Chicago Open 2015

Packet by Dialectic Demolition Derby (Billy Beyer, Chris Borglum, Jordan Palmer, and Ryan Westbrook)

1. Among the institutions praised in the final chapter of this work is the artel, as well as others that fulfill the title function, such as esnafs and amkari. This work's third chapter relies in part on the ethnographic work documented in Peter Kolben's The Present State of the Cape of Good Hope, while its fourth chapter contains an extensive discussion of Iceland and concludes with the claim that medieval cities were not merely "political organizations for the protection of certain political liberties," but rather an attempt at organizing this work's title concept. (*) Written while the author was in exile in England, this work is partially a response to T.H. Huxley's essay, "The Struggle for Existence." The titles of all the chapters of this work begin with this work's title and examine the titular concept among animals, "savages," "barbarians," "the mideaval city," and "ourselves." For 10 points, identify this philosophical exploration of altruistic behavior, written by Pyotr Kropotkin.

ANSWER: Mutual Aid: A Factor of Evolution

2. This man developed the idea of linking a 4-hydroxy-2-cyclopentenone with C7 and C8 side chains units, which is known as the three-component coupling synthesis of prostaglandins. A compound developed by this man enabled the industrial synthesis of the main form of menthol from myrcene using the isomerization of allylic amines. A reaction named for this man uses a catalyst that contains bidentate diphosphine ligands and naphthyl rings. In this man's namesake reaction, enantioselective ketones can be converted to secondary (*) alcohols using the compound BINAP as part of its chiral ruthenium catalyst. For 10 points, name this Japanese chemist who names an asymmetric hydrogenation reaction, and who won the 2001 Nobel with Sharpless and Knowles.

ANSWER: Ryoji Noyori

3. In 2002, Wheeler Thackston produced an English translation of this book, updating the 1905 translation by Annette Beveridge. A frequently reproduced illustration from this book depicts its main character laying out the "Garden of Fidelity." It spends much time discussing its author's love for melons, and describes how its author grieves for his mother by reading contemporary poets like Banna'i of Herat and Asafi. Because his father was a drunkard, this work's author doesn't have his first glass of wine till age 29, leading to a ten-year period of heavy drinking that lasted till a vow of temperance before the (*) Battle of Khanwa. Its first English translations were mostly derived from a Persian version created by the son of Bairam Khan, though it was written in the Chagatai dialect of Turkic. It begins with the author's declaration that at age 12 he became king of Fergana. For 10 points, name this autobiography which chronicles the life of the founder of the Mughal Dynasty.

ANSWER: Baburnama [or The Memoirs of Babur; accept Babur's autobiography before "autobiography"]

4. This event was forced to end prematurely due to an outbreak of an epidemic known as the "English sweats." An important mediating role at this event was played by Martin Beucer. Eberhard von der Tann was dispatched to sabotage this event after being instructed by Elector John to ensure that no alliance resulted from it; despite those efforts, this event did result in a document known as its namesake Sketch of an Alliance. Urbanus Rhegius fell ill prior to this event, which led to Michael Agricola attending it in his place. This event occurred partially due to the request of Johannes Oecolampadius, (*) who was present at it, and thanks to Bucer's efforts a closer agreement than was reached at this event was attained during the two following Concordia Wirtembergensis. This event was organized by Philip the Magnanimous, the Landgrave of Hesse, and produced 15 namesake articles, despite the remaining point of disagreement on the nature of the Lord's Supper. For 10 points, identify this 1529 event at which Philip Melanchthon and Martin Luther argued theology with Huldrych Zwingli.

ANSWER: Marburg Colloquy or Colloquy of Marburg

5. One individual who served as head editor of this publication for only a year was succeeded by Chuck Lane and wrote the book *Martyr's Day* about the First Gulf War, before being killed covering the Iraq invasion in 2003. One of the original founders of this publication coined the term "manufacture of consent" in his book, *Public Opinion*. This publication's notable cultural criticism included a space called

"The Back of the Book." This publication ignited controversy with an issue that featured a smoking black woman holding a baby on its cover under the words "Day of Reckoning," and hosted a "round table" on Hernstein and Murray's *The Bell Curve*. (*) Plagiarist Ruth Shalit and fabulist Stephen Glass were both discovered to be frauds while writing for this publication. Founded by Herbert Croly and Walter Lippman, more recently this publication underwent a period of turmoil when its new owner, Facebook millionaire Chris Hughes, fired editor Franklin Foer and installed Gabriel Snyder and Guy Vidra in key positions. For 10 points, identify this occasionally liberal publication once owned by Marty Peretz whose writing staff included Andrew Sullivan and Leon Wieseltier.

ANSWER: The New Republic

6. A result by Cvitanic and Karatzas used convex analysis to generalize this result to families of functions. A 1951 paper by Dantzig and Wald answered two questions left open by the paper that derived this result by demonstrating both an existence proof as well as a necessity and sufficiency proof. This result can be visualized by depicting it as an optimal receiver operating characteristic curve. In signal detection (*) theory, this statement is equivalent to the maximization of the true positive rate for some upper bound on the false negative rate. This statement was first introduced by its namesakes in the paper "On the Problem of the Most Efficient Tests of Statistical Hypotheses." For 10 points, identify this statement, which holds that for a given threshold and significance level, the likelihood ratio test that prefers one of two hypotheses depending on a critical value of a threshold is the most powerful one.

ANSWER: Neyman-Pearson lemma or theorem

7. This character kept itching powder, a knife to cut purses, and burrs to place on men's heads like horns, symbolic of his cuckolding them, in the 26 pockets of his gown. In one episode, this character shits himself after mistaking the cat Rodilardus for the devil while in the dark hold of a ship, leading him to rattle off fifteen synonyms for shit. This character proposes a plan to build a city wall from Parisian women's vaginas, arguing that they are cheaper than common stones; that proposal was called representative of the theme of fecundity, not misogyny, in a study considering this figure as one aspect of the "carnivalesque" (*) by Mikhail Bakhtin. Milan Kundera argued for a definition of the novel as a space in which moral condemnation is suspended in an essay titled for "The Day [this character] No Longer Makes People Laugh," partly focusing on this character's murder of the shepherd Dindenault by tricking his sheep into running a ship's deck. For 10 points what companion of Pantagruel journeys to the Oracle of the Holy Bottle to find out if he should marry and has a name meaning He who will try anything?

ANSWER: Panurge

8. At the end of a series of two conflicts known by this name, Ranuccio II Farnese was accused of murdering a bishop that had been appointed by Pope Innocent X to the namesake city; that city was then destroyed and a namesake column was erected. This name is also applied to an Iron Age archaeological culture of the Lusitanians and Galicians in the northwest Iberian peninsula, which lasted to the Roman era and produced Celtic goldworks. A leader of this last name, known as the Lion of the Andes, was overthrown by his lieutenant Juan Vicente Gomez after serving from 1899 to 1908 as ruler of Venezuela. Another dictator of this surname used a Mexican gun dealer known as "The Friend," Antonio del Conde, to purchase a vessel called the (*) Granma, which docked at a port called the "Rejoicing of the Pious." That man had led an attack on the Moncada Barracks, which helped to galvanize his revolt called the 26th of July Movement. For 10 points, give the last name of that dictator who declared "History Will Absolve Me" in a noted speech and overthrew Fulgencio Batista to rule Cuba.

ANSWER: <u>Castro</u> [in order: the Wars of Castro, Castro Culture, Cipriano Castro, Fidel Castro]

9. This book's "Chapter XIX" shares an all-capitals reference to "THE TRADITIONALISTS OF PLAGIARISM" with its "Chapter I," and precedes it. A poem that appears later in this book proclaims, "The pure products of America / go crazy." Another poem in this book begins "The crowd at the ball game / is moved uniformly / by a spirit of uselessness / which delights them." The author's claim that "In description words adhere to certain objects, and have the effect on sense of oysters, or barnacles" is illustrated by a poem describing plants that "enter the world naked, / cold, uncertain of all / save that they enter." Published in 1923, this book is named for its first poem, a response to The (*) Waste Land, and includes its author's poem "The Red Wheelbarrow." For 10 points, identify this poetic manifesto by William Carlos Williams, which is named for a poem which opens with the line "By the road to the contagious hospital."

10. Listening to one of these works by this composer was described as "like staring at a cow for 45 minutes" by Aaron Copland. The penultimate one of these pieces contains a third movement Cavatina scored only for strings. The third of these works by this composer contains a "Moderato pesante" third movement and includes a solo part for a natural trumpet in E-flat that was inspired by a (*) bugler who often missed the octave and instead landed on the seventh. In the second of these pieces, a harp plays the notes of the Westminster chimes. The first of these pieces opens with a brass fanfare followed by a chorus singing "Behold the sea itself." The seventh of these pieces was based on the score to a film about a Robert Falcon Scott expedition. For 10 points, name these nine works by the British composer of *The Lark Ascending*, which include one titled for Antarctica.

ANSWER: symphonies by Ralph Vaughan Williams [prompt on partial answer]

- 11. A pidgin arising in this nation arose between several different ethnic groups working in the pearling industry. Fanny Cochrane Smith attempted to preserve one language spoken in this country, and another unusual language spoken here has no words for egocentric coordinates. The aversive case is a unique feature of one group of languages spoken here. A pidgin of two languages spoken in this nation is the origin of the term (*) "bung", meaning dead. Dialects of another language spoken in this nation include one which uses the word "Gammon" for joking and "Dardy" for cool, and another which Anthony Burgess called a sort of "Fossilized Cockney". For 10 points, name this country whose other spoken languages include the Eastern and Western-Central Torres Strait Islander and several languages spoken by Aboriginals. ANSWER: Australia
- 12. An anthology in this language includes a film about a multi-car crash caused by a folk artist's sheet-metal painting of a smiling, crucified Jesus. Films in this language include "The House of Joy" and "The Restaurant the World," part of the anthology *Pearls of the Deep*. Another film in this language sees seven picnickers suddenly surrounded by a bunch of goons and forced into an imaginary jail a man creates by drawing a line around them in the dirt with his heel. The allegory *A Report on the* (*) *Party and the Guests* preceded another film in this language in which a man buys drinks to bribe his town to include his pudgy daughter in a beauty contest at the title event, whose food and prizes are stolen before a climactic fire. That film is *The Fireman's Ball*. For 10 points, name this language of films from a European country's New Wave which included directors like Jan Nemec, Jiri Menzel, and Milos Forman.

ANSWER: Czech

13. Victor Silverman and Susan Stryker directed a documentary about this event, which featured an event with community liason Elliott Blackstone. The NTCU was established after this event, some of whose participants were members of a youth organization organized by the Gilde Memorial Church called the Vanguard. This disturbance supposedly began after a patron threw a cup of coffee into an officer's face, and it took place at an establishment found at the corner of (*) Turk and Tayler in the Tenderloin district. The group that rioted in this event were traditionally excluded from gay bars, and it occurred three years before Stonewall. For 10 points, name this supposed "first queer uprising" in the United States, whose instigators were transsexuals eating at a restaurant in San Francisco.

ANSWER: Compton's cafeteria riot

14. One source says that a participant in this event was serving as the champion of Beli, the supreme god of light. It might have been caused by the theft of a plover or lapwing, or the theft of a white roebuck and a greyhound dog, which one side refused to return. That side gained an edge during this event by singing a song that caused a magic cauldron of immortality to fail, so that only foul smoke was produced when dead men were thrown in it. That side finally triumphed by figuring out the name of a woman called (*) Achren, resulting in victory for the sons of Don. This event, described in the Book of Taliesin, sees the brothers Amaethon and Gwydion defeat the Lord of Annwn. FTP, name this event in Celtic myth in which the forest morphs into an army.

ANSWER: <u>Battle of the Trees</u> [or <u>Cad Goddeu</u>, or <u>Cath Godeau</u>, accept any descriptive answers indicating that <u>trees or plants are battling</u>, also accept answers such as "War Between Gwydion/Amaethon and Arawn or the forces of Annwn"]

- 15. Robert Beaumont formulated a theory to explain the rise of ancient Corinth focusing on its trade for this substance along a route to several towns in Illyria including Damastium. In Classical-era Athens, this substance was used to create the so-called "Laureot Owls," which drew their name from the Laurion region where this material was obtained, including the site of Thorikos. A group of artifacts called the Savso Treasure, (*) thought to have been owned by a fourth-century Roman general, is made of this material. The Twenty-First Dynasty pharaoh Psusennes I is often dubbed the pharaoh of this substance, due to material found in his casket. After the Byzantine emperor Nikephoros I was trapped in the Varbica pass, he was killed and the Bulgarian khan Krum proceeded to line his skull with this substance to make a drinking cup. For 10 points, name this substance combined with gold to form the alloy electrum.

 ANSWER: silver
- 16. In 2008, the exhibition "The Baroque World of" this artist was held at several American museums and marked the first major US retrospective of his work in 30 years. That exhibition credited the development of this artist's style to an early still life of a mandolin with an extremely small central hole. His public sculptures include a five-ton bronze nude in front of London's Liverpool Street Station called Broadgate Venus. After reading a Seymour Hersh article in The New Yorker, he was inspired to paint a 56-piece series which includes several scenes of dogs snarling and (*) attacking blindfolded men. A giant man with an unbuttoned white shirt, standing on rooftops, is riddled with a stream of bullets in his painting Death of Pablo Escobar. He reinterpreted Luncheon on the Grass with a naked man and clothed woman, and donated his paintings of torture at Abu Ghraib to the Berkeley Museum of Art. For 10 points, name this Colombian painter known for his fat, inflated subjects, such as in his parody of the Mona Lisa. ANSWER: Fernando Botero Angulo
- 17. The Cosenza variant of this protein has around 10% the activity of its normal form, and other variants of it include ones named for Orissa and the Mediterranean. Analyzing uterine tissue from heterozygous women with A and B variants of this protein led Linder, Gartler, and Townsend et al. to show that fibroids originate from single myometrial cells. Patients with low levels of this enzyme sometimes show "bite cells" on pathology and should avoid dapsone and primaquine. This enzyme catalyzes a reaction that produces a lactone, and is the first in a pathway whose final products are NADPH and (*) ribose 5-phosphate. It is the namesake of the most common hereditary enzyme disorder, which can be triggered by oxidative stresses like eating fava beans. For 10 points, name this enzyme that catalyzes the first step in the pentose phosphate pathway by removing a hydrogen from a certain phosphorylated sugar. ANSWER: glucose-6-phosphate dehydrogenase [or G6PD; or G6PDH]
- 18. The "Bisman" form of this deity is the black leader of a group called the Guardian Kings in Buddhist tradition. A ceremony in which a lead stone is dropped on a person's head honors this deity, who can appear in a single eternal form, or as either 33 or 99 different gods personifying concepts like time, desire, and the road. He seems to share his name with a Polynesian deity whose wife Papa cheats on him with Rangi, leading him to spear Rangi in the leg. He created the sun Koyash and he battles the dark lord (*) Erlik when he is conflated with the god Ulgan. Charms known as nazar are used by shamans to pray to this deity, who shares his name with the second-highest peak in the Tien Shan mountains. For 10 points, name this blue Sky-Father worshipped by Gokturk and Mongolian peoples.

ANSWER: Tengri [accept Tangaroa, or Tangaloa, or Ta-aroa, or Tan or Tam or "Ulgan" before mentioned]

19. A device developed by Cohen and Moerner called the ABEL trap counteracts this phenomenon by means of electrokinetic feedback. A generalization of this process to situations of non-zero fluid velocity was developed by Kraichnan to investigate the passive scalars problem. It is possible to compute the Boltzmann constant from this process by multiplying the mass by the diffusivity and dividing by the product of temperature and relaxation time. This Wiener (*) process is described by an equation that

models the evolution of particle position distributions under the influence of drag and stochastic noise; that special form of the Fokker-Planck equation is the Smoluchowski equation. The mean square displacement of this process is given by twice the diffusion constant times the elapsed time. For 10 points, identify this process first elucidated in 1905 by Einstein, the random walk of a particle in a viscous fluid.

ANSWER: **Brownian motion**

20. John Dennis published a pamphlet in defense of one of this author's characters as a reply to Richard Steele's Whig critiques. One of his verses ends with the lines "Chloris, at worst you'll in the end / But change your lover for a friend." This author of the love poems "The Forsaken Mistress" and "The Divided Heart" wrote numerous original "Songs" for his dramatic works, including "When Phyllis Watched her Harmless Sheep," which is sung by Aurelia and her lady-in-waiting Letitia in a play subtitled "Love in a Tub." That work, The (*) Comical Revenge, was followed by a play about Courtall's attempts to woo Gatty, She Would if She Could. The protagonist of his third and last play, published in 1676, was inspired by his friend, the Earl of Rochester, eventually marries Harriet Woodvill, and is named Dorimant. For 10 points, name this Restoration dramatist who created the character of Sir Fopling Flutter in his The Man of Mode.

ANSWER: George Etherege

Extra

A qualification for this saw an unbreakable tie involving Robert Hubner finally broken by roulette wheel. A 1996 version of this event was set for Baghdad, while a 1921 occurrence in Havana ended the still-standing longest reign. One took place in September-October 1995 on the World Trade Center Observation floor. Another saw a 15.5-14.5 result reversed 2 years later when a participant gave up alcohol; that man was possibly killed by the Maquis, and his death created a 5-player round robin. One in the Philippines featured an alleged Soviet hypnotist, x-raying of chairs, and a protests about yogurt. A successful participant needed withdrawals of Pal Benko and William Lombardy to play, where his win was rumored to result from Icelandic elves. The winner of a "Brain Games" one faced allegations of restroom cheating at one in 2006: Vladimir Kramnik won that event over Veselin Topalov. For 10 points, name this event, won by Alekhine, Karpov, Bobby Fischer, and Magnus Carlsen.

ANSWER: World Chess Championship [or Clear-Knowledge Equivalents]

1. Work at this extensive cave site began in the late 5th century CE by orders of Emperor Xiaowen. For 10 points each:

[10] Identify this massive complex of caves featuring Buddhist statuary on the Yi River that was likely begun after similar sites at Magao and Yungang.

ANSWER: **Longmen** Grottoes or Caves or Shiku [or "**Dragon's Gate**" Caves]

[10] The largest grotto at Longmen features the Fengxian Temple, which houses a 57-foot-tall Buddha with a face said to be modeled on this female sovereign during the Tang dynasty, who proclaimed herself the founder of the Zhou Dynasty in 690 CE.

ANSWER: Empress Wu Zetian or Zhao

[10] Guyang Cave in the Longmen Grottoes features 300 niches with over 2,000 statues in this style, a fusion of Hellenistic and Southeast Asian art named for a region now in Northwest Pakistan that was home to the city of Taxila.

ANSWER: Gandharan

2. Together with his pupil Posidonius, this philosopher is thought to exemplify Middle Stoicism, which was characterized by the incorporation of pre-Stoic thought. For 10 points each:

[10] Identify this Athenian Stoic who succeeded his teacher Antipater of Rhodes as the head of the Athenian Stoic school. None of his writings survive, so we only know of his thought by references in other philosophers. ANSWER: **Panaetius** of Rhodes

[10] The philosophy of Panaetius was particularly influential on Cicero, who incorporated much of Panaetius' work into this major work of his. According to Henry Sidgwick, this treatise did more than any other to communicate the morality of the ancients to medieval and modern Europe.

ANSWER: De Officiis or On Duty

[10] This man wrote about Posidonius' decision to abandon the stoics in his treatise *On the Doctrines of Plato and Hippocrates*, but is better remembered as a physician from Pergamum who chronicled the Antonine plague. ANSWER: **Galen** of Pergamon/Pergamum or **Galen**os or Aelius **Galen**us [or Claudius **Galen**us]

3. For matter with constant density, a formula developed by Kimura, Takamura, and Yokomakura gives the probability of this process occurring as A times the cosine of delta plus B times the sine of delta plus C, with A, B, and C determined experimentally. For 10 points each:

[10] Identify this process described by a matrix named for Pontecorvo, Maki, Nakagawa, and Sakata.

ANSWER: neutrino oscillations

[10] For oscillation between two neutrino flavors, the probability of oscillation is proportional to the sine squared of twice this quantity, which differentiates mass states from flavor states.

ANSWER: mixing angle

[10] The delta in the KTY formula is a measure of the violation of this symmetry in which a particle becomes an antiparticle and its position coordinates are reflected.

ANSWER: Charge-Parity violation

4. This artist's best-known sculpture was cast in bronze by his brothers after his death. For 10 points each: [10] Name this French artist of the sculpture *Horse* who also created a study of a facade for a proposed Maison Cubiste for the 1906 Salon d'Automne.

ANSWER: Raymond Duchamp-Villon [prompt on "Duchamp"]

[10] Duchamp-Villon's terracotta bust of this French poet, featuring an enlarged, bald pate, is thought to be a retort to a bust of him executed by Rodin, who also created an illustrated version of this poet's best-known collection. As an art critic, this man wrote "The Painter of Modern Life."

ANSWER: Charles **Baudelaire**

[10] The Duchamp brothers formed the core of the Section d'Or, which brought together many of the leading cubist painters, such as this artist of *Simultaneous Contrasts* and *Simultaneous Windows on the City*.

ANSWER: Robert **Delaunay**

5. This poet's epyllion *Hecale* survives in fragmentary form. For 10 points each:

[10] What teacher and later rival of Apollonius of Rhodes also created a bibliography of works at the Library of Alexandria called the *Pinakes*?

ANSWER: Callimachus of Cyrene

[10] Callimachus is best known for this collection which begins with the "Reply to the Telchines" and includes the love story of Acontius and Cydippe.

ANSWER: Aetia

[10] Most classics scholars believe that Catullus added the lines about the "ritus nutpialis" in his famous translation of a Callimachus poem from the Aetia that was taken as inspiration by Alexander Pope in writing this poem about the "violation" of Arabella Fermor.

ANSWER: The Rape of the Lock

6. This novel opens with the emcee of the Tropicana welcoming the crowd in English and Spanish. For 10 points each:

[10] Identify this mostly plotless novel, which features the wordplay of Bustrofedon, a dead character whose voice is presented on tape, and the adventures of the photographer Codac.

ANSWER: Three Trapped Tigers [or Tres Tristes Tigres]

[10] In Three Trapped Tigers, Guillermo Cabrera Infante parodied the writing styles of other Cuban authors in a section about the murder of this historical figure. In Animal Farm, this figure is represented by Snowball.

ANSWER: Leon Trotsky

[10] One of those parodies makes fun of this author, who was declared Cuba's national poet by the Castro regime in 1961. He first gained fame with eight short poems based on Afro-Cuban "Son" music, and wrote the poem "Sensemaya."

ANSWER: Nicolas Guillen

7. Answer the following about Chinese communist propaganda, for 10 points each.

[10] Propaganda hero Wang Jinxi was nicknamed "Iron Man" for his tireless work on the PRC's production of this commodity, especially at Daqing [Da-Ching], Earlier, Wang had worked at this type of production at Yumen.

ANSWER: Oil [or Clear-Knowledge Equivalents]

[10] This man, who acted as a propaganda director of the Jiangxi Soviet, famously stated that Mao was 70% right and 30% wrong. This man was denounced as the "No 2 capitalist roader" at another stage of his career. ANSWER: **Deng** Xiaoping

[10] This is perhaps the most famous Chinese propaganda hero, via his forged diary. Never doing anything particularly heroic, he was lauded for his legendary loyalty to Mao Zedong and his perfect acceptance of Mao. ANSWER: Lei Feng

8. In his namesake book outlining this argument, William Lane Craig tries to invert the story of Tristram Shandy and fails, and he also uses the Borde-Guth-Vilenkin theorem to uphold it. For 10 points each:

[10] Name this argument for the existence of God, which Craig named in honor of a medieval Islamic tradition. ANSWER: kalam cosmological argument

[10] Craig's KCA partly relies on his assertion that an "actual" one of these things cannot exist, while "potential" ones can. The absurdity of "actual" ones of these things is illustrated by Craig using Hilbert's hotel.

ANSWER: infinities [accept infinite sets]

[10] Craig's KCA also relies on the truth of the A-theory of this thing, which was contrasted with its B-theory in a paper by JME MacTaggert that proclaimed that this thing is not real.

ANSWER: time

9. The First Man and First Woman are assisted by this figure after Water Buffalo creates a huge flood. For 10

[10] Name this trickster god of Navajo mythology. In another story, this figure marries the Changing Bear Maiden and turns her evil.

ANSWER: Coyote

[10] During the creation of the world, Coyote once gets impatient with the Black God and tosses a blanket containing these objects. The Black God's temple also contains several of these.

ANSWER: stars

[10] This Navajo culture-bound illness is caused by contact with a spirit called a chindi. It's typically caused by unresolved grief.

ANSWER: Ghost sickness [or a million other translations, but in English it's always called that]

- 10. One ruler of this polity was executed by the Mongols after allegedly poisoning his rival Yuriy's captive wife; his son Dmitry killed Yuriy but was himself executed for this act by the Golden Horde, as was his younger brother Grand Prince Alexander. For 10 points each:
- [10] Name this northeastern Russian city, an early rival to Moscow during the appanage period, whose last ruler, Mikhail III, declared himself an obedient "younger brother" to Ivan III, but was ultimately besieged and fled to Lithuania, whereupon it was incorporated into Moscow's hegemony.

ANSWER: Tver

[10] During its struggle with Lithuania and Tver, Moscow under Dmitry Donskoi had won this 1380 battle, fought against the Golden Horde under Mamai, defeating the Mongol army and convincing the Lithuanians under Jagiello to retreat without fighting. Despite later Mongol retrenchments, this victory marked the beginning of Muscovite independence.

ANSWER: Battle of Kullikovo Field

[10] Dmitry Donskoi's grandson was involved in the only war of succession for the principality of Moscow, first against his uncle Yuriy, then against Yuriy's sons Dmitry Shemyaka and a man of this name known as "the squint eyed." Donskoi's grandson also of this name won the Civil War, despite being blinded in the process. ANSWER: **Vassily** [or **Basil** I guess]

11. Answer the following about controversial hydroelectric projects in American history, for 10 points each. [10] Sometimes referred to as America's worst industrial disaster, the construction of this tunnel to carry water from the New River through Gauley Mountain in West Virginia caused massive outbreaks of silicosis in 1931, resulting in the death of many Union Carbide employees.

ANSWER: Hawk's Nest tunnel

[10] Also in 1931, Herbert Hoover vetoed a bill named for this site in Alabama, where the Wilson Dam had been built on the Tennessee River. The plants at this site, originally named for some mollusks, were turned over to the TVA in 1933.

ANSWER: Muscle Shoals

[10] While serving in this cabinet position under Kennedy and Johnson, Stewart Udall opposed the hydroelectric Rampart Dam in Alaska. This position oversees the Bureau of Land Management and the National Park Service.

ANSWER: Secretary of the **Interior**

12. K. 622 is a concerto for this instrument, which is included in the *Kegelstatt Trio*, and was played by Bernhard Crusell, who composed three concertos for it. For 10 points each:

[10] Name this instrument also played by Heinrich Baermann that is featured along with the piano in an 1816 piece NOT composed by Chopin entitled *Grand Duo Concertant*.

ANSWER: clarinet

[10] That *Grand Duo Concertant* was written by this man, who composed two clarinet concertos in 1811, one in F minor and the other in E-flat major. His other works include *Invitation to the Dance* and the opera *Der Freischütz*, or *The Freeshooter*.

ANSWER: Carl Maria von Weber

[10] This conductor's notable recordings include one in 1958 for EMI of *The Freeshooter* and one in 1954 for Decca of Wagner's opera *Lohengrin*. This man died while conducting the second act of *Tristan and Isolde* in Munich, just like Felix Mottl.

ANSWER: Joseph Keilberth

13. The only known biological example of this type of reaction is catalyzed by chorismate mutase. FTPE: [10] Name this class of pericyclic reaction exemplified by ones named for Claisen and Cope. They are

described by an order term [i, j] that gives the number of atoms in the migrating group and pi system. ANSWER: **sigmatropic** rearrangement [prompt on "rearrangement"]

[10] A sigmatropic rearrangement named for Cope involves the 1,5 type of these compounds, that have two double bonds. In the Diels-Alder reaction, a conjugated one reacts with an alkene.

ANSWER: dienes

[10] The topology of sigmatropic rearrangements is described by this eleven-letter word when the migrating fragment remains on the same "face" of the pi system during the reaction.

ANSWER: suprafacial

14. In a seminar lecture collected in *The Four Fundamental Concepts of Psychoanalysis*, Jacques Lacan equates this action with the anamorphic skull in Holbein's The Ambassadors. For 10 points each:

[10] What action, defined by Lacan as the "underside of consciousness," helps constitute one's desire for the objet petit a?

ANSWER: the gaze

[10] Lacan argued that the gaze of the infant provides her first perception of the Symbolic by creating an "ideal-I" during this stage of recognition of its own image.

ANSWER: Mirror Stage

[10] Laura Mulvey addressed the placement of all movie watchers in the space of the "male gaze" in this seminal 1975 essay.

ANSWER: "Visual Pleasure and Narrative Cinema"

15. The title creature of this work devours a "gypsy child" before being killed by a car. For 10 points each: [10] Name this short story in which an escaped hyena of Lord Pabham's is escorted by Constance Broddle and the narrator Baroness on horseback during a hunt, a dark satire in which the Baroness gets a diamond brooch from the hyena's killer after pretending it was her dog.

ANSWER: "Esme"

[10] "Esme" is a short story by this Victorian satirist of "The Toys of Peace," in which children receive a garbage can for Christmas, and "The Open Window," in which a man is given a nervous fit by a girl with an over-active imagination. This creator of the "frank" character Clovis stupidly volunteered for WWI service, where he stupidly died.

ANSWER: Hector Hugh Munro [or Saki]

[10] A rough contemporary of Saki's who also used a synonym and also wrote repeatedly on animals, W.S. Porter, wrote in *The Four Million* of the memoirs of this creature, which has spent "most of his life in a cheap New York flat." This animal delivers social satire while inveigling his master to get drunk.

ANSWER: Yellow Dog [from "Memoirs of a Yellow Dog"]

16. This essay begins with the words "Mitt Romney is a liar. Of course, in some sense, all politicians... are liars." and much of it is dedicated to telling the story of direct-mail pioneer Richard Viguerie. For 10 points each:

[10] Identify this long essay, published in the "Salvos" section of an online magazine, which details the ways in which conservative movements scam gullible people out of their money.

ANSWER: The **Long Con**

[10] The article "The Long Con," was written by this historian of the American right, who is better known for his volumes on Goldwater and Nixon, titled, respectively, *Before the Storm* and *Nixonland*.

ANSWER: Rick Perlstein

[10] "The Long Con" was published by this magazine, founded by cultural critic and author of 2004's *What's the Matter With Kansas?*, Thomas Frank.

ANSWER: The **Baffler**

17. Branden Jacobs-Jenkins's refashioning of this melodrama, which won the 2014 Obie Award for Best New Play, has a black man putting on whiteface to portray an antebellum slave owner. For 10 points each:

[10] Name this 1859 play by Dion Boucicault. It ends in the suicide by poison of Zoe, the title character, after she escapes potential enslavement by M'Closky.

ANSWER: The Octoroon

[10] This author recently examined Jacobs-Jenkins's reworking of *The Octoroon* in her essay "Reading Racist Literature." She wrote about her time studying Uzbek in Samarkand in her collection *The Possessed:* Adventures with Russian Books and the People Who Read Them.

ANSWER: Elif Batuman

[10] Batuman published "Reading Racist Literature" in this magazine, where she's been a staff writer since 2010. In the mid-20th century, E. B. White and James Thurber were frequent contributors to this magazine, which originally published John Hersey's book *Hiroshima*.

ANSWER: The New Yorker

18. This term describes an instability that arises from a vertical shear of the mean flow and grows by absorbing energy from the meridional horizontal temperature gradient. For 10 points each:

[10] Identify this type of atmospheric instability which results in the formation of eddies whose length scale is the Rossby radius of deformation.

ANSWER: baroclinic instability

[10] The eddies produced by baroclinic instabilities are described by this term, whose "quasi" variant is an assumption in simple models of baroclinic instability. This term refers to situations in which a Coriolis force balances a pressure gradient.

ANSWER: geostrophic

[10] The baroclinic instability is the main driver of formation of these large-scale systems characterized by winds rotating with the direction of the earth and typically centered on an area of low pressure.

ANSWER: cyclones

19. Emulsion PCR is used to prepare samples for one version of this technique developed by the 454 Corporation which relies on the release of pyrophosphate molecules. For 10 points each:

[10] Name this technique in which the order of bases in a DNA molecule is ascertained. The most boring method of doing this involves using dideoxy chain termination nucleotides.

ANSWER: DNA sequencing

[10] After a massively parallel sequencing experiment comes this process, in which the reads are aligned and combined into longer sequences. The Velvet algorithm does this for short reads in transcriptomics studies.

ANSWER: assembly

[10] The Velvet assembler uses these graphs to align sequences in order. In this type of directed graph, an edge is connected between two nodes which have overlapping sequences.

ANSWER: de Bruijn graphs

20. This man formulated a bogus theory of criminality which held that criminals were basically evolutionary throwbacks and hence different by nature, and furthermore that this nature was reflected in physical features. For 10 points each:

[10] Identify this criminologist who expounded on those views in his works such as *Criminal Man*, and *Criminal Woman*.

ANSWER: Cesare Lombroso

[10] Later in life Lombroso reworked *Criminal Man* to include a chapter on the criminality of these people, who, ironically, included Cesare Lombroso. A.F. Thiele studied the criminal patterns of these people in an 1842 work that focused on their gangs, but they were more stereotypically depicted as economic predators.

ANSWER: Jews

[10] A forerunner to Lombroso's theories of criminality was this theory, developed in the 1840s and 50s by Prosper Lucas and Benedict-Auguste Morel, according to which certain physiological markers indicate a pathological state of the organism and held that these pathologies were acquirable and heritable.

ANSWER: **degeneration** theory