

Berkeley Late Spring Tournament—I Know Kung Fu (2004)

Questions by Berkeley Paul (Ashley Chow, Martha Matsumoto, Paul Reverdy and Salpi Vartivarian)

1. The leader of this movement claimed that 300,000 people were present at Kensington Common on April 10, 1848. It lost much of its support after the failure of that meeting, but at its height from 1839 to 1842 it had over three million supporters for its goals of universal manhood suffrage, the secret ballot, abolition of property requirements for members of Parliament, and annual elections. Led by Feargus O'Connor, FTP name this 19th century British reform movement which took its name from a document written by William Lovett.

Ans. Chartism

2. In this novel, the protagonist, the chief financial officer at a bank, attracts most the women he meets including his neighbor Fräulein Bürstner, the usher's wife, and Leni, his lawyer's housekeeper, but ends up being killed "like a dog" on the edge of the city after. Containing the famous parable "Before the Law" and beginning "Someone must have slandered Josef K., for one morning, without having done anything truly wrong, he was arrested", FTP, name this novel by Franz Kafka about K.'s titular court proceeding.

Ans. The Trial

3. He published his etchings on bullfighting in the *Tauromaquia*. His other works include *The Colossus*, *The Yard of the Madhouse*, and "The sleep of reason brings forth monsters," from a series of prints entitled *Los Caprichos*. Late in his life, he moved into the "Quinta del sordo" and painted a series of works on its walls known as the *Black Paintings*. He had earlier worked as a portraitist of royalty, including his depiction of the Spanish royal family of Charles IV. FTP, name this Spanish artist responsible for *Saturn Devouring his Children* and *The Third of May*.

Ans. Francisco de Goya y Lucientes

4. Much of its early development was pushed by IBM's Bob Bemer, who recognized the need for a method of computer-to-computer communication. Among its major contributions to computer science was the inclusion of an escape sequence mechanism that allowed switching between the primary code and other sets of alphabets and symbols, necessary because the original code could only accommodate 128 symbols. FTP, what is this, the most simple of text formats, that is now used for everything from simple communication to online art?

Ans: American Standard Code for Information Interchange (pronounced Ask-ee)

5. This act's sponsor said that civilized people would "wear civilized clothes, send children to school, drink whiskey, and own property." By 1932, two-thirds of the grant was given over to homesteaders and railroad companies after the expiration of the 25 year period of required ownership on the original 160-acre plots of old reservation land. FTP, name this 1887 Act that sought to assimilate Native Americans into white society.

Ans: Dawes Act (accept: Dawes Severalty Act or Dawes General Allotment Act)

6. This league featured teams such as the Dallas Chaparrals, the Minnesota Muskies, and the Anaheim Amigos in its first season, but by the time of its dissolution in 1976, only six teams remained in the league after the Virginia Squires folded after the season. It differed in its use of a 30-second shot clock, introduced the three-point shot, and, of course, used a red, white, and blue ball. For ten points, what is this league, from which the Nets, Nuggets, Pacers, and Spurs eventually joined the NBA in 1976?

Ans: the American Basketball Association

7. Most of the action of the novel takes place on an island which fishermen recognize as the "unchallenged barracuda capital of the world." Newton planned to marry a Ukrainian midget dancer, but she left him after a few weeks, claiming Americans to be "too materialistic." The narrator, Jonah, sets out to track down and interview the three Hoenikker children, but ends up in San Lorenzo. The religion Bokononism is introduced in, FTP, what Kurt Vonnegut novel whose title comes from a popular children's string game?

Ans. Cat's Cradle

8. The contrapositive to this theorem is known as the Gibbard-Satterthwaite theorem. If one of its criteria is relaxed by excluding members in the Smith set, then Condorcet methods can be used to resolve the problem. First popularized in the 1951 book *Social Choice and Individual Values*, it earned its discoverer the Nobel Prize in Economics in 1972. FTP, name this theorem which states that universality, non-imposition, monotonicity, non-dictatorship, and independence of irrelevant alternatives are not all attainable by a single voting system with at least two voters and three options.

Ans. Arrow's Impossibility Theorem or Arrow's Paradox

9. They are sometimes classified into two types, acidic and neutral/basic. Unlike vimentin, they must be combined in heterodimers of type I and type II constituents to form intermediate filaments. All members of this protein family contain a high concentration of cysteine, which brings strength through disulfide bridges. The type that plays a major role in determining the shape of hair is called matrix protein, where the density of disulfide linkages makes hair curly or straight. FTP, name this fibrous protein that is found in hair and nails.

Ans: cytokeratins

10. The defending commander took up position in a windmill on a hill behind his forces, from where he could see the battle. The attackers began by playing a variety of musical instruments, hoping to confuse the enemy, and followed with an equally ineffective volley from their Genoese crossbowmen. Finally, Philip VI ordered a cavalry charge, only to see his horsemen cut to bits by the Welsh longbowmen of Edward III's force. For ten points, name this 1346 battle of the Hundred Years' War, which established the supremacy of archers over mounted knights.

Ans: Battle of Crécy

11. This collection includes Menuets, Rondeaux, and Polonaises, and consists mainly of pieces for harpsichord, including a Rondeau from Couperin's second book of harpsichord works. Perhaps the most well-known piece is not any of the works by the primary composer, but rather Christian Petzold's Minuet in G Major. For ten points, what is the name of this collection compiled by J.S. Bach to teach his second wife how to play the harpsichord?

Ans: Notebook for Anna Magdalena Bach or Notbüchlein für Anna Magdalena Bach

12. Its first state was the Lan Xang, or "Kingdom of the Million Elephants," founded in the 14th century by Fa Ngum. In the following centuries, that state warred against Ayutthaya, Myanmar, and Vietnam, which controlled it from 1694 until its 1707 partition. It regained its independence in 1954, when France pulled out of Indochina. For 10 points--which southeast Asian nation has its capital at Vientiane?

Ans: Laos

13. Director Paul Thomas Anderson dropped out of film school after receiving a "C" on some of this writer's work which he turned in as his own. Also a director, he supposedly times his actors with a stopwatch to make them deliver his trademark fast, rhythmic delivery. 1999's *The Winslow Boy*, starring wife Rebecca Pidgeon, was markedly different from his usual work which deals with con-men and thieves, and contains much profanity. For ten points, name this director and writer whose works include *The Spanish Prisoner*, *House of Games*, and *Glengarry Glen Ross*.

Ans. David Mamet

14. Depending on your point of view, this religion can be considered monotheistic, duotheistic, polytheistic, or atheistic. Sometimes called "The Craft of the Wise," its traditional form was founded by Gerald Gardner in the 1940's. This religion includes components of ceremonial magic from the Masonic Order, but is mostly based on the symbols and beliefs of ancient Celtic society. FTP, name this recently created religion, which, like Asatru and Druidism, is earth-based and Neopagan, whose followers call themselves witches.

Ans. Wicca

15. He could list all the chemists who had committed suicide from memory. Hired by Charles Stine as the first organic chemist in his division of fundamental research, he initially turned down the job offer because he was afraid his mental instability would be too difficult to deal with in an industrial setting. His team

discovered neoprene, but he is better known for finding a polyamide, the first synthetic fiber to be made out of inorganic ingredients. FTP, name this DuPont chemist who discovered nylon.

Ans: Wallace Hume Carothers

16. It was preceded by the rejection of the "eleven points." It took 25 days for its 79 participants to reach Dandi on April 5, where they boiled mud on the beach. Its leader was arrested a month later after telling Lord Irwin he planned to raid a factory that made the same substance they were illegally producing. FTP--what nonviolent 1930 protest against a government monopoly on a kitchen staple was led by Mahatma Gandhi?

Ans: salt march

17. He said, "The move from Rorty's model of fluid conversation to that of the multileveled operations of power leads us back to Ralph Waldo Emerson," "Comprehension is not requisite for cooperation," and "Man they had some deep sharin' and carin' and lovin' and huggin' and the neighborhood was not yet a hood" in, respectively, *The American Evasion of Philosophy*, *The Matrix Reloaded*, and *70's Song*, from *Sketches of My Culture*. FTP--which philosopher and theologian also said "Larry Summers is the Ariel Sharon of American higher education," in reference to his well-publicized 2002 departure from Harvard University?

Ans: Cornel West

18. The title character in this book is the recipient of postcards addressed to Hilde Moller Knag. She also receives a mysterious letter asking the questions "Who are you?" and "Where does the world come from?" Following this letter, she proceeds to learn about philosophy from Albert Knox. As the book progresses, the point of view switches from hers to that of Hilde. In the end the title character and Albert discover that they are both only figments of Hilde's father's imagination. For ten points, name this book by Jostein Gaarder.

Ans: Sophie's World

19. A slowly rolling scalar field became the favored mechanism for this phenomenon after it was realized that a phase transition can't work, since nucleation sites would be ripped apart too quickly. Current models predict adiabatic fluctuations with nearly scale invariant spectra, and solve the horizon, monopole, and flatness problems. First proposed by Alan Guth, FTP name this hypothesized period of rapid exponential growth in the early Universe.

Ans: inflation

20. Although his generals, O'Sullivan and Murray, defeated the forces of John Cope at Prestonpans and Hawley at Falkirk, his army was chased across the Spey by superior numbers and suffered a major setback in a failed night attack on Nairn. Promises of French support proved hollow, and he was forced to flee into the Hebrides, where he escaped to the continent with the help of Flora MacDonald. FTP, name this "Young Pretender," the grandson of James II who was defeated at Culloden Moor in April 1746.

Ans: Bonnie Prince Charlie (or: Charles Edward Stuart)

2004 Berkeley Late Spring
Berkeley Paul

1. Name these groups formed during the civil rights movement FTPE

10) This group was formed by students who organized the first sit-in.

Ans: SNCC ("snick") or Students' Nonviolent Coordinating Committee or Students' National Coordinating Committee

10) This militant group was founded by Huey P. Newton.

Ans: Black Panthers

10) In the Port Huron Statement, mainly written by Tom Hayden, this offshoot of the League for Industrial Democracy outlined its hopes that society could be changed by a more participatory democracy.

Ans: SDS or Students for a Democratic Society

2. Identify the following parts of a modern collider detector, such as CDF, D0, BaBar, or ATLAS, for ten points each.

10) The outermost parts of the detector are usually used to detect these particles which are the only ones which can pass through the rest of the detector and still be detected.

Ans: muons

10) Most of the tracking in the central region is usually accomplished by these chambers, where electric fields are set up to cause electrons ionized by passing particles to move towards wires where they are collected and read out.

Ans: drift chambers or proportional chambers (prompt on just "wire chamber" or "multiwire chamber")

10) In between are these structures, usually consisting of metal sheets interleaved with scintillators, which measure the energy of particles by absorbing that energy.

Ans: calorimeters

3. Identify these characters from Dostoevsky's *The Brothers Karamazov*, 5-5-10-10:

5) This eldest of the Brothers Karamazov is cursed with a violent temper and is accused of the murder of his father.

Ans: Dmitri (or) Mitya (accept either)

5) The middle child, this intellectual and detached character suffers from brain fever near the end of the book. He is responsible for the *Grand Inquisitor*.

Ans: Ivan (or) Vanka (accept either)

10) The second of Fyodor Dostoevsky's wives, this gentle and dependent woman is the mother of both Alyosha and Ivan. Alyosha's child memory involves this woman sobbing hysterically and holding him up to the image of the Virgin Mary.

Ans: Sofya Ivanova

10) This mother of Lise is a wealthy gentlewoman and friend of Katerina Ivanova. She suggested that Dmitri invest in the gold mines, and Rakitin wrote a poem about her injured foot.

Ans: Katerina Ospovna Khokhlakov (or) Hohlakov

4. Name these artists, FTPE:

10) This artist produced some theoretical and critical writings on the concepts of "site" and "non-site". His creations, such as *Spiral Jetty* in the Great Salt Lake, responded to the natural and industrial environment.

Ans: Robert Smithson

10) This Bulgarian artist, famous for environmental and installation art, wrapped the Pont-Neuf in Paris with white cloth and surrounded various islands in the Biscayne Bay with pink plastic sheets.

Ans: Christo

10) This Chinese-American artist and architect studied at Yale and is most well known for the cut stone masonry wall of the Vietnam Veterans Memorial in Washington DC.

Ans: Maya Ying Lin

5. For ten points each, name these presidents from clues about their inaugural address.

10) He gave the longest inaugural address. It probably killed him since he refused to wear a hat, gloves, or coat during the speech despite the heavy rain.

Ans: William Henry Harrison

10) He gave the shortest inaugural address at 2 minutes long and consisting of only 133 words.

Ans: George Washington

10) He was the last to wear the traditional stovepipe hat to his inaugural address. He was also the first to have a poet participate in the ceremonies.

Ans. John F. Kennedy

6. FTPE, given the prank, tell me which celebrity was Punk'd.

10) This singer thought all his property was being seized by the Tax Enforcement Agency because he owed 904,000 dollars in back taxes

Ans. Justin Timberlake

10) She was denied entrance to the premiere of her own film, *Gothika*.

Ans. Halle Berry

10) A fake reporter on the red carpet asked her how it felt to "play someone smart."

Ans. Denise Richards

7. Identify the following about a spacecraft currently in the news for its trip to Saturn FTSNP.

5;5) The craft is named for two early astronomers; one who postulated that light moves at a finite speed, another who discovered the first moon of Saturn. Name them for 5 points each.

Ans: Cassini-Huygens

10) Several weeks before the craft enters orbit around Saturn, it will take pictures of this moon, which orbits Saturn in a retrograde motion, and, like Hyperion, is not tidally locked.

Ans: Phoebe

10) Once in orbit around Saturn, Cassini will release the Huygens probe to study the atmosphere of this moon discovered by the astronomer Huygens.

Ans: Titan

8. For ten points each, given an incident involving Athena, identify the ancient Greek work in which it appears.

10) In this play, Athena casts the deciding vote in the trial of Orestes. She then persuades the title characters to remain and be worshipped in Athens.

Ans. Eumenides

10) Athena tricks Hector into thinking she is an ally and causes his death.

Ans. The Iliad

10) In this Hesiod work, the birth of Athena is described. She springs out of Zeus' head after he eats her mother Metis.

Ans. Theogony

9. Given the subject matter, name the subfield of linguistics, FFPE and a bonus 5 for all correct.

5) The rules that govern how words are put together to form sentences.

Ans. syntax

5) This subfield is concerned with the actual nature of sounds and their production, as opposed to phonology, which operates at the level of sound systems and phonemes.

Ans. phonetics

5) The study of meaning as conveyed by language. This term has its own history in the fields of mathematics, computer science, and logic.

Ans. semantics

5) This is the study of how non-linguistic context influences the interpretation of meaning.

Ans. pragmatics

5) This area of linguistics goes beyond the sentence and studies global and local properties of connected speech and writing.

Ans. Discourse analysis

10. Answer the following about the "Desert Fox", Erwin Rommel, for ten points each.

10) In the desert, Rommel commanded this legendary tank unit, composed of the 15th and 21st Panzer Divisions.

Answer: Deutsches **Afrika Korps** (or DAK)

10) Rommel's last victory in the African theater was his defeat of the American II Corps at this Tunisian site.

Answer: Battle of Kasserine Pass

10) In the 1940 campaign against France, Rommel commanded the 7th Panzer Division, which gained this nickname for its powers of surprise.

Answer: Ghost Division

11. Name these Nietzsche works FTPE :

10) Completed a few weeks before his descent into madness, this is Nietzsche's autobiography, subtitled "How One Becomes What One Is."

Ans. Ecce Homo

10) Central to this book is the notion that human beings are a transitional form between apes and the Übermensch. This work inspired a similarly titled symphonic poem by Richard Strauss.

Ans. Also Sprach Zarathustra (or) Thus Spake Zarathustra (accept either)

10) Nietzsche explains that every component of Western culture is based on the Judeo-Christian tradition, resulting in cataclysmic consequences for the "death of God." However, the "meaning of our cheerfulness" lies in our realization that the sea is infinitely open; we are now free to interpret the world as we please.

Ans. The Gay Science or Gaya Scienza or die froehliche Wissenschaft or The Joyful Science or The Cheerful Science (note: Walter Kaufmann frowns on anyone who gives one of these last two answers)

12. For ten points, given the opening lines and the author, name the novel.

10: Jane Austen; "It is a truth universally acknowledged, that a single man in possession of a good fortune, must be in want of a wife."

Ans: Pride and Prejudice

10: Charles Dickens; "Now what I want is Facts. Teach these boys and girls nothing but Facts. Facts alone are wanted in life."

Ans: Hard Times

10: Nathaniel Hawthorne; "A throng of bearded men, in sad-coloured garments and grey steeple-crowned hats, inter-mixed with women, some wearing hoods, and others bareheaded, was assembled in front of a wooden edifice, the door of which was heavily timbered with oak, and studded with iron spikes."

Ans: The Scarlet Letter

13. Name these African empires FTPE

10) This early African empire was really named Wagadugu, but Arabs and Europeans mistook their word for "ruler" to be the name of the kingdom. In the late 11th century it was destroyed by Muslims, who wanted to convert the kingdom's inhabitants.

Ans: kingdom of Ghana

10) During his pilgrimage to Mecca, one of its emperors, Mansa Musa, gave so much gold as homage to the sultan of Egypt that the value of gold decreased significantly.

Ans: The Mali empire

10) The ruins of this city, capital of the Monomotapa Empire, are the oldest and largest structures in Sub-Saharan Africa.

Ans: Great Zimbabwe

14. Answer the following on a poet and his works, FTSNOP.

5) This poet's works include *The Idea of Order at Key West* and *Thirteen Ways of Looking at a Blackbird*.

Ans: Wallace Stevens

5) This Stevens poem begins, "Call the roller of big cigars,/ The muscular one, and bid him whip/ In kitchen cups concupiscent curds."

Ans: The Emperor of Ice-Cream

10) This Stevens poem contains the lines, "Death is the mother of beauty; hence from her,/ Alone, shall come fulfilment to our dreams/ And our desires."

Ans: Sunday Morning

10) The title object of this Stevens poem "made the slovely wilderness/ surround that hill./ The wilderness rose up to it,/ And sprawled around, no longer wild."

Ans: Anecdote of the Jar

15. Consider the two by two matrix whose first row is 0 -1 and whose second row is 1 0. For 10 points each:

10) What are its eigenvalues?

Ans: i and -i

10) What geometrical transformation of the plane \mathbb{R}^2 (read: \mathbb{R}^2) with the standard basis does this matrix correspond to?

Ans: clockwise rotation by 90 degrees or clockwise rotation by π over 2 radians around the origin

10) What are all possible dimensions of subspaces of \mathbb{R}^2 left invariant by this map?

Ans: 0 and 2 [note: 0,1,2 are the only possibilities a priori, and 1 would correspond to a real eigenvalue]

16. For ten points each, given the description, name the music term.

10) To slow down gradually.

Ans: ritardando

10) To rapidly slide up or down in pitch. On piano or harp, this means every tone or semitone is heard, while on some other instruments the slide is continuous.

Ans: glissando

10) This ornament consists of the note above the main note, the main note, the note below and the main note again.

Ans: turn or doublé or gruppetto or grosso or circolo mezzo or Doppelschlag

17. Answer these questions about everyone's favorite Tsar, Ivan the Terrible.

10) Ivan was the second-to-last ruling member of this dynasty.

Answer: Rurik

10) Ivan established the first of these, a council of the nobles.

Answer: zemsky sobor

10) In 1570, Ivan's personal troops, the Oprichniks, destroyed this city and killed its inhabitants.

Answer: Novgorod

18. Name these prizes in computer science for 15 points each.

15) Given by the Association for Computing Machinery, it is named for a pioneering computer scientist who committed suicide after being persecuted for his homosexuality.

Ans: Alan Mathison Turing award

15) Given for work in theoretical computer science, this award is particularly for work in the areas of decidability and algorithm design, areas which greatly interested the man for which the award is named.

Ans: Gödel prize

19. Name these cyberpunk novels from opening lines for 15, or for 10 if you need more clues.

15) "The sky above the port was the color of television, tuned to a dead channel."

10) In this William Gibson novel, the hacker Case is hired by the AI Wintermute.

Ans: Neuromancer

15) "The Deliverator belongs to an elite order, a hallowed subcategory. He's got esprit up to here."

10) Characters in this Neal Stephenson novel include Raven, Y.T., and Hiro Protagonist.

Ans: Snow Crash

20. The 2004 U.S. Olympic basketball team is losing most of its players. For five points, given a clue, give the player who isn't going to Athens.

5;5;5) Three players, one Timberwolf, one Supersonic, and one Raptor aren't joining the team because of fiancée issues: two are getting married and one is having a baby. Name them for five points each.

Ans: Kevin Garnett, Ray Allen, Vince Carter

5;5) Two players, one Laker and one Spur, want to rest after regular season injuries to their ankle and knee respectively. Name them for five points each.

Ans: Karl Malone, Tim Duncan

5) One player, another Laker, can't come because of legal woes. Name him for a last five.

Ans: Kobe Bryant