

Chicago Open 2018: The spice must flow

Edited by Auroi Gupta, Jacob Reed, Will Holub-Moorman, Jordan Brownstein, Seth Teitler, Eliza Grames, and Joey Goldman, with contributions by Stephen Eltinge, Matt Jackson, JinAh Kim, Raynor Kuang, Dennis Loo, Rohith Nagari, Sriram Pendyala, and Victor Prieto

Packet by We are the Boyd. You will be Aseemulated. Raysistence is fu-Kai-le (Alston Boyd, Aseem Keyal, Chris Ray, and Kai Smith); and by You're so vain, you probably think this team name is about you (Tim Morrison, Mahria Baker, Morgan Venkus, and Young Fenimore Lee)

Tossups

1. Le Comber et al. found that structures built by these animals are fractal because of their attraction to residual kairomones. Females in one species in this family lack corpora lutea and preovulatory follicles due to decreased secretion of LH from the pituitary gland caused by physiological stress induced by urine exposure. The aridity food-distribution hypothesis describes the behavior of these animals due to their bonanza feeding style on (*) tubers in mesic and xeric regions. Some species in this family have relatedness of over 0.8 to other colony members due to inbreeding, which is not practiced by the Damaraland type. Because they lack substance P, these vertebrates are incapable of sensing capsaicin or acid. Burrows are occupied by multiple generations of these rodents, who are divided into castes of soldiers and tunnellers with a breeding queen. For 10 points, name these only eusocial mammals, a family of social burrowing rodents in East Africa that includes a blind, hairless "naked" species.

ANSWER: mole rats [accept *Bathyergidae* or *Heterocephalidae*; accept specific types of mole rat]

<Biology>

2. Note to moderator: please look over the answerline before starting to read this question.

Description acceptable. The phrase "you could not hear God thundering" is used repeatedly to describe the noise of battles toward the end of this book. This book notes that it is "no animal's nature to live in fire" in a section that relates its subject's discovery that the so-called "Salamander" is actually asbestos during a visit to a mine. Henry Yule compiled an 1871 edition of this book largely based on various copies of its "F" (*) manuscript. Early in this book, a diplomat named Cogatai falls ill, so its subject leaves him behind and arrive in Acre with the help of a golden tablet a year after the death of Clement IV. According to a later tradition, this book came into when, after being captured at the Battle of Curzola, its author dictated it to Rustichello da Pisa in a Genoese prison. For 10 points, name this work notable for its descriptions of "Cathay" and the court of Kublai Khan, a travelogue based on the stories of an Italian explorer.

ANSWER: *The Travels of Marco Polo* [accept any of the following: *Book of the Marvels of the World*; *Description of the World*; *The Million*; *Il Milione*; *Oriente Poliano*; *Devisement du Monde*; *Livre des Merveilles du Monde*; also accept descriptive answers as long as they mention Marco Polo and the fact that the work is about his travels or journeys; prompt on partial answer]

<Miscellaneous Lit>

3. In *Connecticut v. Teal*, the Supreme Court held that a practice described by *this* adjective need not exist at the “bottom line” for individuals to be protected against it. In the absence of direct evidence, the *McDonnell Douglas* “burden-shifting” framework can be used to infer whether a practice described by *this* adjective has occurred. A Warren Burger opinion argued that the “touchstone” for determining whether certain actions “operate as built-in headwinds,” and therefore merit *this* descriptor, is “business necessity,” a claim later rejected in *Washington v. (*) Davis*. The city of New Haven attempted to avoid liability for a type of discrimination described by this adjective by invalidating test results of white firefighters, an action that the Supreme Court case *Ricci v. DeStefano* ruled a violation of Title VII of the Civil Rights Act. This adjective is used to characterize labor practices “that are fair in form, but discriminatory in operation” when combined with the word “impact.” For 10 points, name this descriptor commonly used in labor law, which also describes a form of “treatment” that involves singling out and discriminating against members of a “protected class.”

ANSWER: **disparate** [accept **disparate impact** or **disparate treatment**; prompt on discriminatory or adverse]
<Other Academic>

4. A bronze statue from this dynasty in the Met includes hand-like tendrils of flame on its outer circle, which is connected to the main figure’s head by thick, wire-like hairs. A building from this dynasty includes 81 out of a projected 108 sculptures intended to sequentially depict every poses described in an ancient performing arts treatise. The main tower of that building from this dynasty is topped by an 80-ton, cupola-shaped capstone, and was built without mortar in a series of 13 progressively smaller granite squares on 100-foot-square base. A temple built by a member of this dynasty was the first to have a monumental multi-story (*) *gopuram*, or gateway, which is dominated by its 208-foot *vimana* tower. This dynasty built three “Great Living Temples,” one of which was by far the largest in India when it was built around the year 1000. The Briha-dish-vara Temple in Thanjavur was built by Rajaraja I of—for 10 points—what medieval dynasty of South India?

ANSWER: **Chola** dynasty
<Other Fine Arts>

5. For type 1 systems, the value of the velocity constant is used to determine the value of this quantity that guarantees a given finite steady state error for a ramp input. Root locus analysis is used to show how the location of a system’s poles varies with changes in this quantity. In Simulink, the value of this quantity is written inside of a triangular shaped block. The dynamics of a PID controller are given by the values of this quantity for the proportional, integral, and derivative components. The relative stability of a (*) closed-loop system is given by the phase margin and the margin of this quantity, which is typically expressed in decibels. At the cutoff frequencies, this quantity drops by 3 decibels from its midband value, resulting in a 50% reduction in power delivered. For 10 points, name this factor by which systems such as amplifiers increase the amplitude of a signal.

ANSWER: **gain**
<Other Science>

6. Anecdotes in a book about this discipline include the story of the gypsy Willie Winter, who is caught for murdering an old woman due to the nails on his shoes, and an incident in which John Nicholson upbraids a Sikh for not taking his shoes off. The introduction to a pamphlet about this discipline calls it “nothing less than applied Christianity.” This discipline was influenced by the “birch bark roll” written by Ernest Thompson Seton and by the stylings of Frederick Russell Burnham. A bestselling book about this discipline nonsensically claims that its author was given the nickname “The (*) Wolf” by the Matabele and praises the activities of cadets at an event during which the author’s soldiers pretended to avoid barbed wire and set up fake landmines. The female attendants of a 1909 rally for this movement at the Crystal Palace led its developer to reluctantly commission his sister Agnes to lead the “Girl Guides.” For 10 points, what discipline names a group established by the “Hero of Mafeking,” Robert Baden-Powell?

ANSWER: scouting [or scoutcraft; or woodcraft; accept Boy Scouts]

<European/Other History>

7. In a 1992 book, Yuen Foong Khong analyzed how analogies have been used to make decisions about this phenomenon. Richard Ned Lebow identified “spinoff crises” that reproduce this phenomenon, and argued that positive attitudes toward this behavior are motivated by domestic need. By using a base-10 logarithmic scale to model this phenomenon, Lewis Fry Richardson found that their sizes follow a Poisson distribution. The scope of this phenomenon can increase due to (*) “chain-ganging,” according to a scholar who outlined three “images” of this phenomenon in a work titled for *Man, the State, and* [this phenomenon], Kenneth Waltz. The “spiral model” of Robert Jervis describes how “preventive” and “preemptive” forms of this phenomenon can emerge due to the “security dilemma.” For 10 points, name this phenomenon, which Michael Walzer divided into “just” and “unjust” forms, and which was the namesake of a treatise by Carl von Clausewitz.

ANSWER: international war [accept international conflict; prompt on just conflict; do not accept “civil war” or “violence”]

<Social Science>

8. Earle Draper designed a model community named for this man based on Ebenezer Howard’s garden city plans. This politician chose St. Patrick’s Day to execute one of his political maneuvers, since many of its target’s very Irish allies were off drinking themselves into a stupor. This man read aloud a letter from a wall street broker extolling the virtues of war before joining Robert LaFollette as one of six senators to oppose U.S. entry into WWI. This man’s support for unicameralism led his state to adopt the only unicameral legislature in the U.S. After years of blocking Henry (*) Ford’s plans for a private project at Muscle Shoals, this man championed a massive federal project headed by David Lilienthal. *Profiles in Courage* lauds this leader of the House “revolt” against Joseph Cannon. This architect of the TVA co-sponsored a bill that prevented courts from issuing injunctions against non-violent labor actions. For 10 points, yellow-dog contracts were banned by an act named for Fiorello La Guardia and what Nebraska senator?

ANSWER: George W. Norris

<American History>

9. A “monumental style” characterized by strong brushstrokes was developed by an artist who made one of *these* artworks depicting rivers and jagged rocks obscured by clouds, all dominated by a large cypress tree sprawling from the right. A technique in which a second layer of paint is applied on top of a still-wet first layer was used to decorate objects of this kind such as *Wind God and Thunder God*. During the Momoyama period, these objects were decorated in a monochromatic style by the Hasegawa school and in *kinpaku* gold leaf by the Kano school. These objects were often decorated in the same style as (*) *fusuma*, and they include depictions of abstract *Iris*es and of *Red and White Plum Blossoms* bisected by a river, created by Ogata Kōrin. One of these objects takes up most of the background in Whistler’s *Princess from the Land of Porcelain*. *Byōbu* are Japanese examples of—for 10 points—what standalone interior objects, consisting of painted wooden panels connected by paper hinges?

ANSWER: Japanese folding screens [or *byōbu* before mention; or hinged screens; or wind screens; prompt on furniture or furnishing or panels or dividers or partitions; do not accept or prompt on “doors” or “walls” or “curtains” or “blinds”]

<Visual Arts>

10. In a play by this author, a comedian describes how feeling persecuted for being racist is akin to taking “a SHIT in yo FACE for three hundred years and then felt persecuted when you didn’t swallow!” A girl is repeatedly slapped in the face at the start of a play by this author which centers on a girl wearing a pink giraffe shirt before a couple arguing about their relationship takes over the play. Two cranes begin to eat each other’s eyes which then swell to the size of the world in a parable told by Grandma in Heaven in a play by this writer of (*) *Songs of the Dragons Flying to Heaven*. Rapper Omar and Drug Dealer Desmond high-five each other after forgetting that they are black in a play by this author which ends with Pete’s monologue about playing the flute before a blackout, then the constant strobing of lights. Three brothers visit their widowed father Ed and eat Chinese takeout for Christmas in a play by this author of *The Shipment*. For 10 points, identify this Korean-American playwright of *Straight White Men*, the first Asian-American woman to have a play on Broadway.

ANSWER: Young Jean Lee

<Drama>

11. Antony Flew’s work on *this* philosopher’s theory of religion was generalized by Don Garrett to argue that there is a coherence to this man’s philosophy of mind as well. Ernest Mossner’s biography of this philosopher has recently been superseded by James Harris’ intellectual biography, which controversially claims that this man saw philosophy as a “habit of mind” rather than a system of thought as such. In a commentary on a book inspired by this philosopher, Norman Kemp-Smith mistakenly claimed that quotations from this philosopher were available in James (*) Beattie’s *Essay on Truth*, which is largely devoted to attacking this man. An essay by this philosopher suggests that one must imagine oneself “as a man in general” to put aside “prejudices” when hearing a friend declaim. Although he is not Adam Smith, Frances Hutcheson’s influence appears in this man’s application of the concepts of “approbation” and “disapprobation” to art. For 10 points, name this author of “Of the Standard of Taste,” a Scottish skeptic.

ANSWER: David Hume

<Philosophy>

12. For a sample with uniform photogeneration and an infinite surface velocity for this process, the effective time to this process is given by the sample's width squared divided by 12 times the diffusion coefficient. The time until this process is inversely proportional to trap concentration for low injection, and inversely proportional to the square of the excess carrier concentration for high injection. Unlike the "band-to-band" form of this process, the presence of impurities can cause the "trap-assisted" form of this process, which is named for Shockley, Read, and Hall. In thermal equilibrium, the rate of this process is equal to the rate of carrier (*) generation. A non-radiative form of this process donates its resulting energy to an electron, and is named for Pierre Auger. In general, this process involves a transition from the conduction band to the valence band, and the loss of one negative and one positive carrier. For 10 points, name this process in solid state physics in which electrons and holes annihilate.

ANSWER: carrier recombination [or surface recombination; or Auger recombination; prompt on Auger effect; prompt on electron-hole annihilation]

<Physics>

13. The narrator of a 2007 novel set in this city observes beads of kerosene glistening in the hair of an eleven year old boy who is burned alive for stealing from a market. After her nephew attempts suicide, a woman delays her plans to move to this city, which she had announced in an email she sent to her ex-boyfriend "Ceiling" while he is stuck in traffic in this city. The one-eyed King of Beggars helps an Elvis impersonator navigate the slums of this city in the novel *GraceLand* by Chris (*) Abani. After breaking up with the Yale professor Blaine and shutting down her blog Raceteenth, a woman accepts a job at a magazine in this city. The protagonist of Teju Cole's *Every Day Is For The Thief* returns from New York to this city, where he observes "yahoo yahoos" in internet cafes running email scams. For 10 points, name this place where the lovers Ifemelu and Obinze finally reunite at the end of Chimamanda Adichie's novel *Americanah*, a major African city.

ANSWER: Lagos

<Long Fiction>

14. This politician used a hacker to obtain and publish the names of people who profited from a new banking insurance program called Fobaproa. A combination of volunteer and paid canvassing groups called "Sun Brigades" were organized by this politician. Allegations that his government had illegally expropriated a patch of land were the basis of an attempted *desafuero* of this politician. This politician's supporters held a fake inauguration declaring him the "Legitimate President" of his country after his "Coalition for the (*) Good of All" lost a 2006 election. This politician was replaced as leader of his party by Yeidckol Gurwitz after forming a coalition that controversially includes the evangelical Social Encounter Party and whose name translates as "Together We Will Make History." After leaving the PRD in 2012, this politician founded the National Regeneration Movement, also known as MORENA. For 10 points, name this soon-to-be successor of Enrique Peña Nieto, a leftist who won the 2018 presidential election of Mexico.

ANSWER: Andrés Manuel López Obrador [or AMLO; prompt on partial answer]

<Mythology/Geography/Current Events>

15. Using releasing agents and protective agents in one technique can counteract the decrease in this quantity caused by excess sulfate and phosphate anions. The Zeeman effect and Smith–Hieftje corrections are two of several background correction methods used to adjust the measured value of this quantity in a form of spectroscopy. In host-guest chemistry, this quantity is plotted on the y-axis of Benesi–Hildebrand plots. Using only 1 microliter of sample, instruments such as the (*) Nanodrop can calculate the ratio of two values of this quantity to determine the purity of nucleic acid samples. The value at which this quantity is maximized is given in terms of a base value and increments for different functional groups by the Woodward–Fieser rules. This quantity is equal to the the negative log of the transmittance and is equal to the product of path length, concentration, and molar absorptivity according to the Beer–Lambert law. For 10 points, give this dimensionless quantity plotted on the y-axis of the output of UV–vis spectroscopy.

ANSWER: absorbance

<Chemistry>

16. John Aubrey claims that Robert Cotton obtained this man’s writings by buying the field where he had buried them, after which Méric Casaubon published them with a reputation-damaging introduction. The Polish nobleman Albert Laski convinced this man to visit the court of Stephen Bathory, where he was blamed for the king’s death. Robert Hooke theorized that this man’s writings were actually foreign intelligence reports encrypted with a technique drawn from Abbot Trithemius’s *Steganographia*. This originator of the phrase “British Empire” popularized the story of the (*) Welsh prince Madoc to bolster English claims in the New World, a myth taken up by Richard Hakluyt. This man’s shady chief collaborator, the convicted counterfeiter Edward Kelley, dictated books written in a so-called “Enochian” language to him during experiments they conducted with a scrying stone. For 10 points, name this advisor of Elizabeth I known for his efforts to talk to angels.

ANSWER: John Dee

<European/Other History>

17. In his Charles Eliot Norton lecture, the author of this poem jokingly suggests prefacing a second edition with a passage from *Don Juan* reading: “the fact is I have nothing planned / Except perhaps to be a moment merry.” This poem considers the “torment / Of love unsatisfied” and “The greater torment / Of love satisfied,” in a portion of its second section composed of four to seven syllable lines. This poem almost exactly quotes Shakespeare’s sonnet 29 with its phrase “Desiring this man’s gift, and that man’s scope,” which is followed by its speaker admitting: “I no longer (*) strive to strive towards such things,” and asking “Why should the aged eagle stretch its wings?” Later editions of this poem remove the dedication to the author’s wife Vivienne, who inspired the “veiled sister” in a garden whom the speaker beseeches to “let my cry come unto Thee” in its sixth and final section. This poem refrains a *ballate* by Guido Cavalcanti in its opening lines, which repeat: “Because I do not hope to turn again.” For 10 points, name this T.S. Eliot poem about his conversion to Anglicanism.

ANSWER: “Ash-Wednesday”

<Poetry>

18. A composer from this country used rapid percussion to accompany a G pedal point that slowly “branches out” at the beginning of a 1981 orchestral piece inspired by a namesake tree. “Mineral works” by that composer from this country include *Black Topaz* and *Silver Ladders*. The brother of a composer from this country was memorialized in a piece that uses both Chinese Reflex Bells and tuned water glasses in its climax. The commissioning soloist was imagined running in the (*) Olympics in the finale of a concerto from this country, whose slow movement is a series of “Chaconni,” and whose opening movement is named for the address of a conservatory in this country. That composer from this country wrote 2000’s *blue cathedral*, as well as a 2008 violin concerto bookended by the movements “1726” and “Fly Forward.” Ellen Taaffe Zwilich is a composer from—for 10 points—what country home to Joan Tower and Jennifer Higdon?

ANSWER: United States of America [accept either underlined part; or USA; accept any reasonable equivalents]
(The first piece is Joan Tower’s *Sequoia*.)

<Auditory Arts>

19. In two of his works, this man put forth a kind of linguistic metaphysics by connecting reality to the sounds of individual letters. In his major written work, this man wrote that adherence to meditation, mantra, and *mudra* can lead one through *Ten Stages of the Development of Mind*. This man advocated a one-on-one period of study, followed by initiation in an *abhisheka* in which the student is blindfolded and throws a flower. Practices imported by this man included a multi-year process of (*) self-mummification. This man was introduced to the Mandala of the Two Realms by his teacher Huìguō [HWAY-gwoh]. The name of this man’s school is a translation of the word *mantra*. This man returned to Japan in the same fleet as his fellow esoteric Buddhist Saicho, who founded the competing Tendai school. For 10 points, name this founder of Shingon Buddhism, who also invented the writing system *kana*.

ANSWER: Kukai [or Kobo-Daishi]

<Religion>

20. One of this leader’s first acts upon attaining power was the destruction of the Barzan Palace in Ha’il, the ancestral home of his major rivals. Austrian journalist Leopold Weiss took a new name meaning “lion” prior to entering the employ of this man, who sent him to investigate foreign funding of a revolt put down using armored cars. This ruler’s relationship with Percy Cox helped win crucial territory during negotiations at Uqair. This man lost some foreign backing after the Battle of Jarrab, where his advisor (*) William Shakespear was killed by the rival Rashid family. The Darin Pact recognized the authority of this man, who ousted Sharif Hussein’s Hashemite line and obliged the British to agree to the Treaty of Jeddah. This founder of an anti-Bedouin group of “brethren,” the *Ikhwan*, benefited tremendously from his country’s discovery of oil in 1938. For 10 points, name this patron of Wahhabism and founder of Saudi Arabia’s ruling dynasty.

ANSWER: ibn Saud [or Abdulaziz]

<World History>

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Bonuses

1. Essays like "Obscene, Abject, Traumatic" that first appeared in this magazine were collected in the book *The Return of the Real* by its editor Hal Foster. For 10 points each:

[10] Name this art magazine edited by *Artforum* alumna Rosalind Krauss, which was named for a film by Sergei Eisenstein. While working as an editor of this magazine, Douglas Crimp wrote a piece about artists like Cindy Sherman that gave rise to the monicker "Pictures Generation."

ANSWER: October

[10] Pictures Generation member Barbara Kruger is known for her use of white text on rectangles in black and *this* other color. This is the background color for the text in *Your Body is a Battleground*.

ANSWER: red

[10] The landmark 2009 exhibition *The Pictures Generation* was, somewhat surprisingly, held at this New York art museum, instead of at the MoMA. This museum massively expanded its holdings, already the largest in the U.S., with a 2013 gift of Cubist art from Leonard Lauder.

ANSWER: Metropolitan Museum of Art

<Visual Arts>

2. The seven doorways in this building are only closed by a valve that responds to the direction of the wind so Conall Cernach vows to guard all of them against rebel forces. For 10 points each:

[10] Name this building whose destruction by Ingcel Caech is the subject of an Ulster Cycle tale. It is lit on fire three times and put out three times until there is no water left to satiate Conaire Mor's magical thirst.

ANSWER: Da Derga's Hostel [or *Destruction of Da Derga's Hostel* or *Togail Bruidne Da Derga*; or *Orgain Bruidne Uí Dergae*; or *The Massacre of Ua Derga's Hostel*]

[10] Throughout *The Destruction of Da Derga's Hostel*, Conaire Mor breaks his many geasa, which are Irish analogues to taboos. This other Ulster Cycle hero who wields the Gae Bolg violates his geasa by eating dog meat given to him by a hag.

ANSWER: Cuchulainn

[10] *The Destruction of Da Derga's Hostel* begins as a continuation of a story about *The Wooing of* [this woman]. In this woman's tale, Echu Airem and Midir [MEE-"there"] play fídhcell for higher and higher stakes, eventually playing for a kiss and an embrace from this woman.

ANSWER: Étaín [EE-dine]

<Mythology/Geography/Current Events>

3. In describing Thomas More's daughters' use of these texts, Erasmus wrote, "you would swear you were watching the Muses at graceful play in the lovely pastures of Mount Helicon, gathering flowers and marjoram." For 10 points each:

[10] John Locke penned a work titled for a "new method" of organizing the indices of *what* texts, examples of which include Francis Bacon's *Promus* and the *zibaldone* that became popular in early modern Italy?

ANSWER: **commonplace** books [accept **scrapbooks** or **hodgepodge** books; prompt on collections of quotations; do not accept "diaries" or "ledgers"]

[10] One of the best-known commonplace books in the English language was kept by this author, who divided his into sections on ethics, economics, and politics, the last of which compiled a number of quotes on censorship later used in his *Areopagitica*.

ANSWER: John **Milton**

[10] Milton wrote the *Areopagitica* after four tracts that he wrote defending this practice, including the *Tetrachordon* and one titled for the *Doctrine and Discipline* of it, were deemed heretical by Thomas Edwards.

ANSWER: **divorce** [accept descriptive answers, like ending a marriage]

<Miscellaneous Lit>

4. Engaging in this sort of activity earned H.S. Wong a 50,000-dollar bounty from the Japanese government during World War II. For 10 points each:

[10] Identify this activity also practiced by the Bang Bang club in South Africa. Sha Fei, best known for this activity, became a problematic Communist icon after he murdered a doctor.

ANSWER: war **photography** [prompt on "journalism" or equivalents; accept **photojournalism**]

[10] Intense badass Dickey Chapelle was the most prominent woman killed while taking photographs of this war. Nick Ut, Hubert van Es, and Henry Huet took iconic photos of this war, during which Eddie Adams captured a point-blank execution.

ANSWER: the **Vietnam** War

[10] Kenji Nagai, a Japanese photojournalist, continued taking pictures from the ground while dying of a gunshot wound after an end to government fuel subsidies triggered the Saffron Revolution in this country.

ANSWER: **Myanmar** [or **Burma**]

<World History>

5. This compound was used to denature ribonuclease A in Anfinsen's experiment. For 10 points each:

[10] Identify this compound used in studies of protein folding, typically at a concentration of 8 molar.

ANSWER: **urea**

[10] The most common chemical denaturants in protein folding studies are urea and guanidinium hydrochloride, the latter of which is found on the side chain of this basic amino acid, that like lysine or histidine is positively charged.

ANSWER: **arginine** [or **Arg**, or **R**]

[10] Urea and guanidinium hydrochloride are both chaotropes, meaning they destabilize water-water interactions, in contrast with these other agents that enhance solvent-solvent interactions and stabilize protein structure.

ANSWER: **kosmotropes** [or **kosmotropic** agents]

<Chemistry>

6. The Invisible Committee's book *The Coming Insurrection* was cited in the trial of this group, which as of 2018 dragged on for almost a decade. For 10 points each:

[10] Name this group of accused anarchist terrorists. Supposedly led by Julien Coupat, they used horseshoe-shaped iron bars to obstruct electrical signals, causing train delays.

ANSWER: **Tarnac** Nine [accept **Tarnac** Ten]

[10] The Tarnac Nine are accused of attempting to sabotage this French high-speed intercity rail system that has set several wheeled-train speed records.

ANSWER: **TGV** [tay-jay-vay] [or **Train à Grande Vitesse**]

[10] The TGV was mostly developed during the presidency of this man, who also initiated the Ariospace project. He became president after Charles de Gaulle and was succeeded by Valéry Giscard d'Estaing [vah-lay-REE zhees-CAR day-STAN].

ANSWER: Georges (Jean Raymond) **Pompidou**

<European/Other History>

7. This author included a drawing of Anna Karenina produced from police composite-sketch software based on descriptions of her in the novel, in his book *What We See When We Read*. For 10 points each:

[10] Name this former associate art director at Knopf, who designed many of the ubiquitous and iconic jackets and covers found in bookstores, such as the one for Stieg Larsson's *The Girl With the Dragon Tattoo*.

ANSWER: Peter **Mendelsund**

[10] Mendelsund included eyes of various shapes and colors, many featuring keyholes as pupils, in several jackets for books by this author. This author himself doodled on a lot of his papers, which Max Brod thankfully didn't burn, allowing us to read novels such as *The Castle*.

ANSWER: Franz **Kafka**

[10] Mendelsund's cover for this novel resolves its title into three syllables separated by periods, matching the description in its opening paragraph of "the tip of the tongue taking a trip of three steps down the palate to tap, at three, on the teeth."

ANSWER: **Lolita**

<Long Fiction>

8. A 2003 book by this thinker attempts to "indirectly" approach the title concept by examining how notions of pain, suffering, and agency structured new ideas about humanity. For 10 points each:

[10] Name this anthropologist who argued against conceiving of the epistemological category of "secular" as an emancipation from religion in that book, *Formations of the Secular*.

ANSWER: Talal **Asad**

[10] The closing chapters of *Formations of the Secular* focus on the "transmuting" of *this* kind of religious law into "legal norms...that are authorized and maintained" by states in the Muslim world.

ANSWER: **shari'a** law

[10] Asad rejects *this* thinker's claim that people with different "background justifications" can agree on "core principles," arguing that the state draws the line between the two. This philosopher framed secularization as a process of "disenchantment" in a mammoth 2007 book that describes the "Nova effect."

ANSWER: Charles (Margrave) **Taylor** (The book is *A Secular Age*.)

<Social Science>

9. Answer some questions about the weak force, for 10 points each:

[10] Lepton and quark flavor can be changed by this class of interactions mediated by the W^+ and W^- bosons of the weak force. Instances of the counterparts of these interactions that change flavor are suppressed by the GIM mechanism.

ANSWER: weak **charged currents** or **charged current** interactions

[10] Unlike charged currents, neutral currents are mediated by this gauge boson. Along with the W^+ and W^- bosons, this gauge boson carries the weak force.

ANSWER: **Z^0** boson

[10] Function and argument required. The mass of the Z boson is equal to the mass of the W boson divided by this quantity, which equals the weak isospin divided by the square root of the sum of the squares of the weak isospin and weak hypercharge. CODATA 2014 gave a value of 0.2223 for an expression equal to one minus the square of this quantity.

ANSWER: **cosine of the Weinberg angle** [or **cosine of the weak mixing angle**; or **cosine of θ_W**]

<Physics>

10. This location's ability to propagate guilt "is driven by a *priest's desire* to excommunicate and condemn, an *academic-pedant's desire* to be the first to be seen to spot a mistake, and a *hipster's desire* to be one of the in-crowd." For 10 points each:

[10] Identify this hypothetical location born from supposedly misguided identity politics. A late Mark Fisher essay describes "exiting" this location, the fifth law of which is "think like a liberal (because you are one)."

ANSWER: **Vampire Castle** [or "Exiting the **Vampire Castle**"]

[10] Fisher's *Flatline Constructs* examines the transition from "horror at" to "acceptance of" the movement of supposedly inanimate objects. The book takes as a starting point the observation that "our machines are disturbingly lively, while we ourselves are frighteningly inert" made in *this* author's "Cyborg Manifesto."

ANSWER: Donna (Jeanne) **Haraway**

[10] In one of the more popular posts on his influential K-Punk blog, Mark Fisher claimed that being a follower of this philosopher is "both the easiest and the hardest thing in the world." In that post Fisher linked cybernetics' basis in "feedback" to this Dutch philosopher's account of emotion in his *Ethics*.

ANSWER: Baruch **Spinoza** [or Benedict de **Spinoza**; or Benedito de **Espinosa**; or any of those names with "Bento" as a forename] (*One could argue that Spinoza exited the vampire castle of 17th century Jewish Amsterdam.—JG*)

<Philosophy>

11. At the end of this film, a chalk outline of a dog named Moses turns into a real animal. For 10 points each:

[10] Name this film, which uses a minimalist set to depict the title town, which Grace Margaret Mulligan flees to in order to escape her mobster father.

ANSWER: ***Dogville***

[10] *Dogville* was directed by this controversial Danish director of *Antichrist* and *Melancholia*, who spearheaded the Dogme 95 movement with Thomas Vinterberg.

ANSWER: Lars von **Trier**

[10] According to von Trier, the fact that the score *Melancholia* makes extensive and repeated use of *this* specific piece of music is inspired by a passage from *In Search of Lost Time* claiming that *this* is the greatest work of art of all time.

ANSWER: the **Prelude** to *Tristan und Isolde* [or the **Prelude** to *Tristan and Isolde*; accept **Vorspiel** for "Prelude"; prompt on *Tristan und Isolde* by asking "Which section?"; do not accept or prompt on answers including the word "Overture"]

<Other Fine Arts>

12. After taking over four Caribbean islands, including St. Christopher and St. Martin from a failing French chartered company, Phillippe de Poincy convinced this organization to buy them. For 10 points each:

[10] Name this group that ventured into American colonization under Giovanni Lascaris. Four of this organization's major ships were destroyed by a freak tornado in the 1550s.

ANSWER: The Knights **Hospitaller** [or the Knights of **St. John** of Jerusalem; accept, but DO NOT REVEAL, the **Knights of Malta**]

[10] The Hospitaller navy operated out of the Grand Harbor of Valletta on this island where they repelled a Great Siege by the Ottomans in 1556.

ANSWER: **Malta**

[10] The Knights of Malta joined Ferrante I and Andrea Doria to fight this 1538 naval engagement, a victory for the Ottomans over forces organized by Pope Paul III. This victory for Hayreddin Barbarossa was fought in the same area as Actium.

ANSWER: Battle of **Preveza**

<European/Other History>

13. A boy's childlike wonder at moving to the big city evaporates when he sees a turkey being killed for a birthday party in this author's story "The Thin Edge of Happiness." For 10 points each:

[10] Name this author who wrote about a father who sails out into a river and stays there for several decades ignoring all contact from his family in his most anthologized story, "The Third Bank of the River."

ANSWER: João Guimarães **Rosa**

[10] Most of Rosa's works are set in this outback-like region of Brazil, including a novel translated into English as *The Devil to Pay in* [this region].

ANSWER: the **Sertão** [or the **Backlands**; accept *Grande Sertão: Veredas* or *The Devil to Pay in the Backlands*]

[10] The wife of a notary urges Nogueira to attend a church service on Christmas in this Brazilian author's story "Midnight Mass." This author also created a "small winner" who narrates his "posthumous memoirs" from the grave after dying of pneumonia.

ANSWER: Joaquim Maria **Machado de Assis** [prompt on partial answer]

<Short Fiction>

14. In *The New Testament and the People of God*, this scholar set forth a critical-realist epistemology that engages the Bible as both history and theology. For 10 points each:

[10] Name this contemporary Anglican theologian who depicted Jesus as just another first-century Apocalyptic Jewish prophet in *Jesus and the Victory of God*, the second volume of his massive *Christian Origins and the Question of God*.

ANSWER: N.T. **Wright** [or Nicholas Thomas **Wright**]

[10] N.T. Wright has been a particularly forceful advocate of the "New Perspective" on *this* first-century theologian, who preached salvation by faith in numerous New Testament Epistles.

ANSWER: **Paul** [accept **Saul** of Tarsus; accept **New Perspective on Paul**]

[10] Some conservatives have seen Wright's reading of Paul as a denial of the "penal substitution" theory of *this* process. That theory stems from Anselm's "satisfaction" theory of this process, which is his answer to the title question of *Cur Deus Homo* or *Why God Became Man*.

ANSWER: **atonement** [accept any answer that indicates **forgiveness of sins** or Christ dying **for our sins**; prompt on **salvation** by asking "What's the process that makes salvation possible?"]

<Religion>

15. Dark paint and smokeless anthracite coal were commonly used for this action, which was carried out many times by the British sidewheel steamer *Syren*. For 10 points each:

[10] Identify this activity for which the two “Laird rams” were constructed. George Trenholm’s massive fortune from engaging in this action helped land him a position as Treasury Secretary.

ANSWER: Union **blockade running** during the Civil War [accept clear equivalents; prompt on partial answers like “smuggling” until the player makes it clear what conflict/context this occurred during]

[10] The Union blockade formed the “tale” of this strategy devised by Winfield Scott to pinch the Confederacy.

ANSWER: the **Anaconda** Plan

[10] The blockade bolstered the merchant profile of this family under its fabulously-named member Gazaway Bugg. A politician from this family wrote the Mississippi Secession Ordinance and became the first Southerner appointed to the Supreme Court after the war.

ANSWER: **Lamar** [Lucius Quintus Cincinnatus **Lamar**]

<American History>

16. The poem “Devotion” from this collection declares that “there’s nothing / more holy than holding / a man’s heartbeat between / your teeth, sharpened / with too much / air.” For 10 points each:

[10] Name this 2016 collection that includes a poem in which the author reminds himself that “loneliness is still time spent / with the world,” titled “Someday I’ll Love Ocean Vuong.”

ANSWER: ***Night Sky With Exit Wounds***

[10] Vuong began another poem from *Night Sky With Open Wounds* with the line “Suppose you do change your life,” in continuation from this German author’s poem “Archaic Torso of Apollo”

ANSWER: Rainer Marie **Rilke** [or René Karl Wilhelm Johann Josef Maria **Rilke**] (Vuong’s poem is titled “Torso of Air.”)

[10] Vuong resolves to “seal my father’s lips / with my own & begin / the faithful work of drowning” in a poem titled for this mythological figure, who in another poem is left with “the scepter and the isle” with the expectation that he “make mild / A rugged people.”

ANSWER: **Telemachus**

<Poetry>

17. One person in this film defines a practice that emerged from “reading” as “I don’t tell you you’re ugly but I don’t have to tell you because you know you’re ugly.” For 10 points each:

[10] Name this 1991 documentary that focuses on members of “Houses” such as Xtravaganza and LaBeija. It was responsible for popularizing the notion of “throwing shade.”

ANSWER: ***Paris is Burning***

[10] In its depictions of Harlem’s drag “balls,” *Paris is Burning* features several dances by this “godfather of voguing,” who earlier had appeared in the video for Malcolm McLaren’s song “Deep in Vogue.”

ANSWER: Willi **Ninja**

[10] Many elements of 1990s Harlem “ball” culture are present in this singer and TV presenter’s namesake VH1 reality competition, or *Drag Race*.

ANSWER: **RuPaul** (Andre) **Charles** [accept either underlined portion; accept **RuPaul**’s *Drag Race*]

<Other Academic>

18. “Optical” approaches to this process took off following a 1984 paper describing the effect of a nanosecond-pulse laser that was focused on a spot on the plasma membrane of rat kidney cells. For 10 points each:

[10] Identify this process of generating transient pores in cell membranes to introduce nucleic acids specifically into eukaryotic, typically animal, cells.

ANSWER: **transfection**

[10] A much lower-tech method of transfection involves forming a precipitate between HEPES [“heaps”] buffer supplemented with these ions, and a calcium chloride solution containing DNA. The “backbone” of DNA consists of alternating residues of deoxyribose and these anions.

ANSWER: **phosphates**

[10] A neomycin resistance marker may be co-transfected with the DNA construct in this variety of transfection, which applies antibiotic selection pressure to ensure the survival of only the cells capable of dividing and passing on the DNA.

ANSWER: **stable** transfection

<Biology>

19. In Burundi, one of these instruments called an *Inanga* is played while whispering. For 10 points each:

[10] Name this type of instrument exemplified by the tube- and box-shaped *valiha* and *marovany* from Madagascar.

ANSWER: **zithers** [prompt on plucked string instruments]

[10] Malagasy musicians often play the *kabosy* [kuh-BOCE], a small version of this European instrument. A number of West African musicians have imitated local percussion instruments like the *ngoni* and *mbira* using the electric variety of this instrument.

ANSWER: **guitars**

[10] The *mbira*, which consists of a series of metal tines that is plucked with the fingers, is often dubbed the “thumb” variety of *this* instrument.

ANSWER: thumb **piano**forte

<Auditory Arts>

20. Based on pigment reconstruction of *Anchiornis huxleyi*, these structures were used in territorial displays even when they were unbranched barbs in Stage I or Stage II. For 10 points each:

[10] Name these structures whose early stages were described from *Sinosauropteryx* and eventually evolved into a pennaceous structure.

ANSWER: proto**feathers** [or **dino fuzz**]

[10] Feathers enabled the evolution of flight, which is thought to have arisen from wing-assisted incline running, a specific case of this general theory of flight evolution that is opposed to the arboreal theory.

ANSWER: **cursorial** [or **ground-up**]

[10] In his ignored “pouncing proavis” theory of flight evolution, Adrian Thomas suggested that flight evolved from the ambush form of this behavior. Cougars employ the ambush form of this behavior to catch prey which is done as a group by African wild dogs.

ANSWER: **hunting** [prompt on predation or foraging, but Eliza won’t be happy]

<Other Science>