## Questions by Chris Borglum with science by special guest Raj Dhuwalia

1. This man attained the rank of Lieutenant Colonel in the USAF before moving on to work for Ford Motor Companies in 1946. There he became the first non-Ford to become company president. However, a mere five weeks after he had been appointed to that position, Sargent Shriver was asked by the $35^{\text {th }}$ President to offer him a cabinet level post. It was during this post that he helped plan the Bay of Pigs Invasion, the beginning of the Vietnam War, and perhaps most notably, the Cuban Missile Crisis. FTP identify this man, later head of the World Bank, Secretary of State under John F. Kennedy.

## ANS: Robert McNamara

2. It is synthesized by the reaction of chloro-benzene with tri-chloro-ethanol, and the discovery of its primary use won a 1948 Nobel in Medicine for a Swiss chemist in the employ of Geigy Pharmaceutical. It kills its target victims by causing the opening of sodium ion channels, leading to paralysis and death. Its half-life of eight years, coupled with its fat solubility, leads to biomagnification in populations other than those targeted, however, leading the US to ban its use in 1972. Used by the World Health Organization starting in 1955 to fight malaria, FTP name this insecticide banned in the U.S. since 1972, in part for its thinning of bird eggshells.

## ANS: DDT (or dichloro-diphenyl-trichloroethane or 1,1,1-trichloro-2,2-bis(p- chlorophenylethane)

3. This character is repeatedly referred to as "mentecato" or "tonto" by his companion, as when he commonly misstates the refranes, or proverbs, of which he is fond. He suffers numerous beatings, including one in which some muleteers pound him for trying to take the frock from a friar as spoils of a battle won by his master. He loses his eponymous belly when a doctor puts him on a diet before he takes his promised post as governor of the island of Barataria. Riding the donkey Dapple, FTP who is this squire and sidekick of Don Quixote?

ANS: Sancho Panza (accept either)
4. In his last published work, this thinker used the characters of Demea and Cleanthes to argue the existence of god, dividing all such claims into anthropomorphic types, including the ontological, cosmological, and teleological arguments, or mystical types. In an earlier work, he decried the illogic behind the principle of the uniformity of nature because of its reliance on faulty induction. Also using the example that because a struck billiard ball has caused another to move in the past is no reason to assume the same result in the future was, FTP, what radically skeptical $18^{\text {th }}$-century philosopher, author of Dialogues Concerning Natural Religion and An Enquiry into Human Understanding?

## ANS: David Hume

5. Near the mountain Hornisgrinde in this region is the lake Mummelsee which in fables is inhabited by a namesake undersea king who steals tourists' food and is attended by mermaids. The region's highest peak is Feldberg, which hosts its nation's largest ski resort outside the Alps. Straddling Europe's continental divide, the Danube has its source in this mountainous region. Found in the state of Baden-Wurttemburg and a major tourist destination of Southwest Germany is, FTP, what heavily wooded area known for cuckoo clocks and a namesake type of smoked ham?

## ANS: Black Forest or Schwarzweld

6. This poem's speaker curiously says "the Windows failed" in its penultimate line, followed by "and then/I could not see to see." The speaker has "Signed away/What portion of [him] be/Assignable" and is waiting with some well wishers for "that last Onset-when the King/Be witnessed-in the Room." However, before his death, the title creature "interpose[s]" itself "With Blue-uncertain stumbling Buzz." FTP name this poem by Emily Dickinson in which the title insect's sound is heard by the speaker at the moment of his death.

ANS: "I heard a Fly buzz-when I died" or \#465
7. Principal ores with this element include tincal and kernite. A metalloid with a +3 oxidation state, it can form icosahedral crystals in pure form, but it typically exists as a hydrated compound used in fiberglass, adhesives, and detergent. Mined from the Mojave Desert, this is, FTP, what element with 5 protons in its nucleus?

ANS: boron
8. In Fortran, it is indicated by a letter ' $c$ ' in position one and takes the entire line. COBOL requires an asterisk in position seven. Early Pascal used asterisks bounded by parentheses since early keyboards didn't have brackets. In HTML, it begins with a less-than sign, an exclamation point, and two dashes. It begins with a pound sign in Perl and Python, and in BASIC it begins with the capital letters REM. Ignored by the compiler, FTP what is this programming construct which
embeds information important for human readers of the code?

## ANS: comment

9. Park Ave CDs in Winter Park is the only store allowed to sell their bootleg album, The Baron von Bullshit Rides Again. The first album they recorded was entitled Sad Sappy Sucker, but it was shelved in favor of another one and was not released until 2001. That was 1996's This is a Long Drive for Someone With Nothing to Think About. A recent addition to the band is Johnny Marr, the former bassist for the Smiths. FTP name this band, who scored a hits in 2004 with "The Ocean Breathes Salty" and "Float On" from their album Good News for People Who Love Bad News.

## ANS: Modest Mouse

10. The tribal units of this people were headed by an elected executive called an Ataman or Hetman. In the $16^{\text {th }}$ century they separated into two autonomous republics, the Zaporojie and the Oblast Voiska Donskogo, or "Province of the Don Host," and today its unofficial capital is at Novocherkassk. In 1570 Ivan the Terrible paid them in gunpowder, lead and bread to defend Russia's southern frontier, giving them free reign to plunder their non-Orthodox neighbors. FTP name these skilled cavalrymen, the lives of which were described in Gogol's Taras Bulba.

ANS: Cossacks
11. Subsets of this group include the magnoliids [mag-NOL-ee-ids] and eudicots, and they can be classified by the APG2 system. Though they are very diverse, common features include stamens with two pairs of pollen sacs, double fertilization, and ovules enclosed in a carpel. The monocots are also part of this group, whose most distinctive characteristic is the flower. FTP, name this dominant group of land plants, the counterpart of the gymnosperms.

ANS: angiosperms (prompt on "flowering plants")
12. In the deep background at the right of this pastorally set painting can be seen two riders near a river, beyond whom a steeple looms. Painted to celebrate the marriage of Laura Bagarotto to Nicolo Aurelio, the latter's coat of arms appears on the stone object at the center bottom of the work. The figure on the right holds a lamp with flame rising from it, while the clothed figure on the left has an arm resting on a vase filled with jewels, symbolizing the fleeting nature of material wealth. Depicting Cupid reaching into a sarcophagus, FTP name this early 16 th-century allegory by Titian depicting two types of amorous feeling.

ANS: Sacred and Profane Love
13. Its motto was "Our country is the world-our countrymen are mankind," a quote adapted from Thomas Paine. In its first issue, its editor enjoined readers to "urge me not to use moderation in a cause like the present." Within two years the legislature of Georgia offered a $\$ 5,000$ reward for its publisher's arrest and conviction. First appearing on January 1, 1831, FTP name this radical anti-slavery newspaper founded by William Lloyd Garrison.

## ANS: The Liberator

14. The translation of Ovid's Heroides into French in the $16^{\text {th }}$ century helped usher in this form used in Honore d'Urfe's five-volume pastoral work L'Astree. An earlier Spanish example is Juan de Segura's 1548 Procesa de Cartas, and the style was refined and popularized by manuals like Jean Puget de la Serre's Secretaire de la Cour and Secretaire a la Mode. Later examples include Rousseau's The New Heloise and Laclos's Dangerous Liaisons. FTP Richardson's Pamela and Clarissa as well as Alice Walker's The Color Purple are novels written in what style, in which personal letters carry the plot?

ANS: epistolary novel (prompt on anything with "letters")
15. Cultural affinities, including a belief in Doric heritage and participation in the cult of Heracles, were more prevalent in this group than political commonalities. Its leader reserved the right to call up a third of a member's citizenry for military duty, and during its infrequent Congress of Allies, each member had one vote, though the leader was not bound by the group's decisions. Tegaea's joining swung power to the group, and its hegemony was assured by its leader's defeat of Argos. Dissolving soon after its loss at the Battle of Leuctra, FTP name this loose alliance of Greek city states run by Sparta.

## ANS: Peloponnesian League

16. In this work the author uses Freud's then-recent ideas regarding the unconscious to help explain the example of an Australian aboriginal woman who killed her husband and fled to the bush, arguing that individual unconscious drives might be more likely to explain the behavior than racial characteristics. Its first chapter describes the characteristic
separation of the frontal bone from the temporal bone by the sphenoid and parietal processes in apes and humans and describes the author's exhaustive cranial measurement data, refuting the notion of skull differences among races. Making the argument that the titular type of man is as capable of abstract thought and higher emotion as modern man, FTP name this 1911 work of anthropology by Franz Boas.

## ANS: The Mind of Primitive Man

17. For a closed isothermal system, the partial derivative of this quantity with respect to pressure equals volume. In electrochemistry, the change in this quantity is proportional to the change in voltage, and its standard value for a reaction at equilibrium equals negative RT times natural $\log$ of K . More generally, a reaction will be spontaneous if the change in this quantity is negative. FTP name this quantity equal to $U+P V-T S$, symbolized $G$ in honor of its namesake.

ANS: Gibbs free energy or Gibbs energy or Gibbs function
18. "The Judge," Milt Hinton, played this instrument in Cab Calloway's orchestra in the 30s and 40s. Weather Report's troubled Jaco Pastorius played the electric version, as does Stanley Clarke. Paul Chambers used the arco technique while playing in the shifting quintet that recorded Kind of Blue with Miles Davis. FTP name the instrument these men all played, along with Charlie Mingus, who played the stand-up version with a slap style.

ANS: bass (accept double bass or electric bass)
19. Traditional scriptural evidence of its existence comes from $2^{\text {nd }}$ Macabees, which mentions money sent to Jerusalem for prayer for the souls of the deceased. Strictly Catholic, it was codified into dogma during the Council of Florence in the "Degree of Union." As it is founded on the writings of an apocryphal book of the Bible, protestants often deny its existence, and indulgences were a way of buying one's way out of it. FTP identify this place which Dante speaks of as a mountain on the other side of the world from Jerusalem, where the iniquitous wait to be brought into heaven.

ANS: Purgatory
20. The narrator rhetorically asks "don't you know that God is Pooh Bear?" in the last paragraph of this novel. Earlier that narrator exclaims that " $[t]$ he only ones for me are the mad ones . . . mad to live, mad to talk, mad to be saved." He finds such a person in a young man whose letters from a New Mexico reform school asking to learn about Nietzsche make the narrator and his friend Carlo Marx yearn to meet him. Later the narrator will share that boy's girlfriend Marylou before finally seeing him for the last time out the back window of a Cadillac driven by Remi Bencouer. Depicting the amphetamine- and booze-fueled travels of Dean Moriarty and the narrator Sal Paradise, FTP name this 1957 novel by Jack Kerouac.

## ANS: On the Road

21. After sailing out of Manila Bay, it ran into a Typhoon and lost four of its crewmen. At one point, the crew went ashore to assist the Sicilians in a recovery effort after they were struck by an earthquake. It was greeted enthusiastically in Yokohama's harbor. Due to the fact that the Panama Canal was not yet complete, it had to pass through the Straits of Magellan, a potentially dangerous event for this fleet. Rear Admiral Evans commanded it from his flagship, the Connecticut. Consisting of 6 battleships complete with escorts, identify this fleet, sent around the world by Theodore Roosevelt to establish the United States as a naval power.

## ANS: The Great White Fleet

22. In the 1950s, as a member of a folk band called The Tarriers, this man authored a version of "The Banana Boat Song" that reached \#4 before Harry Belafonte's version later the same year. He appeared as Jerry Singleton in three episodes of St. Elsewhere in 1983, and he played the Bean in 1974's Freebie and the Bean. An atypical role was as the sinister drug criminal tormenting the blind woman played by Audrey Hepburn in 1967's Wait until Dark. Nominated for the Best Actor Oscar for The Russians Are Coming, The Russians Are Coming, FTP name this man who finally won one in 2007 as Best Supporting Actor for his role in Little Miss Sunshine.

## ANS: Alan Arkin

23. The most famous work by this man advises not to piss on the road or facing the sun, nor to let one's privates be smeared with semen near one's home hearth, as these acts are disrespectful to the Olympians. "Eoiae" [ay-oh-ee-eye], Greek words meaning "Or like one who," begin the listing of mortal females who bore children to gods in a work he may have written, The Catalogue of Women. The first known poet to claim inspiration by the muses, he described his farm as having a vista of their home, Mt. Helicon, in a work that also was the first to describe the five ages of man. Author of Theogony, FTP who is this early Greek author of the long agricultural poem Works and Days?

## ANS: Hesiod

24. This man's forces had to give up the siege of Belgrade because of an unexpected counterattack led by Janos Hunyadi. In later campaigns he annexed the Karamanid Emirate and neutralized the threat from the Akkoyun Turkmen of Eastern Anatolia. During his most famous exploit, he is said to have ridden his horse to the top of a pile of corpses in the Hagia Sophia. Succeeded at his 1481 death by his son Beyazid II, FTP name this sultan, nicknamed "Fatih," or "Conqueror," for his 1453 taking of Constantinople.

## ANS: Mehmet II (acc. Mehmet the Conqueror or Mehmet Fatih before mentioned)

25. The Koran never actually mentions him and he has a Hebrew name. The origin of his name may be traced from the Hebrew who led the Jews out of Babylon and back to Israel in his eponymous book, Ezra. He is usually thought of as one of the archangels with four faces. Muslims believe that, among other things, he did the reaping in Egypt for the $10^{\text {th }}$ plague. FTP Identify this angel of death from Islam the namesake of the evil cat in the Smurfs.

ANS: Azrael (prompt on Ezra before it is said)


1. Name these people important in the life of Faulkner's character Quentin Compson FTPE.
(10) His sister, in The Sound and the Fury Quentin's sense of honor makes him claim to be the father of her out-ofwedlock child.

## ANS: Candace or Caddy Compson

(10) This is the boy who impregnated Caddy, a town boy who socks Quentin when Quentin decides to fight him. ANS: Dalton Ames (accept either name)
(10) This Canadian is Quentin's roommate at Harvard, with whom he discusses Thomas Sutpen's story in Absalom, Absalom!
ANS: Shreve McCannon (accept either name, but not Makenzie, which
Shreve is called in Sound and the Fury)
2. Answer the following about Billy Beyer's bowels FTPE.
(10) The Arby's Beef and Cheddar Billy had for lunch will be passed from his stomach into the duodenum through this valve.
ANS: pyloric sphincter (prompt on "pylorus," which is the general region)
(10) The bolus that was the Beef and Cheddar Billy savored is pushed through his small intestine by this process of wavelike contraction.
ANS: peristalsis
(10) The small amounts of fructose Billy got from the curly fries he also ate will be taken up by this process utilizing membrane protein channels to allow charged particles to freely diffuse.
ANS: facilitated diffusion or transport
3. Identify these players who figured prominently in this year's men's basketball Final Four FTPE.
(10) This snaky, athletic Gator small forward won the tournament's Most Outstanding Player award.

ANS: Corey Brewer
(10) Though Greg Oden got more press, this freshman point guard and HS teammate of Oden's was the motor behind Ohio State's success.
ANS: Mike Conley, Junior
(10) This star small forward for Georgetown disappeared against Ohio State in the semis, two games after hitting a brilliant game-winner versus Vanderbilt.
ANS: Jeff Green
4. Show you've paid attention to packs you've heard this year by answering these questions about an African empire that comes up every tournament FTPE.
(10) In the late $15^{\text {th }}$ century Sunni Ali greatly expanded this empire at the expense of the dying Mali Empire.

ANS: Songhai
(10) The Songhai Empire reached its greatest territorial extent under this successor of Sunni Ali.

ANS: Askia Muhammad or Muhammad Ture
(10) Askia Muhammad took these lands between the Niger River and Lake Chad, a territory of loosely connected states with a shared language and culture.
ANS: Hausa States
5. FTPE identify the following things about the five vows in Jainism.
(10) This is the vow of non-violence. It applies to all people and animals, thus most Jains are Vegitarians. ANS: Ahimsa
(10) This is the vow of truthfulness. It precedes the "graha" in Mohandas Gandhi's civil disobedience doctrine. ANS: Satya
(10) This is the doctrine of non-posessivness. It is the reason Jains must limit what they own to only the most necessary things.
ANS: Aparigraha
6. Identify each of the following concerning the end of the First Sino-Japanese War, F10PE.
(10) The war was officially brought to an end by this treaty, which saw to the nominal independence of Korea and granted Japan control of Taiwan.
ANS: Treaty of Shimonoseki
(10) After Shimonoseki, Japan was forced by the Triple Intervention to cede this port on the Liaotung Peninsula. It commands the sea route to Beijing and was the site of a battle in the Russo-Japanese War.

## ANS: Port Arthur or Lǔshùn

(10) Due to popular disfavor with the official response to the Triple Intervention, this Prime Minister and his cabinet were forced to resign. He eventually reacquired the post twice more, before retiring.
ANS: Ito Hirobumi
7. Identify these examples of symbiotic growth, FTP each:
(10) This mutualistic association consists of a fungus which has grown into the roots of a plant.

ANS: mycorrhiza or mycorrhizae
(10) It's a symbiotic blend of algae and fungus.

ANS: lichen
(10) Spanish moss is an example of this type of plant, which grows on another plant or tree but uses it only for support, not for nourishment.

## ANS: epiphyte

8. Stuff about a poet and his works FTPE.
(10) This Quaker poet wrote the long poems "Moll Pitcher" and "Maud Muller" and the much-anthologized "Snowbound."
ANS: John Greenleaf Whittier
(10) This Whittier poem's title woman tells Stonewall Jackson to leave Old Glory alone, making it a popular Flag Day recital.
ANS: "Barbara Frietchie"
(10) The speaker of this poem calls for "blessings on" the title male child, who has "cheek of tan" and, apparently, no shoes.
ANS: "The Barefoot Boy"
9. Stuff about a work of economics and its Austrian author FTPE.
(10) This 1945 economic classic has a picture book version adapted from Look! Magazine by General Motors which includes headings like "The planners promise utopias," "The party takes over the country," and "Your discipline is planned," all displaying the original work's critique of collectivist action.

## ANS: The Road to Serfdom

(10) This author of The Road to Serfdom won the 1974 Nobel in economics.

ANS: Friedrich Havek
(10) In the 1920s Hayek, along with Oskar Morgenstern and others who would later become known as the Austrian School, attended the private seminar of this Austrian author of The Theory of Money and Credit.
ANS: Ludwig von Mises [Meez]
10. Answer the following about a great New Wave film FTPE.
(10) Jean-Paul Belmondo plays the smalltime Parisian hood Michel, who is betrayed by the American girl Patricia, played by Jean Seberg, in this 1960 classic.
ANS: Breathless or A Bout de Souffle
(10) This awesome Frenchie directed Breathless.

ANS: Jean Luc Godard
(10) Godard introduced this editing technique, in which significant plot time is elided, in Breathless. An example is the shot in which Michel takes Patricia's room key which is immediately followed by a shot of him exiting her shower.
ANS: iump cut
11. Answer the following about John Foster Dulles's time as Secretary of State FTPE.
(10) Dulles was a major proponent of this policy first iterated by George Kenan that emphasized controlling Soviet expansion.
ANS: containment
(10) Though it may shock you to hear that the US had been involved in regime change before Saddam, Dulles worked with his brother Allan to topple this duly-elected leader of Guatemala in 1954.
ANS: Jacobo Arbenz Guzman
(10) Dulles's efforts to oppose Gamel Abdel Nasser after the crisis involving Nasser's nationalization of this waterway.

## ANS: Suez Canal

12. An empirical law in physics has the form $\mathrm{V}=\mathrm{IR}$. FTSNOP ...
(5) Name that law of resistance.

ANS: Ohm's Law
(10) A current passing through a resistor loses energy to heat. FTP, tripling the current will increase the heat loss through a resistor by what factor?
ANS: increases by a factor of $\mathbf{9}$ (accept obvious equivalents)
(15) A cylindrical copper wire of length $L$ and cross-sectional radius $R$ has resistance 1 ohm . Find the resistance, in ohms, of a copper wire which has length 2 L and radius 4 R .
ANS: $\underline{1 / 8}$ or $\underline{0.125}$ ohms
13. Identify these numerical methods used to solve various types of equations, F10PE
(10) Named for one of the developers of calculus, this is used to approximate the roots of a real-valued function. ANS: Newton's Method
(10) This method of numerically solving ordinary differential equations is named for two German mathematicians. ANS: Runge-Kutta Method
(10) Another way to numerically integrate ordinary differential equations with a given initial value is this method which uses the first two terms of a Taylor expansion and generates errors proportional to the square of the step size.

## ANS: Euler Method

14. Name these avuncular characters from literature FTPE.
(10) Sonya convinces this title character, surnamed Voynitsky, not to kill himself with morphine over his failed life and rejection by Yelena in Act IV of the play in which they appear.
ANS: Uncle Vanya
(10) On his deathbed, this title character forgives Simon Legree for ordering the beating that leads to his death. ANS: Uncle Tom
(10) This former slave created by Charles Chesnutt appears in seven short stories, most notably "The Goophered Grapevine," in which he tells a tale to dissuade an Ohio man from buying a vineyard.
ANS: Uncle Julius
15. Stuff about an $11^{\text {th }}$-century literary work FTPE.
(10) Having no real plot, unlike the contemporary Tale of Genji, this book catalogues lists of the author's likes and dislikes, along with descriptions of Japanese musical instruments, court intrigues, and musings on nature.
ANS: The Pillow Book or Makura No Soshi
(10) This woman, whose surname is likely a description of her court position, wrote The Pillow Book.

ANS: Sei Shonagon
(10) Like Genji, The Pillow Book details court life during this period of Japanese history.

ANS: Heian period
16. ID these terms coined by Carl Jung FTPE.
(10) Jung used this term to describe acausal, coincidental events, like thinking of an old girlfriend and coming home to find she's left a message on your answering machine. Apparently, this impressed Sting.
ANS: synchronicity
(10) This term describes the unconscious masculine aspect in a woman's psyche.

ANS: animus
(10) This is the common repository of images and archetypes shared by all of humanity, according to Jung. ANS: collective unconscious
17. Stuff about a ballet FTPE.
(10) This 1944 Aaron Copland ballet concerns the raising of a barn by a newlywed couple in Pennsylvania in the early $19^{\text {th }}$ century.
ANS: Appalachian Spring
(10) This woman choreographed the dances in Appalachian Spring.

ANS: Martha Graham
(10) The most recognizable section of Appalachian Spring is its seventh, in which Copland presents a set of variations on this Shaker hymn.
ANS: "Simple Gifts"
18. Answer the following about Mjolnir, a totally bitching hammer, FTPE.
(10) This brawny Norse god was the only one who could wield Mjolnir.

ANS: Thor
(10) Mjolnir was created by the Dwarf Eitri, but the hammer has a short handle because this dopey brother of Eitri's dropped the bellows a couple times when Loki, in the form of a fly, bit him.
ANS: Brokk
(10) While Eitri was creating Mjolnir, he also created the golden boar Gullinbursti and this ring given to Odin, which spawned eight rings like itself every ninth day.
ANS: Draupnir
19. FTPE, identify each of the following about a certain period of westward expansion in American history.
(10) Discovered by Robert Stuart and other Astorians, this overland path to the Pacific Northwest allowed wagons to cross the Rockies at South Pass, bypassing the more difficult route taken by Lewis and Clark.
ANS: Oregon Trail
(10) In 1842, the first organized wagon train along the Oregon Trail was led by this man, a doctor from New York who had previously served at a mission in the Willamette Valley.
ANS: Dr. Elijah White
(10) Many of the original settlers and those who came with Dr. White were prompted by this financial panic which was caused by Jacksonian fiscal policy and exacerbated by Van Buren's inaction.
ANS: Panic of 1837
20. The 60 isotope of a certain element has an interesting history. FTP each ...
(10) Name this element with symbol Co.

ANS: cobalt
(10) Cobalt-60 is used in radiation therapy because it emits this type of short-wavelength E-M radiation, known by a Greek letter.
ANS: gamma or gamma-ray
(10) Madame Wu and colleagues found that the "left-handed" emissions from cobalt-60 violated the conservation of what property?
ANS: conservation of parity

