**Chicago Open 2016: "An Insatiable Kingpin of International Meme-Laundering"
Packet by Young Mukherstein (Jordan Brownstein, Eric Mukherjee, Will Nediger, and Jacob Reed)**

**Edited by John Lawrence, Mike Cheyne, Matt Jackson, Adam Silverman, Mike Bentley, Aaron Rosenberg, Jake Sundberg, and Shan Kothari, with contributions from Ewan Macaulay and Jonathan Magin**

**Tossups**

1. **The protagonist of Hong Sang-soo’s film *Night and Day* looks at this painting in a museum and says “I like the image… but not the title.” In 2013, Jean-Jacques Fernier authenticated the long-lost detached upper portion of this painting. André Masson made a terracotta-colored cover for this painting which Jacques Lacan, its last private owner, could dramatically open during therapy sessions. This painting, which depicts only one person, was commissioned by the (\*)** Ottoman diplomat Khalil Bey. It was painted in the same year as *La Belle Irlandaise*, a portrait of its likely model Joanna Hiffernan. A white sheet covers only the left breast of this painting’s subject. Now openly exhibited by the Musée d’Orsay, it was heavily censored during the artist’s lifetime. For 10 points, name this wildly controversial Gustave Courbet painting showing a close-up of a woman’s genitals.
ANSWER: *The* ***Origin of the World*** [or *L’****Origine du monde***]

2. **A speech given during this event lists impossible tasks like forbidding the mountain pines from shaking in the wind and standing on the beach and asking the tide to “bate his usual height.” During this event, a character notes that some people get mad if they see a “gaping pig” or a cat, while others involuntarily urinate when they hear bagpipes. That character is subsequently accused during this event of being the reincarnation of a wolf who was hanged for killing a human, according to the Pythagorean doctrine. This event is peppered by exclamations like “A** (\*) Daniel … a second Daniel!”. A speech given during this event describes “an attribute to God himself” which is “enthroned in the hearts of kings.” This event is officially presided over by the Duke, but is taken over by Balthazar, who is actually a disguised Portia, who describes the “quality of mercy.” For 10 points, name this event in which Shylock goes to court to demand his pound of flesh in a Shakespeare play.
ANSWER: the **trial** scene from *The* ***Merchant of Venice*** [or the **trial** of **Antonio**; or **Act IV, Scene 1** of *The* ***Merchant of Venice***]

3. **Lesions in this structure and in the MLF cause one-and-a-half syndrome. Cinelli discovered that, uniquely in lampreys, a central pattern generator in this structure drives oscillations. This structure is supplied blood by namesake perforating branches of the basilar artery. The dorsal part of this structure, the tegmentum, contains the salivary nuclei. The inspiratory off switch is regulated by the KF and parabrachial regions of this part of the brain. Norepinephrine is synthesized by its (\*)** coeruleus nucleus. A stroke or demyelination here is the most common cause of locked-in-syndrome. Conjugate gaze palsies can be caused by lesions in this structure at the nucleus of the sixth cranial nerve. It and the cerebellum originate from the metencephalon. The pneumotaxic center of this structure regulates breathing. For 10 points, name this part of the brain stem located between the midbrain and medulla.
ANSWER: **pons** [prompt on midbrain; prompt on brainstem]

4. **Much of this essay consists of a response to a 1961 book by A.I. Melden, including an analysis of different “patterns” under which someone might raise their arm to signal while driving. This essay uses the example of flipping a switch and accidentally alerting a prowler to distinguish between intentional and unintentional consequences. Near this essay’s beginning, its author claims “I want to defend the ancient—and common-sense—position that rationalization is a species of ordinary causal explanation.” In this essay, a “pro attitude” paired with a related belief forms a “primary** (\*) reason,” which turns out to suffice as its third title entity. The form of mental causation suggested by this 1963 essay precedes its author’s postulation of “anomalous monism” in “Mental Events.” For 10 points, name this essay about people’s explanations for why they do things, the first major publication of Donald Davidson.
ANSWER: “**Actions, Reasons, and Causes**”

5. **This sentiment explains the name of the Guardian Life Insurance Company. The most famous visual expression of this belief was designed by United Glass Company owner Harry Ryle Hopps. It explains why a socialist coal miner was lynched in Collinsville, Illinois. This sentiment was doubtless intensified after a former Harvard professor planted dynamite in the Capitol Building, put a bomb on the *SS Minnehaha*, and shot J.P. Morgan Jr. It was the primary reason why Iowa Governor William Harding passed the (\*)** Babel Proclamation, with a similar law later struck down in the case *Meyer v. Nebraska*. This sentiment was fanned after the explosion of the Black Tom munitions depot. It was exemplified by a poster with a helmet-wearing gorilla under the words “Destroy This Mad Brute.” For 10 points, what discriminatory attitude resulted in foods getting names like “liberty cabbage” during World War I?
ANSWER: **anti-German** sentiment [or **anti-German-American** sentiment; prompt on nativism or other answers about anti-foreignersentiments; do NOT accept “anti-Nazi” sentiment]

6. **In a Zande myth retold by Evans-Pritchard, the Abare are divine holders of this profession whose nephew Ture tricks them by dancing in a bark cloth costume. In the Mande creation myth, a progenitor of this profession hits a rock to bring the first rain. A man of this profession explains that Gassire's lute won’t sing until it is given a heart. The legendary Mande soothsayers Nounfairi and Farakourou are of this profession, which the Mande people believed to control a sacred life force called *nyama*. Along with hunting and war, the path-clearing Yoruba orisha** (\*) Ogun presides over the material used in this profession. In the *Epic of Sundiata*, Sundiata stands for the first time using a rod given by a worker in, for 10 points, what profession revered in pre-modern West Africa, whose lighter-hued mythical exemplars include the Finnish Ilmarinen and the crippled Greek god Hephaestus?
ANSWER: black**smith**s [or **forge**-workers; or **iron**-workers; or iron**smith**s; or **metal**workers; prompt on craftsmen or craftsmanship]

7. **For an ensemble of two-level qubits, these quantities are given by the trace of the product of the density matrix with the identity and Pauli matrices. Three of these values are equal to the difference in the expectation value of the square of the two E-field components in either a Cartesian, rotated Cartesian, or circular basis. The effect of an element upon the set of these values can be determined by multiplying by a** (\*) Mueller matrix, and three of them define the axes of the Poincaré sphere. These quantities do not retain information about the phase, meaning they cannot be used on coherent sources, for which Jones matrix calculus is used instead. For 10 points, name these four numbers denoted I, Q, U and V, which describe the polarization of light.
ANSWER: **Stokes parameters**

8. **Police in a city led by this party shut down the free Radio Alice station and shot a leader of the Continuous Struggle group. This party’s rule of that city presumably led the Armed Revolutionary Nuclei to bomb the Central Station in 1980. One of its leaders wrote the Yalta Testament, which claimed that different countries could take different “roads,” a doctrine called polycentrism. Dissidents formed the Refoundation Party after this party adopted a cheerful looking oak tree as a symbol and became the (\*)** Democratic Party of the Left. The leader of this party called for the delaying of political questions until after World War II as part of the Salerno Turn. This party’s General Secretary Berlinguer launched the “historic compromise,” an alliance with Aldo Moro’s Christian Democrats. For 10 points, name this party whose leaders included Palmiro Togliatti and *Prison Notebooks* author Antonio Gramsci.
ANSWER: **Italian Communist** Party [or **P**artito **C**omunista **I**taliano; or anything indicating a **Communist** Party of **Italy**; prompt on Communist Party, do not accept “Italian Socialist Party,” “Democratic Party of the Left,” or “Communist Refoundation Party”]

9. **In one poem, this man asks who the first man to forge swords was, punning on *ferus* and *ferreus* to note how "wild" and "iron" such a man had to be. Paul Allen Miller is among many scholars who ascribe a "dreamlike" quality to this man's couplets. Sleep and Dream come at the end of a poem by this man depicting the rustic *Ambarvalia* festival. In one poem, he demands that a rude girl named Pholoe be kind to his boy love-interest Marathus; in another, he asks Phoebus to bless a new priest of the Sibylline books. This man went to war in Aquitania with his patron** (\*) Messalla Corvinus. Six poems by Sulpicia, the only known female Latin poet, were appended to works by, and often attributed to, this man. The ninth poem in Book 3 of Ovid's *Amores* mourns the early death of, for 10 points, what man who died shortly after Virgil, whose two surviving books of elegies are addressed to Nemesis and Delia?
ANSWER: Albius **Tibullus** <MJ>

10. **Alan Blinder interviewed firms to determine causes of this phenomenon. In a model by Caplin and Spulber, this phenomenon exists at the individual level, but not in the aggregate. In a 2002 paper, Mankiw and Reis generalized this phenomenon to avoid predictions of disinflationary booms. For fixed time intervals, this phenomenon is modelled using Taylor contracts. Along with supplier misperceptions, this phenomenon explains the upward slope of the (\*)** short-run aggregate supply curve, violating neutrality of money. Opportunities for firms to leave this situation were modelled as a time-independent Poisson process in the Calvo model of this phenomenon. This phenomenon can be caused by menu costs, and was added to create the New Keynesian Phillips curve. In a classic “downward” example of this phenomenon, employers might choose to lay off workers rather than reduce wages. For 10 points, name this phenomenon in which prices resist change.
ANSWER: **nominal rigidity** [or price-**stickiness**; or **sticky** prices; or wage-**stickiness**; accept **sticky** information or word forms; accept **inflexible wage**s, **inflexible price**s, or word forms; prompt on price rigidity or wage rigidity; prompt on staggered price setting, staggered wage setting, staggered contracts, or similar answers]

11. *Description acceptable.* **Scottish Labour Party founder R.B. Cunninghame Graham presented these places as socialist utopias in *A Vanished Arcadia*. These non-English places are praised as heterotopias because of their grid plan and regulated daily life at the end of Michel Foucault’s “Of Other Spaces.” While living in them, Martin Schmidt emphasized the role of music for residents. Residents of several of these places fought against a forced evacuation under the leadership of Sepé Tiaraju. People living in them fought the Battle of (\*)** Mborore against slave raiders known as bandeirantes, and these places traded products such as cow hides and yerba mate. Many of these places known as reductions were abandoned after their operators were expelled from Portuguese and Spanish territories. For 10 points, Guarani Indians often moved to what type of Jesuit founded settlement?
ANSWER: Jesuit **mission**s in South America [accept **reduction**s until “reductions” is read; accept anything indicating **Jesuit settlement**s until “Jesuit” is read; prompt on general answers like religious settlements]

12. **In one of this composer’s operas, the title character is compared to the “vision of glory promised to the victor” and to her lover’s mother in the aria “La dolcissima effigie.” The title character of his most famous opera stares at her romantic rival while reciting a monologue from *Phèdre* about unvirtuous women. The title character of that opera by this composer declares “I am the music of the verse” and “I’m but the humble servant of the genius creator” in her Act I aria “Io son l’umile ancella.” Like Bizet, he used an Alphonse Daudet play as the basis for his opera** (\*) *L’arlesiana*, which includes the aria "È la solita storia," or the "Lamento di Federico." In his most famous opera, the Princess of Bouillon sends Maurizio’s lover, the title character, a bouquet of poisoned violets, which somehow kill her. For 10 points, name this Italian composer of *Adriana Lecouvreur*.
ANSWER: Francesco **Cilèa**

13. *Description acceptable.* **This character contemplates stabbing her husband with sewing scissors after hearing him lecture a character to “wake up.” While on the verge of consummating the relationship with the man to whom she tells her deepest thoughts, they are interrupted by a clerk throwing a box into a pile of trash, and they never see each other again. That man calls this woman “You dear! You dear! You lovely dear!”, a phrase which is spoken to her dead body by her son. Her son never receives the $800 she has hidden for him in a box by her bed, which was given to her by her father, who owned the** (\*) hotel where she lives. She has a secret understanding with a doctor who stuffs crumpled-up pieces of paper into his pockets, Dr. Reefy. This character’s son has sex with Louise Trunnion in a berry field, and has a confusing sexual experience with his teacher Kate Swift. For 10 points, name this character whose son ends up leaving the town of Winesburg, Ohio after her death.
ANSWER: **Elizabeth** Willard [or **E**lizabeth **Willard**; accept “**George** Willard’s **mother**” or “**Mrs. Willard**”; prompt on just “Willard”]

14. **Chang et al noted that a hypothesis named for these things and formulated by Bennett and Gill violated a result about IP discovered by Shamir. A function with this name may do a pi radian rotation and is used to flip the sign of particular states in the first step of Grover’s algorithm. Two of these things, denoted A and B, exist such that PA [“P-A”] equals NPA [“N-P-A”] and PB [“P-B”] does not equal NPB [“N-P-B”] according to Baker-Gill-Solovay theorem, which thus implies no relativizing proof exists for the P versus NP problem. These constructs can be conceived of as (\*)** Turing machines with an additional head and semi-infinite tape that has an “ask” and “response” state. These constructs are not limited to solving decidable problems. For 10 points, name these theoretical black box constructs which are capable of giving a correct answer to any given instance of a decision or function problem.
ANSWER: **oracle** machine [or **oracle** function or random **oracle** or quantum **oracle** or **oracle Turing machines**; prompt on black-box function before mentioned; do NOT accept just “Turing machines”]

15. **A man with this title had a son who married the commoner daughter of the Master of the Horse in a secret wedding not recognized until two years after the son’s death. Another man with this title had a wife who introduced a popular style of dress called the “Amalia.” That man with this title led the Privy Council himself after forcing out Ignaz von Rudhart. Another man with this title was forced to switch prime ministers after the Goudi military coup and was later shot to death by an alcoholic vagrant while walking near the White (\*)** Tower. During the National Schism, a man with this title abdicated after his pro-neutrality policies clashed with the pro-Allies stance of Prime Minister Venizelos. That member of the House of Glucksburg reclaimed this title after he replaced his son, Alexander, who died from a monkey bite in 1920. For 10 points, what royal title was assumed in 1863 by George I after the deposition of the first modern ruler to hold it, Otto?
ANSWER: **King** of **Greece** [or **King** of the **Hellenes**; accept obvious synonyms for “king]

16. **A 1979 book by Hans-Dieter Betz applied rhetorical criticism to this text. This text says that a set of ancient promises was not made "and to his seeds," meaning all descendants, but "and to his seed" singular, meaning exactly one person. Its author recalls how three people "esteemed as pillars" gave the author "the right hand of fellowship." Near its end, its author exclaims "See what large letters I use as I write to you with my own hand!" Scholars hold differing theories over whether it was written for the "north" or "south" part of its** (\*) namesake area. This six-chapter text claims that Hagar and Sarah are to be interpreted figuratively, and uses the name "Cephas" in rebuking Peter for the incident at Antioch. It says that "There is neither Jew nor Gentile, neither slave nor free, nor is there male and female, for you are all one in Christ Jesus." For 10 points, name this Pauline epistle addressed to a circumcision-happy congregation in central Anatolia.
ANSWER: Epistle to the **Galatians** [prompt on New Testament until "end"]

17. **RM Coates names an unusual polycyclic example of these compounds derived from pentacyclononane. Multiple reactions that form the same one of these compounds show memory effects. These compounds have a delta-sub-sigma value in carbon NMR of up to 400 ppm. Saul Winstein proved anchimeric assistance is stereoselective in forming these compounds, leading to his debate with Herb Brown about 2-norbornene. Though not boranes,** (\*) nonclassical depictions of these compounds give them bridged three-center two-electron bonds. George Olah showed that stable media for these compounds includes antimony pentafluoride. These compounds, which undergo spontaneous methanide migrations, are formed as intermediates in isobutylene polymerization, in Friedel-Crafts alkylation, and in SN1 reactions. For 10 points, name these intermediates in which carbon has a positive charge.
ANSWER: **carbocation**s [or **carbonium** ions; or **carbenium** ions; prompt on ions or cations]

18. **A 1909 biography of this man by Charlotte Fell-Smith tried to reassert his intellectual merit. This man created a glyph resembling a dude with horns and one eye, which he interpreted in 34 "theorems." This author of *Monas Hieroglyphica* used an object perhaps taken from the Aztecs, an obsidian mirror, and kept an extensive personal library and map collection in his estate at Mortlake. This author wrote an original preface to his** (\*) English translation, the first, of Euclid's *Elements*. This friend of Gerardus Mercator took up claims that the Welsh prince Madoc, Brutus of Britain, and King Arthur had conquered parts of the Americas to bolster English claims to empire. This man worked with a crystal "shew-stone" and the scryer Edward Kelley to try to commune with angels. For 10 points, name this sponsor of explorer Martin Frobisher, a Welsh astrologer and magician who advised Queen Elizabeth I.
ANSWER: John **Dee**

19. **One character in this story claims mankind’s falsehoods are as astonishing as finding apple and orange trees that bear frogs and lizards. In this story, two gunshots are fired as a signal that one character has successfully written a note in six languages, without a mistake. One character in this story is baffled to learn that another character read six hundred volumes in four years, but spent an entire year on the New Testament. That character in this story plans to kill a man, but ends up kissing that man’s head with joy after finding him asleep next to a** (\*) note saying that his studies have caused him to despise life and freedom. This story’s title entity is inspired by an argument about whether capital punishment is better or worse than life imprisonment. For 10 points, two million rubles hangs on whether a lawyer can stay confined in the garden wing of a house for fifteen years, in what story by Anton Chekhov?
ANSWER: “The **Bet**” [or ***Pari***]

20. *Description acceptable.* **In one of these songs, the singer ascends an octave from E-flat to E-flat and then a half step up to F-flat the first of three times she piteously cries out for bread. One of these songs opens with part of a children’s choir holding whole notes on F, while another part sings F-G-F and down to D in half notes. A collection of twelve of these, called *Humoresken*, was modified to include “Revelge” and “Der** (\*) Tamboursg’sell.” A choir sings “Bimm, Bamm” to imitate bells in one of these. One of these recounting St. Anthony delivering a sermon to some fish was reworked into the scherzo of their composer’s second symphony. A soprano soloist depicts a child describing life in heaven in one of these which concludes a symphony that begins with a passage for flutes and sleigh bells. For 10 points, Gustav Mahler’s first four symphonies are peppered with settings of what collection of folk poems by Achim von Arnim and Clemens Brentano?
ANSWER: Gustav Mahler’s settings of *Des* ***Knaben Wunderhorn*** [or *The* ***Youth’s Magic Horn***; anti-prompt on “vocal movements / songs from Mahler’s symphonies”; prompt on “Mahler’s songs”]

21. **One system modeled using this distribution considers a container which initially contains a finite number of balls of different colors, and after each successive draw, an additional ball of the drawn color is placed in the container. This statistical distribution is used for the prior topic distribution in a commonly used special case of probabilistic latent semantic analysis introduced by Blei et al; that is its namesake “latent allocation”. An infinite dimensional version of this distribution is used to model a process in which a new customer either sits next to a person already at a table or at a new table, called the (\*)** Chinese Restaurant Process. The multivariate beta function is used as the normalizing parameter of this distribution, whose symmetric version is commonly used as a prior in hierarchical Bayesian modelling. For 10 points, name this statistical distribution, the conjugate prior of the multinomial distribution, named for a French mathematician who also lends his name to the pigeonhole principle.
ANSWER: **Dirichlet** distribution [the first system described is Pólya's Urn]

**Bonuses**

1. This work distinguishes between three types of literary interest: practical, qualitative, and intellectual or cognitive. For 10 points each:
[10] Name this major work of the Chicago school of literary criticism, which coined the terms “unreliable narrator” and “implied author.”
ANSWER: *The* ***Rhetoric of Fiction***
[10] *The Rhetoric of Fiction* is by Wayne Booth, who also wrote a book named after the rhetoric of this concept. Its “dramatic” form occurs when the audience knows something that a character does not.
ANSWER: **irony**
[10] Another prominent theorist of irony was this Belgian critic, whose major Deconstructionist works like *The Rhetoric of Romanticism* and *Blindness and Insight* fell out of favor after his Nazi-sympathizing past was revealed.
ANSWER: Paul **de Man**

2. The double version of this potential can be exactly solved using the Lambert W function. For 10 points each:
[10] Name this potential which is often used to model a particle in a region containing a barrier, like the interface between two conductors. Interestingly, it has the same reflection whether the potential is positive or negative.
ANSWER: Dirac **delta** function potential [prompt on impulse function]
[10] The delta function potential well has a single one of these states at negative energy. In these states, particles tend to stay localized, and they correspond to poles of the S-matrix.
ANSWER: **bound** states
[10] The properties of the delta function potential, like every other potential, are found by solving this equation whose time-independent version can be stated as H psi equals E psi.
ANSWER: **Schrodinger** equation

3. This thinker’s theory of judgment breaks it into three classes: apprehension, judgment, and emotion. For 10 points each:
[10] Name this German thinker. He believed that our experience of time is rooted in a feeling of *proteraesthesis* or “original association,” and he called his approach to the philosophy of mind “descriptive psychology.”
ANSWER: Franz (Clemens Honoratus Hermann) **Brentano**
[10] Although he didn’t use the word, Brentano coined the modern form of this concept: the capacity of the mind to be directed towards an object. It is often confused with another word: the state of planning to carry out an action.
ANSWER: **intentionality** [do NOT prompt on or accept “intention” or “intent”]
[10] Brentano’s later work is characterized by this ontological position that states that intentional objects, or *entia rationis*, are not real, which he summed up with the motto “there is nothing other than things.” This position’s name was coined by its other main adherent, the Polish philosopher Tadeusz Kotarbiński.
ANSWER: **reism** [or **reist**]

4. A variety of these places named for Adonis were designed to be destroyed by the summer heat, in commemoration of the god’s death. For 10 points each:
[10] Identify this sort of place which Epicurus’s school in Athens was named for. Greek writers often discussed a massive one of these places built in Babylon for Queen Amytis.
ANSWER: **garden**s [accept anything with **garden** in it, especially **hanging gardens**]
[10] Gardens were grown on the decks of a ship commissioned by this king which may have been the largest in the ancient world. This tyrant, a former general of Pyrrhus, supposedly asked a mathematician to determine whether his crown was made of pure gold.
ANSWER: **Hiero II** of Syracuse [or **Hieron II**; prompt on Hiero; prompt on Hieron]
[10] Greek gardening practices were often influenced by Persian gardens, such as those found in this capital built by Cyrus the Great. Cambyses II moved the capital to Susa from this place after Cyrus’s death.
ANSWER: **Pasargadae**

5. This is the surname of Sir Mungo, a character from the novel *The Fortunes of Nigel*. For 10 points each:
[10] Identify the surname of Malachi, a pseudonym used for a series of letters supporting the right of Scottish banks to issue their own banknotes.
ANSWER: **Malagrowther**
[10] The *Letters of Malachi Malagrowther* are by this 19th-century author, who sparked a Medieval revival with a novel about a knight who defeats Brian Bois-Guilbert at a tournament and wins the hand of Lady Rowena.
ANSWER: Sir Walter **Scott**
[10] Another humorously-named Walter Scott character is Jedediah Cleishbotham, the purported anthologizer of this series of Scott novels, which include *Old Mortality* and *The Heart of Midlothian*.
ANSWER: ***Tales of My Landlord***[prompt on “Waverley novels”]

6. For 10 points each, name some ideas developed by Joe Felsenstein, probably the most important extant comparative biologist:
[10] Felsenstein invented this method to correlate character traits among species, which seeks to correct non-independence due to shared ancestry of related species. This method assumes that evolution follows a random walk and that the *differences* between traits of sister taxa in a clade can be regressed through zero.
ANSWER: **phylogenetic independent contrast**s [or **PIC**s; or **phylogenetic generalized least-squares** or **PGLS**, which does nearly the same thing]
[10] Felsenstein applied this statistical method to DNA sequences as a way to infer evolutionary trees. This method determines the tree topology and substitution rates that maximize the probability of a given character matrix.
ANSWER: **maximum likelihood** estimation
[10] Felsenstein was also the originator of the idea that asexual reproduction causes a population to accumulate harmful traits, so sex is beneficial, but he named the concept for this Nobel Laureate--calling it this man's namesake “ratchet.”
ANSWER: Hermann Joseph **Muller** [or **Muller**’s ratchet]

7. The moon goddess Bendis was worshipped in this region, where a common artistic motif of a mounted horseman holding a spear may have depicted Heros Karabazmos or the god Sabazios. For 10 points each:
[10] Name this ancient-world region which the Greeks considered barbarian, though much of it is in today's Greece. Kings of it included Procne's husband Tereus and a dude whose horses get jacked in the *Iliad* named Rhesus.
ANSWER: **Thrace** [or **Thracia**; or **Thrakia**]
[10] In Thrace, king Lycurgus persecuted this Greek god of revelry. If you were a maenad following this god, you might carry a pine cone-tipped staff called a *thyrsus*.
ANSWER: **Dionysus** [or **Bacchus**]
[10] A festival worshipping this Thracian goddess of lust included huge, drunken nighttime orgies. A lost comedy by Eupolis concerns followers of her called *baptai*, who came from Thrace to Athens and may have had a rite similar to Christian baptism.
ANSWER: **Cotys** [or **Kotys**; or **Kotytto**; be lenient and accept **Cotyttia** or **Kotyttia**, the name of the festival]

8. Francis Poulenc set to music a non-existent poem by this author which was thought to exist thanks to a mistranslation of a Czech obituary. For 10 points each:
[10] Name this French surrealist poet of “Letter to Youki,” *Body and Goods*, and the novel *Give Me Liberty or Give Me Love!* He wrote the script for Man Ray’s film *The Sea Star* before dying at Theresienstadt.
ANSWER: Robert (Pierre) **Desnos**
[10] Desnos contributed to the 1930 pamphlet *A Corpse*, which criticized this author. This author defined surrealism as “psychic automatism in its pure state” in a manifesto and co-wrote *The Magnetic Fields* with Philippe Soupault.
ANSWER: André **Breton**
[10] An earlier pamphlet called *A Corpse*, published in 1924, called this newly-dead author of *Penguin Island* a “gilded mediocrity.” He wrote about a painter who can’t seem to stop executing people in *The Gods Are Athirst*.
ANSWER: Anatole **France** [or François-Anatole **Thibault**]

9. William Niskanen argued that examples of this sort of organization in government will always seek to maximize their share of the budget. For 10 points each:
[10] Name this type of rule-bound administrative hierarchy attacked in a namesake book by Ludwig von Mises. Max Weber wrote that their stodginess and adherence to routine epitomizes “legal-rational” authority in modernity.
ANSWER: **bureaucracy**
[10] This sociologist wrote that bureaucracy leads to “dysfunctions” such as overconformity and the overuse of formal “secondary relations”. He theorized that deviance comes from five types of adaptation when there’s a gap between a person’s status and goals.
ANSWER: Robert King **Merton** [That’s the basis of strain theory]
[10] This long-time dean of Harvard’s Kennedy School of Government wrote that “bureaucratic politics” conflicts with the “organizational-process” model of decision-making in work that became his book on the Cuban missile crisis, *Essence of Decision.*
ANSWER: Graham T. **Allison**

10. This man parodied the *Eight Views of Xiaoxiang* in his *Eight Parlor Views*. For 10 points each:
[10] Name this eighteenth-century *ukiyo-e* artist, who popularized the *nishiki-e* technique later used by Hiroshige and Hokusai.
ANSWER: Suzuki **Harunobu** [prompt on Suzuki]
[10] When creating a *nishiki-e* print, the artist made a separate woodblock for each of these things in the final print. Western comic book artists used Ben-Day dots to simulate more of these things from the four “process” ones available in cheap printing.
ANSWER: **color**s
[10] Harunobu specialized in *bijin-ga* pictures of beautiful women, which was also a specialty of *this* later eighteenth-century *ukiyo-e* artist. He created *Three Beauties of the Present Day*.
ANSWER: Kitagawa **Utamaro** [prompt on Kitagawa]

11. According to one legend, the gods hid this man's writings after he finished them as a test to see if he could rewrite them exactly from scratch. And he could! Twice! For 10 points each:
[10] Name this fifth-century author of the *Vishuddhimagga,* or "Path of Purification," who is widely regarded as the greatest commentator in Theravada Buddhism.
ANSWER: **Buddhaghosa**
[10] Buddhaghosa translated Sinhalese texts into this language. It was also used to write the *Dhammapada,* a widely-read section within a "canon" of texts also called the *Tipitaka*.
ANSWER: **Pali** [prompt on Prakrit]
[10] The *Sutta pitaka*, within the Pali canon, contains many of these stories, which include "The Monkey and the Crocodile" and "Prince Vessantara". Artwork in India's Ajanta caves depicts several of them.
ANSWER: **Jataka** tales [prompt on birth stories; prompt on descriptive answers such as "stories about the previous incarnations of the Buddha" or "prior lives of the Buddha"]

12. The author of this story hinted that the knife fight that is suggested to occur at its conclusion might be part a fevered hallucination on the part of the protagonist. For 10 points each:
[10] Name this story, whose protagonist contracts septicemia from an injury sustained while running up the stairs with a copy of the *Arabian Nights*.
ANSWER: “The **South**” [or “El **Sur**”]
[10] *The South* was not Borges’ only reference to the *Arabian Nights*. He also wrote an essay on its translations, in which he criticizes Lane and Mardrus, stating that he prefers the version of this British explorer and polymath.
ANSWER: Sir Richard Francis **Burton**
[10] Borges frequently refers to the 602nd night of the 1001 nights, in which, according to Borges, Scheherazade starts telling Shahryar this story, before being interrupted. That account is likely a fabrication of Borges.
ANSWER: the story of the ***Arabian Nights*** [or the story of the ***One Thousand and One Nights***; accept anything indicating she’s telling the story that she herself is part of]

13. Answer the following about the troubled relations between the early papacy and the Tiber river, for 10 points each.
[10] Pirates identified by the Romans with this term sailed up the Tiber in order to plunder Old St. Peter’s Basilica in 846. This term was used to generally identify Muslim Arabs throughout the Medieval era.
ANSWER: **Saracen**s
[10] In January 897, the body of this man was thrown in the Tiber after Pope Stephen VI accused him of perjury and other illegal actions. Later, Stephen was strangled, and this man’s body was recovered after a rehabilitation under Pope Theodore II.
ANSWER: Pope **Formosus**
[10] The first pope of this name set up a system for the feeding of the poor after a flood of the Tiber, and also feuded with Lothair II over his abandonment of Teutberga. A later pope of this name issued a bull authorizing Alfonso V of Portugal to enslave Muslims.
ANSWER: **Nicholas** [or **Nicholas** I; or **Nicholas** V]

14. This composer produced the most widely-used harmonizations of hymns like “Hyfrydol,” and wrote the tune for “For All the Saints” for the 1906 English Hymnal. For 10 points each:
[10] Name this composer of *Fantasia on a Theme by Thomas Tallis* and *The Lark Ascending*.
ANSWER: Ralph [rafe] **Vaughan Williams**
[10] Vaughan Williams shocked audiences with *this* extraordinarily dissonant F-minor piece, written after his *Job: A Masque for Dancing* and premiered in 1934. It ends with a “Finale con epilogo fugato.”
ANSWER: Symphony No. **4** in F minor [accept word forms like **fourth**]
[10] Early in his career, Vaughan Williams drafted three orchestral “Rhapsodies” based on the folk music of *this* English county; only No. 1 was completed.
ANSWER: **Norfolk** [accept ***Norfolk Rhapsody***]

15. Answer some questions about Oaxacan [wah-HAH-kun] cuisine, for 10 points each.
[10] Oaxacan red *mole* [moh-leh] is most often made from red ancho chilis, which are the dried variety of this chili pepper. It is the most common variety used in *chiles en nogada*, and it and not the jalapeno is the most traditional variety used in *chile relleno*.
ANSWER: **poblano** chili pepper
[10] Oaxaca is the namesake of a white, semi-hard cheese, which is produced by stretching the curds into ribbons. *This* is the Italian phrase for the stretched-curd process, which is used to make mozzarella.
ANSWER: ***pasta filata***
[10] Oaxaca is also home to most production of mezcal, which, like tequila, is a liquor distilled from the nectar of *this* cactus-like plant. This plant’s nectar has recently become a popular sugar substitute despite its insanely high fructose content.
ANSWER: **agave**

16. Answer some questions about measuring the binding affinity in interactions of macromolecules, for 10 points each:
[10] Isothermal titration calorimetry measures the change in this state variable during binding while temperature is held constant. At constant pressure, like in a coffee cup calorimeter, it equals the the heat transferred.
ANSWER: **enthalpy** [or **H**]

 [10] Berezovski developed a method in combinatorial chemistry to identify these compounds, which are small oligonucleotides or peptides that bind larger macromolecules. Libraries of them are screened using SELEX.
ANSWER: **aptamer**s
[10] Protein-protein interactions can also be assessed in this technique, which is similar to surface plasmon resonance and measures how the resonant frequency of a piezoelectric crystal changes when a thin film deposits on its surface.
ANSWER: **quartz crystal microbalance** [or **QCM**]

17. A legend describes how after a stable keeper severed the cord connecting a king of this empire to heaven, the king’s supporters sent a pack of dogs covered in poison to kill him. For 10 points each:
[10] Name this empire ruled by Songstan Gampo and Ralpacan which collapsed in the 840s, leading to the Era of Fragmentation.
ANSWER: **Tibet**an Empire
[10] In 763, Tibetan Empire troops briefly occupied the capital of this Chinese dynasty while Emperor Daizong was away. This dynasty followed the Sui and the Song eventually took over after its collapse.
ANSWER: **Tang** dynasty
[10] A millennium after Songstan Gampo’s reign, Tibet was again unified by this leader, who gained power with the help of Gushi Khan. Either name or position and number is acceptable.
ANSWER: the **Fifth Dalai** Lama [or **Ngawang** Lobsang Gyatso; prompt on Gyatso; prompt on the Great Fifth, prompt on the Dalai Lama]

18. Local artists were invited to create the tile mosaics for a set of concrete benches this firm designed for Guatemala City. For 10 points each:
[10] Identify this architecture firm currently building a new headquarters for *Le Monde*. Pae White designed an aluminum-foil-esque curtain for the main theater of this group’s celebrated Norwegian National Opera and Ballet, a building whose roof is publicly accessible.
ANSWER: **Snohetta**
[10] Snohetta recently completed an expansion of the Museum of Modern Art in this West Coast city, also home to the firehose nozzle-shaped Coit Memorial Tower and the Transamerica Pyramid.
ANSWER: **San Francisco**
[10] The Fisher Collection at SFMOMA contains this German photographer’s *99 Cent*, which like many of his works is mural-sized and contains thousands of individual objects. He photographed a motorcycle track in *Bahrain I* and also made *Chicago Board of Trade*.
ANSWER: Andreas **Gursky**

19. This advertisement was created by the popularizer of the term “soccer mom,” Alex Castellanos. For 10 points each:
[10] What 1990 advertisement in North Carolina, used for a Senate campaign against Harvey Gantt, features a voiceover complaining that a job had to go “to a minority because of a racial quota”? Its name comes from the objects primarily seen on screen during it.
ANSWER: “**Hands**” [or “White **Hands**”]
[10] The “Hands” ad was used in the campaign of this man, who was North Carolina’s Senator from 1973 to 2003. With Dan Burton, this racist also names a bill that strengthened the U.S. embargo against Cuba.
ANSWER: Jesse Alexander **Helms** Jr.
[10] In 1989, Helms raised eyebrows after hiring this former civil rights activist as a domestic policy adviser. This man claimed Helms was the only Senator to respond to an offer to serve.
ANSWER: James **Meredith**

20. These objects are in a steady state in the infinite onion model, which is largely discredited. For 10 points each:
[10] Name these large underground pools located underneath volcanoes.
ANSWER: **magma chamber**s
[10] This is the term used to refer to masses of jutting igneous rock generated from crystallizing and fossilizing magma. Dikes and laccoliths are two examples of these masses.
ANSWER: **plutons**
[10] Unlike laccoliths, dikes and baccoliths have this property, meaning their strata cut across the strata of the native rock surrounding them.
ANSWER: **discordant**

21. Name these people who proposed pseudoscientific life forces, for 10 points each.
[10] A man of this surname, the discoverer of paraffin, postulated an "odic force" which you can see as an aura if you spend hours in complete darkness. A German philosopher of this surname tried to reconcile Kant's philosophy of space and time with special relativity.
ANSWER: **Reichenbach** [accept (Baron Dr.) Carl (Ludwig von) **Reichenbach**; accept Hans **Reichenbach**]
[10] This Victorian popular novelist described a magical energy source called vril, which the theosophists were convinced was real, in *The Coming Race.* The line "It was a dark and stormy night" opens his novel *Paul Clifford*.
ANSWER: Edward **Bulwer-Lytton**
[10] This wacko Austrian psychoanalyst put his patients in boxes to harvest a form of sexual energy he called orgone. He also used massage-based “vegetotherapy” to break through patients’ “body armor.”
ANSWER: Wilhelm **Reich**