

# Technophobia VIII

## Round Four

UC Irvine  
Willie Chen

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### 1 UCI Tossups, Round Four

1. Because John Raulston had set a fine of over \$50 without deferring to the jury, it was declared a mistrial. The case itself was originally brought to court because George Rappelyea, a mining engineer, wanted to challenge the Butler Act. The defense, coordinated by the ACLU, didn't want New York lawyer Dudley Malone or Chicago lawyer Clarence Darrow anywhere near the Dayton, Tennessee trial, but the two men came anyway. With the addition of William Jennings Bryan as an assistant prosecutor, the stage for a spectacle was set. For ten points, identify this trial challenging the teaching of evolution dramatized in *Inherit the Wind*.

**Answer:** (John T.) Scopes monkey trial

2. Either he or his father Poeas was given a gift in return for lighting a funeral pyre. He was bitten by a snake and was left on the island of Lemnos due to his wound. However, Odysseus and Diomedes later came back to retrieve him because it was prophesized that items in his possession were the only means to conquering Troy. His wound healed and, in battle, he killed Paris. For ten points, name this Greek hero of the Trojan War who inherited the bow and poison arrows from Heracles.

**Answer:** Philoctetes

3. The Chinese variety of this tree has a mottled bark which is inhospitable to scolytus [SCO-light-us] multi striatus. Found in the temperate regions of Europe and North America, these trees have double-toothed leaf margins and clusters of small flowers. A shipment of wood from Europe to the US during WWI probably brought a fungus that caused a North American epidemic in 1924. For ten points, name these trees, threatened by *Ceratocystis* [kara-TO-si-tuhs] *ulmi*, which was first seriously threatened by the fungus in the Netherlands.

**Answer:** elm trees

4. In mathematics, Euler gave a generating function for it using the q-series of the product from  $m$  equals 1 to infinity of one minus  $q$  to the  $m^{th}$  and the Ferrers diagram is a pictorial representation of it. In statistical mechanics, it is computed as a sum over the eigenstates of the Hamiltonian, normalizes Boltzmann's Probability Distribution, and its logarithm is the free energy of a system. For ten points, identify this function which calculates the number of ways to express a number as sums of integers or computes the number of energy levels available to a system.

**Answer:** Partition Function

5. Debussy wrote two for the piano and Burgmüller wrote one as his Opus 100, Number 2. In ballet, it is when a dancer stands on one leg, the other leg extended backward with straight knee, with the posing arms. In architecture, it denotes a complex and ornate design of intertwined floral, foliate, and

geometrical figures. For ten points, identify this motif developed by Turkish artisans around 1000 AD which — before becoming stylized — simply meant “arabian” in French.

**Answer:** arabesque

6. Daniel Webster and Attorney General William Wirt represented the plaintiff in the appeal to the Supreme Court. The decision in the 1824 case focused on clauses found in Article I, Section 8 and Article VI of the Constitution. The state chief justice James Kent, upheld the monopoly in 1812 that was previously owned by Robert Livingstone and Robert Fulton for operating steamboat travel in New York. With a majority opinion written by John Marshall, FTP, what is this case that expanded the scope of federal authority over interstate commerce?

**Answer:** Gibbons v. Ogden

7. The pre-Xia [SHAW] Banshan pottery found in Gansu province are thought to be from this period; such accouterments were signs that communities were becoming centered around agriculture and domesticated animals; people used sophisticated, finely honed stone tools and ceramic wares to support their new settlements. The earliest communities in this period appeared about 9000 BC in the Middle East, followed by Egypt, India, and China. Ending around 1000 BC, this is—for ten points—what final period of the Stone Age, literally meaning “new rock”?

**Answer:** Neolithic period

8. The secret behind the manufacturing of semen for this film — hint: it involves a top shelf shampoo — is explained in a DVD bonus movie. The title is mentioned only once, after the three main characters have reached *Boca del Cielo* [boo hka del KEE-yo?]. Luisa is an older woman secretly dying of a cancer. Julio and Tenoch are best friends who embark on the car trip that culminates in a *ménage-a-trois*. Directed by Alfonso Cuarón [?], this is—for ten points—what Mexican film, starring Maribel Verdú, Diego Luna, and Gael García Bernal?

**Answer:** Y tu mamá también

**Accept** “Your mother too”

9. Its actual chemical formula is  $\text{Zn}_4\text{Si}_2\text{O}_7(\text{OH})_2 \cdot \text{H}_2\text{O}$ . Originally the name given to the mineral *smithsonite*, it is a type of silicate or carbonate from which zinc is commonly extracted. However, it is now better known as a mixture of zinc oxide and 0.5% ferric oxide. Although quite useful as an over-the-counter medication, it can cause side effects like dermatographism when it comes into contact with jewelry. For ten points, name this compound, which—as a pink powder or a light-pink lotion—can treat skin conditions like poison-ivy rash.

**Answer:** calamine

10. Set in 1995, this current off-Broadway hit stars Brenda Withers and Mindy Kaling, both cross-dressing to play the two title roles. Withers and Kaling also co-wrote the script, which pits the two characters in an hour-long existential dialogue after a movie screenplay that literally falls from the ceiling. For ten points, name this play, which depicts two struggling actors in Boston as they wrote *Good Will Hunting* whose title is the first names of Mr. Damon and Mr. Affleck.

**Answer:** Matt & Ben

11. Its two major rivers are Yaque del Norte and Yaque del Sur, both originating in the Cordillera [kordeh-YEER-ah] Central range. Its largest lake is Lago de Enriquillo and its highest peak is Pico Duarte. Its major cities include Puerto Plata, Santiago, and San Pedro de Macorís—home to several Major League Baseball players. For ten points, name this Caribbean nation that occupies the eastern half of Hispaniola with the capital at Santo Domingo.

**Answer:** The Dominican Republic

12. It opens with the ominous line, “The sexton stood in the porch of Milford meetinghouse, pulling lustily at the bell rope.” The main character’s “two folds of cape . . . entirely concealed his features, except the mouth and chin.” For ten points, what is this Nathaniel Hawthorne short story, subtitled “A Parable,” in which Reverend Hooper wears the titular object to cover his feeling of guilt until the day

of his death?

**Answer:** “The Minister’s Black Veil”

13. Debuting at age 16 in Wigmore Hall, she gained early stardom with a recording of the Elgar Concerto with Sir John Barbirolli [bar-BEER-oh-lee]. After the octogenarian Pablo Casals first heard her performance, he told her, “You can’t possibly be English with such a temperament.” For ten points, name this cellist who, after marrying and performing with pianist Daniel Barenboim, developed multiple sclerosis, which ended her career and later her life.

**Answer:** Jacqueline du Pré

14. He fled the nation when Constantine was deposed, although the rebels he organized in Macedonia continued to fight even when he was in Corsica. Refusing to abandon his country’s ostensibly neutral position in World War One, he again found himself wrapped up in international turmoil as he resisted Italy’s 1941 invasion in the last year of his life. Born in Ithaca, he served as a general in the army and was instrumental in reinstating the autocratic George II as the King of Greece. For ten points, name this man who served as the dictator of Greece from 1936 until 1941.

**Answer:** Ioannis Metaxas

15. A member of Drexel Burnham’s trading division pioneered the use of these to raise large amounts of cash in a short period of time. In the American market, these must pay an average of more than 5% more than the prevailing rate in order to attract investors—hence more than 35% of those issued end up defaulting, thus leading to the downfall of Michael Milken at Drexel Burnham. For ten points, identify this derogatory term for securities officially rated as “below investment grade.”

**Answer:** junk bonds

16. Any non-empty one can be expressed via the Chomsky Normal Form or the Greibach Normal Form, although the Backus-Naur Form is more commonly to describe programming languages. They are not regular, but it is closed under intersection with regular languages but not under intersections with itself. The strings described by this class is equivalent to strings accepted by push-down automata, and the Cocke-Younger-Kasami algorithm describes how to generate a polynomial time acceptor for such languages. Ftp, identify this class of languages which can be expressed in terms of substitutions independent of surrounding symbols.

**Answer:** Context Free Grammar/Language

**Prompt on CFG; prompt on PDA or Push Down Automata; don’t accept “first-order,” but prompt on anything containing “second order”**

17. It was first read in 1960 for the Boston Arts festival, and commemorates one of poet’s ancestors and at the same time alludes to the current civil rights movement. The speaker of this poem compares his nose to a snail crawling on the glass of the old aquarium in Boston, now abandoned “in a Sahara of snow.” The speaker assigns immortality to the monument by Gauden to Colonel Robert G. Shaw, while at the same time recognizing the futility and mortality of the white leader of the 54<sup>th</sup> Regiment of black soldiers during the Civil War. For ten points, what is this elegiac poem by Robert Lowell?

**Answer:** For the Union Dead

18. Although long commemorated as a sage, he was worshipped as the life-giving son of Ptah, god of Memphis, during the Saite period around 500 BC. For his wide knowledge of medicine, the Greeks identified him with Asclepius. Identify this Egyptian physician and adviser to King Zoser of the Third Dynasty, who — for ten points— probably served as the architect of the famous step-pyramid at Saqqarah near Cairo.

**Answer:** Imhotep

19. He introduced color and unusual materials of the *Catalan Renaixensa* in addition to audacious technical innovations through his flamboyant Art Nouveau style. He did not live to see the completion of his most famous work which consumed over forty years of his life because he was struck by a trolley car on his way to vespers in 1926. For ten points, name this Spanish architect, whose work is found almost

exclusively in Barcelona, the site of his spectacular Church of the Holy Family.

**Answer:** **Antonio Gaudí**

20. A great feat of civil engineering, it crosses 600 rivers and streams and two mountain ranges. It is also designed to withstand earthquakes. Nearly half of its 800-mile length had to be supported aboveground to avoid thawing the permafrost. Completed in 1977 under much criticism from environmentalists, this is— for ten points—what project was constructed to transport crude oil to the ice-free port of Valdez?

**Answer:** Trans-Alaskan Pipeline

## 2 UCI Bonuses, Round Four

1. For 5-10-20-30, name these types of headwear:

- (a) Named after the knighted name of Edward Smith Stanley, it is a stiff felt hat with a round crown and a narrow, curved brim.

**Answer:** derby hat (Stanley was the Earl of Derby)

- (b) Named after a Moroccan town, it is a man's felt cap in the shape of a flat-topped cone, usually red with black tassel hanging from the crown.

**Answer:** fez

- (c) It is a skullcap worn by male Jews, especially those adhering to Orthodox or Conservative traditions.

**Answer:** yarmulke

- (d) These are the fur caps given to Soviet officers.

**Answer:** Ushanka

2. Name these groups of poets of the British Isles for ten points each.

- (a) These poets wrote light, witty love poetry under the court of King Charles I. They include Thomas Carew, Robert Herrick, and Richard Lovelace.

**Answer:** Cavalier poets

- (b) This circle of British Christian men such as Charles Williams, Owen Barfield, J.R.R. Tolkien, and C.S. Lewis met in Oxford to read manuscripts and critique each other's work.

**Answer:** Inklings

- (c) Established in 1792 by Iolo Morganwg, this society of Welsh bards organized the National Eisteddfod [AI-stet-vodt], an annual competition of music and literature in Wales.

**Answer:** Gorsedd [GAW-sedt] **poets**

3. Answer the following related questions from drama for ten points each.

- (a) What Chekhov play begins with a group of intellectuals debating the value of the death penalty versus life imprisonment and leads to "the Banker" proving that he can withstand fifteen years of voluntary solitary confinement?

**Answer:** The Bet or The Wager

Accept Larey

- (b) What Dürrenmat play, later turned into a 1964 movie with Ingrid Bergman and Anthony Quinn, tells the story of a jilted lover offering her hometown a billion if the village does in her first love, III?

**Answer:** The Visit of the Old Woman

Accept Der Besuch der alten Dame

- (c) In this musical, Nathan makes a \$1000 bet with Sky Masterson that he cannot take Sarah Brown, a sergeant at the Save-a-Soul Mission, to Havana for a day.

**Answer:** Guys and Dolls

4. Answer these questions on the ancient Phoenicians for 10 points each:

- (a) The Phoenicians established several colonies around the Mediterranean, including this one in northern Africa founded by the legendary Princess Dido.

**Answer:** Carthage

- (b) The city of Carthage was founded by colonists from this city.  
**Answer:** Tyre
- (c) The colony of Tyre is famous for its export of what coloring agent?  
**Answer:** purple dye or indigo
5. Filipino geography, for ten points:
- (a) The capital Manila lies on what island?  
**Answer:** Luzon
- (b) Luzon also contains this volcano that erupted in June 1991 after 600 years of dormancy.  
**Answer:** Mount Pinatubo
- (c) The active volcano Apo, as well as the cities Zamboanga and Cebu, lies on this second largest island of the Philippines.  
**Answer:** Mindanao
6. Name these people involved in movie-making for ten points each:
- (a) This American actor played boxer Jake LaMotta in the 1979 film, *Raging Bull* and won an Oscar for that role.  
**Answer:** Robert De Niro
- (b) This American film director specialized in bloody thrillers. His films include *Carrie*, *The Untouchables*, and the 2002 film, *Femme Fatale*.  
**Answer:** Brian De Palma
- (c) This Italian actor/director, a champion of *cinema vérité*, made *The Garden of the Finzi-Continis* and *Umberto D*. However, he is probably best remembered for directing the 1948 Oscar-winning film, *Bicycle Thie ves*.  
**Answer:** Vittorio De Sica
7. Identify the establishment on a 30-20-10 basis based on appearances in pop culture.
- (a) In a 1987 TV movie with Bud Cort and Robert Picardo, a young Alex West inherits the property after befriendng the former owner in a mental institution and attempts to rehabilitate the property.
- (b) It is from this lair in the area around Terror Lake that Sideshow Bob plots how he will disembowel — er, gut — Bart.
- (c) This out-of-the-way getaway has twelve rooms and twelve vacancies. The innkeeper, Norman Bates, isn't always quite himself.  
**Answer:** Bates Motel
8. For ten points each, answer these questions related to Buddhism:
- (a) A central tenet of Buddhism is this universal force by which good and evil deeds result in appropriate reward or punishment. It is also the force behind reincarnation.  
**Answer:** karma
- (b) Mahayana Buddhism introduced this doctrine—literally “wisdom mercy”—for enlightened beings who, in lieu of entering nirvana, choose to return to earth to save more souls.  
**Answer:** bodhisattva
- (c) This Chinese pilgrim journeyed through Turkestan, India, and Southeast Asia in search of Buddhist Scriptures. He translated the earliest accounts of Buddha's life into Chinese. His 416 AD memoir, *Account of Buddhist Countries*, is the oldest known Chinese travel book.  
**Answer:** Faxian or Fa-hsien

9. 30-20-10. Name the philosopher from clues:

- (a) In his 1755 work, *Theory of the Heavens*, he combined physics and theology in an argument for God's existence.
- (b) His first published work was *Thoughts on the True Estimates of Living Forces*. He argued that human understanding and knowledge did not come solely from experience.
- (c) Born in Königsberg, he argued that right action cannot be based on feelings or inclinations but conforms to a law given by reason, in what he called the "categorical imperative."

**Answer: Immanuel Kant**

10. Give the number from clues about its palindromic properties on a 30-20-10 basis.

30 It is the largest prime factor of the smallest palindromic Carmichael number.

20 It's the smallest palindromic prime  $p$  such that the largest odd factor of  $p - 1$  is a nonprime.

10 It's the smallest three-digit palindromic prime.

**Answer: 101**

11. Name the element on a 30-20-10 basis:

- (a) Like tungsten, it is used in light-bulb filaments. Occurring in nature in ores of zirconium, it absorbs neutrons better than most metals; thus it is used in the control rods of nuclear reactors.
- (b) Co-discovered by Coster and von Hevesy, this element was named after the Latin name of Copenhagen, the city in which it was discovered.
- (c) Its atomic number is 72 and symbol is Hf.

**Answer: Hafnium**

12. Name these diminutive publications on a 5-10-15 basis:

- (a) The title of this children's novel refers to Meg, Jo, Beth, and Amy March.

**Answer: Little Women**

- (b) This book by Mao Zedong adapts Marxist theory to the Chinese conditions.

**Answer: The Little Red Book**

**or Xiao Hong Shu**

- (c) This American literary magazine was founded in Chicago by Margaret Anderson in 1914. It published many experimental writers at that time, including Yeats, Pound, T.S. Eliot, and William Carlos Williams.

**Answer: The Little Review**

13. For 10 points each, name the character in Shakespeare's *Julius Caesar* who speaks the following lines:

- (a) "But those that understood him smiled at one another and shook their heads; but for mine own part, it was Greek to me."

**Answer: Casca**

- (b) "Within the bond of marriage, tell me, Brutus,  
Is it excepted I should know no secrets  
That appertain to you?"

**Answer: Portia**

- (c) Yet Brutus says he was ambitious;  
And Brutus is an honorable man."

**Answer: Marcus Antonius or Marc Antony**

14. The Celtic legend of Tristan and Isolde is a tragic love story. For ten points each:

- (a) Name the German composer who wrote the opera *Tristan und Isolde*, which caused “swan songs” just before a character’s death to come into vogue.

**Answer:** Richard Wagner

- (b) Isolde was the wife of this man, the King of Cornwall and uncle of Tristan.

**Answer:** King Mark

- (c) The fate of Tristan and Isolde was doomed after they accidentally took what drink, a gift from Isolde’s mother?

**Answer:** Liebestrank [lee-b-es-trahnk]

**Accept** aphrodisiac or love potion

15. For the stated number of points each, name these South African politicians:

- (a) For ten, he was elected to the South African Assembly in 1948. Later, as president, he attempted limited power-sharing with non-whites, but saw a massive defection from his own right-wing National Party.

**Answer:** Pieter Willem Botha

- (b) For fifteen, he rose through the ranks of Umkhonto, the armed wing of the ANC, serving as its chief-of-staff between 1987 and 1992. Elected secretary-general of the nation’s Communist Party, he was murdered by a white right-winger, triggering unrest.

**Answer:** Chris Hani

**Accept his real name, Martin Thembisile** Hani

- (c) For five, this man was freed after nearly thirty years of imprisonment to win the 1993 Nobel Peace Prize with de Klerk and became president of South Africa a year later.

**Answer:** Nelson Mandela

16. Name these phobias for the stated number of points each:

- (a) For five, fear of open spaces

**Answer:** agoraphobia

- (b) For five, fear of strangers and foreigners

**Answer:** xenophobia

- (c) For ten, fear of dogs

**Answer:** cynophobia

- (d) For ten, fear of nudity

**Answer:** gymnophobia or gymnotophobia

17. For ten points each, name these things found in the hospital:

- (a) It stops the uncoordinated twitching of an arrested heart, thus providing a “jump start” a heart that has stopped beating.

**Answer:** defibrillator

- (b) This is the general term for a device that measures blood pressure; in hospitals it is usually an uncomfortable fabric collar Velcroed to your arm and squeezed tight.

**Answer:** sphygmomanometer or sphygmometer

- (c) It is a surgical instrument having circular saw-like edges, used to cut out disks of bone, usually from the skull.

**Answer:** trephine or trepan

18. Identify the author from works on a 30-20-10 basis.



- 30 In *Lost Boys*, Step Fletcher, a computer programmer in Steuben North Carolina deal with strange threats to their family.
- 20 *Barefoot in Zion*, a musical written with his composer brother, was played in Utah as part of the Mormon celebration of the sesquicentennial of the entry into Salt Lake Valley.
- 10 *Shadow of the Hegemon*, the latest book in a series about child prodigies taking over the world.

**Answer: Orson Scot Card**

19. Name these chemical processes for 15 points each:

- (a) This trademarked copying process is used to produce positive prints from printed materials or film. The film is placed on top of chemically treated paper and then exposed to ultraviolet light. The image is then developed dry using ammonia vapor.

**Answer: Ozalid process**

- (b) This industrial process is carried out at 400-500 degrees centigrade at 200 atm. 1 part nitrogen and 3 parts hydrogen are passed over a catalyst of finely divided iron. The resulting gas is separated by either dissolving in water or cooling to liquid.

**Answer: Haber process (to produce ammonia)**

20. Name these things a Japanese woman may wear for ten points each:

- (a) It is a long, loose, wide-sleeved robe worn with a broad sash.

**Answer: kimono**

- (b) These are socks with split toes, meant to be worn with either geta or zori.

**Answer: Tabi**

- (c) It is a wide sash fastened in the back with a large flat bow. It is a part of the traditional dress.

**Answer: obi**