

МИНИСТЕРСТВО ОБРАЗОВАНИЯ И НАУКИ РОССИЙСКОЙ ФЕДЕРАЦИИ
ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ
УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ
«НИЖЕГОРОДСКИЙ ГОСУДАРСТВЕННЫЙ ТЕХНИЧЕСКИЙ
УНИВЕРСИТЕТ им. Р.Е. АЛЕКСЕЕВА»

А.Н. ЛАВРОВА

**СПЕЦИАЛЬНЫЙ АНГЛИЙСКИЙ:
МОДЕЛИ ДЛЯ РЕЗЮМИРОВАНИЯ
И РЕФЕРИРОВАНИЯ
(НАУКА, ТЕХНОЛОГИЯ, ПРЕССА)**

*Рекомендовано Ученым советом
Нижегородского государственного технического университета
им. Р. Е. Алексеева в качестве учебного пособия
для аспирантов и слушателей курсов
«Переводчик-референт в специальной сфере»*

Издание второе, дополненное

© Нижегородский государственный
технический университет
им. Р. Е. Алексеева, 2016
© Лаврова А. Н., 2016

Нижний Новгород 2016

УДК 802.0 (075.8)

ББК 81.2

Лаврова, А.Н. Специальный английский: модели для резюмирования и реферирования (наука, технология, пресса) [Электронный ресурс] : учеб.пособие; изд.2-е, доп. / А.Н. Лаврова – Электрон. дан. – Н. Новгород: Нижегород. гос. техн. ун-т им. Р.Е. Алексеева, 2016. – 1 электрон. диск (CD-ROM): зв., цв., 12 см. – Систем. требования: ПК с процессором 486; ОЗУ 8 Мб.; операц. система Windows 95; CD-ROM дисковод; мышь. – Загл. с экрана. – 100 экз.

В пособии представлены языковые модели для составления резюме и рефератов на английском языке. Большой иллюстративный материал (научные статьи и пресса) позволяет наглядно разобраться в использовании предлагаемых моделей.

Книга адресована аспирантам, слушателям курсов «Переводчик-референт в специальной сфере», а также всем, изучающим специальный английский (ESP).

Рецензенты:

доктор филологических наук, профессор *В. Ф. Новодранова*, ММСИ, Москва

доктор филологических наук, профессор *О. С. Сапожникова*,

НГЛУ им. Н. А. Добролюбова, Нижний Новгород.

Редактор О.В. Пугина

Электронное издание подготовлено ЦДОТ НГТУ им. Р.Е. Алексеева, компьютерная верстка С.А. Зубкова

ISBN 978-5-502-00768-9

Адрес издающей организации:

НГТУ им. Р.Е. Алексеева. 603950, г. Нижний Новгород, ул. Минина, 24.

© Нижегородский государственный
технический университет
им. Р. Е. Алексеева, 2016

© Лаврова А. Н., 2016

ПРЕДИСЛОВИЕ

Настоящее издание является учебным пособием к аспирантскому курсу английского специального языка (ESP), который завершается сдачей кандидатского экзамена. Цель этого учебника состоит в формировании у слушателей навыков написания резюме и рефератов на основе изучения структурных блоков специальных языковых моделей, которые последовательно и доступно вводятся в детализированном виде.

Данный курс рассчитан на 140 часов аудиторных занятий. Резюмирование и реферирование манифестирует письменную речь с последующей устной реализацией. Над аннотированием и реферированием рекомендуется работать письменно с последующей устной манифестацией.

Данная книга завершает серию английского специального (ESP). Первая работа, опубликованная в 2006 г., посвящена проблеме особенностей специального перевода (ST). В новом пособии акцентируются модели для составления резюме и рефератов на базе английских специальных текстов из научной периодики и фрагментов прессы. Каждый блок моделей снабжен тремя профессиональными и тремя газетными текстами с резюме для представленных фрагментов. В конце книги тексты сопровождаются рефератами, в которых отражены все изучаемые модели, что способствует их более эффективному закреплению.

В пособии использован богатый фактический материал из английских и американских источников и прессы с полным сохранением их аутентичности. Автор выражает глубокую благодарность и искреннюю признательность рецензентам докторам филологических наук, профессорам В. Ф. Новодрановой и О. С. Сапожниковой за внимательное прочтение рукописи.

PAPERS (NEWSPAPERS) ABSTRACTS WRITING
READ THE PATTERNS TO BE ANALYZED AND MEMORIZED

1. The title of the paper (article) is called...
2. The author is called ...
 The author is not available
3. The information }
 The paper }
 The extract } deals with ...
 The fragment }
 The passage }
 The article }
4. The problem of ... is concerned here
5. Our knowledge of ... { is (rather) poor
 { is (not so much) exact
 { is (not so) vast
6. The studies }
 The experiments } were carried out
 The investigations } were made (done)
 The paper }
 The article }
 The report } was published
 The information }
 The conference }
 The match }
 The meeting } took place
 The demonstration }
 The strike }
 The police raid }
- + to
- demonstrate }
 illustrate }
 describe }
 define }
 declare }
 manifest }
 proclaim }
 realize }
 show }
 reveal }
 find out }
 acquire }
 discuss }
 defend }
 etc }
- smth
7. The information }
 The paper }
 The article } comes from ...
 The fragment }
 The passage }

8. In conclusion the paper
 the information
 the article
 the fragment
 the passage } says about ...

**READ THE PAPERS FRAGMENTS AND THE ABSTRACTS TO
ANALYZE AND MEMORIZE THE ABOVE PATTERNS**

**Text 1
Wait and See**

At the moment, the world economy is passing through a wait-and-see phase affecting most parts of the world. The prospect of a war in Iraq has a heavy shadow over the business climate in recent months. Business leaders' confidence has been eroded, while consumers are showing themselves to be increasingly circumspect about their future. Apart from this climate of uncertainty, which is leading managers to postpone their purchasing, recruitment and investment decisions in the Middle East have also resulted in a significant rise in oil prices. Even though Western economies are less sensitive to fluctuations in energy prices these days than they were twenty years ago, the fact remains that any increase in crude prices will hamper business development.

In the United States, although growth slowed down at the end of 2002, over the year as a whole, GDP rose by 2,4%. This is due in particular to the fact that consumer spending managed to hold up, sustained by cuts in taxation, rising real-estate prices and, as a one-off factor, discounts granted on motor vehicle sales. Nevertheless, consumer confidence has clearly weakened in early 2003. The most recent indicators suggest fairly slow growth in business during the first quarter. At the same time, the twin deficits of public finances and the trade balance are continuing to grow, and this in turn is dragging down the dollar. This has continued to depreciate, notably against the euro, in early 2003. The depreciation in the value of the American dollar is handicapping exporters from the euro zone, at a time when the main components of domestic demand are still merely ticking over. Thus GDP in the euro zone rose by only 0.8 % in 2002, contributing to worsening public-spending deficits. Germany and France in particular found themselves receiving unwelcome publicity, in the form of warnings from the European Commission. Japan, for its part, finally escaped from the recession in 2002, with a 0.3% rise in GDP. Thanks to a particularly buoyant Asian environment, exports have enjoyed sustained progress, but domestic demand still remains only moderate. (Economist)

1. The title of the paper is called “Wait and see”
2. The author is not available.
3. The information deals with the world economy.
4. The problem of business development is concerned here.
5. Our knowledge of cuts in taxation and rising real-estate prices is rather poor.
6. The studies were carried out to demonstrate dragging down the dollar.
7. In conclusion the paper says about the European Commission warnings.
8. The paper comes from the Economist.

Text 2

Novel Concept Moves Further Ahead

The unique Z-Tech design developed by Robert Allan Ltd in 2004 for PSA Marine Ltd, continues to attract significant attention in the marine towage world. Based on the success of the initial 27.6m, 5000bhp model of tug, designated the Z-Tech 6000 (for a nominal 60-tonne bollard pull), for which nine contracts have been completed or are currently under construction, 2005 has been a period of exciting new challenges and opportunities.

The year started with the startling news of an order for eight more Z-Tech 6000 class tugs for the Panama Canal Authority (ACP). However, the specific requirements of The Authority necessitated a number of design changes and refinements, including a lowered wheelhouse and different deckhouse arrangement, as well as a different suite of main propulsion machinery and deck machinery. Also in build in Louisiana for two Texan owners are a pair of Z-Tech 7500 class (75-tonne BP) vessels measuring precisely 30.00m overall.

The demands of the LNG terminal industry for tugs which can perform ship escort and general ship-handling duties in more extreme sea-states than has previously been the norm has presented opportunities for which this design is uniquely well-suited. With a `seagoing stern` shape, the Z-Tech is ideal for operating in situations where waves are impinging on the side or quarters of the ship and the tug needs to be pushing or pulling in the confused sea-state which arises. Due to the need for many of this new generation of LNG terminal tugs to operate in up to 3m seas, larger and more powerful tugs are required. Consequently a new 33.7m design has been developed, designated the Z-Tech 8000 Offshore Class tug. This new tug has a minimum of 80-tonnes bollard pull. The most distinguishing characteristic, however, is the raised aft deck, providing much greater sea-going capability in the tractor mode, or when operating stern-to in ASD mode.

Using a pair of these identical Z-Tech tugs, an LNG carrier can be handled safely in open sea conditions. A stern tug would operate in ASD mode, with its stern to the seas, line led over the bow, while a sister tug, operating in

tractor mode, would act as a bow boat without having to run “backwards” as would a conventional ASD. It is in this latter mode that many ASD designs are notoriously poor at keeping course. If needed, other Z-Techs would be available to push or pull on the ship's side or quarters. (International Tug & Salvage)

1. The title of the paper is called “Novel Concept Moves Further Ahead”.
2. The author is not available.
3. The information deals with the unique Z-Tech design for PSA Marine Ltd.
4. The problem of marine new challenges and opportunities is concerned here.
5. Our knowledge of design changes lowered wheelhouse and deckhouse arrangement refinements is not so much exact.
6. The studies were carried out to demonstrate the most distinguishing characteristic to provide greater sea-going capability in open sea conditions.
7. In conclusion the paper says about other available Z-Techs.
8. The paper comes from International Tug & Salvage.

Text 3

Modern Concept of General Equilibrium in Economics

The modern conception of general equilibrium is provided by a model developed jointly by Kenneth Arrow and Gerard Debreu in the 1950s. Gerard Debreu presents this model in Theory of Value (1959) as an axiomatic model, following the style of mathematics promoted by Bourbaki. In such an approach, the interpretation of the terms in the theory (e.g., goods, prices) are not fixed by the axioms.

Three important theorems have been proved in this framework. First, existence theorems show that equilibria exist under certain abstract conditions. The first fundamental theorem of welfare states that every market equilibrium is Pareto optimal under certain conditions. The second fundamental theorem of welfare states that every Pareto optimum is supported by a price system, again under certain conditions. These conditions were stated in the language of mathematical topology. The proofs used such concepts as separating hyperplanes and fixed point theorems.

Three important interpretations of the terms of the theory have been often cited. First, suppose commodities are distinguished by the location where they are delivered. Then the Arrow-Debreu model is a spatial model of, for example, international trade.

Second, suppose commodities are distinguished by when they are delivered. That is, suppose all markets equilibrate at some initial instant of time. Agents in the model purchase and sell contracts, where a contract specifies, for example, a good to be delivered and the date at which it is to be delivered. The

Arrow-Debreu model of intertemporal equilibrium contains forward markets for all goods at all dates. No markets exist at any future dates.

Third, suppose contracts specify states of nature which affect whether or not a commodity is to be delivered: “A contract for the transfer of a commodity now specifies, in addition to its physical properties, its location and its date, an event on the occurrence of which the transfer is conditional. This new definition of a commodity allows one to obtain a theory of [risk] free from any probability concept...” (Debreu 1959).

These interpretations can be combined. So the complete Arrow-Debreu model can be said to apply when goods are identified by when they are to be delivered, where they are to be delivered, and under what circumstances they are to be delivered. (Economist)

1. The title of the paper is called “Modern Concept of General Equilibrium in Economics”.
2. The author is not available.
3. The information deals with the model developed jointly by Kenneth Arrow and Gerard Debreu in the late 1950 s.
4. The problem of three important theorems is concerned here.
5. Our knowledge of the theory terms interpretation is not so much exact.
6. The Arrow-Debreu model of intertemporal equilibrium was published to demonstrate forward markets for all goods at all dates.
7. In conclusion the paper says about the interpretations to be applied towards goods.
8. The paper comes from “Economist”.

Text 4

Banking

Nature of the Industry

Banks safeguard money and valuables and provide loans, credit, and payment services, such as checking accounts, money orders, and cashier’s checks. Banks also may offer investment and insurance products, which they were once prohibited from selling. As a variety of models for cooperation and integration among finance industries have emerged, some of the traditional distinctions between banks, insurance companies, and securities firms have diminished. In spite of these changes, banks continue to maintain and perform their primary role - accepting deposits and lending funds from these deposits.

There are several types of banks, which differ in the number of services they provide and the clientele they serve. Although some of the differences between these types of banks have lessened as they begin to expand the range of

products and services they offer, there are still key distinguishing traits. Commercial banks, which dominate this industry, offer a full range of services for individuals, businesses, and governments. These banks come in a wide range of sizes, from large global banks to regional and community banks. Global banks are involved in international lending and foreign currency trading, in addition to the more typical banking services. Regional banks have numerous branches and automated teller machine (ATM) locations throughout a multi-state area that provide banking services to individuals. Banks have become more oriented toward marketing and sales. As a result, employees need to know about all types of products and services offered by banks. Community banks are based locally and offer more personal attention, which many individuals and small businesses prefer. In recent years, online banks - which provide all services entirely over the Internet - have entered the market, with some success. However, many traditional banks have also expanded to offer online banking, and some formerly Internet-only banks are opting to open branches.

Savings banks and savings and loan associations, sometimes called thrift institutions, are the second largest group of depository institutions. They were first established as community-based institutions to finance mortgages for people to buy homes and still cater mostly to the savings and lending needs of individuals.

Credit unions are another kind of depository institution. Most credit unions are formed by people with a common bond, such as those who work for the same company or belong to the same labor union or church. Members pool their savings and, when they need money, they may borrow from the credit union, often at a lower interest rate than that demanded by other financial institutions. (Economist)

1. The title of the paper is called “Banking. Nature of the Industry”.
2. The author is not available.
3. The information deals with money, loans, credits, and payment services.
4. The problem of several types of banks is concerned here.
5. Our knowledge of accepting deposits and lending funds operations is not so vast.
6. Commercial banks, saving banks, credit unions and Federal Reserve banks exist to realize money safeguarding (to offer at full range of services for individuals).
7. In conclusion the paper says about online banking expansion.
8. The paper comes from “Banks and Money”.

READ THE NEWSPAPER ARTICLES AND THE ABSTRACTS TO ANALYZE AND MEMORIZE THE ABOVE PATTERNS

Text 1

In Arab World, Secret Police Inhibit Chance for Reform

By Neil MacFarquhar

AMMAN, Jordan - At a cultural festival last year, Sameer al-Qudah recited a poem depicting Arab rulers as a notch below pirates and highway robbers on the scale of honorable professions. Within days, Jordan's intelligence police summoned him.

Mr. Qudah, sentenced to a year in jail for a similar offense in 1996, was apprehensive but not surprised. The secret police, or mukhabarat in Arabic, is one of the Arab world. Jordan's network had surreptitiously video-taped his reading.

"We are hungry for freedoms like the right to express ourselves", said Mr. Qudah, 35, whose day job is supervising construction projects as a civil engineer. "But our country lives under the fist of the mukhabarat".

In Jordan and across the region, those seeking democratic reform say the central role of each country's secret police is one of the biggest impediments. In the decades since World War II, as military leaders and monarchs smothered democratic life, the security agencies have become a law unto themselves.

The terror attacks in Amman on November 9 accentuate one reason that even some Jordanians who consider themselves reformers justify the secret police's blanket presence - the fear that violence can spill across the border. But others argue that the mukhabarat would be more effective if it narrowed its scope to its original mandate of ensuring security.

"The department has become so big that its ability to concentrate is diluted", said Ladid Kamhawi, a businessman active in human rights. "The fact that the intelligence is involved in almost everything on the political and economic level, as well as security, might have loosened its grip on security".

In Jordan, one of the regions most liberal countries, intelligence agencies approve the appointment of every university professor, ambassador and important editor. The mukhabarat eavesdrops with the help of evidently thousands of Jordanians on its payroll.

The United States State Department's annual human rights report, unusually critical of an ally, said the lack of accountability within the mukhabarat and the police resulted "in a climate of impunity" and underscored "significant restrictions on freedom of speech, press, assembly and association". It said the agents "sometimes abuse detainees physically and verbally" and "allegedly also use torture".

Many advocates of democracy deem progress impossible unless the influence of the mukhabarat is curbed.

“The issue of security has become a nightmare,” Mr. Kamhawi said, contending that Jordan had failed to find the balance between democracy and security. “If you give a speech against the policy of the government, this is a threat to security. If you demonstrate against this or that, it is a threat to security. It hits on all aspects of life and it is a severe hindrance to any change.” (The New York Times)

1. The title of the article is called “In Arab World, Secret Police Inhibit Chance for Reform”.
2. The author of the article is called Neil MacFarquhar.
3. The information deals with a cultural festival in Jordan in 2004.
4. The problem of Mr. Kudah reciting a poem of his depicting original Arab rulers is concerned here.
5. Our knowledge of mukhabarat, one of the most powerful forces in the Arabic world is not so vast.
6. Jordan's police summoned Sameer al-Qudach to smother democracy life in Amman.
7. The article comes from "The New York Times."
8. In conclusion the article says about the balance between democracy and security of the intelligence police in Amman.

Text 2

Pursuing Happiness in a Complex World Bhutan Sets Goals for National Well-Being

By Andrew C. Revkin

What is happiness? In the United States and in many other industrialized countries, it is often equated with money. Economists measure consumer confidence on the assumption that the resulting figure says something about progress and public welfare. The gross domestic product, or G.D.P., is routinely used as shorthand for the well-being of a nation.

But the small Himalayan kingdom of Bhutan has been trying a different idea. In 1972, concerned about the problems afflicting other developing countries that focused only on economic growth, Bhutan's newly crowned leader, King Jigme Singye Wangchuck, decided to make his nation's priority its G.N.H., or gross national happiness.

Bhutan, the king said, needed to ensure that prosperity was shared across society and that it was balanced against preserving cultural traditions, protect-

ing the environment. The king, now 49, has been instituting policies aimed at accomplishing these goals.

Now Bhutan's example is serving as a catalyst for far broader discussions of national well-being.

A growing number of economists, social scientists, corporate leaders and bureaucrats around the world are trying to develop measurements that gauge not just the flow of money but also access to health care, time with family, conservation of natural resources and other noneconomic factors. (The New York Times)

1. The title of the article is called "Pursuing Happiness in a Complex World".
2. The author of the article is called Andrew C. Revkin.
3. The information deals with happiness often equated with money in the United States and many other industrialized countries.
4. The problem of afflicting Bhutan and other developing countries is concerned here.
5. Our knowledge of Bhutan's king, 49 to institute policies of cultural traditions and a responsive government is not so much exact.
6. Bhutan's example to accomplish the goals is discussed everywhere to acquire national well-being.
7. The article comes from "The New York Times."
8. In conclusion the article says about economists and social scientists concerning health care, conservation of natural resources and other noneconomical factors.

Text 3

How a Foreign-Area Officer's Skills Strengthened U.S. Efforts in Iraq He learned lay of land; now Pentagon wants him out

By Greg Jaffe

MOSUL, Iraq – Last summer, two dozen U.S. Army Rangers headed for the Iraq-Syria border to figure out how foreign fighters were slipping through western Iraq's barren deserts.

As they had done in the past, the Rangers took positions around each village, an officer named David, accompanied by a small security team, strode into the center looking for someone who would talk. Unlike the clean-shaven, camouflage-clad Rangers, David wore a thick goatee and civilian clothes. The Rangers carried long, black M-4 carbine rifles. David walked with a small pistol strapped to his leg. The Rangers spoke English. He spoke Arabic tinged with a Yemeni accent.

By his own account, David met a woman with facial tattoos that marked her as her husband's property. As they chatted, the paleskinned, sandy-haired North Carolina native imitated her dry, throaty way of speaking. "You are Bedu too", she exclaimed with delight, he recalls.

From her and the other Bedouins, the 37-year-old officer learned that most of the cross-border smuggling was carried out by Shamar tribesmen. (The Wall Street Journal)

1. The title of the article is called "How a Foreign-Area Officer's Skills Strengthened U.S. Efforts in Iraq".
2. The author of the article is called Grey Jaffe.
3. The information deals with two dozen U.S. Army Rangers for the Iraq-Syria border.
4. The problem of figuring foreign fighters to slip through western Iraq's deserts is concerned here.
5. Our knowledge of Rangers positions around each village is rather poor.
6. The U.S. military research was done to reveal the borders smugglers.
7. The information comes from the Wall Street Journal, 2005.
8. In conclusion the article says about Iraq-Syria border radical Islam tribesmen slipping.

PROBLEM (N): CHIEF, MAIN, FUNDAMENTAL, ESSENTIAL, SPECIFIC, PECULIAR, INTERESTING, MINOR

1. This problem is concerned with the study of ...
2. The problem of ... deals with the determination of ...
3. The problem I am studying now bears on the effect of ...
4. The problem of ... is easy
seems difficult
is not too complicated } to realize
to solve
to formulate
to describe
to show } smth

READ THE PAPERS FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

Tomorrow there will be a formal debriefing but today was a day for the team to relax. There were more hullabalos from the land team when our boat docked at the condo but then things quieted down—at least until the evening. The splash-up may have been over but there was still the business of the splash-up party to attend to... This was a mega-wingding held outside a private house on a sprawling waterfront estate that included innumerable palm trees, a dock, and even a lighthouse. Bill tended bar while Dave, on behalf of the crew, thanked everyone involved and recognizing the crew's spot at the top of a very large pyramid of people who made NEEMO 9 possible. This had been, by far, the most audacious undersea research program ever undertaken anywhere. And it was hugely successful.

We served ourselves from buffet tables and mingled. The evening was filled with ideas. As I moved from one animated conversation to another, I realized that the future of NEEMO, and the Future of exploration in general, will be limited only by our imaginations. (MTZ Worldwide)

1. The main problem is concerned with the study of a team day to relax.
2. The specific problem of the boat docked deals with the determination of undersea research program.
3. The chief problem I' am studying now bears on the effect of future general exploration.
4. The interesting problem of serving ourselves is easy to realize.
5. The essential problem of people who made NEEMO was rather complicated to formulate.

Text 2

BEYOND ENGINEERS?

WITH SO MANY functions high-tech makeovers, what's to stop the railroads from building fully automated trains? After all, some airplanes already can take off, fly long distances and land without the assistance of pilots. In fact, remote control locomotives (RCL) are at work in a limited role: switching cars in railyards. This is a dangerous job. Before remote control, yard workers coordinated by radio with an engineer in the cad and everyone sweated to workers doing the switching operate the locomotives themselves, using wearable remote-control units.

The Federal Railroad Administration has begun allowing remote operation, under strict rules, on certain sections of open track. However, there may be too many grade crossings and stretches of dark, un signaled territory throughout the country to make the technology widespread.

Perhaps that's a good thing. America's rails are destined to become more crowded, with powerful locomotives roaring along hauling the longest, heaviest loads anyone has ever seen. The next generation of trains will help drive the nation's business while combating energy short-ages. Their sophisticated new technology will be welcome – but it's comforting to know a human will still be at the controls. (The international Engineering Consortium).

1. The chief problem is concerned with the study of high - tech makeovers.
2. The fundamental problem of airplanes taking off, by long distances and landing without pilots deals with the determination of remote control locomotives (RCL) and switching cars in railyards.
3. The essential problem I' am studying now bears on the effect of the new system to use wearable remote-control units.
4. The problem of allowing remote operation under strict rules was easy to start for the Federal Railroad Administration.
5. The specific problem of the next train's generation to use new technology is rather complicated to be realized without human controls.

Text 3

Personal Communications Services (PCS)

The future of telecommunications includes personal communications services. PCS at 1900 MHz (PCS 1900) is the North American implementation of DCS 1800 (Global System for Mobile communications, or GSM). Trial networks were operational in the United States by 1993, and in 1994 the Federal Communications Commission (FCC) began spectrum auctions. As of 1995, the FCC auctioned commercial licenses. In the PCS frequency spectrum the operator's authorized frequency block contains a definite number of channels. The frequency plan assigns specific channels to specific cells, following a reuse pattern which restarts with each n th cell. The uplink and downlink bands are paired mirror images. As with AMPS, a channel number implies one uplink and one downlink frequency: e.g., Channel 512 = 1850.2 MHz uplink paired with 1930.2 MHz downlink.

1. The chief problem is concerned with the study of telecommunications future.
2. The fundamental problem of personal communications services deals with the determination of the trial networks. (IEEE Microwave Magazine)

3. The minor problem I'am studying now bears on the effect of specific channels to specific cells.
4. The essential problem of Global System for Mobile Communications or GSM is rather complicated to be realized.

READ THE NEWSPAPER ARTICLES AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

Spain Wins Final Antitrust Say on Energy Deal

EU regulators cede power on potential combination of Gas Natural, Endesa.

By Adam Cohen

BRUSSELS - The European Commission today plans to cede antitrust powers to Spain in **Gas Natural SDG SA's** €21.6 billion (€25.3 billion) hostile takeover bid for **Endesa SA**, a commission official and two people close to the situation said.

While commission officials have said they are worried about allowing a near-monopoly in Spain's energy market, Madrid is seen as having given its blessing to the combination.

Antitrust Commissioner Neelie Kroes has tried to inject more competition into Europe's energy markets. According to preliminary findings of a commission report on the energy sector to be published today, European energy prices are too high because of stalled deregulation, too-dominant utilities and little cross-border integration.

An official involved in the study said the European Commission's problems with specific companies will be described sometime next year and expects the study's final report to single out energy giants such as Germany's **E.ON AG** and France's **Electricite de France**.

Initially, the commission wanted to investigate Gas Natural's takeover of Endesa, arguing it might create a dominant utility. But the law left it little room for maneuver. Under EU rules, a national regulator has sole antitrust authority if both companies generate more than two-thirds of their sales in that country.

The commission studied Endesa's sales figures for almost two months, and despite Endesa's best attempts to show otherwise, concluded that the company's sales outside Spain didn't meet the threshold for a pan-European review.

European commission President Jose Manuel Barroso said at a press appearance that "all such decisions are taken according to objective criteria and there will be no favors for anybody".

Not all is lost for the deal's opponents. Though Ms. Kroes won't conduct the review, a lawyer involved in the deal said the two-month delay to study Endesa's sales figures will likely keep Spain from just rubber-stamping the deal".

In addition, the European Commission can study a crucial aspect of the transaction - Gas Natural's planned sale of some Endesa assets to **Iberdrola** SA, which it is doing to avoid antitrust problems. A large chunk of the €7 billion to €9 billion of assets involved in that sale aren't Spanish, placing it firmly under the commission's authority.

Under the proposal, Iberdrola, Spain's second-largest electricity company, would get Endesa's 65% stake in SNET, France's second-largest power producer, Endesa's Italian electricity holdings and still-to-be-determined assets in Latin America. Sales figures for these businesses haven't been disclosed, but Iberdrola executives say the numbers point to European Commission oversight.

"If the commission says 'no' to the Iberdrola deal, then the whole transaction can't go through, even if Spanish regulators want to approve it," said Brussels - based antitrust lawyer Clive Stanbrook, who isn't involved in the deal. All 25 commissioners are due to vote today in Strasbourg, France, on Ms. Kroes's recommendation to give Spain antitrust powers in the Gas Natural-Endesa deal. (The Wall Street Journal)

1. The interesting problem is concerned with the study of The European Commission plans to cede antitrust powers to Spain in Gas Natural SDG.
2. The chief problem of commissions officials worry deals with the determination of antitrust Commissioner Neeie Kroes to inject more competition into Europe's energy markets.
3. The essential problem I' am studying now bears on the effect of very high European energy prices.
4. The specific problem of Gas Natural's planned sale is rather complicated to be solved.

Text 2

Abbott Reports Mixed Showing for Heart Drugs

Two heart drugs from Abbott Laboratories turned in contrasting results in clinical trials reported at the American Heart Association's annual scientific meeting in Dallas.

A drug called Simdax, for which Abbott is seeking U.S. approval to treat patients with congestive heart failure, appeared to boost the benefits of standard treatment and led more patients to improved symptoms or at least not becoming worse off.

But an existing drug for diabetics, Tricor, despite some signs of benefit, failed in its goal of significantly reducing deaths during a five year test. In a large trial, Tricor, which lowers blood fats called triglycerides, failed its primary goal of significantly reducing heart attacks and coronary deaths among patients with Type II diabetes, researchers said.

But patients taking Tricor fared better than those taking placebos on a number of secondary measures, including a reduction in the need for procedures to clear clogged arteries and for laser treatments of eye disease.

“Clearly, the results of the trial were mixed”. Said Dr. Anthony Keech, an associate professor of medicine at the University of Sydney in Australia, the trial’s lead researcher.

Tricor, whose chemical name is fenofibrate, was tested in a study involving nearly 10000 male and female diabetics in Australia, New Zealand and Finland. More than three-fourths of the patients had no prior history of heart disease. By the end of the trial, those taking Tricor had an 11% smaller combined incidence of heart attack or coronary death than those taking placebos.

But the reduction-the main goal of the trial - wasn’t considered statistically significant, meaning the results could well have occurred due to chance.

Simdax, Abbott’s experimental drug for chronic heart failure, fared well in a study that enrolled 600 heart-failure patients at hospitals in the U.S., Australia and Israel. About half the patients were given a placebo in addition to standard therapy.

The study showed that 19% of patients receiving Simdax improved, compared with 15% of patients receiving the placebo. Fewer patients receiving Simdax worsened compared with the placebo arm. Moreover, 27% of patients receiving standard therapy worsened, compared with 19% receiving standard drugs in addition to Simdax, the brand name for the drug levosimendan. (The Wall Street Journal)

1. This fundamental problem is concerned with the study of two heart drugs from Abbot Laboratories.
2. The essential problem of drug called Simdax deals with the determination of US approval to boost.
3. The interesting problem Jam studying now bears on the effect of an existing drug for diabetics to significantly reduce deaths during a five year test.
4. The specific problem of abbot’s experimental drug for chronic heart failure seems not so easy to be realized.

Text 3

Starwood to Sell Hotel Properties to Host Marriott

By Eamon Beltran

Starwood Hotels & Resorts worldwide Inc. agreed to sell 38 properties to Host Marriott Corp. for about \$ 4 billion plus \$ 700 million in debt.

The deal, in line with Starwood's long-term strategy to shed assets and focus on operating rather than owning hotels, includes hotels under the Sheraton, W, Westin, St. Regis and Luxury Collection brands.

Starwood shareholders will receive \$ 11.18 for each class B share. The payment will consist of 0.6122 Host Marriott share and 50.3 cents in cash.

Starwood of White Plains, New York, expects that \$ 2.45 billion in cash and share proceeds from the transaction, or 60% of total proceeds, will flow directly to its shareholders. Starwood will receive \$ 941 million in cash and transfer \$ 704 million in debt to Host Marriott, based in Bethesda, Maryland.

The deal is expected to close in the first quarter. The boards of both companies have approved the proposed transaction.

Host Marriott said the transaction will expand its geographic distribution into new foreign markets. The hotels include six in Europe and two each in Fiji and Chile. Of 28 properties in North America, three are in Canada.

Starwood said it signed a license and management contract for the hotels it agreed to sell. The deal has an initial 20 year term, plus two 10 year extension options at Starwood's discretion. Starwood will receive a license fee of 5% of gross room revenue and 2% of food and beverage revenue. It estimates the license and management contract would have paid \$61 million for 2007. For 2008, Starwood expects earnings of \$2.14 a share, assuming the 38 hotels are sold on Jan. 1.

1. The essential problem is concerned with the study of Starwood Hotels & Resorts Worldwide Inc. selling 38 properties to Host Marriott Corp.
2. The problem of Starwood's long strategy deals with the determination of focusing on operating rather than owning hotels.
3. The specific problem Jam studying now bears on the effect of the deal expected to be closed in the first quarter.
4. The main problem of proposed transaction seems not so difficult to be solved.

INFORMATION (n): EARLIER, PRELIMINARY, PAST, PRESENT, CURRENT, FURTHER, SUFFICIENT, COMPLETE, EXTENSIVE, DETAILED, EXACT, PRECISE, GOOD, RELIABLE, VALUABLE, POOR, SCANTY, UNRELIABLE ETC

1. There is (some) }
enough }
detailed } information
valuable }
scanty }
etc. }
- in literature
in the paper
in the article
in this fragment
- { concerning
regarding }
- the use
the application
the observation
the discussion
the fine structure
the action
the program
- } of... smth
-
2. (At present) } we
Now } they
Today } the authors
Nowadays } the chairmen
Here } the programmers
the coworkers
etc }
- (still do not) possess }
provide }
create }
have }
- some
(not) enough
complete
exact
precise
valuable
unreliable
- } information
- { concerning
regarding
to concern,
to regard }
- the nature
the influence
the effects
the efficiency
the match
the strike
the meeting
the researches
the searches
etc }
- } of...
-
3. Some of our information }
Some data }
Some results }
- comes
(have) come
are obtained
are provided }
- from
- { recent investigations
the experiments on
recent studies of...
the experimental results of... }
- { to concern
to regard }
- } smth

READ THE PAPERS FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

**Text 1
Case Studies**

The electric utility industry in the United States has come a long way from its beginnings more than one hundred years ago when Thomas Edison introduced electricity into New York City. During this period, electricity use has expanded and now constitutes a critical input in sustaining the Nation's economic growth and development and the well-being of its inhabitants.

Net generation from electric utilities amounted to 2.883 billion kilowatt-hours in 1993. This record power output was produced by the consumption of 30.3 quadrillion Btus of energy resources representing 36 percent of total primary energy consumption in the United States. Coal provided about 57 percent

of total net generation, followed by nuclear power at about 21 percent. Hydroelectric power and natural gas each supplied around 9 percent of the total. Petroleum products contributed over 3 percent of the output with other renewable resources accounting for the balance. During the same year, the industry consumed large volumes of fossil fuel - over 800 million tons of coal, nearly 2.700 billion cubic feet of natural gas, and over 160 million barrels of petroleum products - to generate 160 million 70 percent of the domestic output of electricity . To sustain its operating capability at the levels indicated above, the industry owned nearly 700 gigawatts of net summer generating capability in 1993 together with associated transmission and distribution facilities. Significant levels of investment are required to own and operate these facilities, making the electric utility industry the most capital-intensive industry in the country. Its assets in 1993 were approximately three-fourths of a trillion dollars, with aggregate operating revenues of about \$200 billion. Taken together, these impressive statistics accord the electric utility industry an important place within the domestic economy.

Yet, the growth of the electric power sector has been a mixed blessing. While electricity has proven itself to be the sine qua non of industrialization and societal wellbeing, byproducts of its production and distribution have an undesirable affect on the environment. Most of these result from the combustion of fossil fuels used in converting thermal energy into electrical energy. Pollutants in the air include nitrogen oxides, sulfur dioxide, traces of heavy metal contaminants, organic pyrolysis compounds and others. (Journal of Electrochemical Society)

1. There is valuable information in the paper concerning the electric utility industry in the United States.
2. At present the record power output possesses some details concerning (to concern) the industry consumption of fossil fuel.
3. At present the USA possess complete information regarding (to regard) the Nation's economic growth and the well being of its inhabitants.
4. Impressive statistics information of investment significant level is provided by the fossil fuels combustion results to convert thermal energy info electrical energy.

Text 2

Why You Want Vista Now!

Microsoft Windows Vista, the long-awaited and long-delayed successor to Windows XP, is still in the beta-testing stages. Until recently, Microsoft held firm to a release date in the second half of this year. (And let's be candid: When

Microsoft uses a vague term like “second half,” that sure doesn’t mean July). But then, on March 21, the company announced that though Vista would be available to businesses in November, consumers would have to wait until January 2008. So why would you want Vista now, when the product is likely six to nine months away from shipping?

Two words: More fun. Like a new car, Vista practically begs you to play with all its shiny new gadgets, see how hard you can drive it, and luxuriate in the novelty of the experience.

We admit that’s not the most rational justification. Fair enough. There are plenty of down-to-earth reasons Vista is appealing. Improved security, for one. Dramatic improvements in tools that can help you cope with information overload, for another. Better support for multimedia and mobile devices, a better version of Internet Explorer, and a dramatically revamped UI, to name a few more. If Vista delivers on all its promises, you’ll spend much less time performing tedious maintenance and configuration tasks and much more time being productive or just keeping yourself entertained.

1. There is enough information in this paper fragment concerning Microsoft Windows Vista, the long awaited and long delayed successor to Windows XP.
2. At present consumers still do not possess reliable information concerning (to concern) this new product to be for six to nine months away from shipping.
3. Some information of down-to-earth Vista reasons to be appealing are provided by Internet Explorer.

Text 3

Plastic Modules. Future Developments

In the future, greater importance will be attached to combining various functions within a single module for use in commercial vehicles. Multifunctionality will also play a more important role in cam cover modules. Several approaches are being taken: for example, wire connector ducts for the control system of the common-rail injectors, **Figure 8**. The plastic cam cover module for commercial vehicle engines can integrate many other elements as well, as in the area of crankcase ventilation. In that area, blow-by gas suction with oil separation could be integrated, along with a crankcase pressure regulator – both of which are already in use in passenger car engines.

Another potential application of plastic modules in the engine compartment of commercial vehicles: the oil pan. New, especially efficient fiber-reinforced plastic materials can be used to make more resistant parts than was possible with conventional plastics. In addition, some oil pans are now being protected by chassis components against the effects of the road or terrain, last

but not least, using plastics in the oil pan can help to meet cost and weight constraints, which are more important now than ever. Further advantages: An oil baffle and oil suction hose can be integrated at low cost. Acoustic decoupling of the oil pan from the engine block – as with the cam cover – would also be feasible but the isolating element should be designed to withstand higher stress. Besides reducing costs and weight, plastic oil pans would also reduce noise pollution. (Autotechnology)

1. There is earlier information in the paper fragment concerning (to concern) single module various functions to be combined to be used in commercial vehicles.
2. The detailed information regarding (to regard) multi-functionality possesses further advantages concerning commercial vehicle engines.
3. This sufficient plastic modules potential application information is obtained from engine makers.

READ THE NEWSPAPER ARTICLES AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

By Gregory Zuckerman

EXCHANGE-TRADED FUNDS are attracting increasing interest from investors, and for many good reasons. ETFs usually have lower expenses than traditional mutual funds and generally are easier to trade.

But one of the best reasons to turn to ETFs is that they can do a better job than individual stocks and most mutual funds of allowing an investor to make a targeted – but still diversified – bet on a specific slice of the stock market.

ETFs trade throughout the day on an exchange, much like stocks. But they aim to track an index or a basket of stocks, providing some diversification and an ability to target a specific corner of the market.

Most track broad market benchmarks such as the Standard & Poor's 500-stock index. But ETFs are getting narrower, focusing on economic sectors and even subsectors, from alternative energy to medical devices to water treatment.

"With pinpoint precision, an ETF allows you to focus on a particular area of the market or world where you want exposure," says Jack Ablin, chief investment officer at Harris Private Bank in Chicago.

ETFs are especially worth considering for investors looking for exposure to volatile but promising areas, such as emerging markets. Buying individual

foreign stocks can be quite perilous, especially in growing countries in Asia and Latin America. (Weekend Journal)

1. There is earlier information in the newspaper fragment regarding (to regard) Exchange Traded Funds investors increasing interest.
2. This newspaper fragment possesses the information concerning (to concern) the ability to target a specific corner of the market.
3. ETE'S reasons to attract the increasing interest come from weekend Journal, information.

Text 2

Don't Trip When Offering a Tip

By Cindy Loose

IF EVER THERE WAS a good time to show off, it was then.

Joe Feldman had just walked into a Miami restaurant to celebrate a friend's 40th birthday, and who should be at a nearby table but his soon-to-be-ex-wife and her soon-to-be-next husband. Mr. Feldman made what he thought was an important point by buying his party a magnum of Dom Perignon.

"I was still okay with it until the check came, and then I suddenly felt horrified by the thought of a \$75 or \$100 tip merely to open a bottle and pour. What is an appropriate tip at that point?"

Ah, the angst of tipping. When we invited readers to tell us their tipping dilemmas and stories, in they poured. In the U.S., 15% to 20% of the bill before tax is the accepted standard for tipping a waiter. But what about a sommelier who only uncorks and pours your wine? The question takes on more urgency the more expensive the beverage.

And what about the free breakfast buffet at a hotel? Or the free shuttle service? Or the guy who delivers a free toothbrush to your room? And what if both food and service are awful but it is clearly the kitchen's fault, not the waiter's?

Complications and ethical concerns multiply when traveling. Customs vary not only by country, but by city. Even if you know the customary percentage, figuring out a foreign currency can be difficult. (The Washington Post).

1. There is valuable information in the article concerning (to concern) restaurant tipping in Miami.
2. At present journalists still do not possess exact information regarding (to regard) readers tipping dilemmas and stories.
3. Traveling tipping complications information is provided by The Washington Post correspondent Cindy Loose.

Text 3

Piëch Says Volkswagen to Renew CEO's Contract

By Michael Brendel and Stephen Power

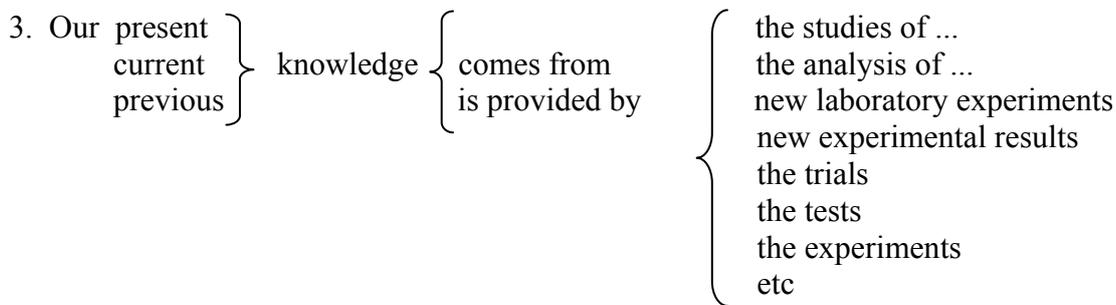
Pischetsrieder wins support from board despite tensions.

Volkswagen AG Chairman Ferdinand Piëch said he expects the company's supervisory board to extend the contract of Chief Executive Bernd Pischetsrieder, and that the board is "very satisfied" with the auto maker's management, despite tensions at the company over Mr. Pischetsrieder's cost-cutting bids. Mr. Piëch's comments – during a brief, hastily organized news conference at Volkswagen's Wolfsburg headquarters – follow weeks of uncertainty about Mr. Pischetsrieder's future, fueled partly by Mr. Piëch's own previous comments on the matter. In a Feb. 27 interview in The Wall Street Journal, Mr. Piëch said it was "an open issue" whether the company would keep its CEO, because of what Mr. Piëch then characterized as strong opposition from the company's labor representatives, who hold half the seats on the supervisory board. (The Wall Street Journal).

1. There is exact information in the article concerning (to concern) Volkswagen AC Chairman Ferdinand Piëch expectations to extend the contract of Chief Executive Bernd P.
2. Strong opposition from the company's labor representatives possesses current information concerning (to concern) half of the seats on the supervisory board.
3. Here reliable information is obtained from Mr. Piëch comments regarding cost-cutting bids tensions.

KNOWLEDGE (n): SUFFICIENT, PROFOUND, COMPLETE, DETAILED, EXACT, INSUFFICIENT, INCOMPLETE, FRAGMENTARY ETC

- | | | | | | | | | |
|---|---|--|---|--|---|-------------------------|---|--|
| 1. There is
At present we have
Now we possess | } | some
detailed
exact
thorough
precise | } | knowledge
information
data
etc | } | to concern
to regard | } | scientific management
environmental effects
background documents
undesirable actions (of)
the electric utility industry
etc |
| 2. We (still) know (very) little | } | to concern
to regard | } | the energy information
the electricity generation
the fuel cycle of ...
etc | | | | |



READ THE PAPERS FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1 Improved Parking Aid

Bosch has introduced a new generation of ultrasonic sensors.

The parking aid from Bosch assists car drivers in parking and manoeuvring their vehicles. The supplier from Stuttgart has now introduced a smaller lighter and even more capable generation of the core elements of a parking aid – the ultrasonic sensors. The installation depth of these components has been reduced by as much as a third to 29 millimetres. This makes it easier to install the sensors into the bumpers.

Pedestrian protection is also improved because the new sensors now allow more space in the bumpers for soft impact zones. Parking itself has also become more convenient. Since the sensor measurement range has been doubled to three metres, the system now detects obstacles even earlier. Bosch is already working on an autonomous parking assistant that not only steers, but also controls the engine and brakes. The vision of automatic parking at the push of a button could become reality even within the next decade. (Autotechnology)

1. There is exact knowledge concerning the parking aid from Bosh to assist car drivers.
2. We still know very little regarding (to regard) a new generation of Stuttgart ultrasonic sensors core elements.
3. The pedestrian protection knowledge is also provided by improved bumpers space for soft impact zones.

Text 2

New Ford Escape Hybrid

BorgWarner Supplies Engine and Transmission Components.

BorgWarner will provide various emission and air management components, as well as the engine timing system and clutch systems for North America's first hybrid vehicle, the Ford Escape. "Several of BorgWarner's traditional products can be found hybrid vehicles such as the Ford Escape, the Honda Insight and Civic and the Toyota Prius." said Tim Manganello, BorgWarner Chairman and Chief Executive Officer. The Ford Escape Hybrid combines the fuel economy of a full hybrid with the versatility of four-wheel drive, and teams a high-voltage storage battery with an efficient petrol engine to charge the engine without the need for plugging it in. In addition, Ford expects the Escape Hybrid to be certified for sale as an Advanced Technology Partial Zero Emissions Vehicle (AT-PZEV), the strictest emissions certification. The Escape Hybrid can run solely on electric power at speeds below 25 mph, and then switch seamlessly and quietly into petrol mode at higher speeds. (Autotechnology)

1. There is precise information in the paper fragment concerning (to concern) various emission, air management components, the engine timing system and clutch systems as well.
2. We still know very little regarding (to regard) North America's first hybrid vehicle, the Ford Escape.
3. Our current knowledge comes from Jim Manganello, Borg Warner Chairman and Chief Executive Officer.

Text 3

Beru Presents First 'Smart' Glow Plug

New Technology is Able to Reduce the Fuel Consumption, Noise and Emissions of Diesel Engines.

Beru has developed a smart pressure sensor glow plug, called PSG (Pressure Sensor Glow Plug). According to Beru PSG technology reduces diesel engine, fuel consumption, minimises engine noise and further cuts, down on emissions. The glow plug, which is positioned right in the middle of the combustion chamber in the cylinder to accommodate other micro components is equipped with pressure sensor functions. In cooperation with Texas Instruments, Beru has integrated a piezo-resistant pressure sensor into the glow plug. In view of the extremely high temperatures, vibrations and pressure ratios in the cylinder head, the mechanical design of the glow plug is a major issue. The heating element is

not incorporated into the body of the glow plug, as is usually the case, but is instead mounted on flexible bearings as a moving part, transmitting the pressure to the membrane. The actual pressure sensor is nowhere near the combustion chamber, and is located in much more favourable conditions. The use of a heating element from the Beru Instant Start System (ISS), which only glows at the tip, means that the thermal load can be controlled. By combining the glow plug with the modern high-performance electronics of this system, low-emission cold starts are made possible even at the lowest of temperatures. The PSG is now to be prepared for mass production as quickly as possible. A European car manufacturer has already placed a major order. (Autotechnology)

1. There is detailed knowledge regarding (to regard) a smart pressure sensor glow plug in this paper fragment.
2. Our knowledge is still incomplete concerning (to concern) Beru diesel engine fuel consumption decrease, engine noise minimizing and further cuts down on emissions.
3. Our current knowledge comes from Beru PSG advertising technology to have been published in Autotechnology.

READ THE NEWSPAPER ARTICLES AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

Nucor Earnings Increase 7% on Record Output, Shipments

By Kris Maher

Nucor Corp. said first-quarter profit rose 7% on record steel production and shipments driven by strong demand, especially in the nonresidential construction market.

The Charlotte, North Carolina, steelmaker reported net income of \$379.2 million, or \$2.42 a share, compared with \$354.7 million, or \$2.20 a share, a year earlier. That exceeded its earnings forecast of \$2.20 to \$2.40 a share, as well as the \$2.33-a-share average estimate of analysts surveyed by Thomson Financial. Revenue totaled \$3.55 billion, up from \$3.32 billion a year earlier.

"Industry conditions were good and they're going to get better," said Chuck Bradford, a New York metals analyst with Bradford Research/Soleil. He said demand from nonresidential construction companies has helped many steelmakers, and that despite the woes of Detroit auto makers, demand for steel in the automotive market overall is high. (Weekend Journal)

1. There is detailed knowledge in the article concerning (to concern) Nucor Corporation 7% record steel production.
2. We still know very little regarding (to regard) very good Bradford Research industry conditions and North Carolina steelmaker net income of \$ 379.2 million.
3. Our present knowledge comes from Chuck Bradford, a New York metals analyst.

Text 2

China's Rapid Growth Poses Risks

By Andrew Browne

GDP Surge of 10.2% Ratchets up Pressure to Cool the Economy.

BEIJING – Adding to U.S. pressure on President Hu Jintao to let the yuan appreciate, China's growth at home is surging so quickly it risks overheating.

Driven by exports and rapid investment, China's economic growth raced ahead by 10.2% in the first three months of this year, even faster than the blistering 9.9% pace registered for all of 2005.

The speed appears to have taken Mr. Hu by surprise. "We do not want, nor are we pursuing, overrapid economic growth," the Chinese leader said earlier this week.

Mr. Hu, meeting with U.S. President George W. Bush on Thursday in Washington, struck an accommodating tone, saying he was "ready to work with the U.S. side in a spirit of seeking mutual benefits and win-win outcomes" on the two countries' economic relations.

But it is getting harder for Beijing to hold the line as its trade surplus hits highs and sucks in vast amounts of cash. (The Washington Post)

1. There is exact knowledge in this article concerning (to concern) China's economic growth by 10.2 % in the first three months of the current year.
2. We still know very little regarding (to regard) George W. Bush meeting with Mr. Hu on Thursday in Washington.
3. Our present knowledge regarding (to regard) China's growth at home to develop risks to be overheated comes from Beijing.

Text 3

Debenhams to Relist in London with Aim of Raising \$1.25 Billion

By Lilly Vitorovich

LONDON U.K. department store chain **Debenhams** PLC said it will return to the London Stock Exchange through an initial public offering, seeking

to raise £700 million (1.25 billion) amid tough trading conditions in the U.K. retail market.

The price range for the IPO has been set at 195 pence to 250 pence per ordinary share, implying a market capitalization of as much as £1.95 billion. The company will offer 449.4 million shares, of which 314.6 million will be new and the rest will be sold by existing shareholders.

The book-building process started Thursday, with the final offer price and share allocation expected May 4.

Debenhams is the second-biggest department-store chain in the U.K., with 19% of total U.K. department-store sales, behind Marks & Spencer Group PLC.

The company made its debut on the London Stock Exchange in 1928 and traded as an independent company until 1985, when it was acquired by the Burton Group. In 1998, Burton spun off Debenhams onto the LSE. (Surrey Advertiser)

1. There is precise knowledge in the article regarding (to regard) U.K. department store chain Debenhams, the second biggest department-store.
2. Our knowledge is exact concerning (to concern) this department store sales only behind Marks & Spencer Group.
3. Our current knowledge is provided by Lilly Vitorovich from London.

METHOD (n) – APPROACH (n) – TECHNIQUE(n):
CURRENT, MODERN, UP-TO-DATE, IMPROVED, MODIFIED,
NEW, OLD, OUT-OF-DATE, OUTDATED, CONVENTIONAL,
ROUTINE, ACCURATE, SUITABLE, SENSITIVE,
UNSATISFACTORY, POOR, USELESS, UNRELIABLE, INVALID,
TIME – CONSUMING ETC

1. The method of ... is } seems } is regarded as } accurate } adequate } suitable } effective } reliable } etc } + { to study } to separate } to investigate } to continue } to estimate } to implement } etc } smth (+ to inf)
2. We } Most authors } Most (co)workers } Investigators } widely } extensively } often } seldom } never } use } apply } study } investigate } research } examine } this method ... } the method of ... } the old technique ... } the above procedure ... } nowadays } in our research } in such experiments

3. The newly-developed method } has { certain } advantages { over the existing methods
 The procedure we used } { some } { over the one used + to infinitive
 } { several } { over the old procedure
 } { many } { as compared } with ...
 } { few } { to compare }
 } { no }

READ THE PAPERS FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1 Introduction to QAM

Many modern fixed microwave communication systems are based on quadrature amplitude modulation (QAM). These systems have various levels of complexity.

Simpler systems such as phase shift keying (PSK) are very robust and easy to implement because they have low data rates. In PSK modulation, the shape of the wave is modified in neither amplitude nor frequency, but rather in phase. The phase can be thought of as a shift in time. In binary phase shift keying (BPSK), the phases for the sine wave start at either 0 or 1/4. In BPSK modulation, only 1 bit is transmitted per cycle (called a symbol). In more complex modulation schemes, more than 1 bit is transmitted per symbol. The modulation scheme QPSK (quadrature phase shift keying) is similar to the BPSK. However, instead of only two separate phase states, QPSK uses four (0, 1/2, and 3/2), carrying 2 bits per symbol. Like BPSK, QPSK is used because of its robustness. However, because it modulates only 2 bits per symbol, it still is not very efficient for high-speed communications. Hence, higher bit rates require the use of significant bandwidth.

Even though QPSK uses no state changes in amplitude, it is sometimes referred to as 4-QAM. When four levels of amplitude are combined with the four levels of phase, we get 16-QAM. In 16 QAM, 2 bits are encoded on phase changes, and 2 bits are encoded on amplitude changes, yielding a total of 4 bits per symbol.

In Figure 20-1, each unique phase is spaced equally in both the I and Q coordinates. The angle of rotation indicates the phase, and the distance from the center point indicates the amplitude. This approach to modulation can be expanded out to 64-QAM and 256-QAM or higher. Although 64-QAM is very popular in both cable and wireless broadband products, 256-QAM is also being

tested. The higher the density in QAM, the higher a signal-to-noise (s/n) ratio must be maintained to meet the required bit-error rates (BERs).

1. The method of quadrature amplitude modulation seems accurate to estimate various levels of the systems complexity.
2. Most authors seldom apply this out-of-date method nowadays because of its robustness and inefficiency.
3. The newly developed method (QPSK) has got some advantages over the existing BPSK.

Text 2

Base Station

The base station (also referred to as the hub or the cell site) is the central location that collects all traffic to and from subscribers within a cell. The indoor base station equipment consists of channel groups. The channel groups each connect to the existing network, typically with a DS-3 with ATM signaling. The function of the channel group is to effectively act as a high-speed radio modem for the DS-3 traffic. The outdoor base station equipment (Tx/Rx node) modules are located on a tower or a rooftop mount and consist of frequency translation hardware and transmitters/receivers. The Tx/Rx node delivers and collects all the traffic to and from subscribers within a cell or a sector. Additionally, the Tx/Rx node equipment translates the channel group output into the appropriate frequency for over-the-air transmission. Multiple channel groups are used in each sector to meet the traffic demands, thus providing a highly scalable architecture. (IEEE Microwave Magazine)

1. The method of the base station is regarded as the method of the central location cell to collect all the traffic to and from.
2. The workers widely use the channel group functioning technique in this equipment.
3. The base station approach has got many advantages to collect all traffic to and from subscribers.

Text 3

Non-Line-of-Sight Wireless: Overcoming Multipath in Non-Line-of-Sight-High-Speed

Microwave Communication Links

Since the beginning of development of microwave wireless transmission equipment, manufacturers and operators have tried to mitigate the effects of reflected signals associated with signal propagation. These reflections are called

multipath. In real-world situations, microwave systems involve careful design to overcome the effects of multipath. Most existing multipath mitigation approaches fall well short of the full reliable information rate potential of many wireless communications systems. This section discusses how to create a digital microwave transmission system that not only can tolerate multipath signals, but that also can actually take advantage of them.

Digital microwave systems fall into two categories: wavelengths less than 10 GHz and wavelengths greater than 10 GHz (referred to as millimeter wave). Several bands exist below 10 GHz for high-speed transmissions. These may be licensed bands, such as MMDS (2.5 GHz), or unlicensed bands, such as U-NII (5.7 GHz). Bands that are below 10 GHz have long propagation distances (up to 30 miles). They are only mildly affected by climatic changes such as rain. These frequencies are generally not absorbed by objects in the environment. They tend to bound and thus result in a high amount of multipath.

Bands over 10 GHz, such as 24 GHz, LMDS (28 GHz), and 38 GHz, are very limited to distance (less than 5 miles). They are also quite susceptible to signal fades attributed to rain. Multipath tends not to be an issue because the transmission distances are less and because most of the multipath energy is absorbed by the physical environment. However, when these frequencies are used in highly dense urban areas, the signals tend to bounce off objects such as metal buildings or metalized windows. The use of repeaters can add to the multipath propagation by delaying the received signal. (IEEE Microwave Magazine)

1. The method of signal reflected effects is regarded as the beginning to develop microwave wireless transmission equipment.
2. The authors seldom use such multipath mitigation approaches in communication systems.
3. The newly developed method to create a digital transmission system has certain advantages to compare with multipath signal toleration.

**METHOD (n) – APPROACH (n) – TECHNIQUE (n) –
PROCEDURE (n) – WAY (n) – PATH (n) – IDEA (n) –
POSITION (n) – TREND (n) – SYSTEM (n) ETC**

**READ THE ARTICLES FRAGMENTS AND THE PATTERNS
USED TO ANALYZE AND MEMORIZE THEM**

Text 1

By Karen Lundegaard

Dan Freeman never intended to sell biodiesel fuel.

For years, Dr. Dan's Alternative Fuelwerks, his auto-repair shop and alternative-fuel station in Seattle, Washington, was focused on getting compressed natural gas into vehicles. But a few years ago, a local environmental group asked Mr. Freeman to start selling biodiesel, fuel made from soybeans that has lower emissions than regular diesel. At first he refused. A few months later, he decided it was "the simplest, most perfect solution" for cutting U.S. dependency on foreign oil.

Now, sales of biodiesel – which can be used in existing diesel automobiles – are the biggest part of his business. Mr. Freeman says he has more than 3,000 customers signed up, who get 24-hour access codes to the pump at his shop.

A typical customer, the 45-year-old Mr. Freeman says, drives up on a Thursday in a Subaru Outback wagon and asks a series of questions. The person comes back Monday in a Volkswagen Jetta diesel, ready to fill it with biodiesel.

Why do they make the switch? A few reasons, Mr. Freeman says: They no longer want to support foreign oil. They want to clean up the environment. They want to support the local economy and U.S. farmers. They like the "idea of never using petroleum again," he says. (The New York Times)

1. Focusing on compressed natural gas was regarded as an effective method not to sell biodiesel fuel by Dan Freeman.

2. A typical customer, the 45 year old Mr. Freeman made the switch to the newest method to cut U.S. dependency on foreign oil nowadays.

3. The newly developed procedure to sell soybeans fuel has many advantages over the old regular diesel.

Text 2

Fantasy Games are Virtual Living Rooms for Close-Knit Kinfolk

By Mike Musgrove

WASHINGTON – The Holman family gets together practically every weeknight and most weekends these days, even though Jean is in Washington's Dupont Circle, her father and sister Susan are in Pennsylvania and her uncle and cousin are in Texas.

Together, they are also in Tyria, the virtual world of a fantasy computer game called Guild Wars, where they form the "Jelo" team, fighting the undead and other groups of players as a family unit. Along the way, they also might plan vacations or share family gossip.

Although computer games have been thought of as a pastime for the anti-social, communal online worlds such as the one in Guild Wars are the hottest things in games these days. The most popular title in this genre, World of Warcraft, has more than five million subscribers – all text-chatting with fellow players or using microphones and headsets to collaborate on the latest monster-killing mission.

Game companies don't track how many families play online games together, but they say the trend helps drive their popularity. (The Washington Post).

1. The Holman family virtual world approach is regarded as effective and adequate to investigate fantasy computer world.
2. Game companies extensively spread on line games technique to help drive their popularity.
3. Widely developed genre title system World of Warcraft has some advantages over the existing systems for the subscribers.

Text 3

Auto Makers Gear Up to Introduce Vehicles with Appealing Traits

By Norihiko Shirouzu

An executive vice president of Ford Motor Co. opened 2006 with a startling message. "Small is big in America," Mark Fields declared in a speech at the Greater Los Angeles Auto Show.

It was quite a turnaround for the maker of hulking land yachts like the Ford Expedition and Lincoln Navigator. Even more so considering the state of the market: Small cars – subcompacts like the Hyundai Accent and the Kia Rio – accounted for less than 1% of U.S. car sales last year.

But now Ford and a host of other industry giants, including Toyota Motor Corp., DaimlerChrysler AG and General Motors Corp., are gearing up to introduce a host of small cars in the U.S., most priced around \$15,000 or less. A number of other Asian auto makers are joining the fray, importing small cars that have been big sellers elsewhere.

What is spurring these moves? A number of trends are coming together. There are increasing numbers of people in the U.S. – from young families to retirees – who can't afford, or don't need, big cars. Cities are more congested, making large cars less practical. And, most important, energy prices have soared.

1. The idea of small cars in America seemed to be effective to open 2006 Greater Los Angeles Auto Show.

2. Ford and other industry giants extensively examined the state of car market to introduce a host of small cars in the U.S.
3. The newly declared Mark Fields trend had some advantages for young and retirees as compared with less practical large cars.

**EXPERIMENT – TEST – TRIAL – SEARCHE – REID –
COMPETITION – MEETING – SHOW – RUN – SET:
INITIAL, PIONEER, EARLY, FURTHER, PROMISING,
SPECIFIC, THOROUGH, PRECISE, UNSUCCESSFUL,
MEANINGFUL ETC**

1. The authors } carried out } these } experiments }
 investigators } performed } such } tests }
 coworkers } understood } etc } trials }
 etc } conducted }
 } started }
 } finished }
 }
 } to { design
 { match
 { examine
 { study
 { formulate
 { show
 { demonstrate } smth
 { test
 { develop
 { evaluate
 { control
 { provide
 { complete
 { etc

2. The experiments } on { (some) equipment } were { done } { design }
 tests } { dive } { trains } { passed } { determine }
 trials } { living } { cars } { carried out } { establish }
 controls } { (radar) } { boats } { performed } { open }
 researches } { installations } { etc } { attempted } { develop }
 } { started } { to } { create } smth
 } { initiated } { } { reveal }
 } { } { } { examine }
 } { } { } { watch }
 } { } { } { etc }

**READ THE PAPERS FRAGMENTS AND THE PATTERNS USED
TO ANALYZE AND MEMORIZE THEM**

**Text 1
Accurate Simulation Models**

Education News

The design of RF and microwave power amplifiers continues to be somewhat of an art yet to be reduced to a systematic repeatable design practice on a wide-scale basis, despite the many excellent treatments of the subject in the literature (e.g., [1]), and a number of courses. The general unavailability of sufficiently accurate and reliable nonlinear models for power transistors has been a major factor in limiting the accuracy of power amplifier (PA) simulation results. Suitable nonlinear models must properly treat the nonlinear and combined dc/ac analysis required for proper power compression and efficiency simulation under varied load and bias conditions. Here an accurate nonlinear transistor model is shown to form the basis for a systematic simulation-based design procedure for a microwave PA. As an illustration of the procedure, a high-efficiency PA was developed with excellent first-pass performance results. This circuit was designed using a nonlinear transistor model and passive component models commercially available from University of South Florida (USF) spin-out company Modelithics, Inc. [2], [3] in combination with Agilent Technologies Advanced Design System software [4]. An 8-W PA with 62% efficiency was achieved at 1.3 GHz, without modification of the circuit. This circuit was awarded first place in an IEEE sponsored PA design competition. (Journal of Lightwave Technology)

1. The authors carried out initial experiments to develop a high-efficiency PA to demonstrate excellent performance results.
2. The promising experiments on a non-linear transistor model were undertaken to design that circuit.
3. The pioneer experiments on accurate nonlinear transistor models were done to form the basis for a systematic simulation – based design procedure.

Text 2

Student High Efficiency PA Design Competition

The 2005 competition attracted entries from five universities (Ecole Polytechnique de Montreal; Sogang University, Korea; University of California, Davis; University of California, San Diego; and University of South Florida) plus a sixth demonstration only entry (Postech University, Korea). The PAs were fabricated and tested prior to the contest and carried to IMS 2005 by team members. The test equipment used to evaluate the PAs was provided by Agilent Technologies and centered about a PNA Vector Network Analyzer programmed to display PAE. Special thanks must be given to the Agilent volunteers headed by Ken Wong for their assistance with the measurements. Each team was given time to optimize their amplifiers for the best efficiency. Most of the PAs operated near the minimum frequency of 1 GHz, where high efficiency

should most easily be achieved. The winning entry came from the University of South Florida and, was designed by Sonoko Akamatsu, advised by Prof. Larry Dunleavy. It produced an efficiency of 61.7% and operated near 1.5 GHz. The highest measured efficiency of 69.2% was actually produced by Postech's PA, but it was not part of the official competition. The entry from Ecole Polytechnique de Montreal, which used a Doherty design and achieved a PAE 50.4%, is also worthy of note; its unique design allowed this efficiency to be produced at a higher power backoff with higher linearity than the other entries. The PA entry from the University of California, San Diego, achieved a PAE of 58.85%. The Postech's HPA had exemplary performance. (MTZ Worldwide)

1. The authors carried out PA's tests to fabricate them prior to the contest.
2. The promising tests on Agilent Technologies equipment were done to optimize the best efficiency amplifiers.

Text 3

OFDM System Model

In older multi-channel systems using FDM, the total available bandwidth is divided into N non-overlapping frequency sub-channels. Each sub-channel is modulated with a separate symbol stream and the N sub-channels are frequency multiplexed. Even though the prevention of spectral overlapping of sub-carriers reduces (or eliminates) Inter-channel Interference, this leads to an inefficient use of spectrum. The guard bands on either side of each sub-channel is a waste of precious bandwidth. To overcome the problem of bandwidth wastage, we can instead use N overlapping (but orthogonal) sub-carriers, each carrying a baud rate of $1/T$ and spaced $1/T$ apart. Because of the frequency spacing selected, the sub-carriers are all mathematically orthogonal to each other. This permits the proper demodulation of the symbol streams without the requirement of non-overlapping spectra. Another way of specifying the sub-carrier orthogonality condition is to require that each sub-carrier have exactly integer number of cycles in the interval T . It can be shown that the modulation of these orthogonal sub-carriers can be represented as an Inverse Fourier Transform. Alternatively, one may use a DFT operation followed by low-pass filtering to generate the OFDM signal. The details of this method are explained in the next section.

It must be noted that OFDM can be used either as a modulation or a multiplexing technique.

1. The workers conducted bandwidth wastage experiment to overcome spectrum inefficient use problem.

2. The experiments on the subcarrier orthogonality specifying condition were attempted to represent the subcarriers like an Inverse Fourier Transform. (IEEE Microwave Magazine)

EXPERIMENT – TRIAL – COMPETITION – SHOW – RUN – SET
– SEARCH – EVENT – INCIDENT – ACCIDENT

**READ HE ARTICLES FRAGMENTS AND THE PATTERNS USED
TO ANALYZE AND MEMORIZE THEM**

Text 1

Lawyers Seek Release of Men in Aruba

By Peter Prengaman

ORANJESTAD, Aruba – Island residents and tourists prayed for a missing Alabama teenager at church services Sunday, and defense lawyers for two men detained in connection with her disappearance said there isn't enough evidence to continue holding them.

The case took an unusual turn over the weekend after Deputy Police Commissioner Gerold Dompig told the Associated Press that one young man in custody said "something bad happened" to Natalee Holloway, 18, when he and two others took her to a beach. But prosecutors refused to confirm or deny his account, and the investigation appeared to remain stalled.

The lawyers for two former hotel security guards also detained in the case since June 5 said they would file motions today seeking the immediate release of their clients. None of the five men in custody has been charged.

"This is turning into a game, an illogical investigation," said Noraina Pietersz, who represents Antonius "Mickey" John, 30. He and Abraham Jones, 28, deny any connection to Holloway. Attorney General Caren Janssen said Sunday, "There is reasonable suspicion, so its not time to let them go."

Holloway's mother said she thought the two former hotel security guards were innocent. But she said Aruban authorities should pressure the other young men to reveal what they know about her daughter's disappearance.

"All three of those boys know what happened to her." Beth Holloway Twitty said. "They all know what they did with her that night." (Weekend Journal)

1. Island residents and tourists prayed at church service to search the case of Natalee Holloway, 18, disappearance.

2. The prosecution searches over five men in custody were initiated to investigate a missing Alabama teenager case.

Text 2

Arlene Exits Quietly, Leaves Sighs of Relief

By Larry Copeland

PENSACOLA, Fla. – Little evidence remained Sunday of Tropical Storm Arlene, which swept ashore a day earlier as a much weaker storm than had been feared. A few puddles, scattered power outages and relieved smiles were about all that was left of the first named storm of this year's Atlantic hurricane season.

A city still dotted with debris piles, blue tarp-covered roofs and scarred psyches from September's Hurricane Ivan escaped the flooding and misery it had braced for. The expected 75 mph winds and 5-10 inches of rain that had residents lining up for gas and stocking up on storm supplies Friday never materialized.

No deaths or injuries were reported here from Arlene, which had winds of 60 mph when it came ashore. "We dodged a bullet," Mayor John Fogg says.

Arlene, which reached land about 3 p.m. Saturday just west of here, was a typical early season tropical storm – "a rainmaker and a little coastal flooding," says National Weather Service meteorologist Gary Beeler. It was not as big a rainmaker as the thunderstorms that drenched Pensacola this spring; April was the city's wettest month on record with 24.46 inches.

Still, some here worry that Arlene's early arrival might be a harbinger of an even more ferocious hurricane season than last year, when Florida was struck by four hurricanes in 44 days. The storms caused about 140 deaths and \$22 billion in insured losses. (USA TODAY).

1. The earlier storms accidents caused 130 deaths and \$22 billion to illustrate their sweeping power.

2. Blue tarp-covered roofs events and scarred psyches from September's Hurricane Ivan were left to realize its nature by National Weather Service.

Text 3

Second U.S. Case of Mad cow Disease

By Elizabeth Weise

Animal wasn't marketed; testing continues

There appear to be more questions than answers after the Department of Agriculture's announcement Friday night that the USA might have its second case of mad cow disease.

Agriculture Secretary Mike Johanns held a news conference Friday to announce that an animal that was the subject of conflicting earlier findings has tested positive in a more conclusive test. The samples have now been sent to a world-recognized laboratory in Wey-bridge, England, for confirmation.

Johanns and John Clifford, chief veterinary officer of the USDA's Animal and Plant Health Inspection Service, indicated that the agency may not know for up to two more weeks, as testing continues, whether the animal in question definitely had the brain-wasting disease. The test came back as a "weak positive," Clifford says.

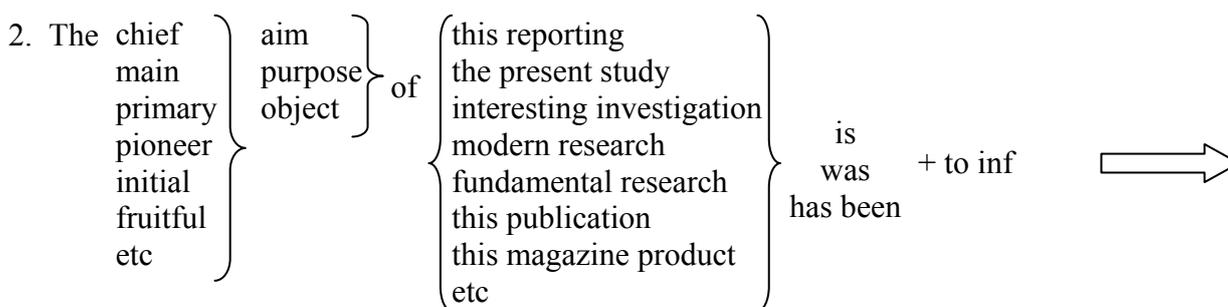
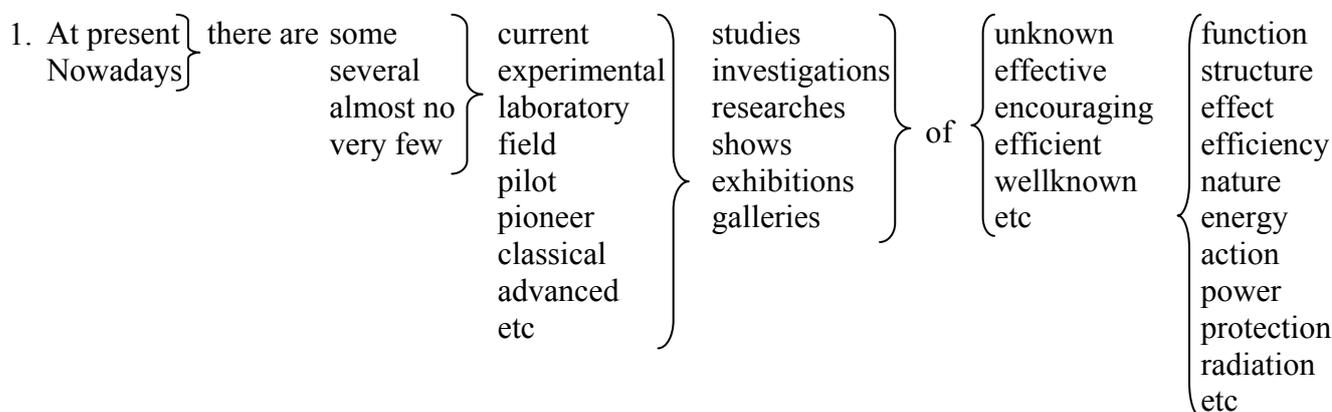
The USDA officials were quick to say, however, that the mad-cow "fire-walls" worked perfectly. Because the animal was unable to walk when it arrived at the slaughterhouse last fall, it was destroyed and did not enter either the food or the animal-feed chain.

"There is no risk to human health." Johanns said, adding that he planned to have steak for dinner that night.

Johanns did not disclose where the animal was slaughtered, leaving open the possibility that this may be the first case in a U.S.-born animal. The only confirmed U.S. case of the disease, known to scientists as bovine spongiform encephalopathy, was discovered in December 2003 in a Washington state dairy cow imported from Canada. (USA TODAY).

1. The Department of Agriculture's reported the second incident of mad cow disease to confirm no risk to human health.
2. Mike Johanns, Agriculture Secretary held a news conference to announce conclusive experiments results.
3. The samples were sent to a world – recognized laboratory to confirm the animals brain-wasting disease experiments.

STUDY – INVESTIGATION – RESEARCH: INITIAL, PIONEER, PREVIOUS, RECENT, PRESENT, FURTHER, ENCOURAGING, STIMULATING, FRUITFUL, ELEGANT, FULL-SCALE, EXTENSIVE, COMPREHENSIVE, TECHNICAL, HIGHLY TECHNICAL



- to obtain pioneer results (deep knowledge)
 to achieve full scale experimental data
 to find out the role of ...
 to establish some factors concerning (to concern), regarding (to regard) ...
 to reveal the causes of ...
 to publish this pioneer work

READ THE PAPERS FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

**Text 1
 The Future Looks Bright**

Now the focus is on developing countries.

Oil and gas companies planned to increase world-wide exploration and production spending in-2005 by 5.7 per cent – estimates suggest that spending will increase to US\$176.8bn in 2005 versus a figure of US\$167.3bn in 2004, with similar increases forecast through 2006.

"Exploration typically lags gains in the oil price because producers look for sustained demand before investing in projects that may not pump oil for 5-10 years. Oil futures, however, show that crude prices will stay at close to US\$40 a barrel until 2011, spurring investments once considered to be marginal."

The Lamnalco Group remains focused on the production support sector, at both ends of the supply chain, whether involving onshore/offshore support to floating production systems technology or providing, marine support solutions to onshore or offshore liquified natural gas (LNG) and oil production/export and reception/import facilities.

A scramble for reserves replenishment is accelerating the shift away from mature fields, such as those in the North Sea and Alaska, where companies have been harvesting the fruits of investments they made in the 1960s and 70s at costs far lower than those that prevail today. Now the focus is on developing countries such as Angola, Nigeria, Trinidad, together with the states of the former Soviet Union. National oil companies are also looking to increase their capacity in frontier territories.

1. At present there are some gas companies researches of increasing world wide exploration and production.
2. The initial aim of the Lamnalco Group focusing is to provide marine support solutions to concern oil production export facilities etc.

Text 2 ISU's Annual Statistics

Property (ships, bunkers and cargoes) salvaged by ISU members in 2004 totalled US\$1.46 billion in value – an increase of 15 per cent on the US\$ 1.27 billion recorded in 2003. The number of salvage services finalised rose to 194 (173 in 2003).

Revenue from Lloyd's Form and other contractual services (excluding SCOPIC claims and wreck removal) increased in 2004 -up by nearly 11 per cent to US\$ 84.3 million (US\$ 76 million in 2003). The return from casualty salvage services, expressed as a percentage of salvaged value, rose to 8.04 per cent, a return to 2002 levels (8.39 per cent). The 2003 return, at 5.99 per cent, was the lowest figure recorded since 1997.

These statistics concern the salvage cases finalised by award, negotiated agreement or fixed price. The actual salvage services may have been performed in 2004 or earlier.

ISU revenue from all forms of salvage activity (including wreck removal) fell from US\$ 195.6 million in 2003 to US\$ 183.25 million - a decline of just over six per cent. Hans van Rooij comments: "Record results from wreck re-

removal activities in 2003 helped compensate for the steady decline in salvors' earnings. In 2004, however, the uncertain wreck removal income stream declined dramatically, from US\$ 96.57 million to US\$ 32.12 million, despite the fact that the same number of operations -45- were performed. As a result, the overall income of the international salvage community resumed its decline. This adds further weight to the ISU's case that the international shipping and insurance communities should listen to the case for a new and distinct salvage reward for environmental protection services. This industry needs adequate income if spill prevention and other salvage services are to be provided in future years."

No Article 14 cases were finalised in 2004. Article 14's successor, the SCOPIC clause had been invoked in 104 cases up to the end of 2004. During last year 13 SCOPIC cases were finalised, producing revenue of US\$ 33 million - an increase of US\$ 10.4 million on 2003. A total of 61 SCOPIC cases had been finalised up to the end of 2004, producing revenue of US\$ 117.8 million (around US\$ 1.93 million per case).

1. There are some statistical ISU investigations of negotiated agreement and fixed price.
2. The primary study of ISU members is to get revenue from all forms of salvage activity.

Text 3 Competing

It's all about competitiveness.

About staying competitive. And today, competitive is all about business. About staying in business. Which, as anyone related to the auto industry knows, isn't easy. And if, some say, it's never been easy, then it can also be stated that it has never been harder. Now it isn't enough to be competitive within one's own sphere of geographical influence. Which isn't exactly a revelation to anyone serious about business. After all, people have been talking about "world-class" this and "global" that for the past several years. But it is interesting to see what the ramifications are on a supplier plant that was established 25 years ago with the intentions of, presumably, dealing with a trade agreement entered into by sovereign governments and consequently achieving lower labor and materials costs.

1. At present there is some investigation of effective auto industry competitiveness.

2. The primary aim of present competitive research is to achieve Lower labor and materials costs.

READ THE ARTICLES FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1 London Round-Up

The octogenarian American artist Ellsworth Kelly describes his paintings as "memories that haven't quite gelled," says Sarah Whitfield in a splendid introduction to the catalog for his show of 16 paintings and two sculptures at the Serpentine Gallery. This comment refers, for example, to a memory of the juxtaposition of the colors pink and orange in a painting of the Virgin and Child by Ambrogio Lorenzetti that Mr. Kelly spent a summer copying in Boston in the late 1940s. Ms. Whitfield says he went on to use that combination of colors in two major paintings in the early 1950s, but couldn't recall why.

Though this insight into latent memory isn't going to help you decipher the work in the current exhibition much of which is black, white or gray along with pure, highly saturated hues of blue, red, green, yellow and violet, it does help the viewer to know that there is some meaning to these large stretches of simple color.

On the other hand, it is possible to stand in the gallery's beautiful white rooms and simply respond to the shimmering power of the colors of these pictures, even to the all-white ones. Approach more closely and you notice the carefully made marks of the brush. The strangest aspect of this show is that, though the work feels like the product of a long artistic career and experience of life, and though it in some ways could not be more simple, it is never serene. There's an awful lot going on here, even if Mr. Kelly can't quite remember what it is.

1. There is an American extensive show catalog of 16 paintings and two sculptures by an octogenarian artist Ellsworth Kelly.
2. The chief aim of the current exhibition at the Serpentine Gallery is to respond to the shimmering power of the colors.

Text 2

Muslim Playboy

Take a look at the first Indonesian issue of Playboy magazine and it's hard to see what the fuss is about. But Islamic protesters still attacked the magazine's Jakarta offices last week and intimidated local distributors into refusing to sell its product. Long-time Indonesia watchers expressed fears for the Muslim-majority nation's future as a multicultural society.

All this over a magazine whose publication earlier this month left Indonesian men feeling distinctly untitillated. "The photographs in this are not even that provocative," one disgruntled purchaser complained to the Jakarta Post. All he could find was a touch of thigh and midriff in the few pages of photos sandwiched between essays on religion, literature and Indonesia's oil industry. That left local wags joking that, just for once, the standard male excuse – "I'm only buying it for the articles" – really had to be true this time. But that didn't stop extremists from the Islamic Defenders Front, or FPI, from vandalizing the magazine's offices. Their goals extend far beyond Playboy. With their attacks on bars and nightclubs and efforts to stop women going out alone at night, FPI vigilantes are trying to turn Indonesia. (Review & Outlook).

1. There is recent issue of Indonesian Playboy magazine of Jakarta publishing house.
2. The main purpose of Islamic protester magazine's attack is to refuse to sell the Playboy product.

Text 3

To the People's Queen

By Paul Levy

An American Citizen and a British Subject, Writes for the Journal on the Arts

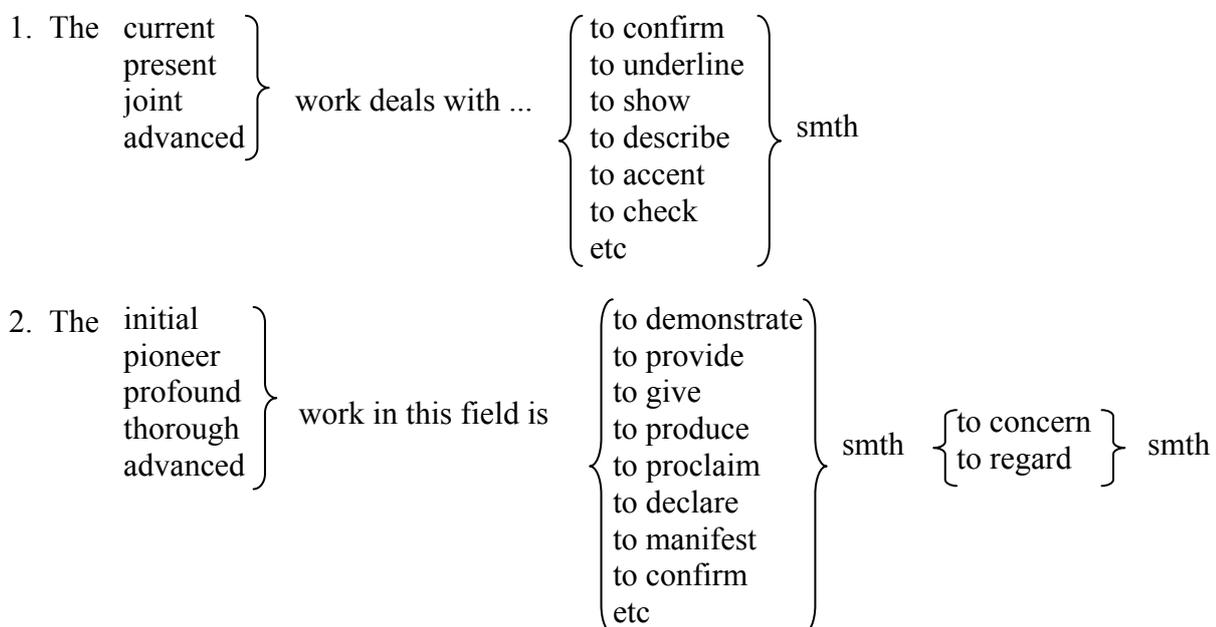
OXFORD, England-Happy birthday. Ma'am: One esoteric rule of royal etiquette is that the informal American mode of address here applies only to you, even on the day of your 80th.

In those years, you've done a great job as a symbol of unity for the four sometimes antagonistic nations – England, Northern Ireland, Scotland and Wales – that make up your kingdom. Your obvious dedication makes it possible for those legions of us who are newly British to feel patriotic without the irony with which Brits normally view patriotism.

Nowadays your subjects often think of themselves as citizens, as it says on their passports. And they don't care very much that you are also queen of the Commonwealth which brings together the 53 states that were formerly part of the British Empire. We know, though, that you feel passionately about it since you were once at handbags drawn with your prime minister, Margaret Thatcher, who threatened the stability of the Commonwealth by opposing sanctions on South Africa. In some respects you've been a thoroughly modern monarch – as when, in 1993, you voluntarily began paying taxes on your large personal income. This means that we get your services virtually for free? since your ancestor George III surrendered the revenues from the Crown Estate to the government in exchange for the Civil List, which finances the monarch's activities as head of state.

1. There is a great job done by the Queen of the four antagonistic nations.
2. The chief aim of the Queen is to bring together the 53 states of the Commonwealth, the former part of the British Empire.

WORK: INITIAL, PIONEER, USEFUL, EXTENSIVE, COMPREHENSIVE, JOINT, CAREFUL, PROFOUND, THOROUGH ETC



READ THE PAPERS FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

Bragg Grating Fast Tunable Filter

A fiber Bragg grating is a periodic perturbation of the refractive index along the fiber length which is formed by exposure of its core to an intense interference light pattern. Hill *et al.* in 1978 first noticed permanent changes in the refraction index of germanium-doped optical fibers due to an intense Argon-ion laser irradiation launched into the fiber. Meltz *et al.* demonstrated in 1989 the side writing technique which permits to realize Bragg gratings at every wavelength. Various methods are today in use to fabricate Bragg gratings by exposure of the fiber to ultraviolet (UV) laser light as the interferometric and the phase mask techniques. Photoinduced fiber Bragg gratings are currently in use for example as mirrors for fiber lasers, as temperature, stress or pressure fiber sensors in engineering, as filters, mode converters, or wavelength multiplexers in telecommunications.

To shift the Bragg grating central wavelength peak there are two main methods: by modifying the fiber refraction index or by changing the grating period. These variations can be induced thermally or by mechanical stresses. Due to the excellent silica behavior under stress and its low thermal expansion coefficient, 10-11 pm/°C at 1.5 pm. mechanical stresses have been preferentially applied to obtain wide tuning ranges. In particular, Ball *et al.* realized a compression based tunable fiber laser with 36 nm tuning range.

1. The current work deals with permanent changes in the optical fibers refraction index to be formed by exposure of its core.
2. The pioneer work by Meltz et al in the field of fiber Bragg grating is to fabricate such gratings by fiber exposure concerning (to concern) UV laser light.

Text 2

Polymer – Bonded Negative Electrodes for Led-Acid Batteries

It is common practice to blend polymers with active materials of an electrode in order to improve physical and electrochemical properties of the electrode. In the patent literature there are many descriptions of electrode structures incorporating a variety of polymers. This is exemplified by the work of Duddy who was one of the first to introduce polyethylene, polyvinyl chloride, and their copolymers as porous carriers of electrode materials. Other examples of processes which are based on the principle of polymer bonding are bonding fuel

cell electrodes with polytetrafluorethylene to render them hydrophobic and to bind the catalyst compounding metal oxides with polymers to produce conductive coatings forming rechargeable electrodes with a polymeric binder.

This report describes polymer bonding the active material of the negative lead electrode. The method improves the cycle life, charge acceptance, and lack of gassing of the lead-acid cell over that of commercially available ones. Scanning electron microscopy (SEM) was used to follow structural changes of the polymer-bonded electrodes during cycle life. This also supplied corroborating evidence for the dissolution-precipitation mechanism of the electrode reaction.

1. The present work deals with the process of polymers blending to improve physical and electrochemical electrode properties.

2. Duddy's pioneer work in the field of porous electrode materials is to introduce polyethylene, polyvinyl chloride and their copolymers to improve physical and electrochemical properties of the electrode.

Text 3

Non-Destructive Testing of Thermally Sprayed Coatings

There are very few reliable NDT methods available for thermally sprayed coatings. The majority of tests for coatings tends to be of a destructive nature, which, obviously can not be used on the actual coated part going into service and therefore, must be considered as a test for process control. The main practical NDT methods used are:

- Dimensional measurements- micrometer, eddy current and magnetic thickness measuring devices etc.
- Machining tests-response of coating during machining operations is a good test for general integrity.
- Visual inspection- grit blast spraying, coating/substrate, machined finish.
- Dye penetrant- used in limited applications, but natural coating porosity fogs flaw indications.

Ultrasonic and magnetic particle flaw detection methods have proved to be poor with thermally sprayed coatings due to the very high number of particle boundaries giving flaw like responses and causing high levels of interference.

Hardness testing is generally considered a destructive test for coatings unless made in a non-working area.

Advanced techniques like thermography, thermal wave interferometry and acoustic emission are presently being researched and are still laboratory set-ups with limited practical use for industry.

Destructive testing such as hardness, bend, bond strength, metallography etc. are important to prove the process and coating integrity expected in the component.

The limited non-destructive testing available for thermally sprayed coatings should emphasize the need for a high standard of quality control over the process to ensure a high level of confidence in the coated products.

1. The present work deals with the process of thermally sprayed coatings to confirm tests destructive nature.

2. The advanced technique work in the field of thermography is intended to re-search Thermal wave interferometry and acoustic emission.

READ THE ARTICLES FRAGMENT AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

Rover's Chinese Take Away

By Jo Knowsley

SWARMS of Chinese engineers are stripping valuable car-making equipment from the former MG Rover factory at Longbridge and sending it to the Far East.

Last week 400 men in hard hats were tearing out key pieces of machinery, packing it into crates and on to low-loader lorries.

The work has sparked fears that MG Rover's new Chinese owners are carrying out an asset-stripping "lift and shift" operation at the site of Britain's last volume car-maker.

An undercover reporter who got into the Birmingham factory saw the engineers removing machinery from most of the buildings on site. He said: "We did try to speak to these workers, but none of them spoke any English.

"It was all very mysterious, but there was a lot of activity going on."

Longbridge, birthplace of the world-famous Mini in 1959 and spiritual home to mighty British marques such as Rover, Austin and MG, closed in April with the loss of 6,000 jobs.

The business was bought by Nanjing Automobile Corporation in July and, last month, vice president Wang Qiu Jing said plans were in place for production to restart in 2007.

But there are now concerns about asset-stripping and whether Nanjing – which pledged 1,200 jobs at Longbridge – has the finance to fulfil its promises.

A spokesman for the T&G union said: 'Nanjing says it wants to have limited manufacture at Longbridge but we have always been concerned that this would end up as nothing more than a lift and shift campaign.

"After all, they have no obligation to the workforce."

Last night a spokeswoman for accountants Pricewaterhouse-Coopers, which took charge when the business went into receivership, said: 'We knew that they were going to remove some asset and send them overseas. It was always part of the plan.'

1. The thorough work done by Chinese engineers was discovered by an undercover reporter.
2. The joint work to remove some assets and send them overseas was part of the plan.

Text 2

Crime... It's Not a Laughing Matter

One of the main reasons Brits give for leaving their home country is that they feel it is no longer their own. They blame the increasing immigrant population for depriving them or their religion, their culture and their language. So they up sticks and move, mostly to Spain or France, where they proceed to inflict everything British upon their neighbours – depriving them, in turn, of their religion, culture and language.

In recent years, I have lived in both France and Spain. While Paris remains a refreshingly Brit-free zone, the Costa del Sol is packed with retired, overweight, over-tanned expats who feel malnourished if they so much as walk 100 yards without a chip.

Despite the fact that they make no effort to speak Spanish and mingle with the local community, they can't, really be blamed for leaving the UK, and if more reasons were needed to do so, last week's television provided them by the bucket load.

MacIntyre's Toughest Towns is a ten-part series in which investigative journalist Donal MacIntyre visits town and cities in the UK with the highest crime rates. It is all a far remove from my childhood in Wales, where the greatest crime I recall was when a patient on day release from the "mental hospital", as it was affectionately known, stole the City bus and drove it through the village at 60mph.

Pity the young people growing up in today's Glasgow. Actually, pity everyone living in today's Glasgow. Once billed "the Chicago of Europe" (without the "Hope" of the television series), in 2003 there were 31 murders, most of

them knife-related. There are two to three knife injuries a day, with 37 percent of stabbings taking place at weekends, and most of them alcohol-related.

1. The extensive work of the increasing immigrant population led Brits to leave their home country.
2. The criminal statistics work shows Glasgow to be the highest crime rate town in the UK.

Text 3

Harmful algae arrive on New England coast at peak of the season; the bloom "couldn't come at a worse time"

By Rick Hampson

Bruce Keafer was looking down the barrel of his microscope for signs of red tide. But he didn't expect to see the first evidence of New England's worst outbreak in three decades.

The ocean biologist's research vessel was 15 miles off Cape Cod. He had already inspected water samples from two other spots in Massachusetts Bay and found only a few of the toxic algae cells that contaminate shellfish.

Suddenly, the water in a new slide under his microscope was swimming with them.

He started to count the cells, which look like two hard hats pressed together brim to brim, using a hand counter. *Click, click, click.* A colleague heard the sound and came over.

"We got a lotta cells here," Keafer said. "So many I can't count 'em all." It was time to call state fisheries officials: *Boston, we have a problem.*

That was May 10. A month later, clam beds from Maine to 1 Massachusetts have been closed, thousands of shellfish-ermen are out of work, and the red tied bloom shows no sign of abating. A reading of 200 red tide cells per liter of seawater is considered toxic; since their initial discovery, scientists aboard the research ship have found 40,000 per liter. (USA TODAY).

1. Bruce Keafer work dealt with the process to look down the barrel of his microscope for signs of red tide.
2. The current work of the ocean biologist was to find the toxic algae cells to contaminate shellfish.

DATA (n) – RESULTS (n) – FINDINGS (n) – EVIDENCE (n):
PRELIMINARY, BASIC, CHIEF, MAIN, CONCLUSIVE,
COMPARABLE, DRAMATIC, STRIKING, UNRELIABLE,
INVALID, FUNDAMENTAL

1. The data } they
 findings } the authors
 results } the workers
 } the coworkers
 } scientists
 } investigators
 } publishers
 } etc. } reported here are rather { convincing
 } } { dramatic
 } } { striking
 } } { elegant
 } } { conclusive
 } } { fundamental
 } } { etc
2. The data } available in { literature } striking
 The information } { the monography } convincing
 The literature } { the journal } reliable
 The evidence } { the magazine } (do not) seem to be { conclusive
 The report } } } { unreliable
 } } } { etc.
3. Most of the data } are } chiefly } obtained } from recent studies of ...
 findings } were } largely } achieved } from experiments on ...
 results } } } done } by large scale experiments on ...
 } } } etc. } by the laboratory tests ...

**READ THE PAPERS FRAGMENTS AND THE PATTERNS USED
 TO ANALYZE AND MEMORIZE THEM**

Text 1

**Tsunami Waves Generated by 1883 Krakatau Eruption:
 Analysis and Source Definition**

The 1883 Krakatau volcanic eruption has generated a destructive tsunami higher than 40 m on the Indonesian Coast where more than 36,000 lives were lost. Sea level oscillations connected with this event have been reported at significant distances from the source in the Indian, Atlantic and the Pacific Oceans. Evidence of many manifestations of the Krakatau tsunami was a subject of the intense discussion. Thirty-five tide-gauge records were collected by the Royal Society and published in the special report in 1886. All records are digitized with time step 2 min and processed.

First of all the filtration of high-frequency noise by a sliding average with a 5 minutes window has been made. Then inflows have been eliminated with

the help of the Godin's filter. The Godin's filter is based on a sliding average method, convenient for a low-frequency filtration. It includes consecutive connection of 3 filters with a different average window length. In our case it is 60, 60 and 70 minutes.

1. The data available in the paper to concern 36 000 lives lost seem convincing.
2. The evidence of the 1883 Krakatau volcanic eruption they reported here is striking.
3. Most of the dramatic findings were chiefly obtained from the Royal Society in 1886.

Text 2

Six Myths of Market Research

Harari, Oren

If businesses took market research as gospel there would be no such thing as hair-styling mousse or telephone answering machines. Market research initially identified mousse as "goopy" and answering machines as "rude," reports the University of Chicago's Willard Zangwill. Even after using the full array of customer research techniques, 92 percent of new cereal introductions fail, he reports. And with a success rate of only 8 percent, "more and more companies are revising their thinking about doing customer research as usual," he says.

As indeed they should. Last month I suggested that market research can easily mire a company in a corporate equivalent of a LaBrea tarpit and lead you down the path to self-destructive management. To demonstrate, let's examine six myths.

1. The data the author reported here to concern market research are rather convincing.
2. The information available in the paper fragment to regard six myths seems to be rather interesting.
3. Most of the findings collected on the basis of a systematic analysis of 100,000 respondents are largely achieved by the studies of Coca-Cola company research.

Text 3

Coca-Cola's Gaffe

Remember Coca-Cola's monumental gaffe to replace "old" Coke with "New Coke" a few years ago? The decision was based on the most meticulous market research; a systematic analysis of more than 100,000 respondents. The

results were accurate-in describing peoples' reactions to taste tests in an artificial setting. But as one soft drink executive told me: "The people who participated in the tests didn't realize that the old Coke would be taken off the shelf. That was like finding out that the company used your results to kill momma."

Meanwhile, the Nielsen and Arbitron ratings which drive entire television and radio industries-have been accused in independent sources of "flimsy statistics."

1. The findings Coca-Cola reported here are rather striking.
2. The data available in the paper seem to be accurate.
3. Most of the findings to regard "New Coke" replacement are the results of a systematic analysis of more than 100,000 respondents.

READ THE ARTICLES FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

Rich Can Contribute More to Social Security

Reba Shimansky, New York

USA TODAY argues that lifting the \$90,000 wage cap on Social Security taxes is the wrong answer for the program's solvency problems. The newspaper says that it is wrong to make 6% of wage earners responsible for the entire solution and that those earning under \$90,000 should sacrifice to save Social Security ("Taxing the rich won't solve Social Security's problems," Our view, Should the prosperous pay more? debate, Wednesday).

I could not disagree more.

The U.S. tax system is supposed to be progressive. But the Social Security payroll tax is regressive. Why shouldn't those who earn over \$90,000 pay the same percentage of their income into Social Security as those who earn less? Especially since those high earners have benefited the most from President Bush's tax cuts.

There is no need to cut benefits and rise the retirement age. Social Security is not going broke. It will pay benefits until 2041, when only minor adjustments will be necessary to maintain its solvency.

In his effort to destroy Social Security, Bush is flying around the country trying to scare Americans that the system is going broke. However, like most things that Bush says, that is a lie.

1. The findings USA TODAY reported here are not so conclusive to concern social security taxes.
2. The data available in the fragment to regard 6% of wage earners responsible for the entire solution seem to be not very convincing.
3. Most of the results are largely achieved by Bush Social Security.

Text 2

Equal Taxes All Around?

Steve Schoeman, Leawood, Kan

I've read with interest USA TODAY'S coverage of Social Security reforms, in particular a letter from reader Peter Blackstock regarding the \$90,000 income cap ("It's about equal treatment," June 6).

He argues that the cap should be eliminated to ensure Americans who make more money are paying their fair share. He notes that someone who earns \$200,000 a year is paying only about 2.8% to Social Security, but those who make less than the \$90,000 cap are paying 6.2%.

That is a fine argument to make if you're willing to also use that same logic for income taxes.

Is Blackstock willing to agree that a person who earns \$200,000 should pay only 25% of his or her income in taxes - the same percentage as someone who earns \$60,000 - instead of the 33% he or she pays under today's tax system? After all, according to his comments, it is about equal treatment. I highly doubt he would agree in this case.

This is the kind of sleight of hand, faulty argument that is typical of the political left. To them, fairness in taxation is getting the most money as possible out of those who earn the most

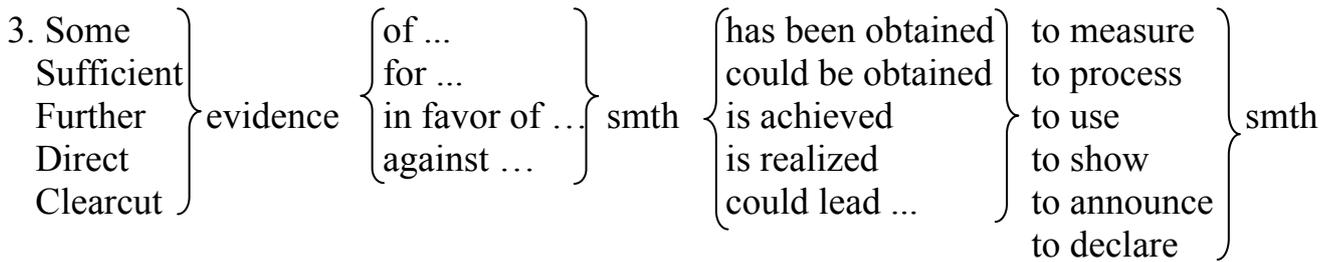
1. The findings USA TODAY reported are of interest for readers of the newspaper.
2. The data available do not seem to be unreliable for Americans.
3. Most of the findings are largely obtained from Social Security reforms publications.

Text 3

Americans Can Fix Program

USA TODAY's editorial describes the risks to the broad support for Social Security if the necessary reform is based on taxing the "fellow behind the tree."

to report



READ THE PAPER FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

The Management of Organizations

Peter Drucker emphasizes the necessity of management by objectives' if high performance is to be achieved. Thomas Peters and Robert Waterman, in an influential analysis, report a set of eight attributes which characterize excellent firms, and propose that they should be widely adopted. William Ouchi asks what management lessons the West can learn from Japanese companies, and suggests adaptations which can be beneficially applied. Rosabeth Moss Kanter proposes ways in which organizations should be managed to draw more fully on the total human resources within them.

1. At present there is clear evidence by Peter Drucker to emphasize the necessity of management by objectives to achieve high performance.
2. Until now there were no eight attributes to characterize excellent firms.
3. Sufficient evidence of management lessons from the West could be learned from Japanese companies to suggest and apply some adaptations.

Text 2

Organizations with different structures, functioning in different environments, have to be managed. As long as there is management there will be the problem of how to manage better. In one sense, attempts at answers to the problem will be as numerous as there are managers, for each will bring an individual approach to the task. None the less, at any one time there is enough in common for there to be broad similarities in what is thought and what is taught on this issue. The writers in this section have each sought to improve the understanding

of administration and its practice. They have looked for the ingredients of a better management.

1. At present we have enough evidence to manage organizations with different structures and in different environment.
2. Until there is management there is clear evidence to manage better.
3. Direct evidence in favor of administration improving understanding is chiefly achieved by looking for the ingredient of a better management.

Text 3

Henri Fayol

Henri Fayol puts forward a classic analysis of the management task, based on his long practical experience of doing the job, and the personal insights he gained. F. W. Taylor's name is synonymous with the term "scientific management". His extremely influential ideas made him a controversial figure in his own day and have remained a subject for much argument. Harry Braverman, from a Marxist perspective, mounts a critique on the degradation which Taylor's ideas bring to modern work.

1. Nowadays we have practical evidence to use Fayol's classical analysis of the management task.
2. Until now there is convincing evidence to consider F. W. Taylor's name to be synonymous with the term "scientific management".
3. Sufficient evidence against F. W. Taylor is mainly achieved by making him a controversial figure.

READ THE ARTICLES FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

As Tensions Subside

By NORIMITSU ONISHI

Outdated ideas about warfare and North Korea.

UIJONGBU, South Korea – In this city that lies between Seoul and the border with North Korea, an odd-looking gatelike structure rises above the main street, ready to be dismantled. It still supports what seems to the naked eye to be several metric tons of concrete that serve no particular purpose beyond casting a shadow over approaching cars and the small shops nearby.

The concrete slab, transformed into a giant billboard, offers few clues. "Kids learn from Dad's good driving and yielding," says an advertisement for Kia Motors. Below it a message warns: "Report Spies. Call 080 7771113."

"Where are the spies?" asked Moon Jung Bin, 12, who was eating at a nearby store with her classmate Lim Ji Su, also 12. "How do you discover who's a spy?" Ji Su said, as the two started giggling.

Neither had ever noticed the exhortation to report on infiltrators from North Korea. As for the odd-looking structure itself, although Jung Bin believed it was "some construction project," Ji Su's parents had told her that it was, in fact, an antitank fortification.

In the event of an invasion, explosives would blow up the fortification and send concrete blocks crashing down to form an instant barricade.

1. At present Uijongbu (South Korea) has clear evidence to witness an odd-looking gatelike structure to be dismantled.
2. Now there is enough evidence to consider the construction protect as an anti-tank fortification.
3. Further evidence against the project is reported to send concrete blocks crashing down to form an instant barricade.

Text 2

Stars Tired of Travel Settle in Vegas Luxury

By FRANK BRUNI

LAS VEGAS – Not many performers have backstage dressing rooms in a luxurious league with Celine Dion's. Hers is less a niche for primping and idling than a rambling private apartment, reached by way of a hidden garage deep below Caesars Palace. It not only has a large dining room, where she can entertain guests, but also a smaller one, where she can dine alone. Beyond the brightly lighted area for hair and makeup is a softly lighted room for massages. All that singing and chest thumping in performance are murder on her back.

Las Vegas has been nothing if not comfortable to Ms. Dion, who made her debut here in 2003 as the resident talent at Caesars, performing about five shows a week in a 4,100-seat theater built specifically for her, at a cost of roughly \$95 million. Instead of flying to a new city every day, she slips into the back seat of a black Mercedes for a 20- to 30-minute commute.

1. Nowadays we have not enough evidence to possess backstage dressing rooms in a luxurious league.

2. Just now there is definitive evidence to confirm the publication to concern Celine Dion's niche to entertain guests to dine.

3. Futher evidence in favor of Mr. Dion as the resident talent at Caesars is realized to declare Ms. Dion's five shows weekly at a cost of \$95 million in Las Vegas.

Text 3

The tiny tropical frog that could rid the world of Aids

By Eleanor Wayne

A LITTLE red-eyed frog could hold the key to ending the scourge of AIDS.

Scientists have found that a chemical in the skin of the Australian red-eyed tree frog can block infection by HIV - the virus that causes AIDS - by destroying the viral particles.

They hope further research could lead to an 'after-exposure' lotion to protect against HIV and AIDS.

The chemical is part of the 2S in-long frog's defences. Special glands on their skin produce and store packets of the compound, which is released when they are injured or alarmed and acts to protect them from infection by killing fungi, bacteria and viruses.

The ability to target HIV was discovered when researchers at Vanderbilt University in Nashville, Tennessee, decided to investigate whether the chemical was effective against viruses that infect humans.

In tests using human immune system cells, the chemical killed HIV particles but left the immune cells unharmed. It is thought to work by damaging the membrane of each viral particle, either by punching holes which cause it to fall apart, or through a 'detergent effect' which breaks apart fatty molecules in the membrane.

Research leader Dr Scott Van-Compernelle said: 'There are lots of substances which destroy viruses but the trick is finding one that doesn't also destroy the membrane of our cells. That is why these frog peptides are unique.'

Further tests showed the chemical could stop the virus being passed between cells, thus blocking infection. The scientists infected cells with HIV, treated them with the frog chemical and then exposed them to healthy cells. The virus appeared to have vanished.

They hope it will be possible to develop a cream to target infected cells.

1. At present we have, sufficient evidence to end the scourge of AIDS.

2. Until now there is no much evidence to believe the Australian red-eyed tree frog to block infection by HIV (the virus to cause AIDS).

1. Our information to concern Henry Fayol to be an economist has been no more than a tentative assumption.
2. . Fayol biography data in the very paper correspond with the basic assumption to concern his practical and theory activity.
3. The assumption to regard Fayol to be a great specialist in general management administration is confirmed by his ideas in published articles.

Text 2

The History of Management Science

The English version appears as *General and Industrial Management*, translated by Constance Storrs and first issued in 1949. There has been some debate over this rendering of the title of the work, and in particular of expressing the French word "*administration*" by the term 'management'. It is argued that this could simply imply that Fayol is concerned only with industrial management, whereas his own preface claims that: 'Management plays a very important part in the government of undertakings; of all undertakings, large or small, industrial, commercial, political, religious or any other.' Indeed, in his last years he studied the problems of State public services and lectured at the *Ecole Superieure de la Guerre*. So it can be accepted that his intention was to initiate a theoretical analysis appropriate to a wide range of organizations.

Fayol suggests that: 'All activities to which industrial undertakings give rise can be divided into the following groups.

1. The English version of the title of the work has been just an assumption to verity a special term "management".
2. Fayol preliminary industrial management ideas do not correspond with the assumption of Fayol own preface claim.
3. In reality the assumption to regard management of all undertakings was confirmed by Fayol theoretical analysis appropriate to wide range of organizations.

Text 3

Oracle is the Leader in E-Business Management Solutions

Oracle enables transactions to flow seamlessly throughout Oracle's supply chain modules without delay or redundancy. This is possible because Oracle built Oracle Supply Chain Management from the ground up leveraging leading internet practices and a common data model. Critical information is shared across applications, eliminating the need to synchronize and ensuring accuracy so you can rapidly respond to and satisfy changing customer demands. As the only provider of one hundred percent internet-based applications, tools, and da-

tabase technology, as well as global consulting, education, support, and partner services, Oracle provides the most complete e-business supply chain management solution.

1. Oracle Supply Chain Management to be the leader in e-Business is not a tentative assumption.
2. Critical information does not contradict the assumption of rapid respond to change customer demands satisfaction.
3. The assumption of Oracle to be the only provider of one hundred percent Internet-based applications tools, data base technology is confirmed even by the Critical Information.

READ THE NEWSPAPERS FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

Which of These Can Prevent Cancer

By GINA KOLATA

Leslie Michelson does not have prostate cancer, hut as chief executive officer of the Prostate Cancer Foundation he knows all too well how bad the disease is. So Mr. Michelson, 54, changed his diet.

He used to avoid cruciferous vegetables, like cauliflower and Brussels sprouts, hating their taste. Now he has them three or four times a week. He rarely ate fish, but now has it three times a week. He eats tomato sauce at least twice a week.

"I'm persuaded that with prostate cancer, diet makes a difference," he said.

Mr. Michelson is one of a growing number of people worried about cancer because it is in their families or because they have seen friends suffer with the disease – who are turning to diets for protection. Cancer patients, doctors say, almost always ask what to eat to reduce their chances of dying from the disease.

The diet messages are everywhere in the United States, the National Cancer Institute has an "Eat 5 to 9 a Day for Better Health" program, the numbers referring to servings of fruits and vegetables, and the Prostate Cancer Foundation has a detailed' anticancer diet.

Yet despite the advice, scientists say they really do not know whether dietary changes will make a difference. It is turning out to be much more difficult than anyone expected.

It's not that broccoli is bad for you. But evidence is lacking that eating your vegetables can prevent cancer.

Fat and breast cancer once seemed closely linked. But large, well-done studies have show no connection.

A lean diet, like one with fish, may prevent heart disease. Cancer is another matter.

1. The chief executive officer Leslie Michelson idea to change Mr. Michelson diets was a recent assumption to prevent from prostrate cancer.

2. Cauliflower and Brussels sprouts, like fish and tomato sauce all together do not contradict Leslie Michelson previous assumption to concern prostrate cancer.

3. The assumption of diet making difference is not confirmed by scientists.

Text 2

The Archbishop of Canterbury Warns

The House of Lords will this week discuss the possibility of an Assisted Dying Bill, allowing doctors to agree to the requests of sick people who want to be helped to die at a point of their choosing. It is not a proposal for euthanasia against the will of a patient. But it is clear that the current proposals would be a significant first step in this direction.

It is crucial to realize that if any such Bill is accepted by Parliament, it will signal a fundamental change in the relationship of the law of this country to the people of this country.

The law has always been what guarantees the security and the lives of citizens, irrespective of quality of life or life expectancy. If it becomes lawful for a private citizen to bring about the death of another private citizen, we are in uncharted waters.

I make no secret of the fact that I believe that I must oppose this Bill, chiefly on the grounds of my religious commitments - the conviction that life is a gift from God that we cannot treat as a possession of our own to keep or throw away as we choose; the conviction that no situation is completely beyond the grace of God.

Now it would be wrong to make particular laws - or to resist the making of laws - as if everyone in this country shared these beliefs, and I don't assume that everyone does.

However, if this proposed law is as misguided as most religious people think, we should not be surprised to find other factors that reinforce this sense of disquiet, factors not directly related to religion.

1. House of lords assisted Dying Bill discussion is no more than a tentative assumption for a Bill to be realized.
2. Allowing doctors to agree to help sick people to die at a point of their choosing contradict the law and religious assumption.
3. The assumption of euthanasia Bill contradicts to guarantee the security and the lives of citizens.

Text 3

A Blow to Business

One attraction to the business of shellfishing is low overhead. In towns such as Chatham, shellfishers work much as they have since colonial times, with nothing more than a rake and a basket.

And they are being hurt by the infestation. "This should be the time of year when you start coming out of the hole and, make some money," says Pete Schimmel, 45, who has dug clams on the cape for 15 years. "You're just through paying your taxes, your license, your mooring fees."

Some clammers have other occupations. Tom Upson, 46, earns about half his income from the seabed. He also paints and sells watercolor seascapes. This week he's finishing work on a scene of the Stage Harbor Lighthouse and lobbying officials for emergency assistance.

The governors of Massachusetts and Maine have declared a state of emergency, allowing their states to seek federal disaster aid for the shellfish industry. Sen. John Kerry and other members of the Massachusetts congressional delegation have asked the Small Business Administration to see whether the shellfishers are eligible for low-interest loans.

Seasonal shellfishers include college students such as Shannon Eldredge, 22, a recent graduate of Keene State College in New Hampshire. She hoped to make about \$10,000 this summer to pay off student loans and save for graduate school. "Now I can't dam," she says, "and no other job in town measures up. I'm broke."

1. Shellfishing business attraction is not just an assumption to concern such towns as Chatham.
2. This fragment information corresponds to the earlier assumption to regard other clammers occupations.
3. The assumption to declare a state of emergency is confirmed by the governors of Massachusetts and Maine to seek federal disaster aid for the whole shellfish industry.

HYPOTHESIS (n) – HYPOTHESES (pl): WORKING, TENTATIVE, HELPFUL, STIMULATING, PECULIAR, IMPROBABLE, INVALID, (UN) TRUE

1. The above hypothesis of. ... was advanced in ...
2. The author } suggested }
the company } advanced } the hypothesis { in the last decade
scientists } put forward } { in the early (60 s) etc
{ in the late (40 s) etc
3. The hypothesis of ... { is { offered { to explain
{ was { suggested { to account for
{ has been { advanced { to verify
{ put forward { to declare
{ to proclaim
{ etc } smth

READ THE PAPER FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

Noise and Loading Action in Helicopters.

SUMMARY

This paper deals with the hovercraft noise problem from two distinct points of view. At the outset, hovercraft noise is reviewed in relation to the noise associated with other means of transport. While hovercraft appear to be rather less noisy than aircraft of comparable installed power, they tend to be noisier than conventional surface transport. It is concluded that, for the first generation of commercial craft, the distance between a terminal and the nearest houses in a quiet residential area should be at least 800 yds to completely avoid increase in the normal level of noise. On the other hand, in a busy urban locality, a distance of 150 to 200 yds is sufficient to bring the noise from the hovercraft down to the existing level of traffic noise. Estimates made in connection with the design of the SR.N4 show that these distances will be substantially reduced for the next generation of hovercraft. It is pointed out that the noise problem at a terminal can be alleviated by minimising the need for manoeuvring.

1. The hovercraft noise hypothesis was advanced in relation to the noise associated with other means of transport.
2. They advanced the hovercraft hypothesis to show rather less noise compared with installed power aircraft.

3. The hypothesis of noise problem (the noise problem hypotheses) was advanced to bring (to reduce) the noise from the hovercraft down to the existing level of traffic noise.

Text 2

Comparison with Aircraft Noise

Fig 1 shows over-all sound pressure levels for the SR.N2 and SR.N5 (i.e. the craft used on the Ryde-Southsea service) plotted against the distances at which the measurements were made. Comparing the hovercraft measurements with the superimposed aircraft noise data, it will be seen that neither of the hovercraft is as noisy as a typical propeller-driven transport aircraft (let alone a turbojet), while many of the points fall in the light aircraft band.

At first sight, the relatively low noise levels for the hovercraft are rather surprising and suggest that, since it is not weighted to give prominence to high frequency noise, the overall sound pressure may not be a good basis for comparison. However, while this- particular unit probably gives the hovercraft some advantage relative to piston-engined light aircraft, it was very evident-at the 1964 SBAC Show that the noise produced by the SR.N5 was insignificant compared with that from most of the aircraft taking part in the flying display.

Even when the comparison is made on the basis of weighted sound levels (dBA), it is evident that neither the SR.N2 nor the SR.N5 is unacceptably noisy *by aircraft standards*. Fig 2 shows measured dBA levels for these two hovercraft plotted against distance. Noise "climates" for various situations are superimposed on the diagram but, for the present, we shall confine our attention to the maximum levels permitted in London.

1. The above hypothesis (Fig.1) of overall sound pressure levels for the SR.N2 was advanced by Ryde-Southsea Service.
2. They suggested the hypothesis to compare the hovercraft measurements with the superimposed aircraft noise data.
3. The tentative hypothesis is introduced to explain weighted sound levels (dBA).

Text 3

Siting of Terminals

From the foregoing review of the noise from hovercraft and conventional surface transport it is evident that the movements at a terminal are unlikely to produce any significant change in the noise "climate" of an urban situation only a quarter of a mile away. If the district is one with roads carrying heavy traffic,

this distance could come down to something of the order of 150 to 200 yds. The extreme situation was studied at the Ryde terminal for the service across Spithead last summer, «here the base was located close to one of the quietest residential areas on the outskirts of the town.

The siting of the terminal, in as far as it influences the amount of space available, the layout and the need for manoeuvring, also has an important influence on noise. The subjective effects of fluctuations in the noise level associated with propeller pitch adjustments during the approach of the SR.N5 have already been noted; obviously the need for such corrections must be related in some way to the limitations imposed by the approach path and the space available for setting the craft down. Again, if the craft has to be turned before departure, the consequent manoeuvring extends the duration of the noise.

1. The stimulating hypothesis was evident to be advanced to produce any significant change in the noise “climate”.
2. The working hypothesis to study the extreme solution at the Ryde terminal was advanced in previous summer.
3. The true hypothesis of fluctuations subjective effects was proved to explain the level noise associated with propeller pitch adjustments.

HYPOTHESIS(ES) – PROPOSAL(S) – IDEA(S)

READ THE ARTICLES FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

Governor Wants Better Training

By Our Banking Correspondent

ROBIN Leigh-Pemberton, the Governor of the Bank of England, last night called for a high level of training and professional standards in the securities industry to protect the City's position, as a worldwide financial centre.

He was speaking at the official launch of the Securities Institute, the new professional body for the City's stockbrokers, asset managers and corporate financiers.

The institute will be responsible for training and qualifications in the securities industry.

Mr. Leigh-Pemberton said: "Whatever the regulatory regime, the competence and ethics of practitioners are bound to remain the essential underpinning to a sound and honest market. The institute will help to provide the infrastruc-

ture, in terms of trained and qualified personnel, to sustain the City's reputation."

"The stock market has always prided itself on its integrity and "professional expertise. These qualities are as important as ever and subject to greater scrutiny, from regulators, the press and the general public," he added.

The institute was founded in March and has replaced individual membership of the London Stock Exchange. It already has 3,500 members, most of whom have transferred from the stock exchange, it hopes to expand this to 5,500 by March.

Its main role will be to organise a training and qualification programme on behalf of the Securities and Futures Authority. Prospective members of the institute will have to pass three levels of exams, foundation, competency and professional, before they can join.

The institute has also drawn up a code of ethics and will discipline members that break the rules.

1. The stimulating hypothesis of Mr. Leigh-Pemberton to protect the City's position as a world-wide financial centre was advanced at the official launch of the Security Institute.
2. The Governor of the Bank of England put forward the hypothesis to provide the intra structure to sustain the City's reputation.
3. The working hypothesis of expanding London Stock Exchange to 5,500 members was offered to raise the Role of the Institute founded in March.

Text 2

Even 'Toons Must Follow The Rules

Just like every Academy Awards category, the one for full-length feature animation has rules. Thursday is the final deadline for studios to hand in potential titles and, with an assist from the academy's John Pavlik, here's an animated Oscar guide for dummies. The complete rules can be found at oscars.org.

An "animated film" must be at least 70 minutes in length, have a significant amount of major animated characters and be at least 75% animated. Pavlik says a discussion arose about what defines an animated movie. "Is there a difference between animation and computer graphics? Was the intention to look animated or fake reality? There's room to adapt and change the rules as needed."

The short films branch (about 330 members) that covers both live-action and animation now includes features. It's not such a big switch since many who create full-length cartoons belong, anyway. A branch committee will judge the submissions in mid-December to determine if there are at least eight worthy

films and may recommend to the board of governors that a category of three should exist. If there are 16 or more eligible entries, then five films may be nominated.

1. The stimulating hypothesis of feature animation was announced by Academy on Thursday.
2. John Pavlik put forward a working hypothesis to arise the problem to concern an animated movie.
3. The hypothesis of a Branch committee was suggested to judge the submissions in Mid December to determine at least eight worthy films.

Text 3

Next Phase of Scheme

PHASE seven of the 525-home Queen Elizabeth Park development in Stoughton has been given the go-ahead.

Members of Guildford Borough Council's planning committee were initially unhappy with the proposal, which includes 46 home comprising 30 affordable units and 16 private units.

Councillor's branded the block of flats, which were designated as affordable "unacceptable" and then sent the designs back to Linden Homes so they could be redrawn.

The application was also deferred to allow officers to negotiate sustainability measures additional planting and details of the emergency access.

Cllr Fiona White (Lib Dem, Stoughton), who requested the deferral said: "I am sure the members of the committee will agree that the new design is very much an improvement.

"I am glad that it went back for further negotiations.

Cllr White continued: "I am also satisfied that the planting is adequate and that the emergency access is now acceptable."

1. The stimulating hypothesis of the adequate planting and the acceptable emergency access was advanced by Cllr Fiona White (Lib Dem, Stoughton)/
2. The working hypothesis of phase seven of the 525-home Queen Elizabeth Part development in Stoughton was to be given the go –ahead.
3. The true hypothesis of the application to allow officers to negotiate sustainability measure was advanced to defer the project.

**THEORY (n) – METHOD (n) – APPROACH (n): COMPETENT,
CONVINCING, ADEQUATE, PLAUSABLE, MEANINFUL,
CONFLICTING, CONTROVERSIAL**

1. The theory is based on the $\left\{ \begin{array}{l} \text{assumption} \\ \text{hypothesis} \\ \text{idea} \\ \text{statement} \end{array} \right\} + \left\{ \begin{array}{l} \text{to improve} \\ \text{to produce} \\ \text{to remove} \\ \text{to declare} \\ \text{to proclaim} \\ \text{to demonstrate} \\ \text{to implement} \\ \text{to realize} \end{array} \right\} \text{ smth}$
2. The fundamental feature of the theory has $\left\{ \begin{array}{l} \text{certain} \\ \text{some} \\ \text{several} \\ \text{no} \\ \text{not many} \end{array} \right\} \left\{ \begin{array}{l} \text{advantages} \\ \text{strong pointes} \\ \text{attractive points} \\ \text{drawbacks} \\ \text{shortcomings} \end{array} \right\} + \left\{ \begin{array}{l} \text{to implement} \\ \text{to realize} \\ \text{to develop} \end{array} \right\} \text{ smth}$
3. The newly advanced $\left. \begin{array}{l} \text{old} \\ \text{invalid} \end{array} \right\} \text{ theory of..} \left\{ \begin{array}{l} \text{is} \\ \text{was} \end{array} \right\} \text{ of } \left\{ \begin{array}{l} \text{great importance} \\ \text{much significance} \\ \text{rather sufficient} \\ \text{etc} \end{array} \right\} \left\{ \begin{array}{l} \text{to develop} \\ \text{to show} \\ \text{to demonstrate} \\ \text{to illustrate} \\ \text{to study} \\ \text{to process} \end{array} \right\} \text{ smth}$

**READ THE PAPER FRAGMENTS AND THE PATTERNS USED
TO ANALYZE AND MEMORIZE THEM**

**Text 1
The Hovercraft Problems**

During the operation of the passenger service between Ryde and Southsea last summer, the noise produced by the hovercraft working on the route attracted publicity in the local Press. While this probably means that the hovercraft has "arrived" and is no longer regarded just as a curiosity, the question of noise must receive proper and adequate attention.

The abatement of noise cannot be viewed with indifference by the Hovercraft Industry, since the potential of this vehicle to operate close to centres of

population would be affected. At Westland Aircraft considerable thought has been given to the problem and to the means by which future hovercraft can be made much quieter than those of the present generation.

In this paper the available factual information regarding hovercraft noise will be reviewed to establish the comparison with other means of transport. The various noise sources will then be examined in some detail and the lines of development necessary to reduce noise considered. Only brief reference will be made to the noise within the craft. To date few passengers seem to have been worried by it, but in any case, internal noise reduction is simply an exercise in soundproofing.

1. The adequate theory to quiet hovercraft noise is based on the public attraction in the local press to concern the passenger service between Ryde and Sputtsea.
2. The newly advanced theory of hovercraft noise abatement was to be reviewed to establish the comparison with other means of transport.
3. The fundamental feature of the noise abatement theory has some attractive points to be realized together with the Hovercraft Industry.

Text 2

Control Product Cost and Quality

Ensure the delivery of high quality products at the lowest possible cost. Oracle Cost Management supports multiple costing methods-Standard, LIFO, FIFO, and Average – and provides perpetual and periodic cost systems for purchasing, inventory, work in process, and order management transactions. Integration with Oracle E-Business Suite financial applications and business intelligence capabilities helps identify variances and aid in controlling costs. Oracle Quality, a component of Oracle Manufacturing, is a flexible enterprise-wide quality management system that lets you collect, distribute, and analyze critical quality data throughout your supply chain. Oracle Quality's tight integration with Oracle Manufacturing, Oracle Purchasing, Oracle iSupplier Portal, and Oracle Service, enables you to collect quality data at the source to enhance responsiveness to customers specific requirements and ensure compliance with industry standards via continuous improvement programs, such as resource lot traceability, that help you track cost and defect problems through to resolution.

1. Oracle Cost Management meaningful theory is based on the support of multiple costing methods to provide perpetual and periodic cost systems.
2. The fundamental feature of the Integration theory with Oracle E-Business has certain advantages to help identify variances and aid control costs.

3. The newly advanced Oracle Supplier Portal, and Oracle Service theory is of great significance to enable to collect quality data.

Text 3

As a key element of Oracle E-Business Suite, Oracle Supply Chain Management is the only completely integrated solution to deliver value in five critical business areas product development, planning, procurement, manufacturing, and order fulfillment offering both enterprise-based and business-to-business collaboration solutions. Oracle delivers intelligence capabilities that enable companies to monitor and continuously improve supply chain performance. A fast, flexible, modular implementation approach fits the needs of different companies and entire supply chains, resulting in the biggest impact and return on investment real bottom line value delivered throughout your entire supply chain. Oracle Supply Chain Management breaks down the barriers to communication among organizations, spots opportunities for revenue growth and savings, employs true business intelligence in every decision at every step in a process, and gets the job done better and faster while using fewer resources.

1. The fundamental feature of Oracle E-Business Suite theory is of great importance to deliver value in five critical business areas.
2. The newly –advanced theory of Oracle is rather sufficient to deliver intelligence capabilities to enable companies to monitor and improve supply chain performance.
3. Oracle Supply Chain theory is based on the idea to break down the barriers to communication among organizations.

THEORY(IES) – POINT OF VIEW – INFORMATION – FACT(S) – INCIDENT(S) – CALL(S)

READ THE NEWSPAPER FRAGMENTS AND THE PATTERNS USED TO ANALYZE AND MEMORIZE THEM

Text 1

JOHN PEEL, the influential BBC DJ who died last year, has revealed in his memoirs that he was raped by another pupil at his public school.

His harrowing ordeal at Shrewsbury - where younger boys were expected to perform sexual favours for the prefects - will be described in Margrave Of The Marshes, Peel's autobiography to be published next week.

Shortly before his death last October at the age of 65, Peel revealed that he had been the victim of sexual abuse after arriving at the all-boys school as a 'cute' 13-year-old in 1953.

But the book will reveal that an unnamed prefect went on to rape him in a public convenience.

Peel's widow, Sheila, said yesterday that the DJ had not mentioned the rape until three years before his death.

She told a newspaper: 'I'm not lessening the importance of it, but I think at public schools at that time there would have been a lot of the kind of treatment John received. He regarded it as almost part of school life.'

She added that the incident had been incorporated in tours of the school which he gave Sheila and their four children. 'He'd say, "That's where the Fives courts are and that's the lawn you couldn't stand on unless you were a prefect."

'In more recent times, it would be, "And that's where I was raped." It became part of the tour.'

Six months before he died, Peel -disclosing the abuse then prevalent at the school. (The Mail on Sunday)

1. The published fact is based on the all boys school in 1953.
2. The main idea of this public fact has got some peculiarities to reveal it.
3. The described incident is of much importance to be revealed in BBC DY memoirs.

Text 2

Logging in Amazon

By LARRY ROHTER

RIO DE JANEIRO – To the dismay of environmental groups here and abroad, the Brazilian government has restored logging licenses that were suspended last year as part of an effort to impede deforestation in frontier areas of the Amazon where the jungle is rapidly vanishing.

The reversal came after loggers and their allies blocked a major highway through the heart of the jungle and a large tributary of the Amazon River, burned buses, and threatened to pollute waterways with chemicals and seize an airport.

Environmental groups described the government's unexpected policy change as a setback to conservation efforts in the Amazon and said it would only encourage further lawlessness in an area already noted for violence.

"Giving in to blackmail is always a dangerous precedent, and I think that is the case here," said Adriana Ramos of the Socio-Environmental Institute, a research and advocacy group.

Days after the government's decision, an American nun involved in peasants' rights and environmental causes in the Amazon was shot to death by a pair of gunmen. (New York Times)

1. The conflicting incident is based on Logging licenses restoration to impede deforestation in the Amazon.
2. The main fact of the incident had certain reversals to block a major highway through the jungle and to burn buses etc.
3. The next precedent was of terrible disway to illustrate the American nun death.

Text 3

Pressure is on for an Elstead Crossing

A CALL was made this week for a crossing to improve road safety on the busy B3001 through Elstead.

Local residents have lobbied for a pedestrian crossing in the village centre for many years, but the matter had gone quiet because they believed that a major traffic calming scheme for Elstead, which was due to be implemented this year, would solve the problem.

Surrey County Council's decision earlier this year to postpone the scheme, however, due to a cash shortfall, has revived local pressure for an Elstead crossing.

Elstead parish councillor Nancie Mitchell told members at their meeting on Monday that a local resident had appealed for help from the parish council to get a pedestrian crossing installed on the grounds that the B3001 had become so busy it could take her up to 10 minutes to cross it when she was walking her grandchildren to school.

Mrs. Mitchell informed members that the parish council would need to write to Surrey to make the case for a crossing. If approved, a traffic and pedestrian survey would be done after which a design could be drawn up and submitted to the decision making Waverley Local Committee.

"I raised this five years ago and was told a crossing on the B3001 would increase the danger," Cllr Roger Holroyd warned.

Cllr Richard Terry also sounded a warning note: "I don't agree that the traffic calming scheme is completely dead," he said. "If we get this crossing it could seriously detract from getting the scheme."

It was agreed, however, that the council should make the request: "I think it's worth having a go," the chairman Denis Holmes said.

"It will highlight our concern about the need for traffic calming in Elstead and we should push and push until we get roads that are not dangerous to cross in the daytime."

Members decided it was best to leave it to Surrey to pinpoint the best place for the crossing (Surrey Advertiser)

1. A call made is based on the necessity for a crossing to improve road safety on the busy B3001 through Elstead.
2. The incident happened many years ago to lobby for a pedestrian crossing in the village centre by Local resident.
3. The main fact of the incident has a long story to be lobbied for pedestrian crossway in the village centre by local residents.
4. The further step of the local authorities is rather sufficient to leave the problem to Surrey to pinpoint the best place for the crossing.

READ THE PAPERS AND SYNOPSES TO ANALYZE THE ABOVE PATTERNS

Paper 1

Flicker: Causes, Symptoms, and Cures

John DeDad, Senior Director, Editorial and EC&M

Static compensators. These devices (other than STATCOM) employ capacitive and/or inductive passive components that are switched, phase controlled or combined with controlled core saturation. They supply the required stabilizing reactive current either in discrete steps or, more often, in a continuously variable fashion. Static compensators are considered to be the most advantageous solution for improving the power supply quality, in both technical and economic terms.

Compensators with saturable reactors. These devices employ magnetic circuit saturation for voltage stabilization. Two of these solutions have found a wide practical application: self-saturable reactors (SRs) and reactors with DC control circuit. SRs were one of the first static compensators applied on an industrial scale to mitigate the effects of voltage fluctuations. They are designed so that, at the minimum of the voltage range, the core is just below saturation and a magnetizing current flows, similar to that of an unloaded transformer. In this state, it has practically no influence on the voltage magnitude. At nominal voltage, the reactor is saturated, so a small change in the supply voltage effects a considerable change in the current. The compensator is usually connected to the supply network without a step-down transformer.

Reactors with DC control circuits are most often operated with a parallel capacitor bank, which forms a filter for high order harmonics. It essentially works as a transducer, where adjusting the DC magnetizing current controls the primary current magnitude. The control DC winding is usually supplied from a fully controlled thyristor converter – the power of which does not normally exceed 1 % of the stabilizer rated power. This solution enables the forcing of transient current, thus providing faster operation of the system. By adjusting the magnetizing current, the reactor's primary current changes from practically zero (unsaturated core) to the maximum value (saturated core) over the entire range of the primary current changes. A considerable disadvantage of this solution is the generation of the high order current harmonics. In the 3-phase version, a larger number of slots and appropriate linking of numerous windings allow the high order current harmonics to be practically eliminated, but at the cost of slower system response. The use of three single-phase stabilizers allows for correction of unbalance.

Thyristor switched capacitors (TSC). In this solution, the sectioned capacitor banks are connected phase-to-phase with each section switched (on or off) by means of AC thyristor switches. Therefore, the values of the compensator equivalent susceptances change in a discrete manner, depending on the number of active sections. By providing a suitably large number of small sections, the required resolution of change of susceptance for a single step can be obtained. Synchronization of switching and initial precharging of the capacitors avoids the overcurrents and overvoltages normally associated with capacitor switching. Time of reaction for symmetrical operation does not exceed 20 milliseconds.

FC/TCR compensator. This solution is an example of indirect compensation. Depending on the required function (voltage stabilizer or reactive power compensator), the value of the sum of two components of the current is controlled. For example, to control the fundamental harmonic of the capacitor current, the capacitor is operated as a filter or as switched capacitor steps (TCR/TSC). For control of the fundamental harmonic of the reactor current, a thyristor AC switch is used.

Self-commutated converter voltage sources and reactive current/power sources. The compensator comprises a voltage source converter (VSC). The switching states of semiconductor devices (pulse width modulation) determine the value and character of reactive power (inductive or capacitive).

The most commonly used compensator is STATCOM, which is a new generation of static compensators that employs semiconductor devices with forced commutation. Its name – *static synchronous compensator* – is derived from the principle of operation, which is analogous to the operation of the synchronous compensator. The basic part of the compensator is an AC/DC converter, which is connected to the network via an inductive reactance, usually the leakage inductance of transformer. When the converter voltage is lower than the

supply network voltage, the compensator is an inductive load. Conversely, when the converter voltage is greater than the supply voltage, the compensator supplies reactive power to the network, thus behaving as a capacitive load.

Big picture. Flicker is a subjective phenomenon. Consequently, it's difficult to determine the direct cost of its effect. Nevertheless, the phenomenon affects the ability to provide lighting that is steady and consistent. Certainly, it can affect productivity in an office or factory, but the cost of flicker usually is based on the cost of mitigating it when the complaints become significant.

Developments in power electronics, in particular in semiconductor device manufacturing, has enabled the practical realization of voltage dynamic stabilization systems of larger and larger rated power, while at the same time minimizing investment and operational costs. The availability of equipment with the ability to execute complex control algorithms also allows the use of diverse functions, including dynamic voltage stabilization. (Electrical Construction and Maintenance Development)

Paper Synopsis 1

The information is called "Flicker: Causes, Symptoms, and Cures". The author is called John DeDad. The information deals with mitigation of voltage fluctuations in power systems. The problem of voltage changes amplitude influenced by power system characteristics is concerned here. My knowledge of voltage fluctuations occurrence rate determined by the type of load and character of its operation is rather scanty. The information was published to describe focusing the amplitude mitigation measures limiting. This chief problem to reduce the amplitude of voltage fluctuations is concerned with the study of reactive power changes in the supply system. The fundamental problem of dynamic voltage stabilizers effectiveness seems difficult to be described. There is valuable information in literature to concern only separate influenced technological processes.

I still do not possess sufficient information to regard fluctuating loads from steady loads to use three-winding transformer separate windings. At present I have fragmentary knowledge to supply loads category from dedicated lines. My knowledge to connect the load at a higher nominal voltage level is still incomplete. In my experiments I often use the improved method to supply welding plants from a dedicated transformer. The accurate method of using adjustable speed drives has several advantages as compared with direct engaging. The specific experiments were started to provide preliminary heating charge phenomena. Pioneer experiments were made to determine some facts to regard reducing voltage fluctuations amplitude. At present there are several initial studies to function electrode control systems nature. The main purpose of the present study is to reveal the causes of supply network impedances voltage

drops. The comprehensive work deals with the process to underline drawing reactive power at the fundamental frequency. The current work in this field is designed to provide some information to concern balanced load distribution between phases. I have at present direct evidence to show the connecting single-phase welding machines to different phase from those powering lighting equipment to ensure voltage changes mitigation. Until now there is no definitive evidence to suggest dynamic voltage stabilizers to be mainly 2-phase systems. This has been no more than an incorrect assumption to use synchronous machine with no excitation current control to be advisable. In conclusion I'd like to say about the reactive current fast time synchronous machines to be effective. My information comes from Electrical Construction and Maintenance.

Paper 2

Test & Measurement World

DSM fault models

Roberto Mattiuzzo and Laura Tarantini.

A key goal in manufacturing test is to maximize the quality of parts delivered to customers—ideally, shipping zero defective parts while reducing the cost of testing those parts. The arrival of deep-submicron (DSM) designs has created new problems in clock skew and power delivery, while the latest nanometer technologies have demonstrated that defects are located predominantly in routing. Failure analysis conducted by major silicon manufacturers reveals that most of part failures are timing related, and delay is the biggest culprit.

As a result, manufacturers are demanding dynamic defect models that are more sophisticated than the traditional static stuck-at model, transition and path-delay models satisfy this demand, aiding the identification of various manufacturing defects, including in-line resistances as well as opens on single and pairs of transistors.

Combining advanced fault models with conventional stuck-at and I_{DDQ} models allows engineers to generate high-quality structural test patterns. Although the use of multiple fault models may create additional concerns—forcing larger pattern sets and increasing test time—scan-compression techniques make the overall test data volume manageable.

Finding bridging faults

Today, two approaches to bridging-fault detection are in mainstream use. The \sqrt{N} -detect approach uses traditional stuck-at models in conjunction with enhanced ATPG algorithms to detect the same fault multiple times. In this approach, ATPG makes random decisions to target faults that reside in the least observed locations of the circuit, such that a fault is marked as detected and

dropped from the target fault list once it has been detected a specified (N) number of times.

Some experiments have demonstrated that multiple-detect test patterns with high coverage not only provide a high diagnostic resolution but also can help maximize the coverage of node-to-node bridging defects. This approach makes the ATPG process more difficult and CPU-intensive, but it is conceptually easy to apply and does not require any change in the test-pattern-generation flow.

Yet, the N -detect approach is not truly deterministic: It relies on the probabilistic assumption that node-to-node bridging faults can be detected by increasing the number of times the same stuck-at fault is observed by a larger test set.

The second, fully deterministic, approach takes advantage of an improved fault model that logically describes a bridging defect; the ATPG tool can use this fault model for creating test patterns. Although this approach requires modeling efforts and a link to the physical layout for realistic fault-list creation, the generated test patterns ensure detection of defective parts that may not be caught by a high-coverage stuck-at vector set alone.

Three deterministic models

There are three advanced, deterministic fault models for DSM defect testing: the bridging fault model, the transition fault model, and the path-delay fault model.

The first, the bridging fault model, assumes that two nets are contaminated by a resistive short between them, which could be caused by a piece of metal from the sputtering process. For most fabrication processes, defects between metal lines are the most likely defect mechanism.

Whereas the stuck-at fault model assumes that a cell input or output is always tied to a fixed value, the bridging fault model assumes that one net will dominate the value driven on the other net via the electrical path through the resistive short. If one net dominates, then the other may have an incorrect logic value at one or more of its fanouts. The dominant net is commonly referred to as the aggressor, and the corrupted net is called the victim.

The bridging fault model can be described in terms of the stuck-at fault model, with two additional conditions:

- the aggressor must be at the opposite value of the victim, and
- four possible bridging faults exist for each pair of susceptible nets.

Each net can have two possible values and might behave as either the aggressor or the victim. An important conclusion that can be drawn from the relationship of these two fault models is that if a bridging victim is successfully tested, the associated stuck-at fault at that location will be automatically tested as well. In other words, a stuck-at fault is just a special case of a bridging fault, where the aggressor is a net that is always at a fixed value. This obvious proper-

ty has one profound benefit: It is not necessary to generate and run two independent test sets for stuck-at faults and bridging faults. A high-coverage bridging fault test set will also provide high coverage of stuck-at faults.

The second type of deterministic fault model is the transition fault model. While this fault model has been in limited use for many years, the more common occurrence of resistive vias at 130 nm has lead most major semiconductor vendors to require high-coverage transition testing over the past several years.

The transition fault model assumes that a cell input or output has a defect that does not allow a logic transition to propagate through the cell or along the net within the time required for proper device operation. In general, transition faults occur at the same sites as stuck-at faults, although they may be ignored on signals such as asynchronous resets or test modes, which are not expected to operate at-speed.

A transition fault is an extension of a stuck-at fault on the same node, with two additional conditions:

- the node must undergo a transition to the fault-free value, and
- the final value of this transition must propagate to an observation point (typically a scan cell) within a time that corresponds to the at-speed operation of the device.

As with the bridging fault model, once a transition fault has been detected, its corresponding stuck-at fault is guaranteed to be tested.

The third deterministic fault model is the path-delay fault model. Where the transition fault model assumes that the additional delay from a defect is relatively large and localized to a single point, the path-delay fault model assumes that delays may be distributed across multiple gates or even the entire device. The path-delay model addresses the specific goal of testing all the accumulated delay—both expected and from any defects—along critical timing paths of the design.

While the path-delay fault model is much more complex than the other two, which only involve one or two circuit nodes, there are still important relationships that can be exploited to improve the efficiency of testing for multiple fault models. The most important of those is that a robust path-delay test guarantees detection of all the transition faults along that path, and that a non-robust path-delay test will often lead to the detection of many transition faults along a path. Also, just as tests for bridging and transition faults uncover the related stuck-at faults, tests for path-delay faults also detect all or many of the corresponding stuck-at faults.

Finding the optimal DSM test is an NP-complete problem, as it would make full use of all the fault models in order to capture all defects. Instead, near-optimal results can be achieved with this proposed workflow:

- generate patterns for the "most complex" fault model;
- fault-grade those patterns against the "next-most-complex"

fault model;

- generate additional patterns on that fault model to improve, or "top off" coverage; and
- repeat this for each subsequently "simpler" fault model.

Bridging pairs based on electrical analysis

Extracting physical defects based on electrical analysis can uncover all bridging pairs, as it allows generation of a node file for ATPG, where circuit net pairs are listed on the basis of their coupling capacitance. But a one-pass RC extraction from a placed-and-routed database does not distinguish between "intra-layer" and "inter-layer" wires, and intra-layer wires are much more sensitive to bridging. Also, for a dense multimillion-gate design, managing a complete list of net pairs may be impractical.

A potential solution is to further refine the technology file for a given process. Changes can be applied to adjust the dielectric values so they more closely correlate with bridging defect probability, either decreasing the weight for inter-layer net pairs or increasing it some order of magnitude for intra-layer couples, or both.

This approach allows semiconductor manufacturers to generate a more accurate node file, which better orders and prioritizes net pairs that are more exposed to a bridging defect, but it also forces the manufacturer to rerun the RC extraction. Also, the technology file—which is typically proprietary to a foundry—must be modified, and that may prove undesirable.

Bridging pairs based on topological analysis

Bridging probability cannot be represented by a dielectric-constant value alone. The distance between wires and the area of the wires facing each other are often nonlinear bridging probability factors, and a purely electrical approach cannot take these factors into consideration. In addition, certain metal geometries may be more prone to bridging defects than others with the same electrical properties. In summary, a high coupling capacitance does not necessarily mean a high bridging probability. Two wires facing each other for a long path and at a long distance are less likely to bridge than two nets facing each other for a short path and at a short distance.

A proximity analysis that takes into account the topological design information can address these issues and is a good alternative to the electrical-based defect extraction technique.

The experimental bridging defect extraction based on a topological approach relies on the following principles:

- only intra-layer bridging candidates are examined, and
- only net pairs facing each other at the minimum spacing, as defined by the technology rules, are computed.

For conductors that run adjacent to each other on multiple metal layers, the cumulative facing length is calculated, thus providing an accurate classifica-

tion of the bridging probability. Although this approach requires multiple data analyses and the availability of the accurate design rules, it should result in a more accurate and manageable node file for ATPG of bridging faults. Indeed, our results from this approach, summarized in Table 1, demonstrate that combining models for bridging, transition and stuck-at faults in an IC design flow enables optimal test coverage.

Stuck-at and I_{DDQ} limitations

For the past decade, scan-based techniques combined with efficient ATPG tools have made the insertion of test structures into complex SOC designs very efficient, and these techniques have accelerated the production of manufacturing test vectors. The key advantage of using ATPG tools is that they are "deterministic" by nature, which allows for the creation of test patterns with a very high coverage (as opposed to complex and unpredictable functional vectors).

Fault coverage of scan-based patterns is usually measured with respect to a targeted fault model. The most commonly used fault model is the stuck-at fault, which models any defect as a net shorted to power and shorted to ground, respectively. In VLSI technologies, the stuck-at model was adequate for modeling the behavior of a defective device and, albeit with more limitations, useful in identifying defects that do not manifest themselves as pure stuck-at faults.

Nanometer technologies are making IDdq more difficult and less accurate, as the average background leakage is in tens of milliamperes. The well-known inefficiency of IDDQ has driven manufacturers to develop improved methods for creating vectors that detect bridging defects. While it is clear that a single stuck-at test can easily identify low-resistive bridging with power-supply lines, the detection of node-to-node bridges is not guaranteed (Time and Management World)

Paper Synopsis 2

The title of the paper is called "DSM fault models". The authors are called Roberto Mattiuzzo, Laura Tarantini and Cy Hay. The paper comes from the Test & Measurement World web site at www.tmworld.com. The information deals with integrated circuits manufacturing test. The problem of effective test patterns generation approach is concerned here. There is a lot of valuable information in the publication today to concern the use of different fault models. But we still do not possess sufficient information to regard the optimal test set generation methods. There is now exact knowledge to regard the nature of defects in integrated circuits. Most of the recent data have been obtained from studies involving failure analysis. We have now precise information to concern the main culprits of parts failures. The primary aim of the technical investigations performed by the authors was to analyze the effectiveness of mainstream

fault models currently used. The extensive studies were carried out to propose an optimal DSM testing flow. The essential problem of efficient test patterns generation deals with the combination of advanced fault models with conventional ones. The working hypothesis of subsequent fault models use has been suggested by authors to account for the high-coverage test set generation.

The main result of the profound work described in the paper is to provide new enhanced approach to the test generation patterns. The newly-developed method has certain advantages over the existing ones. Thorough experiments were carried out to examine the novel approach. The preliminary results the authors have reported seem very promising. Most of these striking data have been chiefly obtained by large-scale experiments. Sufficient evidence of the proposed method effectiveness has been obtained from these studies. Extensive investigations of the bridging pairs extraction techniques have been also provided in this paper. The main object of this profound research was to find out which approach is more accurate: electrical analysis or topological analysis. The chief findings the authors have reported here reveal the necessity of combining both techniques. In conclusion the paper provides multi-pass ATPG flow summary results.

Paper 3

Embedding Phase Space Reconstruction

By Jun Zhang

Generally, the observed chaos phenomenon in real world is in chaotic time series data format. Thus, analysis of chaotic time series take a very important role in chaos research. Reconstruction phase space method using known chaotic time series data was found by Taken. After embedding the like random chaotic time series data to phase space, chaos attractor can be observed. Chaotic time series display some stochastic behavior in time domain, at the same time the determined behavior of chaotic time series was shown in phase space structure. Therefore, chaotic time series in phase space can be analysed and predicted. Takens's embedding method is described as follows:

From observed time series $x(t)$, data vector $Y(t) = F(x(t), x(t-T), \dots, x(t-(D-1)T))$ is generated, where T is the time delay; this vector indicates one point of a D -dimensional reconstructed phase space RD , where D is call embedding dimension. Therefore a trajectory can be drawn in the D -dimension reconstructed phase space by changing T . Assume that the target system is a deterministic dynamical system and that the observed time series is obtained through an observation system corresponding to $C1$ continuous mapping from the state space of dynamical system to the one-dimension Euclidean space R . Then, the

reconstructed trajectory is an embedding of the original trajectory when the D value is sufficiently large. If any attractor has appeared in the original dynamical system, another attractor, which retains the phase structure of the first attractor, will appear in the reconstructed state space. In order that such reconstruction achieves embedding, it has been proven that the dimension D should satisfy the condition: $D > 2m + 1$ where m is the state space dimension of the original dynamical system. However, this is a sufficient condition. Depending on the data, embedding can be established even when D is less than $2m + 1$.

In the embedding method, there are two parameters, embedding dimension and time delay. Abarbanel gives us a good suggestion on how to select those two parameters. Time delay does not strongly affect reconstruct phase space and Lyapunov exponents estimation. One approach to estimating this value is to select the frequency (1/time scale) that corresponds to a dominant power spectral feature.

The reconstructed phase consists of points in D -dimension phase space. This number D should not be so small that the reconstruction is topologically incorrect. Memory constraints are the biggest problem with picking a value for D -dimension that is larger than the minimum acceptable value. An embedding could be obtained, if the embedding dimension is chosen to be greater than twice the dimension of the underlying attractor. However, because attractors reconstructed using smaller values of embedding offer yield reliable Lyapunov exponents, if embedding dimension is chosen too large, the noise in the data will tend to decrease the density of points defining the attractor, it making embedding trajectory harder to find replacement points. Noise is an infinite dimensional process that, unlike the deterministic component of the data, fills each available phase space dimension in a reconstructed attractor. Increasing embedding dimension past what is minimally required has the effect of unnecessarily increasing the level of contamination of the data.

Therefore, in this paper, a novel multi-dimension embedding phase space method to improve the accuracy of chaotic time series prediction is proposed for predicting chaotic time series. This method will be introduced in Section 4. As shown in Figs. 1 and 2, Rossler attractor is used as an example to show the result of embedding the Rossler time series data to different phase space. (Computers and Electrical Engineering)

Paper Synopsis 3

The title of the paper is called "Embedding Phase Space Reconstruction".
The author is called Jim Zhang, The information deals with system identifica-
tion. The problem of phase space reconstruction is concerned here. Our know-

ledge of Lyapunov exponents is not so much exact. The researches were carried out to demonstrate embedding dimension and time delay. The fundamental problem I'm studying now bears on the effect of time series stochastic behavior in time domain. The essential problem of memory constraints is not easy to solve. There is a lot of specific information in literature to concern dynamic systems. Now I have complete information to concern chaos attractor.

We still do not possess sufficient information to regard fundamental characteristic of chaotic systems. Some of the information comes from time series experiments. Now there is some knowledge to regard dominant power spectral feature. But yet I know very little concerning multi-dimension map. The knowledge of random behavior in time series is still incomplete. The present knowledge of embedding phase space reconstruction comes from Computers and Electrical Engineering. The embedding phase space method is effective to study time series. Most authors widely use this method. The newly-developed method has advantages compared with auto-regressive technique. These experiments were carried out to test the novel method. Time series experiments were performed to reveal some facts to concern embedding trajectory. At present there are some experimental studies of dynamic system structure.

The chief aim of the present paper is to obtain exact knowledge to regard the computer simulation result. The main purpose of this investigation is to show quantitative analysis of systems dynamics. The primary object of the research has been to assess the role of phase space reconstruction. In conclusion the paper says about Rossler attractor.

READ THE NEWSPAPERS ARTICLES AND SYNOPSES TO ANALYZE THE ABOVE PATTERNS

Article 1 Of Bushes, Clintons and Unlikely Bonds

By ELISABETH BUMILLER

WASHINGTON – When the Bushes and Clintons held hands before 15,000 mourners at Coretta Scott King's funeral on February 7, it looked like a prayerful moment. But as almost anyone watching America's two leading political families knew, underneath the tranquil image was a drama of ambition, rivalry, love and alliance that could shape the 2008 presidential election.

The scene, a riveting tableau in the six-hour celebration of Mrs. King's life and the political power of black America, offered complex layers of inter-connecting relationships: father and son, husband and wife, president and for-

mer president, adversary turned ally and first lady turned senator turned probable presidential candidate.

It was one of the most public manifestations to date of the odd friendship and mutual need of two dynasties that, on the surface at least, have almost nothing in common. But as President Bush put it in an interview with CBS News last month, "Bush, Clinton, Bush, Clinton." Mr. Bush made the remark in a telling exchange with Bob Schieffer, who said, "Well, you know, if Senator Clinton becomes president."

"There we go," Mr. Bush said.

"Maybe we'll see a day," Mr. Schieffer continued.

"Bush, Clinton, Bush, Clinton," Mr. Bush responded.

Earlier in the interview, when Mr. Schieffer noted that Senator Hillary Rodham Clinton was "running pretty hard right now for the Democratic nomination," Mr. Bush jumped in and called her "formidable," an unusually friendly assessment.

People who know both the Clintons and the Bushes said Mr. Bush's remark was an honest personal view. It reflected, they said, the growing friendship between Mr. Clinton and Mr. Bush's father, the first President Bush, and the powers of a shared experience that just five men alive – the two Bushes, Mr. Clinton and former Presidents Jimmy Carter and Gerald R. Ford – wholly understand.

"They've got this secret handshake that nobody else knows about," said Representative Rahm Emanuel, an Illinois Democrat who was a top White House adviser to Mr. Clinton.

Friends of both men say the current President Bush and Mr. Clinton have grown to like each other in Mr. Bush's time in office, even after Mr. Bush had disdained Mr. Clinton's relationship with Monica Lewinsky.

Article Synopsis 1

The title of the article is called "Bushes, Clintons and unlikely bonds". The author is called Elisabeth Bumiller. The problem of the growing friendship between two political dynasties is concerned here. Our knowledge of the presidential election is rather scanty. The article was published to demonstrate the prayerful moment of meeting Bushes and Clintons. The main problem I am studying now bears on the effect of rivalry between political leaders. The interesting problem of the tranquil image is easy to understand. There is some detailed information to concern the use of political alliance to win the presidential election.

Now we have enough complete information to regard political power of black America. At present there is exact knowledge of interconnecting relationships between presidential candidates. Our fragmentary knowledge available in

the article to conctrn the most public manifestations is still incomplete. The current method of two dynasty's presidential government is regarded as suitable. Most correspondents extensively apply the most modern approaches to interview candidates. The author made the pioneer search to demonstrate the mutual needs of two dynasties. Specific questionnaires were used to determine some facts to regard Senator Hillary Rodham Clinton. At present there are some experimental elegant searches to regard the growing friendship effects between Mr. Clinton and President Bush. The main purpose of this comprehensive search is to obtain some knowledge to concern personal Bush's view. The present interesting observation deals with the process to underline shared experience powers. The main result of this review is to achieve new information to concern five powerful American men. The basic findings reported here are rather interesting. The chief facts available in the article seem to be rather interesting and convincing. At present we have enough clear evidence to show the adversely affected system. Until now there is not much direct evidence to show the secret of former Presidents handshaking. The information comes from New York Times. In conclusion the article says about the close relationship between Mr. Clinton and Monica Lewinsky.

Article 2

Spiritual, Ethnic, Single? There's a Card Just For You

By Lorrie Grant

The growing ranks of small and start-up greeting-card makers still account for a little slice of the market, but they believe they are contributing a big wave of creative fresh air sorely needed by a \$7.5 billion industry with flat growth.

Retailing Cardmakers' sales have been stuck at that level since 2003 – and are forecast still to be there through at least 2007, according to Stanford Group analyst Kathleen Reed.

The boutique makers' cards have offered new designs, new technology and cultural diversity.

"My generation is the first to grow up on hip-hop music, and its culture was not being represented in the greeting-card market," says Ron Williams, whose Long Island, N.Y.-based company Lyrics2go makes cards with technology that plays 10 seconds of urban music.

"It's unique because several races listen to hip-hop, making it the new rock 'n' roll in America," adds Williams, 36.

Consumers purchase about 30 cards a year, led by cards for occasions such as Father's Day this Sunday. Most cards are turned out by the two giants

that dominate big retail outlets: Kansas City, Mo.-based Hallmark, with 50% of the market, and Cleveland-based American Greetings, with 35%.

Mass retailers – particularly discount and dollar stores – are the fastest-growing retail distribution channel for cards, Stanford Group's Reed says. That's particularly true for the big players, while small makers have a bigger share of their sales at specialty stores and, now, heavily through the Internet.

While unit sales are still growing slowly - in the low single digits - pressure on pricing is keeping industry revenue flat, Reed says. The discount market now accounts for about 8% of industry sales revenue, but 20% of the cards sold.

"Pricing has been the determining factor in industry growth for a given year," she says, noting the average card price now is just above \$1. "We have seen negative pricing trends over the past five years due to the increased penetration and popularity of mass retailers and the onslaught of deep discounters."

The behemoths also have moved to respond to social change – and look for new sales – in some areas first staked out by small and specialty makers.

For example, they now have cards for non-traditional families, tributes to military personnel and inspirations from Christian authors such as T.D. Jakes.

"Cards are mini time capsules, addressing things like national mood, culture, change in lifestyle and the fast pace of society." (USA TODAY)

Article Synopsis 2

The title of the newspaper articles is called “Spiritual, ethnic, single& There’s a card just for you”. The author is called Lorrie Grant. The article comes from the “USA Today”. The information deals with the greeting-card industry. The problem of the cardmakers’ sales sticking growth is concerned here. There is a lot of present information in the publications today to concern the growing ranks of small and start-up greeting-card makers. But we still do not possess detailed information to regard such companies' role in the market. There is now exact knowledge to regard the unique greeting-card features offered today. The main result of small makers' pioneer work is to provide new designs, new technology and cultural diversity. The specific problem of the greeting-card market today deals with the pressure on pricing keeping industry revenue flat. The statistical studies were carried out to find out the determining factor of industry growth. The main object of the recent investigations is to establish the way of the market's stagnation overcoming. Most of the current data have been chiefly obtained from the recent studies of the Stanford Group. The conclusive results reported here reveal the fastest-growing retail distribution channels for cards. At present we have clear evidence to show the small and special card makers extensive upcoming. In conclusion the article says about the non-traditional cards offered by small greeting-card makers.

Article 3

Government Eases Rules for Livestock that Graze on Federal Land

Critics say changes will hurt ecosystem

By Tom Kenworthy

DENVER – Thousands of ranchers whose livestock graze on government land will face less burdensome federal regulations under new rules announced Thursday.

The regulations, which go into effect in mid-August, reverse some of the key changes pushed through by the Clinton administration to protect 160 million acres of rangeland in the West.

The rules announced by the Bureau of Land Management will affect those who hold about 18,000 grazing permits. Ranchers currently pay \$1.79 a month for a cow or calf to graze on government land. That fee will not change.

"This rule puts back some of those things that (the Clinton administration) had taken away, but it hardly gives us a superior place" on federal land, said Jeff Eisenberg of the National Cattlemen's Beef Association.

Tom Lustig, a Colorado-based attorney for the National Wildlife Federation, and other environmentalists criticized the change as a giveaway to the ranching industry that will make it harder to crack "down on overgrazing and other harmful practices, and limit public comment on-grazing decisions made by the government. "It cuts out the public," Lustig said. "It will be extremely difficult to remedy grazing that is causing problems." Lustig and others say grazing, particularly in arid areas, has harmed wildlife and native plants, caused erosion and damaged streams.

Under the new rules:

- The government must document harmful grazing practices and then wait up to three years before imposing changes such as reducing the number of cows.
- If the government wants to cut back the number of animals in an area by more than 10%, the reduction will have to be phased in over five years.
- Ranchers will be allowed to share ownership of water right and structures such as fences on federal land.

Tom Gorey, a spokesman for the bureau, said the rules would result in "improved cooperation with ranchers who we regard as stewards of public lands." (USA TODAY)

Article Synopsis 3

The article is called "Government eases rules for livestock that graze on federal land." The author is called TOM KENWORTHY. The information deals

with government land. The problem of federal regulation new rules is concerned here. Our knowledge of rancher's livestock is rather scanty. The article is published to protect 160 million acres West rangeland. The essential problem I am investigating now bears on the effect of grazing permits. The specific problem of ranching industry is not easy to solve. There is some sufficient information in the article to regard Land Management Bureau. At present we possess precise information to concern the use of superior place federal land.

We have complete knowledge to regard the National Cattlemen's Beef Association. But we still know very little to concern National Wildlife Federation. The modern method of the increasing cows number is rather reliable. We widely use this suitable method of public comment for grazing decisions. They carried out these initial reviews for environmental to be criticized. Previous reviews to concern animals were done to explain harmed wild life. At present there are some recent studies of damaged streams. The primary object of this extensive research is to share ownership water rights. The present article deals with Clinton administration changes. The main result of this observation is improved cooperation. The basic data available in literature concern arid areas. Most of the main data were chiefly obtained from recent studies of Tom Lustig, a Colorado-based attorney. Some direct evidence of government document was obtained from the former Clinton administration. The information comes from USA TODAY. In conclusion the article says about hurt ecosystem changes.

READ CONFERENCE PAPERS AND ANALYZE THE PATTERNS STUDIED

Conference paper 1

My conference paper is called "Multipath Delay Effects Spread on Time Recovery". My information deals with digital communications environment. The interesting problem of time delay spread is concerned here. Our knowledge of multipath radio propagation is not so much exact. The paper is dedicated to describe next-generation wireless data communications network. The fundamental problem of timing recovery circuit is yet difficult to solve. This specific problem is concerned with the study of dispersive channel time-variation.

There is some detailed information to regard digital communication baseband model. Until now we still do not possess sufficient information to concern channel dispersion nature. But my today knowledge of carrier recovery process is incomplete yet. We still know very little to concern squaring bit synchronizer. The up-to-date method of coherent and differential detection is reliable. We widely use this accurate method nowadays. Meaningful experiments were per-

formed to evaluate irreducible BER (bit error rate) performance. The pioneer experiments were started to establish some facts to regard channel impulse response. At present there are some experimental studies of time delay probability density function. The chief aim of this comprehensive investigation is to obtain some knowledge to concern ensemble average over Rayleigh fading.

The present work deals with the processes underlying multipath propagation. The current work in this field is designed to provide some information concerning delay distribution standard deviation. Most of these conclusive data are chiefly obtained by experiments with timing loop bandwidth. Our competent theory is based on the assumption of the “eye-closure” to be the most important mechanism for burst error. The fundamental feature of this convincing theory is power delay profile. In conclusion I’d like to say the method used in my analysis is very perspective and significant and is not time consuming.

Conference paper 2

Radiating Resistance Equipment Maintenance

My conference paper is called “Radiating Resistance Equipment Maintenance”. My information deals with an opportunity to use some components in the military and space industry. The problem to carry out radiating experiments is concerned here. My knowledge of radio-electronic components radiation influences is not so much exact. The essential problem I am studying now bears on linear induction accelerators. Microcircuits radiation specific problem reactions are difficult to observe. We still do not possess sufficient information to concern modern electronic base resistance.

Most of the detailed information is not accessible for a mode of privacy. Now we have some knowledge from open sources. Even my knowledge of irradiated samples influence factors is still incomplete, and the old method of microcircuits testing is ineffective to study modern devices like workbench. The newly-developed method of PIO (Parallel Input/Output) has several advantages over the old one to concern high accuracy, universality and presentation. Modeling installations experiments are done with parameters close to real. I performed these experiments to test the linear induction accelerator.

At present there are similar researches made in several laboratories in the world. The main object of this investigation is to reveal failures in the equipment work. The current work in this field is intended to provide some information to concern handicaps reduction methods. The main result of the work is to provide new information to concern specialized microcircuits creative technologies. The data available in literature to concern achievements in this area seem rather reliable. Most of these data are chiefly obtained by large-scale experiments with microcircuits in defeat nuclear explosion zone. At present we have

enough evidence to show the Russian microcircuits successful cope with tasks in view. In conclusion I'd like to say the method of X-rays simulation used in my analysis is very much perspective, significant and not time consuming.

Conference paper 3 **IT-Tecnologies Investments Inflow Aspects**

I'd like to introduce my conference paper to you. It is called "IT-Technologies Investments Inflow aspects". The problem of investment inflow communication branch is concerned in my paper. I can't say my knowledge of Russian telecommunication market is very vast. I'd wish to demonstrate the ways of investments to new technologies to concern people connection to each other. The main problem I am studying now bears on the effect to find the best non-financial aspects concerning investments effectivity. The interesting problem to attract more money to hi-technologies to make new services is not so difficult to solve. There is some detailed information to concern the use of new services, such as Internet, IP-calling, GPRS, WAP, GLONASS. Now we have enough complete information to regard Global Navigation Satellite System (GLONASS). At present we have exact knowledge of the Russian communication company's own capitals.

My knowledge of the communication branch's income is still fragmentary. The current method of investments compared with the developed by Pareto is regarded by me as suitable. Most authors extensively apply this modern method of Pareto's principle. Specific experiments on Russian IT-companies were started to determine some facts to regard national and foreign direct investment inflow to new IT-technologies. Pioneer experiments presented here are carried out to demonstrate the most effective investment to get more profit. At present there are some experimental elegant investigations of the effects to concern enterprise's economic stability to get new credits. The main purpose of my comprehensive investigation is to obtain some knowledge to regard stock market instruments. The present useful work deals with the process to underline Russian and foreign investors activity.

Our main result of this thorough work is to be provided with new information to concern the communication systems investment flows best ways. The basic findings reported in my paper are rather interesting, because the chief data available in my paper are very reliable and that's why convincing. At present I have enough clear evidence to show the investments system to be adversely affected. Until now there is not much direct evidence to show the best non-financial aspects to understand the structure of investment process. In conclusion I'd like to say the method used in my experiments is considered by me to

be a very perspective one in my future research, it is rather significant and not time consuming.

Conference paper 4

Fault Segmentation in Fabric Image Using Gabor Wavelet Transform

My conference paper is called "Fault Segmentation in Fabric Image Using Gabor Wavelet Transform". My information deals with machine vision. The problem to detect defects is concerned in my present conference paper. My knowledge concerning edge detection is exact. The main problem I'm studying now bears on the industrial inspection of fabrics defects. The fundamental problem of automatic fault segmentation is difficult to solve as it requires real-time solution. There is some complete information concerning information local texture defects analysis. Now we have sufficient information to concern abrasion and shrinking detection to control textured material quality. Now we have a profound knowledge regarding texture classification. Our present knowledge concerning faults classification comes from the studies of wavelet transform.

The Fourier analysis method does not provide enough information to detect local defects. Nowadays most workers are using a human vision method to detect the texture faults. The use of wavelet transform for texture analysis was started in Mallat initial experiments. I have started these promising experiments to test their efficiency. At present there are recent studies to concern wavelets transformation to decrease scale sensitivity of image. The chief aim of this extensive research is image decomposition to achieve the maximum texture discrimination. The curent work deals with tunable detector research to capture energy at a specific frequency.

The current joint work to regard Gabor wavelets is aimed to provide real-time fabric analysis. The main results of these experiments are very useful to obtain the automatic structure checking. The data concerning local defects available from Fourier filter are not reliable. We have some clear evidence to show the Gabor Fillters bank. Until now there is previous insufficient evidence to show redundant information in the image after Gabor filter. In conclusion I'd like to say the method used in my experiments is very useful to inspect and identify texture materials faults.

Bibliography

1. **Аполлова, М. А.** Specific English / М. А. Аполлова. – М.: Международные отношения, 1977. 136 с.
2. **Капина, С. М.** О науке языком науки / С. М. Капина. – М.: Наука, Ленинградское отделение, 1977. 308 с.
3. **Лаврова, А. Н.** О подъязыке органической химии (английский язык) / А. Н. Лаврова. – Н. Новгород: Нижегородский государственный технический университет, 1994. 100 с.
4. **Лаврова, А. Н.** Методические указания к работе с общенаучной английской лексикой для студентов II курса. Структуры для реферирования и резюмирования: метод. указания / А. Н. Лаврова. – Горький: ГПИ им. А.А. Жданова 1988. 15 с.
5. **Lavrova, A. N.** ESP: Special English, Special Translation: учебное пособие / А. Н. Лаврова; Нижегородский государственный технический университет. Н. Новгород, 2006. 100 с.
6. **Миньяр-Белоручева, А. Н.** Англо-русские обороты научной речи: учебное пособие для оформления курсовых, дипломных и диссертационных работ, для ведения конференций и деловых встреч. Издание второе и дополненное / А. Н. Миньяр-Белоручева. – М.: Проспект-АП, 2005. 110 с.
7. **Orlova, E. S.** Stretch your language skills. University Preparatory Course Guidance / E. S. Orlova – Н. Новгород: Нижегородская медицинская академия, 2002. 86 с.
8. **Торбан И. Е.** Справочник: мини-грамматика английского языка / И. Е. Торбан. – М.: Высшая школа, 1992. 95 с.

The List of Periodicals

1. Autotechnology, International Magazine for Engineering
2. Banks & Money
3. Economist
4. Energy Information Administration/Electricity Generation and
5. Environmental Externalities
6. IEEE Microwave Magazine
7. International Tug & Salvage
8. Journal of Electrochemical Society
9. Journal of Lightwave Technology

10. MTZ Worldwide
11. PC Magazine
12. The International Engineering Consortium
13. Thermal Effecting Spray Coating Process Metallurgy

Newspapers

1. Surrey Advertizer
2. The Mail on Sunday
3. The New York Times
4. The Wall Street Journal
5. The Washington Post
6. USA Today
7. Weekend Journal

Dictionaries

1. **Ахманова, О. С.** Словарь лингвистических терминов / О. С. Ахманова. – М.: Советская энциклопедия, 1966. 606 с.
2. Большой англо-русский толковый словарь: в 2-х т. Ок. 160000 слов / авт. Ю. Д. Апресян, И. Р. Гальперин, Р. С. Гинсбург и др. Под общ. рук. И. Р. Гальперина и Э. М. Медниковой – 4-е изд., испр. с дополнением. М.: Рус. яз., 1987. 2110 с.
3. **Мюллер, В. К.** Большой русско-английский словарь, 120000 слов и выражений / В. К. Мюллер. – М.: Эксмо, 2008. 637 с.
4. **Ожегов, С. И.** Словарь русского языка / С. И. Ожегов. – М.: гос. изд. иностр. и нац. словарей, 1960. 900 с.
5. The Concise Oxford Dictionary of Current English. New Edition. – Oxford: Oxford University Press, 1980. 1368 p.
6. The Oxford Universal Dictionary Illustrated on Historical Principles (I, II volumes). – London : Oxford University Press, 1974. 2710 p.

CONTENTS

Preface	3
Papers (Newspapers), Abstracts, Patterns	4
The Papers Fragments and the Abstracts	5
The Articles Fragments and the Abstracts	10
<u>Problem:</u> chief, main, fundamental, essential, specific, peculiar, interesting, minor	13
The Papers Fragments and the Patterns	14
The Articles Fragments and the Patterns	16
<u>Information:</u> earlier, preliminary, past, present, current, further, sufficient, complete, extensive, detailed, exact, precise, good, reliable, valuable, poor, scanty, unreliable etc	20
The Papers Fragments and the Patterns Used	20
The Articles Fragments and the Patterns Used	23
<u>Knowledge:</u> sufficient, profound, complete, detailed, exact, insufficient, incomplete, fragmentary etc	25
The Papers Fragments and the Patterns Used	26
The Articles Fragments and the Patterns Used	28
<u>Method – Approach – Technique:</u> current, modern, up to date, improved, modified, new, old, out-of-date, outdated, conventional, routine, accurate, suitable, sensitive, unsatisfactory, poor, useless, unreliable, invalid, time-consuming etc	31
The Papers Fragments and the Patterns Used	32
<u>Method – Approach – Technique – Procedure – Way – Path – Idea – Position – Trend – System etc</u>	35
The Articles Fragments and the Patterns Used	35

<u>Experiment – Test – Trial – Search – Reid – Competition – Meeting – Show – Run – Set:</u> initial, pioneer, early, further, promising, specific, thorough, precise, unsuccessful, meaningful etc	37
The Papers Fragments and the Patterns Used	38
<u>Experiment – Trial – Competition – Show – Run – Set – Search – Event – Incident – Accident</u>	41
The Newspapers Articles and the Patterns Used	41
<u>Study – Investigation – Research:</u> initial, pioneer, previous, recent, present, further, encouraging, stimulating, fruitful, elegant, full-scale, extensive, comprehensive, technical, highly technical	44
The Papers Fragments and the Patterns Used	45
The Articles Fragments and the Patterns Used	47
<u>Work:</u> initial, pioneer, useful, extensive, comprehensive, joint, careful, profound, thorough etc	49
The Papers Fragments and the Patterns Used	50
The Articles Fragments and the Patterns Used	52
<u>Data – Results – Findings – Evidence:</u> preliminary, basic, chief, main, conclusive, comparable, dramatic, striking, unreliable, invalid, fundamental	55
The Papers Fragments and the Patterns Used	55
The Articles Fragments and the Patterns Used	57
<u>Evidence:</u> earlier, previous, further, clear, clearcut, definitive, experimental, (in)direct, (in)sufficient, (in)convincing, (in)conclusive, (in)comparable	60
The Papers Fragments and the Patterns Used	60
The Articles Fragments and the Patterns Used	62
<u>Assumption:</u> erroneous, wrong, (in)correct, (un>true, tentative, invalid	64
The Papers Fragments and the Patterns Used	65
The Articles Fragments and the Patterns Used	67

<u>Hypothesis – Hypotheses:</u> working, tentative, helpful, stimulating, peculiar, improbable, invalid, (un)true	69
The Papers Fragments and the Patterns Used	70
<u>Hypothesis(es) – Proposal(s) – Idea(s)</u>	72
The Articles Fragments and the Patterns Used	72
<u>Theory – Method – Approach:</u> competent, convincing, adequate, plausible, meaningful, conflicting, controversial	74
The Papers Fragments and the Patterns Used	75
<u>Theory(ies) – Point of View – Information – Fact(s) – Incidents(s) – Call(s)</u>	78
The Newspapers Fragments and the Patterns Used	78
The Papers and the Synopses	80
The Articles and the Synopses	92
The Conference Papers 1, 2, 3, 4	98