road signs in place in 1935.

[4] Their work was prompted in part by America’s great urban thinkers: people like Kevin Lynch and Jane Jacobs, who argued that spaces should be designed not to fulfill the grand visions of architects but with humble human uses in mind.

[5] And because the law deals with visual as well as physical impairment, its accessibility guidelines require that standards of legibility be maintained in directional signs; they evolved to specify everything from the size of fonts to the contrast between lettering and its background. This development turned out to be as useful for the rest of us as it was for the legally blind.

[6] As a result, security guards and secretaries were often the ones to help orient the lost.

[7] Ironically, just as our signs have improved, we’ve seen the advent of something that makes us less dependent on them than ever before: satellite navigation.

[8] For years, designers have been developing graphical symbols to help non-natives find the bathrooms.

[9] In addition, businesses and municipalities alike have realized that well-oriented people are calmer, happier, and more likely to spend money (and plan return visits) than people who are lost.

[10] Finally, there’s the fact that we have all increasingly become connoisseurs of good design.

**UNIT 4**

**Section C Vocabulary and Structure**

**1~5 CBDCB 6~10 CADDA 11~15 BCCAD**

**16~20 ADBDD**

**PART II LISTENING**

**Dictation**

**Money**

Money is accepted across the world as payment for goods or services. People use money to buy food, clothes and hundreds of other things. In the past many different things were used as money. People on Pacific islands once exchanged shells for goods. The Chinese used cloth and knives. In Africa elephant tusks or salt were used. Even today some people in Africa are still paid in salt. Coins were first invented by the Chinese. Originally they were round pieces of metal with a hole in the center so that a piece of string could keep them together. This made doing-business much easier. But people still found coins inconvenient to carry when they wanted to buy something expensive. To solve this problem, the Chinese again came up with a solution. They began to use paper money for coins. Now paper notes are used throughout the world.

**Sections A-C**

**1~5 CDBAC 6~10 DBCAD 11~15 BCDAB**

**16~20 BABDA 21~25 CDBCA**

**PART III READING**

**Section A Read and Summarize (null)**

**Section B Reading in Depth**

**Passage 1**

1-5 D D B C A

Key spots in the Text:

[1] Read the first paragraph and focus on: They have led some birds to give up on migration.

[2] Read the third paragraph and focus on: Andrea Flack of the Max Planck Institute found that birds following traditional migration routes were more likely to die than German storks that flew only as far as northern Morocco, and spent the winter there on rubbish dumps.

[3] Read the fourth paragraph and focus on: And we don’t know about the long-term consequences. They might eat something toxic and damage their health.

[4] Read the sixth paragraph and focus on: Landfill sites on the Iberian Peninsula have long attracted local white storks, but all of the Spanish birds tagged in the study flew across the Sahara desert to the western Sahel.

[5] Read the seventh paragraph and focus on: Migrating birds affect ecosystems both at home and at their winter destinations, and disrupting the traditional routes could have unexpected side effects.

**Passage 2**

6-10 C D B A B

Key spots in the Text:

[6] Read the second paragraph and focus on: a group of international researchers based at Beijing Normal University found that for every 1.8°F ( 1℃) rise of the Earth’s temperature, the number of hurricanes in the Atlantic that are as strong or stronger than Hurricane Katrina will increase twofold to sevenfold.

[7] Read the third paragraph and focus on: More water vapor in the air from evaporating ocean water adds fuel to hurricanes that build strength and head toward land.

[8] Read the fourth paragraph and focus on: It lost strength as it passed over the Florida peninsula, but gained destructive power fight before colliding with New Orleans, killing more than 200 people and causing $ 80 billion in damage.

[9] Globally read the seventh paragraph and focus on: The primary cause, a consensus of scientists has said, is the rising emissions of greenhouse gases like carbon dioxide and methane.

[10] Read the seventh paragraph and the eighth paragraph and focus on: The primary cause, a consensus of scientists has said, is the rising emissions of greenhouse gases like carbon dioxide and methane; the trend may be similar further back in time, but comprehensive hurricane data doesn’t exist.

**Passage 3**

11-15 C C B A B

Key spots in the Text:

[11] Read the first paragraph and focus on: On December 2nd he was convicted of a less sophisticated crime: trying to bribe police officers.

[12] Read the third paragraph and focus on: The judge found that Mr. Dantas tried to pay bribes, via two go-betweens, to keep his name out of the Satiagraha investigation.

[13] Read the fourth paragraph and focus on: a gifted financier who has serially fallen out with his business partners.

[14] Read the fourth paragraph and focus on: A man who sleeps little and socializes less, he is a vegetarian and self-made billionaire, a gifted financier who has serially fallen out with his business partners.

[15] Read the fifth paragraph and focus on: During the1990s, when many state-owned businesses were privatized, Mr. Dantas positioned himself as the man with the needed expertise and contacts.

**Section C Matching**

1-5 K G C L I 6-10 M A N L D

Key spots in the Text:

[1] Tablet computers are a key stimulus in this endeavor; Tablet was a needed development.

[2] You can’t highlight or underline things in the e-book. I find it more of a trouble.

[3] And publishers and book resellers are spending millions attracting students to their online stores and e-reader platforms as mobile technology improves the readability of the material on devices such as tablet computers.

[4] Instead of tables of content, Mind Tap provides “a learning path” that students can access for text, multimedia, self-assessment tools, quizzes and note sharing.

[5] Publishers are eager for a quicker transition to the format because e-textbooks cost less to publish and would generate income from every student who buys one. Digital books can’t be resold, at least, not legally.

[6] The cloud-based website means students can access information wherever there’s an online connection--features social networking, and works with Google Apps for Education.

[7] More than half of its students routinely skip buying textbooks.

[8] In exchange, students must pay a fee to enroll.

[9] Textbook publishers are partnering with universities for exclusive trials, buying stakes in start-ups and developing their own technologies.

[10] Despite emerging attempts at innovation, the industry has been slowed by clumsy technology, the lasting appeal of print books

**UNIT 5**

**Section C Vocabulary and Structure**

**1~5 BABAD 6~10 CCBCC 11~15 AADCB**

**16~20 DACBD**

**PART II LISTENING**

**Dictation**

**Forests**

The world’s forests are disappearing. As much as a third of the total tree cover has been lost since agriculture began some 10,000 years ago. The remaining forests are home to half of the world’s species, thus becoming the chief resource for their survival. Tropical rain forests once covered 12% of the land of the planet. As well as supporting at least half of the world’s plants or animals, these forests are home to millions of people. But there are other demands on them. For example, much has been cut for timber. And an increasing amount of the forestland has been used for industrial purposes, or for agricultural development such as crop growing. By the 1990s, less than half of the world’s original rain forests remained. And they continued to disappear at an alarming rate every year. As a result, the world’s forests are now facing gradual extinction.

**Sections A-C**

**1~5 ACBBB 6~10 CBADC 11~15 CADCA**

**16~20 ABDCC 21~25 BABCA**

**PART III READING**

**Section A Read and Summarize (null)**

**Section B Reading in Depth**

**Passage 1**

1-5 D A C C B

Key spots in the Text:

[1] Read the first paragraph and focus on: Although many researchers broadly agree that public access to raw data would accelerate science.

[2] Read the first paragraph and focus on: most are reluctant to post the results of their own labors online.

[3] Read the third paragraph and focus on: Last year, the Royal Society in London said in its report that scientists need to “shift away from a research culture where data is viewed as a private preserve”.

[4] Read the third paragraph and focus on: But the barriers are disappearing, in part because journals and funding agencies worldwide are encouraging scientists to make their data public.

[5] Read the fourth paragraph and focus on: the practice is not purely altruistic. Researchers who share get plenty of personal benefits.

**Passage 2**

6-10 A D B B A

Key spots in the Text:

[6] Read the first paragraph and the second paragraph and focus on: Terry Wolfisch Cole may seem like an ordinary 40-year-old mom; Through those little white ear buds, Wolfisch Cole listens to a playlist mixed by her favorite disc presenter-herself; she types an online journal chronicling daily news of her life, then shares it all with the Web.

[7] Read the third paragraph and focus on: Wolfisch Cole-who also gets her daily news customized off the Internet and whose digital video recorder (DVR) scans through the television wasteland to find and record shows that suit her tastes-is part of a new breed of people who are filtering, shaping and even creating media for themselves.

[8] Read the fifth paragraph and focus on: Devotees of iMedia run the gamut from the 89-year-old New York grandmother, known as Bubby, who has taken up blogging to share her worldly advice, to 11-year-old Dylan Verdi of Texas, who has started broadcasting her own homemade TV show or “blog”, for video web log.

[9] Read the sixth paragraph and focus on: If the old media model was broadcasting, this new phenomenon might be called “ego-casting”, says Christine Rosen, a fellow with the Ethics and Public Policy Center.

[10] Read the seventh paragraph and focus on: Rosen and others trace the beginnings of the iMedia revolution to the invention of the TV remote, which marked the first subtle shift of media control away from broadcasters and into the hands of the average couch potato.

**Passage 3**

11-15 B D A B D

Key spots in the Text:

[11] Read the second paragraph and focus on: Moviegoers aren’t the only ones wearing 3D glasses nowadays — doctors could benefit from them, too, a new study suggests.

[12] Read the third paragraph and focus on: In the past, doctors have been skeptical of using 3D technology in their work, preferring to rely on their own experience.

[13] Read the seventh paragraph and focus on: The glasses-free model relied on an eye-tracking camera system that delivered separate images to each eye, creating a 3D effect in the brain.

[14] Read the ninth paragraph and focus on: The winning surgeon performed the procedure in 15 percent less time and with considerably increased precision.

[15] Read the eleventh paragraph and focus on: The surgeons in the study rated the 3D glasses system the highest, and the glasses-free system as comparable to the 2D one.

**Section C Matching**

1. I 2. C 3. L 4. D 5. K 6. E 7. G 8. A 9. N 10. J

Key spots in the Text:

[1] But there are also many examples of growing wealth by trashing the environment, in rich and poor parts of the world alike,

[2] The protection and improvement of the human environment is a major issue which affects the well-being of peoples and economic development throughout the world,

[3] It’s simply not true that economic growth will surely make our world cleaner.

[4] You will find that the linkage between environmental protection and economic progress is a common thread.

[5] It is also the reason why development agencies are not united in their view of environmental issues;

[6] Managing ecosystems sustainably is more profitable than exploiting them, according to the Millennium Ecosystem Assessment. But finding hard evidence to support the thesis is not so easy.

[7] Managing ecosystem sustainably-working with nature rather than against it-might be less profitable in the short term, but certainly brings long-term rewards.

[8] We take care of the natural environment and resources on which our economic activity depends.” That statement comes not, as you might imagine, from a stereotypical tree-hugging, save-the-world greenie, but from Gordon Brown, a politician with a reputation for rigour, thoroughness and above all, caution.

[9] As countries become richer, they produce more greenhouse gases; and the impact of those gases will fall primarily in poor parts of the world.

[10] One recent study attempted to calculate the extent of this “ecological overshoot of the human economy”, and found that we are using 1.2 Earth’s-worth of environmental goods and services-the implication being that at some point the debt will be called in, and all those services-the things which the planet does for us for free-will grind to a halt.