Abstract

In this section you will find a number of sample abstracts on various topics. While reading each abstract try to identify the **main sections** (i.e. ***reason for writing, problem statement, methodology*** etc.), the **key terms**, as well as the **clichés** and **set expressions** typical for this type of summary.

Social science:

Human Resource Management in India: 'Where From' and 'Where To?'
Author: Samir R. Chatterjee

- India is being widely recognized as one of the most exciting emerging economies in the world. Besides becoming a global hub of outsourcing, Indian firms are spreading their wings globally through mergers and acquisitions. During the first four months of 1997, Indian companies have bought 34 foreign companies for about U.S. $11 billion dollars. This impressive development has been due to a growth in inputs (capital and labour) as well as factor productivity. By the year 2020, India is expected to add about 250 million to its labour pool at the rate of about 18 million a year, which is more than the entire labour force of Germany. This so called 'demographic dividend' has drawn a new interest in the Human Resource concepts and practices in India. This paper traces notable evidence of economic organizations and managerial ideas from ancient Indian sources with enduring traditions and considers them in the context of contemporary challenges.

History:

"Their War": The Perspective of the South Vietnamese Military in Their Own Words

Author: Julie Pham (UCB participant in UC Day 2001)

- Despite the vast research by Americans on the Vietnam War, little is known about the perspective of South Vietnamese military, officially called the Republic of Vietnam Armed Forces (RVNAF). The overall image that emerges from the literature is negative: lazy, corrupt, unpatriotic, apathetic soldiers with poor fighting spirits. This study recovers some of the South Vietnamese military perspective for an American audience through qualitative interviews with 40 RVNAF veterans now living in San José, Sacramento, and Seattle, home to three of the top five largest Vietnamese American communities in the nation. An analysis of these interviews yields the veterans' own explanations that complicate and sometimes even challenge three widely held assumptions about the South Vietnamese military: 1) the RVNAF was rife with corruption at the top ranks, hurting the morale of the lower ranks; 2) racial relations between the South Vietnamese military and the Americans were tense and hostile; and 3) the RVNAF was apathetic in defending South Vietnam from communism. The stories add nuance to our understanding of who the South Vietnamese were in the Vietnam War. This study is part of a growing body of research on non-American perspectives of the war. In using a largely untapped source of Vietnamese history, this project will contribute to future research on similar topics.

Biology:

"The Listeria monocytogenes p60 Protein is not Essential for Viability in vitro, but Promotes Virulence in vivo"

Author: Sina Mohammedi, 2002 UC Day nominee and runner-up

- Intracellular pathogens (agents which infect host cells), such as Mycobacterium tuberculosis and Listeria monocytogenes, cause very high mortality rates in the United States. Therefore, deciphering the mechanisms through which the pathogens cause disease is of great interest. Listeria infection of mice is a well-developed model system for studying the fundamentals of host-pathogen interactions. In vitro assays in animal cell cultures have helped show that Listeria causes illness by secreting molecules, called virulence factors, to the outside of the bacterial cell in order to affect the host organism. My work involves one such secreted protein, called p60. P60 is an antigen (an agent seen by the host immune system) implicated in regulated bacterial cell wall breakdown. The objective of this study was to examine two questions: first, is p60 essential to the viability of Listeria, as previously published? and second, is p60 a virulence factor in Listeria? To examine these questions, I constructed a Listeria strain lacking p60 (p60-). This new strain displayed no defect in viability. In fact, most standard in vitro pathogenicity assays were normal for p60-. However, when p60- was tested in a mouse (in vivo), a 1000-fold reduction in virulence was observed. This discovery suggests that p60 is indeed a key factor in the disease-causing ability of Listeria, but not essential for viability. Future studies will focus on the precise role of p60 in Listeria pathogenesis. This work increases our understanding of such diseases as tuberculoses, various food poisonings, and meningitis.

Science:

Gravitational radiation from black hole spacetimes

Author: Luis Lehner, Ph.D. University of Pittsburg

- The problem of detecting gravitational radiation is receiving considerable attention with the construction of new detectors in the United States, Europe, and Japan. The theoretical modeling of the wave forms that would be produced in particular systems will expedite the search for and analysis of detected signals. The characteristic formulation of GR is implemented to obtain an algorithm capable of evolving black holes in 3D asymptotically flat spacetimes. Using compactification techniques, future null infinity is included in the evolved region, which enables the unambiguous calculation of the radiation produced by some compact source. A module to calculate the waveforms is constructed and included in the evolution algorithm. This code is shown to be second-order convergent and to handle highly non-linear spacetimes. In particular, we have shown that the code can handle spacetimes whose radiation is equivalent to a galaxy converting its whole mass into gravitational radiation in one second. We further use the characteristic formulation to treat the region close to the singularity in black hole spacetimes. The code carefully excises a region surrounding the singularity and accurately evolves generic black hole spacetimes with apparently unlimited stability.

Paraphrasing

An original example sentence:

- *Until recently, criminologists could not afford to analyze DNA evidence for all homicide cases.*

An effective paraphrase of this sentence:

- *Crime labs can now use DNA for all murder cases.*

The main paraphrasing techniques:

- Replacing a Word with a Synonym
- Starting the Sentence Differently
- Replacing a Phrase with a Word or a Word with a Phrase
- Changing Passive into Active Voice/Negative into Positive

Exercise 1: Simple Sentences

DIRECTIONS: Study the examples of paraphrasing with synonyms:

1. "My car needs gasoline."
   a. My automobile needs fuel.
   b. My wheels need gas.

2. "The U.S. government has an enormous debt."
   a. The federal government has an extremely large debt.
   b. The national government has a huge debt.

DIRECTIONS: Study the examples of paraphrasing with definitions:

1. "A college student usually has homework to do."
   a. A person going to college typically has to study at home.
   b. People taking college courses usually have assignments to do.

2. "Alcoholics drink more and enjoy it less than social drinkers."
   a. A person who is addicted to alcohol consumes more but gets less pleasure than a person who drinks just to be sociable.
   b. People who really need to drink have a high level of intake but a lower level of satisfaction than people who can take it or leave it.

Exercise 2: Complex Sentences – A

DIRECTIONS: For each of the following complex sentences, extract three ideas and state them separately.

Example: Although our human ability to communicate is genetically determined and hence is a part of our biological nature, speech development is importantly affected by the environment.

a. The ability for human communication is biologically based.
b. The ability for human communication is transmitted through genes.
c. Environment also influences how human communication develops.

1. Learning to talk occurs in similar ways and on similar schedules for all normal children, with little effect of differences in training or practice.
2. Although a bad environment can retard language development, children can learn to speak in any environment where other people speak, but they need a supportive environment to learn to speak eloquently.
3. There is a limited number of possible sounds of speech (which are called phonemes, the building blocks of language) which can be combined in various way to make up words.
4. Nonverbal means of communication can be useful in expressing emotions and feelings, but they are narrower than the verbal system which can express abstract concepts and help in problem solving.
5. Human nonverbal communication is not unique and indeed is no better than that of other primates, but our verbal system sets us apart from other animals because it gives us the ability to express cognitive as well as emotional thoughts, and to share complex ideas with others.

Exercise 3: Complex Sentences - B

- *DIRECTIONS: Paraphrase the following statements in two different ways. You may find it helpful to imagine rephrasing the statements as if you were speaking to different audiences, such as another student, a parent, or a teacher. Two examples are provided:*

Example 1: Even though many species of animals communicate, human verbal communication is by far the most complex system.

a. While people are not the only animals who communicate, our system of communication is the most complex.

b. Other animals besides humans communicate, but their systems of communication are less complex.

Example 2: By shifting the physical quality of one's voice, a person can express varied emotional states.

a. A person can change the physical quality of his or her voice to express different emotions.

b. To express different feelings, people may use different voice tone, volume, or emphasis.

1. When speaking, a person combines sounds into complex structures, and each different structure is a meaningful unit.
2. Even dogs can express emotions, as when they growl at a postman or bark to be let in or out of the house.
3. One of the complicated ways animals describe their environment is the dance done by bees to tell other bees where there is nectar.»
4. Many bird species sing long sequences of different songs in a way that is analogous to humans combining words into sentences.
5. Other animals can express emotions, describe the environment, or combine sounds into strings, but only humans can do all of these.
6. It is possible to teach a chimpanzee to use sign language, but no chimpanzee has proven able to construct a new sentence in the way that humans do routinely.
7. Nevertheless, there are still many mysteries of communication among animals, including the 'songs' of whales and dolphins.

Exercise 4: Paragraphs – A

- *DIRECTIONS: Paraphrase the following paragraphs by stating each idea in a separate sentence.*

Example: Natural languages follow various rules and it is reasonably clear that humans inherit an innate cognitive capacity to learn these rules. As a result of normal maturation, this capacity of language acquisition reaches a stage of 'readiness' before the age of two, and continues on through the childhood years until puberty. The actual nature of this universal readiness for language is still unknown. Some scientists think that humans are preprogrammed with the basic rules of language, but others believe that humans are innately prepared to learn these rules.

- It is likely that the capacity to learn language rules is innate.
- Readiness to learn language depends upon maturation.
- The period of language readiness is from age 2 to about 14.
- No one knows for sure what the nature of this readiness is.
- It could be that language rules are instinctive.
- Or it could be that humans are predisposed to learn a language.

1. Verbal communication begins as a one-word utterance that seems to serve as a complete sentence. That is to say, one word is sufficient to express the child's idea. Indeed, most parents can readily translate a baby's one-word utterance into an adult sentence.

1. In language development, we see a progression from nothing at birth to one-word utterances at one year, to actual grammatical sentences at three years. It is not clear why children change toward more and more complex grammatical structures nor do we know how the child 'knows' what changes to make. What is clear is that no special training is needed to enable a child increasingly to approximate adult language.

3. There are some 'language universals' such as the distinction between nouns and verbs. Even if these universals are innate, the child must learn the specific way they appear in the particular language that the child is acquiring. For example, some languages put adjectives after the noun while others put adjectives before the noun. One theory is that every normal child has an innate grammar that maps onto the sentences the child hears.

Exercise 5: Paragraphs – B

- *DIRECTIONS: First, summarize each paragraph in one or two sentences. Then, summarize your summary.*

Example: What do people gain from language development? Verbal communication offers many advantages: greater ability to describe one's experiences, greater ability for abstract thought, greater ability to express complex ideas to others. Combined with memory, verbal communication provides the basis for the accumulation of knowledge. In sum, our ability to cope with large amounts of information is dependent on our possession of verbal language system.

- Language development enables a person to handle a lot of information efficiently. This includes describing experiences, expressing ideas, and even thinking.
- Language helps organize knowledge.

1. Human language is dependent on a single structure in the brain; if this structure is destroyed through injury or stroke, language is lost. During early childhood, brain processes develop very much in parallel with language acquisition. Accordingly, most scientists believe that language results from biological maturation as well as environmental influences.

2. It is clear that a child must learn to speak. This apparently happens through experimentation. All normal infants innately produce many sounds such as crying, cooing, and gurgling. As the child gets accustomed to sound-making, babbling becomes a frequent form of practice. The child at an early age produces all the sounds in all the languages in the world, some of which may be lost because they are not in the language the child will learn. Increasingly, the child imitates sounds that are heard during normal speech of older children and adults.

3. "Of course, intelligible speech is more than making sounds, and the child must somehow learn the communication code of his or her society. Some scientists contend that language is acquired in the same way that any other behavior is learned: Specific utterances by the child are rewarded or not according to how closely they fit with adult rules. Others contend that the rules of language are much too complex to be learned piece-meal in this fashion and that the human infant is innately equipped for language.