

## **Technophobia VII – 23 November 2002**

**Questions by Kevin Costello (with assistance from Maribeth Mason and Matthew Norman)**

1) The name of this body of water has been the subject of debate behind the scenes, to the point where other countries may use up to three names on the map. However that might change, as two of the countries involved in the dispute have taken the debate to the UN this year. It is the site of the ports of Khasan and Valdivostok, FTP name this sea, which shares its name with either the peninsula or the island group it borders.

A: The SEA OF JAPAN or the SEA OF KOREA or the EAST SEA.

2) Kissinger considered him "One of the two or three most impressive men I have ever met". Even though he was one of the leaders of the Long March with Mao Tse Tung, he was criticized by the radicals during the cultural revolution for being too moderate, which may have been caused by his speaking out against the Red Guards and inviting President Nixon to visit his country. FTP name this longest serving premier of the State Administrative Council, once thought to be China's next leader until his death in 1976.

A: \_Chou\_ En-lai

3) He worked almost entirely in Seville, where he was a student of Juan del Castillo. Starting with dry paintings of such subjects as the Madonna, the Holy Family, and Saint Francis of Paola he later moved on to a more realistic genre, painting such works as Boys Eating Fruit and The Young Beggar. FTP Name this 17th century artist most famous for his many pictures of the street urchins of Spain.

A: Bartolome Esteban MURILLO

4: The author reflects on the grating roar of pebbles, and how that same roar was once heard by Sophocles on the shore of the Aegean. He himself only hears a "melancholy, long, withdrawing roar", while with his eyes, he notes that the moon is full and that the sea is calm despite all this. FTP name this poem where the Sea of Faith was once full and ignorant armies now clash by night, a work of Matthew Arnold.

Answer: \_Dover Beach\_ (Do not accept or prompt on Dover Bitch).

5: It distinguishes between the tragic hero and the Knight of Faith, saying that the latter goes through both the moment of infinite resignation and the leap of faith. In the "Exordium", its author suggests just how incomprehensible one man's faith is by suggesting four alternative paths, all of which would have made him more understandable, but less than the father of faith. Tempted by the ethical, the man nevertheless decides he is willing to sacrifice his son. FTP identify this interpretation of the Biblical story of Isaac and Abraham, written under the name Johannes de Silentio by Soren Kierkegaard.

Answer: \_Fear and Trembling\_

6: Von Neumann's assumption that this could be found for uncertain events by taking an expected value was challenged by the Allais paradox. The assumptions that it is concave, that it has infinite slope at 0, and that it has slope going to 0 at infinity

guarantee a unique solution to the budget problem. This solution can be found by setting its derivative parallel to the vector of prices, since that derivative represents your relative exchange rate of one good for another. FTP identify this function from economics which gives a consumers relative preferences amongst bundles of goods.

Answer: \_Utility\_ function. (Do not accept or prompt on Marginal Utility)

7: Its consists of three parts: small microvesicles, a large vacuole, or paired membranes. Functions of this organelle include removing mannose from oligosaccharide chains and producing mucogen granules. In plant cells, it synthesizes polysaccharides for use in the cell wall. Its main purpose, however, is to receive molecules from the Endoplasmic Reticulum and distribute them throughout the cell. FTP identify this protein packaging system, named for an Italian scientist.

Answer: \_Golgi\_ Apparatus (or \_Golgi\_ Body, or The \_Golgi\_, or anything else that contains the word Golgi).

8: It remained basically unknown to the public until the publication of Seymour Hersh's interview with Ron Ridenhour. Although 80 men were initially under investigation and 25 were charged, only one man was convicted, and he was released after 3 years house arrest. Captain Medina was blamed by some of the men of Charlie Company for encouraging it, and Hugh Thompson eventually emerged as a hero for landing his helicopter and rescuing some of the villagers. Committed under Lieutenant William Calley, FTP name this infamous Vietnam War massacre.

Answer: \_My Lai\_ (pronounced Me Lie)

9: Variants include no press, where there is no communication between the players, and Chaos, a wild 34 player free for all, as well as the published colonial version. Strategies include in Italian troop transport from Naples to Smyrna, known as the Lepanto, and an early Franco/German alliance against the English known as the Sealion. Players spend from 1901 onwards trying to guide one of seven countries towards conquering 18 supply centers in, FTP, what Avalon Hill game?

Answer: \_Diplomacy\_

10: This island has about a tenth of the population of the island directly south of it, even though it is much larger. The Dayak people of this island live in the central highlands near Gunung Palung national park and have been fighting to end Australian mining operations. Home to the provinces of Kalimantan, Sabah, and Sarawak and the city of Bandar Seri Begawan, FTP name this island shared by 3 nations.

Answer: \_Borneo\_

11: In order to secure the votes of 3 moderate Senators against a critical amendment to the bill creating it, Trent Lott was forced to agree to revise provisions relating to offshore companies competing for government contracts and lawsuit immunities for manufacturers of mercury based vaccines. Proposed by President Bush in June 2002, its components will include the Secret Service, Coast Guard, Customs Service, and the Immigration and Naturalization Service. FTP name this soon to be created cabinet department which may or may not be headed by Tom Ridge.

Answer: Department of \_Homeland Security\_

12: He declares his love at Ragueneau's pastry shop and at the Hotel de Bourgogne's playhouse. He is fond of the grand gesture, such as giving his money to theatre patrons in front of his friend Le Bret, and of shouting insults at the actor Montfleury to stop his performance, as well as challenging a hundred men to a duel. He is a little too successful at coaching Christian in the ways of love, however, since Christian is soon able to marry his true love Roxanne. FTP name this title character of a Rostand play, famed for his huge nose.

Answer: \_Cyrano de Bergerac\_

13: The day begins when a white thread and a black one can be distinguished outdoors. During the day, a spirit of restraint should be respected by the tongue, eyes, and ears, or else the other actions are rendered worthless. At night, the *Taraweeh* is said as an expression of one's faith. This cycle continues from the day the first *Hilal* is sighted until 29 days later, when it disappears again and the *Eid al-Fitr* is celebrated. FTP what is this 9th month of the Muslim Calendar, observed worldwide by fasting?

Answer: \_Ramadan\_ (prompt on early fasting or *Sawm*).

14: It opens with a chromatic passage for three flutes, descending and ascending a tritone from C sharp to G natural in nine eighth time. A harp glissando ushers in a series of horn calls, followed by an extended variation on the flute theme and a clarinet solo. Other themes are brought in by the oboe, violins, woodwinds, and finally a pair of antique cymbals, as the titular character decides sleeping is better than deciding whether he was visited by nymphs while he slept. Based on a poem by Stephanie Mallarme (Mall-er-may), FTP name this impressionistic work by Claude Debussy.

A: \_Prelude to the Afternoon of a Faun\_ (accept *Prelude a l'apresmidi d'un Faune*)

15: The title character was hailed as a genius for his Laissez-Faire economic policies, as well as playing Crokinole with the Princess of Monaco. He wanted to make Friday part of the weekend and give babies chocolate eclairs, but instead made a switch with a peasant friend and now works a succession of minimum wage jobs like working at the pizza pizza or vacuuming the turf at the Skydome, so he's now eating humble pie. FTP what is this Moxy Fruvous song which does not feature Juan Carlos II?

Answer: The \_King of Spain\_

16: Associated Steel and Amalgamated Switch and Signal are thriving, in part due to increased government regulation and in part to a sudden lack of competition. Summit Casting and Barton Jones have gone bankrupt, along with many companies in a once thriving region of Colorado. Meanwhile, Sanders Aircraft, Hammond Cars, and Wyatt Oil have mysteriously stopped operating, and the existence of Richard Halley's Fifth Concerto cannot be ascertained by Dagny Taggart. FTP this describes the events in what novel of Ayn Rand that asks "Who is John Galt".

Answer: \_Atlas Shrugged\_

17: His wife is forced into prostitution by Phil Connor, her boss, and later dies in

childbirth. He assaults Connor in a rage, but Connor's political connections through Mike Scully cause him to lose his foreman's job. Just when things look bleakest, he encounters Tommy Hinds, who gives him a job in a small hotel and teaches him the wonders of Socialism. FTP who is stepson-in-law of Teta Elzbieta and husband of Ona who serves to expose the horrors of meat-packing plants in Upton Sinclair's *The Jungle*?

Answer: \_Jurgis\_ \_Rudkus\_ (accept either)

18: Wedderburn's theorem guarantees this property is satisfied by all finite division rings, and it is satisfied by homology groups, but not fundamental groups. It holds for the additive operation in rings, but not necessarily the multiplicative function, and it holds for both operations in fields. All groups of prime order satisfy this property, and are therefore known as abelian. FTP what is this property which in addition simply states that  $a + b$  equals  $b + a$ ?

Answer: \_Commutativity\_ (accept equivalents; also accept forms of \_Abelian\_ before it is mentioned. Prompt on "Field" before homology).

19: Temperature is given by the derivative of energy with respect to this property. Therefore it is given for isothermal processes as the change in heat divided by the temperature, leading to its typical measurement in joules per kelvin. The informational variety of this property explains the failure of Maxwell's demon, and it can be determined explicitly via Boltzmann's equation. What is this property which on average always increases and, FTP, gives a measurement of the disorder of a system?

Answer: \_Entropy\_

20: Along with American Psycho, it is the only movie ever to have earned a perfect zero at Cap alert dot com. Among the bad influences cited is the portrayal of a stuffed monkey performing sexual acts, the throwing of grandma down the stairs to stop an assailant, and the piano which followed her down. And that's not even mentioning the acting of Anna Faris, Cheri Oteri, and the brothers of the director. FTP what is this Wayans brothers movie which attempts to parody I Know What You Did Last Summer, Scream, and most other films of the title Genre?

Answer: \_Scary Movie\_

21: "A Network of Lines that Embrace" isn't "A Network of lines that Intersect". Neither of them are "Leaning From the Steep Slope", and none of the above are "Without Fear of Wind or Vertigo" or "Outside the Town of Malbork". This is all quite unfortunate for you and Ludmilla, as you've never been able to finish any of the 10 novels you've started. FTP this describes the plot of what work told in the second person by Italo Calvino?

Answer: \_If on a Winter's Night a Traveler\_ (or Se una notte d'inverno un viaggiatore)

22: It may very well be the only warship of its class to ever survive attack by an aircraft, suffering damage from a five hundred pound bomb. It was certainly not intended for this type of action, as the wooden hulled, 100 gun ship of the line was in dock at the time. Having served for admirals such as Howe, Hood and Jervis, this ship rounded out

an eventful career by surviving combat one more time. FTP, name the oldest commissioned warship in the world, which was still in commission more than a century after being used as Nelson's flagship at Trafalgar

Answer: HMS Victory

## **Technophobia VII – 23 November 2002**

**Questions by Kevin Costello (with assistance from Maribeth Mason and Matthew Norman)**

1. We at Caltech recognize that you did have a wide variety of choices in activities for this weekend and thank you for choosing Technophobia. That being said, however, identify these other things that you could be doing today instead.

A: FFP each these teams are playing in the Rose Bowl in a game that is critical to at least one team's BCS hopes.

Answer: \_UCLA\_ and \_USC\_

B. This touring production of 70's music that had best be forgotten is enjoying its final performance at the Ahmanson Theatre at 8pm tonight.

Answer: \_Mamma Mia!\_

C: If you're willing to wait a day for higher culture, however, you can catch the first performance of this Offenbach Opera at the Dorothy Chandler Pavillion at 6:30 tomorrow.

Answer: \_Tales of Hoffman\_ (accept Les Contes d'Hoffman)

2. Identify these plays of Aristophanes FTP each

10) Bdelucleon tries to wean his father Philocleon from his love of the law by creating a court at home and trying the dog for stealing some cheese.

Answer: The \_Wasps\_

10) In an attempt to find someone even more ill-mannered than the new slave Paphlagon, the regular slaves turn to the Sausage seller Agoracritus. Sausage selling turns out to be excellent preparation for heading a household..

Answer: The \_Knights\_

10) Dicaeopolis decides to make peace with Sparta while the rest of Athens is at war.

The parallels between his partying and other men's preparations for war serve as a protest against the Peloponnesian war.

Answer: The \_Acharnians\_

3. Given a position, identify the holder of the major league record for most home runs hit while at that position. FTP each,

10) Third Base

Answer: Mike \_Schmidt\_

10) Second Base

Answer: Ryan \_Sandburg\_

10) Catcher

Answer: Carlton \_Fisk\_

4. Identify these types of auctions FTP each:

1) This is the auction most commonly used in practice and is also called the ascending auction. Bidding is open, and bidders can bid more than once. The highest bidder pays their bid.



Answer: \_English\_ auction

2) The reverse of the English auction, in this type of auction the auctioneer starts by offering a high price which is gradually lowered. The first bidder to accept a price pays that price.

Answer: \_Dutch\_ auction

3) In this type of auction named for the 1994 Nobel Laureate in Economics, bidders make a single sealed bid. All winning bidders pay the highest amount bid by a losing bidder.

Answer: \_Vickrey\_ auction (prompt on second-price).

5. It tells the story of a monk who realizes that his life lacks beauty and therefore decides to destroy something beautiful. FTP each:

1. Name this work by Yukio Mishima.

Answer: The \_Temple of the Golden Pavillion\_ or (Kinkakuji)

2. Name the Zen acolyte and narrator who destroys the title structure.

Answer: \_Mizoguchi\_

3. The Temple of the Golden Pavillion is based on the actual 1950 torching of the Kinkakuji temple in this city.

Answer: \_Osaka\_

6. Identify these warriors for Irish independence FTP each:

A) A participant in the Easter Rebellion, he was Minister of Finance during the Irish War of independence, becoming de facto leader when de Valera went to America. He was assassinated in 1922 in his home county of Cork

Answer: Michael \_Collins\_

B) A political warrior more than a military one, his parliamentary maneuvering forced Gladstone to accept land reforms and the principle of Home Rule. He was forced to resign when his relationship with Kitty O'Shea became public.

Answer: Charles Stuart \_Parnell\_

C) He founded the Society of United Irishman in 1791 with Napper Tandy. He sailed with French invasion forces in 1796 and 1798 in an attempt to conquer Ireland, but was captured and died in prison in November 1798.

Answer: Theobald Wolfe \_Tone\_

7. Answering the following regarding a water dispute FTP each

10) In 1988 the Supreme Court ruled that New Mexico had stolen approximately 14 million dollars worth of this river's water from Texas, violating a 1948 compact sharing the river's name

Answer: The \_Pecos\_ River

10) The task of appointing a new engineer to manage the Pecos river water is falling to this governor-elect of New Mexico

Answer: Bill \_Richardson\_

10) The Texas town of Pecos, which wants the extra water, is the last major farm community to use the water before the Pecos joins this larger river

Answer: Rio Grande

8. Given a film, identify the city that it takes place in for ten points each.

A. Russian Ark

**Petrograd / St. Petersburg / Leningrad [acc. any]**

B. Lola Rennt

**Berlin**

C. Good Will Hunting

Boston (**prompt on Cambridge, as he only works there**)

9. Identify the following structures used in combinatorics for fifteen points each:

A. This is an grid of letters such that each letter appears exactly once in each row and each column. It can be used in the design of balanced experiments.

Answer: Latin Square

B. This is a matrix of plus and minus ones such that the inner product of any two rows is

0. It is used to construct the Reed-Muller error correcting code.

Answer: Hadamard Matrix

10. Answer the following questions concerning the impeachment of Andrew Johnson FTP each.

10) Johnson was impeached for violation of the Tenure of Office act when he fired what secretary of War?

Answer: Edward Stanton

10) What then Chief Justice of the Supreme Court presided over the impeachment trial?

Answer: Salmon P. Chase

10) Although 6 other Republicans voted for Johnson's acquittal, this Kansas Senator is the most famous, and was featured in Profiles in Courage

Answer: Edmund G. Ross

11. The magic ring is a popular theme throughout legend and mythology. Answer the following regarding them FTP each

10) This golden ring of Odin spawned 8 nearly identical copies of itself every ninth morning.

Answer: Draupnir

10) This Knight of the Round Table received a ring from Dame Lionesse which prevented him from shedding blood, no matter how grievously wounded.

Answer: Sir Gareth

10) This trickster pretended to have sent a ring of great power to the King Lion. Its three gems would give light in darkness, guard the wearer from all ills, and cure all blains



and sprains

Answer: \_Reynard\_ the Fox

12. Identify these works of Jorge Luis Borges FTP each:

10) This title object is "a sphere whose center is everywhere and whose circumference is nowhere...one of the points in space that contains all other points"

Answer: The \_Aleph\_ (or El \_Aleph\_)

10) Dr. Yu Tsun must tell Berlin the name of the town where the British are keeping an artillery unit. He does so by killing a man with the same name as the town, and letting the Germans read the newspaper accounts of the murder.

Answer: The \_Garden of Forking Paths\_ (or "El jardín de senderos que se bifurcan")

10) Men have found the ultimate library, the library that contains every single book. Unfortunately, there are so many books the characters can't find any of them.

Answer: The \_Library of Babel\_ (accept La Biblioteca de Babel )

13. Identify these principles and formulae from the theory of relativity FTP each:

This principle states that the laws of physics look the same in a uniformly accelerated laboratory as they do in a uniform gravitational field.

Answer: Principle of \_Equivalence\_

This factor of the quantity  $1 - \frac{v^2}{c^2}$  raised to the negative one half power, where  $c$  is the speed of light, appears throughout the theory.

Answer: \_Lorentz\_-Fitzgerald Factor (prompt on just Fitzgerald)

This quantity can be defined as the square root of the quantity Energy squared over  $c$  to the fourth minus momentum squared over  $c$  squared

Answer: \_Rest Mass\_ or \_Invariant Mass\_ (prompt on Mass, do not accept or prompt on relativistic mass)

14. Identify these figures from Medieval and Renaissance Music FTP each.

A: The founder of a convent in Rupertsberg, her *The Play of the Virtues* tells how Anima falls to temptation but is rescued by, among others, Faith, Hope, and Charity.

Answer: \_Hildegard\_ Von Bingen

B: His *Pope Marcellus Mass* was written to satisfy the demands of the Council of Trent that religious works have intelligible text. He also composed more than 250 a capella motets, including famous ones based on the Lamentations and the psalm "Sicut Cervus" Giovanni Pierluigi da \_Palestrina\_

C: With works such as *The Coronation of Poppea* and *Orfeo*, he helped found the Genre of Opera.

Claudio \_Monteverdi\_

15. Apart from dignity and propriety, there were a few other losers in this month's elections. Identify the losing incumbent given the man he lost to for ten points or further details for five.

10: Bob Riley

5: This Alabama governor lost by 3,000 votes after 7,000 of his votes in Baldwin county mysteriously disappeared in a computer glitch.

Don \_Siegelman\_

10: Mark Pryor

5. This Arkansas Senator was unable to survive the political fallout from the breakup of his 29 year marriage.

Tim \_Hutchinson\_

10: Jim Talent

5: This Senator had only spent 2 years in office, but was not on the ballot two years ago, so had to run again.

Answer: \_J\_ean \_Carnahan\_ (prompt on last name only)

16. For the stated number of points--given a set of related child actors, name the TV show on which they all appeared.

A. For 5 points--Mary-Kate and Ashley Olsen, from 1987-1995.

answer: \_Full House\_

B. For 10 points--Zachary and Myrinda Brino from 1999-2001, Nikolas and Lorenzo Brino from 2001 to the present.

answer: \_7th Heaven\_

C. For 15 points--Blake and Dylan Tuomy-Wilhoit, from 1992-1995.

answer: \_Full House\_

17. Given a list of four countries, name the two countries from the pair who do NOT share a border with each other FTP each, all or nothing.

A: Austria, Czech Republic, Hungary, Slovakia

Answer: \_Hungary\_ and the \_Czech Republic\_

B: Kazakhstan, Kyrgystan, Tajikistan, Uzbekistan

Answer: \_Kazakhstan\_ and \_Tajikistan\_

C: Burundi, Rwanda, Tanzania, Uganda

Answer: \_Burundi\_ and \_Tanzania\_

18. Everyone knows about the 20 gazillion treaties signed in Paris, but what about their British neighbors? Answer the following questions about treaties named after London FTP each.

1) This 1930 treaty involving the US, Britain and Japan was one of several treaties designed to insure that World War I was the last great war. It was not particularly effective.

A: The London \_Naval\_ Disarmament Treaty

2) A 1913 treaty of London ended this war, with Turkey abandoning all claim to Crete.

A: The FIRST BALKAN War

3) The 1839 treaty of London guaranteed that England, France, Russia, Prussia and Austria would forever safeguard this country's neutrality.

A: BELGIUM

19. 30-20-10, name the location

30) Said to have been built by Orestes, Theodore, despot of Epirus was killed there by the King of the Bulgars in 1229.

20) Site of many battles, including one between Constantine and the emperor Licinius in 324, it was ironically the namesake of a peace treaty in 1829 between Russia and the Ottoman Empire.

10) The most famous event there was the defeat of Emperor Valens at the hands of the Goths in 378.

A: ADRIANOPLE

20. FTP each name the element of the periodic table which has:

10) The greatest electron Affinity

Answer: \_Chlorine\_

10) The highest Ionization Energy

Answer: \_Helium\_

10) The highest electronegativity

Answer: \_Flourine\_

21. Identify the Anthropologist from works, 30-20-10

30: Race: Science and Politics

20: Concept of the Guardian Spirit in North America

10: Patterns of Culture, the Chrysanthemum and the Sword

Answer: Ruth \_Benedict\_