

Technophobia VIII

Round Two

UCSD

Coram Bryant, Kevin Costello, Matthew Norman

November 10, 2003

1 UCSD Tossups, Round Two

1. "History Will be Kind to Me. I know I have fulfilled my duties. God Willing, I will be back." Saying these words, this graduate of Bentley College handed over his green sash to Moses Blah, ending a career that had started in Samuel Doe's government and spiraled through larger and larger conflicts until he was forced to seek asylum to avoid a war crimes tribunal in Sierra Leone. For ten points, Nigeria is the new home of what former president of Liberia?

Answer: Charles Ghankay "Pappy" Taylor

2. An interpolation method for determining the polynomial of smallest degree passing through a set of specified points. A theorem stating that every positive integer is the sum of four squares. A theorem stating that the order of a subgroup divides the order of the group. Five stable points in and around the planet's heliocentric orbit. A multiplier used in constrained maximization. FTP, these are all graced with the name of what French mathematician?

Answer: Joseph Louis Lagrange

3. An adult human has the capacity to produce approximately 100 of these, though it is rare to use more than 85, and English has about 45. In 1956, Roman Jakobson constructed a classification of their distinctive features, which include nasal or oral enunciation, and explosive or tense characterization. Linguists typically represent them between slashes. For ten points, identify these subunits of linguistic morphemes, the smallest meaningful units of sound in spoken language.

Answer: Phonemes

4. Originally a cup-bearer in the city of Agade, near Kish, he rebelled and replaced his master. Claiming to be a self-made man, found abandoned by a gardener, his story claims his mother was nothing more than a temple prostitute. The first of the great kings to speak Semetic as his native tongue, his defeat of Lugal-zaggisi, despoiler of Lagash, allowed him to extend his kingdom across the Middle East in a series of wars. For ten points, name this first and greatest king of the Akkadians, whose birth story, like Moses, involves him being found in a homemade boat on an open river.

Answer: Sargon

5. It was originally performed at the 405 BC Lenaeon Festival of Athens, where it took first prize. Two months later, it was restaged at the Dionysia, possibly because it features that God disguised in the coat of the Nemean Lion. The disguise backfires when the denizens of the underworld mistake Dionysus for Hercules, and he is forced to trade clothes with Xanthias before continuing on his journey to fetch Euripides, Aeschylus, or some other playwright to rescue the world of Greek tragedy. For ten points, what is this play of Aristophanes whose title characters inhabit the river Acheron?

Answer: The Frogs

6. This theory based on the work of Malthus was originally devised as an argument against Britain's poor laws. Later adapted for use by Karl Marx, it claimed that demands for goods, and thus price levels, increase with population. Population growth, however, would be caused by a change in pay rates. Thus an increase in salary leads to a corresponding increase in prices, leading to, for ten points, what theory of Ricardo which states that real pay tends to remain at a subsistence level?

Answer: The Iron Law of Wages

7. A Norwegian engineer originally thought of this as a linear device, but it was judged impractical due to the length of the vacuum tube that would be required. M. Stanley Livingston, a graduate student, did much of the work of creating a new model, which would allow physicists to use the same potential several times in a single test by bending charged particles. First run in a proton experiment on January 2nd, 1931, this was — for ten points — the first of what type of scientific instrument, created by Ernest Lawrence at the University of California at Berkeley?

Answer: Cyclotron

8. It appears in Rachmaninoff's "Symphonic Dances" and as a counterpoint to the title theme in his "Rhapsody on a Theme by Paganini". Berlioz used this melody traditionally ascribed to Thomas of Celano mockingly during the Witch's Sabbath movement of his "Symphonie Fantastique", while Faure stuck portions of it within the "Libera Me" instead of giving it a movement to itself as would have been typical for a Requiem mass. For ten points, name this 11th Century Roman Catholic hymn for the dead which describes the day of wrath.

Answer: Dies Irae

accept Day of Wrath or similar translations until the end of the question

9. His involvement with Phillip Henslow, particularly as an actor in the play "The Isle of Dogs," led to his imprisonment for sedition, and later underwent a miraculous conversion to Catholicism to avoid the death penalty. This, his play *Sejanus* and his collaboration with Marston and Chapman on *Eastward Ho* combined to create the unfortunate side effect of him being accused before the privy council of "Popery and Treason". Nevertheless, he still found time to write plays about dupes and deceivers that served as worthy successors to his *Every Man in His Humour*. For ten points, who is this Elizabethan author of *The Alchemist* and *Volpone*?

Answer: Ben Jonson

10. The micro variety of this cell class breaks down dead and dying neurons, and serves as part of the immune system in the brain. Star-shaped astrocytes form a bridge between blood vessels and neurons, providing them with structural support and nourishment. Oligodendrocytes and Schwann cells provide the myelin sheath units that greatly facilitate axonal signal transfer. For ten points, give the collective name for these cells, the most numerous in the nervous system, a name that literally means "nerve glue."

Answer: Neuroglia

accept glia or glial cells, or equivalent

11. It is the only U.S. State to have its eastern and western boundaries composed entirely of rivers. Other major rivers in this state include the Turkey, Cedar, and Skunk, along with a river sharing its name with the capital city and emptying into the Mississippi. Places to visit include the Amish communities Kalona and Amana as well as the Bridges of Madison County. For ten points, what is this state with a State University located in Ames and a capital at Des Moines?

Answer: Iowa

12. A dedicated libertine, his biography by N.A.M. Rodger calls him "The Insatiable." When his wife was declared insane in 1767, he took a 17-year old mistress, the singer Martha Ray, who was later murdered in front of the Opera House at Covent Gardens. Considered inept and corrupt, he had the bad fortune to be in charge of the Admiralty when the Royal Navy lost America. For ten points, name this first lord of the admiralty, most prominently known for a type of food he invented either to give

himself more time for gambling or for working at his desk.

Answer: The 4th Earl of Sandwich or John Montagu (accept either)

13. It was blamed for multiple incidents, including the death of its most famous victim's dog reputedly at the same time as his master, but it was recently disproved in an article in the British Medical Journal. Some people blame the entire idea on anthrax present in the closed stone room, which might explain the mysterious illness of the most famous victim, Lord Caernarvon himself, who had funded the entire venture. For ten points, name this legendary invisible killer created in rumors that failed to kill its most obvious target, archaeologist Howard Carter.

Answer: The Curse of King Tutankhamen (Accept equivalents)

14. It started as part of the "Fall Frolic," and the first winner received a golden mermaid trophy in a related event. Protest from religious groups over "Bobbed Hair and Bare Arms" shut it down in 1928, leaving Lois Delander to hold for 5 years the title originally won by Margaret Gorman in 1921 as "Inter City Beauty, Amateur." For ten points, Erika Harold won what 2003 installment of an annual Atlantic City beauty pageant?

Answer: Miss America

15. In perturbation theory, this term is used to describe a change in the hamiltonian which changes eigenvalues but leaves eigenstates unchanged, and the lapse rate by this name describes the change in temperature undergone by air undergoing convection. This term also describes a process undergone by a gas where pressure times volume raised to the power of the ratio of heat capacities at constant pressure and volume is a constant, since that implies that the work done by the gas is equal to the energy change, which by the first law of thermodynamics guarantees the gas neither gains nor loses heat. For ten points, what is this reversible process which does not change entropy?

Answer: Adiabatic process

16. A ruthless TV executive in Robert Redford's Quiz Show. The co-star of Jack Lemmon in the TV movie Tuesdays With Morrie, and an over-the-top Guatemalan houseboy in The Birdcage. The Simpsons characters Professor Frink, Comic Book Guy, Chief Wiggum, Moe, and Apu. For ten points, these characters were all played or voiced by which two-time Emmy Award winner and former-husband to actress Helen Hunt?

Answer: Hank Azaria

17. Located in the western extremity of the Liaotung peninsula, it currently is almost forbidden to foreign visitors as it houses one of China's premier naval bases. Actually, this is hardly new as its sheltered coves have served to protect ships from hostile forces since its original construction during the Han dynasty. Seized by Japan during the 1894-95 war, it was rented to them under the Shimonoseki treaty, only to be returned to China after substantial international pressure. For ten points, give the other name for the port of Lushun, which played its largest role in history after being rented by the Russians in 1898, the port city whose siege played a pivotal role in the Russo-Japanese war.

Answer: Port Arthur

accept Lushun or Lshun on an early buzz

18. Like Roberto Clemente, the waiting period for him to enter the Hall of Fame was waived after he retired from a knee injury at the age of 31. He earned three consecutive NHL regular season MVP awards from 1970 to 1972, during which time he also earned two playoff MVPs. However, he is most widely recognized for his unprecedented run of eight consecutive Norris Trophies, and for being the first man at his position to win the Art Ross Trophy as the league's highest scorer, for ten points name this Boston Bruin defenseman.

Answer: Bobby Orr

19. Seidel and Aragon describe this data structure as an alternative to more complex trees that require costly rebalancing operations. Averaged over all random priority assignments, the expected cost of any insert, membership test, or delete is $O(\log n)$ [oh of log en] Based on the binary search tree, its

nodes also contain a priority key; operations are designed to preserve not only preserve binary search tree ordering but also heap ordering with respect to priority. For ten points, identify this data structure whose name is a tribute to its combination of “tree” and “heap” qualities.

Answer: Treap prompt on “randomized binary search tree”

20. This man’s nephew Matthew turns his back on his family, denying having been involved in the robbery and murder of which this man’s son stands accused. His brother John has risen from his beginnings as a humble carpenter to become a rich and powerful man, but John is unable to speak out for radical change the same way Arthur Jarvis, the man murdered by this man’s son. That son, Absalom, disappears, causing this pastor to journey from Ndotsheni to Johannesburg. For ten points, who is this priest from Alan Paton’s “Cry, the Beloved Country”

Answer: Stephen Kumalo (prompt on either name alone)

21. It was first attained by the British in the Peace of Utrecht in 1713, even though it had been occupied by an Anglo-Dutch force since 1704. It was only granted status as a colony in 1830, but it did not return to local ownership after World War II. Recently, 98.97% of the population voted in a referendum to reject Britain sharing sovereignty with the country it was originally part of. This may fix British ownership of — for ten points— what strategically important piece of land that let Britain control the approaches to the Mediterranean during World War II?

Answer: Gibraltar

2 UCSD Bonuses, Round Two

1. Name the following types of particles, FTP each.

- (a) This class of three particles and their antiparticles are radiated in abundance by the sun. However, due to their low interaction rate with matter, no detector was built to examine them until 1970.

Answer: Neutrino(s)

- (b) This is the name for any indistinguishable particle that has a symmetric wavefunction.

Answer: Boson

- (c) This construct is the particle representation of the vibrational energy of a substance.

Answer: Phonon

2. Identify the following American alternative religions for 10 points each.

- (a) Founded by Mary Baker Eddy in the 1870s, this faith teaches that the only reality is the Mind and that the physical world is an illusion. It is best known for its belief in spiritual healing rather than conventional medicine.

Answer: Christian Science

- (b) In 1909, George W. Hensley began building a loosely organized group of churches in Appalachia dedicated to this dangerous practice suggested in the gospel of Mark. Although outlawed since the 1940's, it continues in a few southern churches today.

Answer: Snake Handling (accept equivalents)

- (c) Organized in New York in 1875 by Helena Blavatsky and Henry Olcott, this movement has its foundations in Spiritualism, but has since branched out to incorporate a variety of occult and Asiatic religious influences.

Answer: Theosophy (accept Theosophical Society)

3. Identify the following about tea FTP each:

- (a) Although this oil is used in several blends of teas, it is probably most famous for its use in Earl Grey.

Answer: Oil of Bergamot

- (b) This type of tea is prepared by ~~only~~ fermenting only the tips of the leaves, leaving it halfway between the fully fermented black and fully unfermented green tea.

Answer: Oolong Tea

- (c) The minimal processing involved in producing this type of tea may be responsible for its antioxidant properties, which are even greater than those of green teas. Typically the leaves are picked early in the growing cycle, then withered and sun-dried.

Answer: White Tea

4. It has been giving sellout performances in Beijing's Great Hall of the People, a big step up from its beginnings as a interval filler in the Eurovision Song Contest. For ten points each:

- (a) Identify this show, once billed as "The hottest show on 160 legs"

Answer: Riverdance

- (b) Name the original male lead dancer from Riverdance, who went on to star in "Lord of the Dance"

Answer: Michael Flatley

- (c) This group originally provided most of the vocals for Riverdance. It has gone on to release such CD's as "Behind the Closed Eye", "Deep Dead Blue", and "Cynara."

Answer: Anuna

5. Identify these Artists who joined the Nazi Party FTP each:

- (a) This architect designed the Reich Chancellory in Berlin and the Nazi Party Palace in Nuremburg before becoming minister of armaments in 1942.

Answer: Albert Speer

- (b) She is most famous for the propaganda films "Olympia" and "Triumph of the Will". Although acquitted twice by Denazification courts, she was imprisoned by the French for her filmmaking and her career never fully recovered from the scandal.

Answer: Leni Riefenstahl

- (c) This conductor joined the Nazi party in 1935 and promptly obtained a position of Music Director at Aachen and frequent commissions to perform at official party events. Unlike Riefenstahl and Speer, his postwar career flourished, including over 30 years as director of the Berlin Philharmonic.

Answer: Herbert von Karajan

6. Identify these terms from games which we were playing when we really should have been writing our packet instead for ten points each:

- (a) In Chess, this term describes, for example, white moving a pawn from f2 to f4 and black capturing it by moving his pawn to f3.

Answer: En Passant

- (b) In Go, this describes a situation where a group of pieces is reduced to a single liberty and can be captured in one move.

Answer: Atari (accept Ate)

- (c) In Euchre, this name is given to the two jacks of the same color as the trump suit.

Answer: Bowers (Accept Right and Left Bower, or other word forms)

7. Answer the following concerning the Furies for the stated number of points.

- (a) For 5 points each, name the three furies.

Answer: Tisiphone, Megaera, and Alecto

- (b) For 5 points, the Furies were said to have sprung from the blood shed by Uranus when which leader of the titans killed him with his scythe.

Answer: Cronus or Kronos or similar sounding things

- (c) For 10 points, which killer of Aegisthus and Clytemnestra was tormented by the Furies until he sought the judgment of the court of Areopagus?

Answer: Orestes

8. VISUAL BONUS: Name the fantasy author from a portion of a map of a world they created for ten points or from the title of a few books in the series containing that map for five.

10 (wait for answer)

- 5 A Crown of Swords, The Great Hunt, The Eye of the World

Answer: Robert Jordan

10 (wait for answer)

5 Wizard's First Rule, Blood of the Fold

Answer: Terry Goodkind

10 (wait for answer)

5 Voyage of the Dawn Treader, The Silver Chair, The Last Battle

Answer: Clive Staples Lewis

9. Ah yes, November, when young men's hearts turn to general mayhem. Answer the following for ten points each:

(a) November 29, 1864 marked the beginning of this massacre where troops under Colonel John Chivington killed over 200 indians, about two thirds of which were women and children

Answer: Sand Creek Massacre/Battle (Prompt on Chivington's Massacre)

(b) In 1923, this November 8th and November 9th attempt to overthrow the regional government in Munich failed, but did not stop the rise of the nascent political movement.

Answer: The Munich Beer Hall Putsch

Accept Marsch auf der Felderhnhalle or Hitler Putsch

(c) November 1970 marked the beginning of this Lieutenant's court martial at Fort Benning for the murder of non-combatants at My Lai (ME-LIE)

Answer: William Calley

10. Name the following Russian Tsars for ten points apiece.

(a) Tsar of Russia during the rise of Napoleon, he was murdered by a palace coup after attempting to reduce the power of the nobility.

Answer: Paul

(b) Son of Paul, he was aware of the conspiracy to depose his father, although he wished it to be non-violent. He personally insisted on taking the Russian army deep into Europe in pursuit of Napoleon's beaten army, and was a dominating anti-liberal figure at the Congress of Vienna.

Answer: Alexander I

(c) Successor to Alexander I, this Tsar of a military background swore that he did not want to shed blood on the first day of his reign, but was forced to disperse troops who claimed to support his brother Constantine in the Decemberist uprising.

Answer: Nicholas I

11. In 1996 the NBA named the 50 greatest players in his league's history. Name some of them for ten points each.

(a) Nicknamed "Pistol Pete", this man averaged 44.2 points over his college career and won three NCAA scoring titles. As a pro, he led the NBA in scoring in 1977, and was known for his exceptional passing skills.

Answer: Pete Maravich

(b) This man was the first player to move straight from high school to the professional league, where he made an immediate impact for the Utah Stars. In 1983, he won the regular season and playoff MVP awards while leading Philadelphia to the NBA Championship.

Answer: Moses Malone (prompt on Malone)

(c) The only player to be named the MVP of both the ABA and the NBA, this Philadelphia 76ers star is best known for popularizing the slam dunk, being one of the first to do so from the free throw line.

Answer: Julius Erving (prompt on Dr. J)

12. Given a work of British Literature, name the title character or characters for the stated number of points.

- (a) For 5 points each, Shakespeare's *Two Gentlemen of Verona*

Answer: Valentine and Proteus

- (b) For ten, D.H. Lawrence's *Lady Chatterly's Lover*

Answer: Oliver Mellors (accept either)

- (c) For ten, Thomas Hardy's *The Mayor of Casterbridge*

Answer: Michael Henchard

13. 30-20-10. Name the artist from clues.

30 A painting of his originally thought to be of a woman weighing pearls is now referred to as "Woman Holding a Balance", since microscopic analysis revealed that the balance was in fact empty.

20 Many of his paintings involved the making of music. Among these are "The Music Lesson," "The Guitar Player," and "The Concert."

10 Very few of his early landscapes survive. Among them, however, is a view of his hometown of Delft.

Answer: Jan Vermeer

14. Name the following figures involved in the unification of Japan FTP each.

- (a) His defeat of Asikaga Okazaki in 1573 ended the Muromachi Shogunate, but he died in 1582 before Japan was fully unified.

Answer: Oda Nobunaga (accept either)

- (b) A general under Nobunaga, he took over leadership of Nobunaga's forces after his death. His completion of the unification was more successful than his two attempts to invade Korea.

Answer: Toyotomi Hideyoshi (accept either)

- (c) His triumph at the battle of Sekigahara ended the struggle for power after Toyotomi's death, earning him the title of Shogun.

Answer: Tokugawa Ieyasu (accept either)

(Note: The answers are accept either because some of these people fought members of their own clan enough that some sources just refer to them by their first name).

15. Name the following movies featuring Robert Duvall FTP each.

- (a) This 2003 movie features Duvall as Boss Spearman, a veteran Cowboy whose pacifistic ways contrast with Kevin Costner's Charley Waite.

Answer: Open Range

- (b) This 1998 movie about toxic waste in your tap water garnered a Best Supporting Actor Oscar nomination for Duvall as Jerome Facher.

Answer: A Civil Action

- (c) Duvall's first lead actor Oscar Nomination came for this 1979 film based on a Pat Conroy novel in which he played Bull Meechum, a Marine father whose hard-headed ways threaten to tear his family apart.

Answer: The Great Santini (accept The Ace or The Gift of Fury)

16. Give the following related mathematical terms for ten points each.

- (a) This is the general name given to a space endowed with a symmetric distance function which satisfies positivity and the triangle inequality.

Answer: Metric space

- (b) If X and Y are metric spaces, a function f from X to Y has this property if for every epsilon and every point x nought in X , there is a delta such that all points within distance delta of x nought are taken to within epsilon of f of x nought.

Answer: Continuity, or Continuous, or other word forms thereof

- (c) The definition of continuity allows delta to depend on x nought. If for each epsilon we can find a delta which works for every x nought simultaneously, the function f is said to have this property:

Answer: Uniform Continuity or Uniformly Continuous
again, accept word forms

17. For ten points each answer the following concerning Supreme Court Decisions in the 2002-2003 term

- (a) In the cases *Gratz v. Bollinger* and *Granholtz v. Bollinger*, the court ruled that this University's Law School admissions policy was constitutional, but its Undergraduate policy was not.

Answer: University of Michigan

- (b) The case *Lawrence v. Texas* overturned Texas's Sodomy law, in effect overturning this 1986 ruling on a similar Georgia Law.

Answer: Bowers v. Hardwick

- (c) The court dismissed an appeal from this company, effectively allowing a lawsuit of Mark Kasky claiming that the company made false statements about its overseas labor practices to go forward

Answer: Nike

18. Identify the following works containing Superfluous Men for ten points each:

- (a) This work is a diary of Grigory Pechorin, a cynical young army officer who wastes his time on wine, women, song, and dueling, the last of which causes him to die young.

Answer: A Hero of Our Time or Geroy nashego vremeni

- (b) Although this Pushkin title character predates Turgenev's "Diary of a Superfluous Man," he embodies all the usual characteristics: rich, disillusioned, too self-centered to admit at first he loves Tatyana, and too stupid not to duel with Tatyana's husband, Lensky.

Answer: Eugene Onegin or Yevgeny Onegin

- (c) This Ivan Goncharov novel's title character is a slothful nobleman who graduates from college, decides he can't hold down a job, and proceeds to do nothing but eat and sleep (taking about 50 pages just to get out of bed). We will avoid the obvious comparison to grad students.

Answer: Oblomov

19. Name the following African countries suffering nasty HIV epidemics FTP each.

- (a) In the news recently for land redistributions under President Mugabe, its HIV infection rate among 15-49 year olds is approximately 33.7%.

Answer: Zimbabwe

- (b) The economy of this nation with capital at Gaborone is dominated by diamond mining. Its HIV infection rate among 15-49 year olds is 35.4%

Answer: Botswana

- (c) Granted independence in 1968, this nation is currently ruled by Mswati III and has a shocking HIV infection rate of 38.6% among 15-49 year olds.

Answer: Swaziland

20. Answer the following concerning the Three Kingdoms Period in Chinese History for the stated number of points.

- (a) For five points each and a bonus 5 for all three, Name the Three Kingdoms involved.

Answer: Wu, Wei, and Shu Han

- (b) This legendary tactician is known as the Sleeping Dragon in the Romance of the Three Kingdoms. His advice to Liu Bei helped keep the Shu kingdom independent from the Wei.

Answer: Zhuge Liang (accept either)

Note from Matt: Zhuge Liang "Totally Sucks" in Dynasty Warriors 3 and 4.

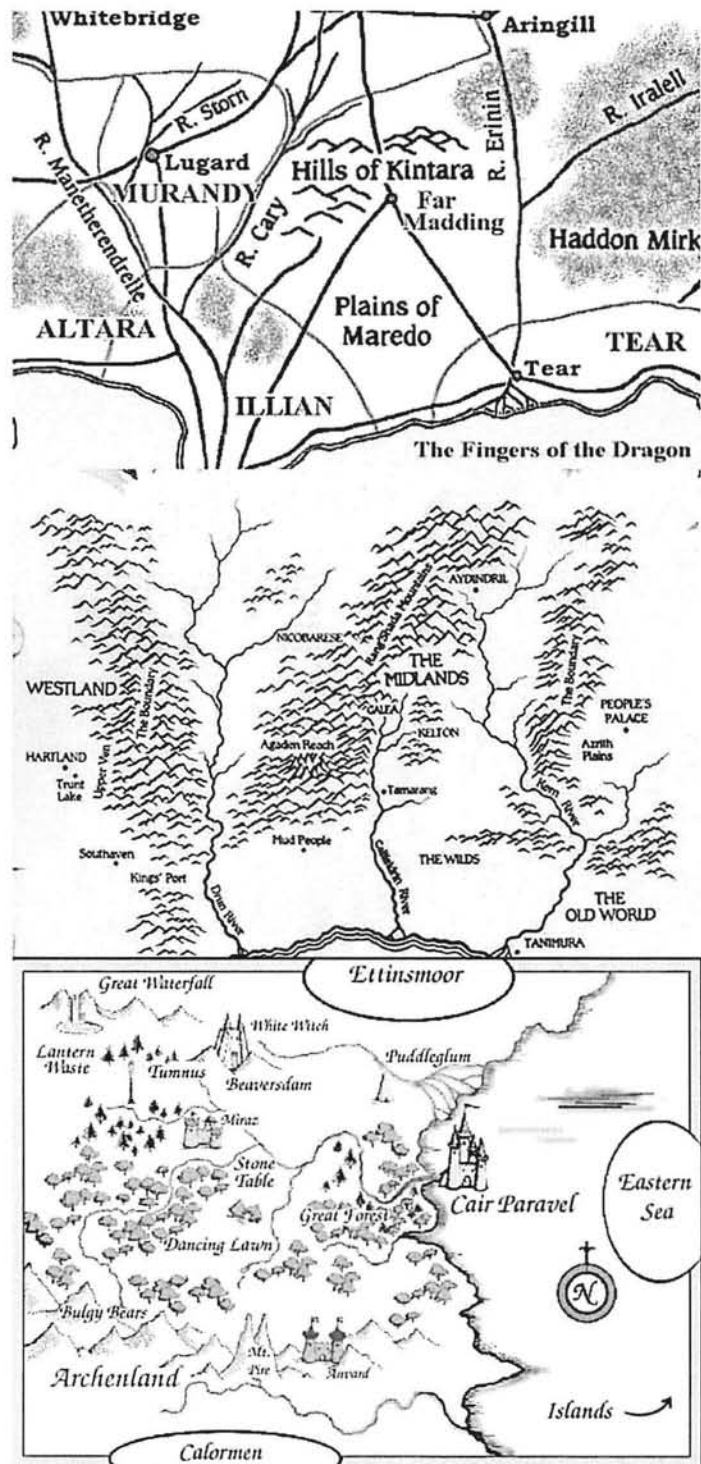


Figure 1: A) Top, B) Middle, C) Bottom