Chicago Open 2013: No Subtext, Just Tacos Packet by Adam Sperber, Andrew Wang, Austin Listerud, Ray Luo Edited by Matt Bollinger, Libo Zeng, Sriram Pendyala, Dennis Loo, Sinan Ulusoy, and Kevin Koai, with invaluable contributions by Matt Jackson

Tossups

1. A character in this play observes, "It is not love that loves to anger love," after soliloquizing about how "disturbed thoughts drives me from company and dries my marrow with their watchfulness." A painter in this play possesses the scientifically dubious ability to create poisoned paintings that kill anyone who looks at them. In a later scene in this play, a murder is averted by the timely appearance of Mike Cheyne's Elizabethan avatar, Lord Cheyne. In this play, the redistribution of church property during the reign of Edward VI results in Greene losing his land to the title character, after which he hires the comically inept murderers Black Will and Shakebag. While playing a game of backgammon with the adulterer Mosby, the title character of this play is stabbed repeatedly by a group of conspirators led by his wife Alice. For 10 points, name this watershed domestic tragedy written by an (*) anonymous playwright that depicts the real-life murder of the title gentleman.

ANSWER: Arden of Faversham

2. A combination of Tris-HCl, glycine and methanol comprises the Towbin buffer system that is used in one step of this process, and the most commonly used dye in this procedure is Ponceau S. The casein present in milk causes an increase in background noise when used for phosphorus containing compounds, making it inferior to BSA as a blocking agent. UV crosslinking can be used to fix nucleic acids to a polyamide membrane in this procedure, whose "direct" form suffers from lack of signal amplification as there is no secondary (*) antibody. This procedure can be used after ELISA to confirm an HIV diagnosis, and two enzymes commonly used for detection are alkaline phosphatase and horseradish peroxidase. In this process, the contents of an SDS-PAGE gel are transferred to a nitrocellulose or PVDF membrane, which are then washed with antibodies and run through a scanner for detection. For 10 points, name this laboratory procedure, also known as an immunoblot, that is used for detecting proteins.

ANSWER: Western blot [accept immunoblot before mention]

- 3. This text contains a simile that claims children of God who free themselves from fault are "shin[ing] like stars in the universe," and it then invites the listeners to "be glad and rejoice with me." It's not Colossians, but the faithful in this work are referred to as "the circumcision," as they "glory in Christ Jesus, and who put no confidence in the flesh;" it then invokes the Tribe of Benjamin. The concept of kenosis, or (*) self-emptying of will for want of God's intent, is introduced in this text, containing the line, "[A]t the name of Jesus every knee should bow, in heaven and on earth and under the earth." Claiming that "I can do all this through Christ who gives me strength," the author of this text was aided by Ephaphroditus before bidding him return home with gifts to sacrifice to God. For 10 points, name this book in the New Testament, a Pauline epistle to a church in Macedon. ANSWER: Epistle of Paul to the Philippians
- 4. At one point, this work asks if putting a lustful man in front of a gallows and threatening to execute him could stop him from fornicating. Scholars cite this work using the Academy pagination numbers from 5:3 (five three) through 5:163. Three nameless Theorems in this book argue that "determining grounds for the will" can include the mere form in which a principle is posited, not just its matter. This work introduces its author's idea of the summum bonum as the joining of virtue with happiness. This work's conclusion notes that humans find awe in two things: "the starry heavens above, and the (*) moral law within," after showing that the title concept compels us to believe in God's existence, free will, and the immortality of the soul. This work is meant to establish, rather than delimit, the "pure" subtype of the title mental faculty. For 10 points, name this shortest in a series of three philosophical texts, a more abstract treatment of duty-based moral philosophy than the author's earlier Groundwork of the Metaphysics of Morals.

ANSWER: Critique of Practical Reason [or Kritik der praktischen Vernunft]

5. One character in this work has a flashback about going to a fraternity party and waking up covered in broken glass all because he thought "Sigma Nu" consisted of three Greek letters. Another character in this novel practices writing out her signature for her upcoming remarriage yet ends up signing with her current

husband's last name. A school principal with acid reflux disease is among the casualties after John Voss opens (*) fire with an antique gun at his high school, although his friend Tick survives. In this novel, Tick's mother Janine ends up marrying a gym instructor known as the Silver Fox, Walt Comeau, who breaks his arm while arm wrestling Janine's ex-husband, Miles Roby, at the family diner. For 10 points, name this novel titled for a fictional town in Maine, which won the 2001 Pulitzer for Richard Russo.

ANSWER: Empire Falls

6. This state repealed the Racial Justice Act, intended to reform its use of the death penalty, in 2013. Earlier this month, this state became the first to opt out of receiving long-term federal unemployment benefits, thus cutting aid to 70,000 people. In 2008, an incumbent senator from this state alleged that the Godless Americans PAC had held a secret fundraiser for the Democratic challenger. Reverend William Barber leads this state's NAACP, which has led the (*) "Moral Monday" protests against this state's Republican legislature. Its Republican governor has threatened to veto an anti-abortion measure passed by its legislature as an attachment to a motorcycle safety bill. Represented in the Senate by Kay Hagan, this state is where Julian Castro gave a keynote address in September 2012. For 10 points, name this state governed by Pat McCrory, where the 2012 DNC was held in Charlotte.

ANSWER: North Carolina

7. This thinker argued that actions are carried out with three levels of social consciousness: self-aware "discursive consciousness," cognizant but inarticulate "practical consciousness," and "the unconscious." That tripartite division forms a basis for his "stratification model" of action. This author of Runaway World takes a "discontinuist" approach to comparing traditional and modern social orders in a book that discusses the radicalization of (*) modernity. This sociologist described the relationship between the social sciences and their objects of study as a "double hermeneutic." This author of The Consequences of Modernity reconciled structural and agential theories by describing a "duality of structure" in The Constitution of Society. In books such as Beyond Left and Right, this sociologist developed a center-left "Third Way" in politics that was adopted by Tony Blair. For 10 points, name this British sociologist who developed the theory of structuration and wrote New Rules of Sociological Method.

ANSWER: Anthony Giddens, Baron Giddens

- 8. This empire's conquests facilitated the growth of a merchant guild called the Five Hundred Lords of Ayyavolu. One king of this empire was said to have a large bell for people seeking justice to ring, so when an animal whose child was trampled rang the bell, he ran his son over with his own chariot. This empire built a temple featuring a famously tall tiered *vimana* tower and the sizable statue of the bull Nandi at its entrance; that Brihadeeswara Temple was built in (*) Tanjore. This empire plundered Buddhist monasteries and stupas during its conquest of Sri Lanka and frequently harassed the contemporary Srivijaya Empire. This empire was at its peak from the 10th century to the 12th, when it was supplanted by the Hoysalas. One of the three *muventar* along with the Chera and Pandya Empires, this is, for 10 points, what Tamil empire ruled by Rajendra I and Rajaraja I? ANSWER: Chola Empire [or Chola Dynasty]
- 9. Richer and Ulrych identified one of these stars in Leo Minor that is considered to be the most stable celestial clock. In May of 2012, Hermes et. al claimed to have found one with extremely low mass; its hydrogen atmosphere means that star is classified in the ZZ Ceti type of these objects. Another class of these objects, predicted by D.E. Winget, is designated DBV. The first star of this type to be observed was seen by Haro and Luyten in 1961; seven years later, Arlo Landolt determined that star, HL Tau 76, was one of these stars. Still another variety of these stars uses carbon and oxygen to carry out the kappa mechanism, which manages to occur despite the presence of helium in its atmosphere. That variety, the GW Vir star, is suggested to eventually become the result of the collapse of a star below the Chandrasekhar Limit. For 10 points identify this type of star with a varying luminosity that is held together by electron degenerate pressure.

ANSWER: Pulsating White Dwarf [Prompt on Variable White Dwarf]

10. This artist won his first major prize for a Neoclassical sculpture of a Trojan hero carrying his son, *Hector and Astyanax*. In one of this artist's largest projects, a woman wearing a feather headdress steps on the broken chain formerly tying down an African woman; a band illustrated with the animals of the Zodiac surrounds a spherical cage in that sculpture, in which the four continents hold up a rotating Earth. A smiling young boy clasps a shell up to his ear in this artist's (*) *Neapolitan Fisherboy*, a much smaller-scale work than

his *Observatory Fountain*. A marble sculpture by this artist depicts two dead boys around a screaming youth who embraces the legs of the title character, who is horrifiedly gnawing on his fingers. In another sculpture by this artist, a winged naked man with upward-flowing hair enthusiastically lifts a tambourine as leery naked women join hands to circle around him. Though he is not Rodin, this artist did a famous sculpture of *Ugolino and his Sons*. For 10 points, name this French neoclassical sculptor of *The Dance*, found in the Palais Garnier.

ANSWER: Jean-Baptiste Carpeaux

11. He's not Francois Villon, but Ezra Pound wrote a 3-act opera that set 11 poems of this author to music. Pound's Canto 73 opens with the image of this man riding on horseback after a return from exile just before relating this author's name to galloping. T.S. Eliot's "Ash Wednesday" opens with the line "Because I do not hope to turn," a reference to this man's poem about his exile in Sarzana. Near tombs at the port of St. John, his character argues that those who are not scientists or poet-philosophers are worse than dead once (*) Betto's brigade insults him for trying to disprove God in *The Decameron*. His most famous work, an Averroesinspired poem that philosophically explicates love in eight chapters, translates as "A lady asks me." For 10 points, name this 13th-century poet of *Ballata* and *Donna me prega*, who, along with Guizinelli and Dante, was a leading writer of the *dolce stil novo*.

ANSWER: Guido Cavalcanti

12. Suspected members of this movement were subjected to "pitch-capping," a form of torture that involved burning a paper bag over the suspect's face. Though not the Chartists, this movement published a radical newspaper called the *Northern Star*. William Drennan's pamphlets supported this organization, which became more radical as it strengthened its alliance with the Defenders, and which originated as an offshoot of the Grattan-supporting Volunteers. Charles (*) Cornwallis directed the quashing of this movement, founded by now-heroized men like Thomas Russell and James Napper Tandy. Its most famous leader arrived with 1000 soldiers from the French Directory far too late to do anything in County Mayo. For 10 points, name this political movement that planned the failed Irish rebellion in 1798 under the leadership of Wolfe Tone.

ANSWER: the Society of **United Irish**men

13. This man's sister Physadeia was once taken hostage by Castor and Pollux; she later became a handmaiden of Helen of Troy. An alternate myth holds that this man was killed by a big dog after trying to abduct the daughter of the Molossian king Aedoneus. In the *Metamorphoses*, this man claims that the gods do not actually have the power to change their shape, prompting Achelous to tell the story of Philemon and Baucis. This man tested a hero's bravery by driving that man's cattle from (*) Marathon and subsequently befriended that hero. A sudden earthquake convinced Heracles not to rescue this man; thus, he is still bound to the Chair of Forgetfulness for trying to abduct Persephone. That occurred after the death of this man's wife Hippodamia, whose marriage to this man provoked the Centauromachy. For 10 points, name this bosom companion of Theseus, the mythological king of the Lapiths.

ANSWER: Pirithous [or Peirithoos]

14. This composer's Second String Quartet depicts four men who "converse, discuss, argue...fight, shake hands, shut up – then walk up the mountainside to view the firmament!" One of this composer's song texts posits a "place in the soul all made of tunes," a phrase which titles J. Peter Burkholder's authoritative study on this composer's use of musical borrowing. This composer theorized a dichotomy between musical "substance" and "manner" in the Epilogue to his Essays Before a Sonata. The dissonances of one movement by this composer were supposedly inspired by the sound of two different (*) marching bands playing simultaneously, and he wrote a piano piece that features optional flute and viola parts. That piece contains a "human faith" melody that is thematically related to quotations of the "Fate" motif from Beethoven's Fifth. For 10 points, name this composer who depicted figures like Emerson and Thoreau in his Concord Sonata.

ANSWER: Charles Ives

15. NOTE: Description acceptable. Dolbow et al. combined the LATIN method with the extended finite element method to model a system with the frictional form of this phenomenon. In the absence of external forces, the radius of this phenomenon is proportional to the Young's Modulus to the one-third power in both the DMT model, which is applicable when the Tabor coefficient has a value of under 0.1, and when Tabor coefficient is over 5 where the JKR model is applicable. The assumptions of elastic strain, the lack of friction,

a non-conforming surface, and characteristic radii much larger than this type of radius characterize (*) Hertz's model, which was the first to model this phenomenon. More advanced models of this phenomenon considered the longer range range van der Waals force and direct adhesion. For 10 points, name this phenomenon that occurs when two solid materials touch each other.

ANSWER: **contact** [accept description that includes "two," some indication that the objects are solid, and some synonym of "touch each other" until the question itself tells this, prompt after; accept **crack** formation until "frictional"]

16. One battle named for this type of entity followed a skirmish in which the aggressors lost a cannon named "St. John the Evangelist" to the enemy. During that battle named for this sort of thing, five bridges were built over a river overnight, and Jacques de la Palice and the duc de Longueville were captured. Henry VIII took Maximilian I as his vassal in a 1513 invasion of France in which French soldiers fled at the Battle of (*) Guinegate, more commonly named for this kind of object. Another battle named for this type of object occurred in reaction to a massacre of people who could not pronounce the phrase "shield and friend." Robert II of Artois dishonorably lost a battle named for these things, which precipitated an "infantry revolution," since Flemish militiamen on muddy ground were able to massacre well-trained French cavalry. For 10 points, the 1302 Battle of Courtrai is commonly named for what kind of object, which Edward the Black Prince proverbially "won" at the Battle of Poitiers?

ANSWER: **spurs** [or the Battle of the **Spurs**; or the Battle of the Golden **Spurs**]

- 17. Although it's not palladium, mechanistic studies of the Miyaura borylation reaction catalyzed by organometallic compounds of this element with bipyridyl or cyclooctadiene ligands have been investigated by the Ishiyama group, uncovering uncommon *tris*-boryl intermediates where this element is present at oxidation state +2. The Eisenberg group investigated complexes containing this element in the catalysis of interrupted Nazarov cyclizations, famously achieving good yields on a Nazarov-Michael sequence catalyzed by compounds of this element. A complex containing this element is notable for homogenously catalyzing the hydrogenation of alkenes better than the rhodium-containing Wilkinson's catalyst; that is Crabtree's catalyst. A complex containing this element bound to a triphenylphosphine ligand is notable for binding oxygen reversibly; that is Vaska's complex. FTP, name this element which is the second densest metal at room temperature after osmium. ANSWER: iridium
- 18. This figure eagerly gets engaged to three immortal women, who hand him a silken undershirt that transforms into three ropes tied around him. In another incident, this figure dives into the River of Flowing Sands to talk to a demon wearing nine skulls around his neck. The Bull Demon King shapeshifts into this character to retrieve a magical fire-extinguishing fan. At the end of the novel in which he appears, he receives a promotion to (*) "Cleanser of Altars." This creature was a Marshal of the Heavenly Reeds before being banished for assaulting the moon goddess Chang'e; after Kuan Yin transforms him, he wields a magical nine-forked rake as the second-strongest member of his team. For 10 points, name this notably gluttonous guardian of the monk Xuanzang from *Journey to the West*.

ANSWER: Zhu Bajie [or Zhu Bajie; or Pigsy]

19. Multiple versions of this person's *Pieta* have tools litter the ground as John the Baptist catches a fainting Mary. This painter's *Annunciation* takes a birds-eye view in an outdoor setting as it marks the transition from Judaism to Christianity with a change from Gothic to Romanesque architecture. A piece of coral lies against the shelf next to crystal grains in a painting by this artist that, like a Quentin Massys painting, features two men in a convex mirror. In that painting, a man who might be Saint Eligius weighs a wedding ring for a young, wealthy couple. Rogier van der Weyden's *Portrait of a Woman* influenced his *Portrait of Young Girl*, but his most famous portrait shows a fly just below a fork-bearded (*) monk. For 10 points, name this pupil of Jan van Eyck who painted *A Goldsmith in his Shop* and a portrait of a Carthusian.

ANSWER: Petrus Christus

20. This last name belonged to the oldest man ever nominated on a major presidential ticket, an 80-year-old West Virginia senator who served as Alton J. Parker's VP nominee in 1904. A soldier with this surname became the first black general in the U.S. Army; that man's son of this last name organized the desegregation of the Air Force for Harry Truman. A Supreme Court Justice with this surname unexpectedly resigned from the Electoral Commission of 1877 to take a Senate seat, enabling Rutherford B. Hayes to win. That author of

the majority opinion in *Ex Parte Merryman* served as Abraham Lincoln's (*) campaign manager in the election of 1860. The commander of the Tuskegee Airmen bore this last name, along with a colonel who was wounded in the foot while commanding the Mississippi Rifles at the Battle of Buena Vista. For 10 points, identify this last name of the only president of the Confederacy.

ANSWER: <u>Davis</u> [or Henry <u>Davis</u>, David <u>Davis</u>, Benjamin <u>Davis</u> or Jefferson <u>Davis</u>]

Bonuses

- 1. This Spanish word denoted the medieval lawcode of the Visigoths, called the *Liber Iudiciorum* in Latin. For 10 points each:
- [10] Identify this word which also refers to a franchise given by noblemen or clerics to individual Spanish cities or communities. They were privileges granted by Christian monarchs to encourage settlement in newly-conquered cities.

ANSWER: fueros

[10] This medieval Spanish king tried to repopulate the Ebro Valley by promulgating the Fuero of Zaragoza, which he had reconquered. He also founded a community of knights called the Confraternity of Belchite.

ANSWER: Alfonso the Battler [or Alfonso I; or Alfonso the Warrior; or Alfonso el Batallador]

[10] This was one of the kingdoms ruled by Alfonso the Battler, along with Navarre. It was united with the Crown of Castile after its king Ferdinand married Isabella.

ANSWER: Aragon

- 2. Loss of the magnocellular cells in this area can lead to quadrantanopsia, where an outer portion of the visual field is unable to be perceived, for 10 points each:
- [10] Name this component of the thalamus which receives its input from the retina via the optic nerve. It also contains parvocellular cells which receive input from cones.

ANSWER: <u>lateral geniculate nucleus</u> [or <u>LGN</u>]

[10] The input from each optic tract crosses at this region located beneath the hypothalamus. Mass effects from pituitary tumors can cause visual field defects as they push on this structure.

ANSWER: optic chiasm

[10] One way to look for visual field problems is with this technique in which the namesake object is used to diagnose an afferent pupillary defect as it moves from one eye to the other.

ANSWER: swinging flashlight test

- 3. At the top of this painting, a Greek inscription explains that it was created a millenium and a half after the birth of Christ, at a time when the devil was loose, and that this painting depicts a celebration after the devil's defeat. For 10 points each:
- [10] Name this Italian Renaissance painting which shows twelve angels carrying olive branches flying around in a circle above a manger where Mary watches over the baby Jesus.

ANSWER: *The Mystic Nativity* [or *The Mystical Nativity*]

[10] *The Mystic Nativity* was painted by this Florentine master. The painting shows the influence of Savonarola, which apocryphally convinced this artist to burn his paintings in the Bonfire of the Vanities.

ANSWER: Sandro **Botticelli**

[10] A baby satyr gets stoned by eating a hallucinogenic fruit in the bottom-right corner of this Botticelli painting, which also shows three other baby satyrs, one wearing a helmet and one blowing a conch, carrying off a huge lance.

ANSWER: **Venus and Mars**

- 4. This pantheistic religious sect was led by crazy people like the author of *A Single Eye*, Laurence Claxton. For 10 points each:
- [10] Name this fanatical sect of possibly-nudist Antinomians. If it existed at all, it was prominent during the English Commonwealth.

ANSWER: the **Ranter**s

[10] Ann Lee founded this communal sect, whose members dedicated themselves to celibacy. It was also known for producing a namesake kind of plain furniture.

ANSWER: the **Shaker**s

[10] George Fox's Quakers took inspiration from this heretical belief system promoted by Madame Guyon and

Miguel de Molinos. According to this belief system, man could perfect himself by withdrawing from the world to contemplate the divine.

ANSWER: Quietism

5. The motto of this order is *honi soit qui mal y pense*, or "shame to him who thinks evil on it." For 10 points each: [10] Name this chivalric order founded by Edward III of England.

ANSWER: Order of the Garter

[10] The Order of the Golden Fleece was founded by Philip the Good, who built up the power of this duchy also ruled by Charles the Bold and John the Fearless.

ANSWER: **Burgundy**

[10] To consolidate power over Hungary, Sigismund of Luxembourg created this much more exciting chivalric order, consisting of twenty-four barons loyal to him who administered the state.

ANSWER: Order of the Dragon [or Order of the Dragons; or Societas Draconistarum]

- 6. When this character ignores Durvasa, he is so enraged that he curses the man who falls in love with her forget about her existence. For 10 points each:
- [10] Name this character who is remembered by Dushyanta when he is shown a ring that he had given her.

ANSWER: Shakuntala

[10] Shakuntala's mother, Menaka, was one of these cloud spirits, which are often married to Gandharvas.

ANSWER: Apsaras

[10] Another character who angrily curses people is Kannagi, the wife of Kovalan from the Tamil epic Silapathikaram. That epic is canonized as one of this many "great epics" from Tamil literature.

ANSWER: 5

- 7. Answer the following questions about amine-forming reactions and their reagents. FTPE:
- [10] Name the functional group which is reduced by triphenylphosphine in the Staudinger reaction to form an amine, and is characterized by three nitrogen atoms.

ANSWER: azide

[10] This named reaction, which is used to form Boc-protected amines when performed in *tert*-butanol, involves the reaction of acyl chlorides with azide ions and subsequent rearrangement to isocyanates which are generally solvent-trapped.

ANSWER: Curtius rearrangement

[10] This doubly-eponymous coupling reaction between primary or secondary amines and aryl halides, mediated by palladium-catalysis using bidentate or monodentate phosphine ligands, was invented in the 1990s as a method to form C-N bonds. One of its namesakes is an MIT professor.

ANSWER: Buchwald-Hartwig amination

- 8. A baker insults the protagonist of this novella, an officer, so the officer decides to end himself with his sword. For 10 points each:
- [10] Name this work. Its title soldier forgoes suicide, since the scent of spring flower and the stroke suffered by the baker give him new life.

ANSWER: Lieutenant Gustl

[10] *Lieutenant Gustl* was written by an author from this country. It is also the home of the drama *The Jewess of Toledo* and of *The Loser*, a novel about a pianist who becomes obsessed with Glenn Gould.

ANSWER: Austria [or Osterreich]

[10] Arthur Schnitzler, the author of *Lieutenant Gustl*, wrote of Fridolin's visit to a mask orgy in *A Dream Story*. Fridolin works in this profession, the same job held by Bernard Rieux and Charles Bovary.

ANSWER: **doctor** [or **physician**; or logical equivalents]

- 9. Answer some things about minerals containing magnesium for 10 points each.
- [10] Magnesium is found in this sheet silicate that often forms with muscovite. This mineral is also called black mica and was named after a French physicist who studied optics and is part of a doubly-eponymous law of electromagnetism.

ANSWER: Biotite

[10] Iron rich forms of this mineral make up the Fayalite group, while magnesium rich forms comprise the Fosterite. This green mineral is found at the end of the discontinuous branch of Bowen's reaction series, and the gem variety of

this mineral is peridot.

ANSWER: Olivine

[10] This mineral has a similar appearance to asbestos fibers, and is part of the grunerite solid solution series. Its unit has a formula of $(Mg,Fe)_7Si_8O_{22}(OH)_2$ and may be better known for its amusing name which comes from a Massachusetts town.

ANSWER: Cummingtonite

10. This system developed after Duke Huan developed Qi into a power beyond that of its neighbors. For 10 points each:

[10] Identify this system that provided some stability during the Spring and Autumn Period. In this system, one state would serve as a "Hegemon" and preserve stability through alliances with many smaller states.

ANSWER: <u>ba</u> system [prompt on <u>hegemon</u> system]

[10] In the later Warring States period, this state was able to surpass its neighbors and unify China in 221 B.C. Its first emperor was advised by book-burning advocate Li Si.

ANSWER: State of **Qin** [or **Qin**guo; or the **Qin** Dynasty]

[10] The state of Qin drew its power from the Legalist reforms enacted by this powerful statesman, including obligatory military service and an enormous secret police. He was torn apart by chariots after the death of Duke Xiao.

ANSWER: **Shang** Yang [or Lord **Shang**]

11. The first movement of this work oscillates continually between F-sharp minor and A major, and this work concludes with an extended piano postlude that draws on material from its twelfth song, "Am leuchtenden Sommermorgen." For 10 points each:

[10] Name this song cycle that begins with "Im wunderschönen Monat Mai" and concludes with a song about throwing a coffin full of old songs into the sea, "Die alten, bösen Lieder."

ANSWER: <u>Dichterli</u>ebe

[10] *Dichterliebe* was written by this composer during his "year of song," which also saw the composition of *Frauenliebe und -leben* and this composer's marriage to Clara Wieck.

ANSWER: Robert Schumann

[10] The singer declares, "I saw, my love, how wretched you are" in this bitterly ironic song, the seventh in the cycle. In it, the singer claims that he will not be resentful although his heart breaks.

ANSWER: "Ich grolle nicht"

12. Its Pueblo Grande museum has exhibits of Hohokam people, while its Heard Museum has a kachina doll room full of American Indian artifacts. For 10 points each.

[10] Name this city on the Salt river, home to a Desert Botanical garden and a weird Mystery castle.

ANSWER: Phoenix

[10] This suburb of Phoenix is home to Frank Lloyd Wright's Taliesin West. It lies northeast of a different suburb that houses Wright's Gammage Auditorium at Arizona State.

ANSWER: Scottsdale

[10] This peak just north of Phoenix and west of Paradise valley is also called Squaw peak. Its more common name memorializes the first woman killed in the Iraq War.

ANSWER: Piestewa peak

13. These linguistic entities are usually written out using square brackets with a plus or minus sign just inside the first bracket. For 10 points each:

[10] Name these subcomponents of segments or phonemes, such as [+strident], indicating the sibilant s sound, and [-back] indicating that a vowel is a front vowel. They name a theory of phonetics devised by Roman Jakobson.

ANSWER: distinctive features

[10] Differences in this feature allow English speakers to distinguish the /f/ phoneme from the /v/ phoneme. Phonemes with this feature can only be produced when folds in the larynx vibrate.

ANSWER: **voice**dness [or [+**voice**d]; or [-**voice**d]]

[10] This single-valued privative feature indicates a sound whose place of articulation involves raising the tip or blade of the tongue. Consonants with this feature include dentals, alveolars, and palatals.

ANSWER: +coronal [or [CORONAL]]

- 14. Answer the following about expeditions to find the source of the Mississippi River. For 10 points each:
- [10] As a part of an 1820 expedition, this politician named a lake after himself, thinking it the source. This author of the 1844 Hannegan letter administered the Black Hawk War as Andrew Jackson's Secretary of War.

ANSWER: Lewis Cass

[10] In 1805, Louisiana Territory governor James Wilkinson ordered this brigadier general to find the source of the river. The Spanish captured him in Colorado, the state that contains a peak named for him.

ANSWER: Zebulon Pike

[10] This member of Cass's expedition succeeded at the task in 1832, correctly identifying the source as Lake Itasca. The negotiator of the Treaty of Washington with the Ojibwe, he wrote some *Algic Researches* that inspired the *Song of Hiawatha*.

ANSWER: Henry Rowe **Schoolcraft**

- 15. This author first came to international prominence when Abraham Cahan was impressed by his short story "The Pearl." For 10 points each:
- [10] Name this Yiddish-language novelist of *The Carnovsky Family*, who chronicled the history of a Jewish family living in Lodz in his masterpiece, *The Brothers Ashkenazi*.

ANSWER: <u>I</u>srael <u>J</u>oshua <u>Singer</u> [or <u>I.J. Singer</u>; do not accept anything along the lines of "I.B. Singer"; prompt on <u>Singer</u>]

[10] I.J. Singer's more famous brother, Isaac Bashevis Singer, wrote this story set in the town of Frampol, where the title easily-deceived character learns that his wife has borne children by another man.

ANSWER: "Gimpel the Fool" [or "Gimpel Tam"]

[10] Herman Broder, a Holocaust survivor who has married his savior Yadwiga, discovers that his first wife Tamara is still alive in this Isaac Bashevis Singer novel. Its title evokes Herman's ambivalent relationship to his wives.

ANSWER: Enemies, a Love Story

16. A shepherd disrupts a dance ritual of Eros in the opening act of this ballet. For 10 points each:

[10] Name this ballet based on Tasso's Aminta, in which Aminta battles Orion for the title nymph of Diana.

ANSWER: Sylvia

[10] Sylvia composed by Leo Delibes, who also composed this ballet about Franz's love for a mechanical doll.

ANSWER: Coppelia

[10] The nymph Naila helps Djamil win the heart of Nouredda, the betrothed of the Khan of Ghendjib in this ballet with music by Delibes and choreography by Ludwig Minkus.

ANSWER: *La Source* [or *The Spring*]

- 17. One work in this collection asks, "Who will in fairest booke of Nature know / How virtue may best lodg'd in Beautie be?" For 10 points each:
- [10] Name this 16th-century sonnet sequence by Philip Sidney, possibly addressed to Penelope Rich but definitely titled for a star-lover and his star.

ANSWER: Astrophel and Stella

[10] Philip Sidney's niece, Mary Wroth, wrote a noted prose romance partially titled for this Muse. This Muse was sometimes conflated with the Holy Spirit, which is why Milton invokes her in *Paradise Lost*.

ANSWER: **Urania**

[10] This Elizabethan poet was first published when five of his songs were included in a knock-off edition of *Astrophel and Stella*. Also a composer, this Catullus translator wrote his own lute music to accompany the poems he included in the *Book of Ayres*.

ANSWER: Thomas Campion

- 18. Donald Glaser claims to have filled prototypes of this contraption with beer. For 10 points each:
- [10] Name this device that was invented during Glaser's stay at the best university ever—the University of Michigan. This device's invention won Glaser the 1960 Nobel in Physics. It improved upon the cloud chamber by using superheated liquid to detect the movement of electrically charged particles

ANSWER: **Bubble Chamber**

[10] Another scientist who worked with bubble chambers was this man, who designed a bubble chamber that used liquid hydrogen, which had the effect of combining the detector and target in a single device. He also observed k-capture and used a cyclotron to produce tritium.

ANSWER: Luis Walter Alvarez

[10] Although in accelerator experiments bubble chambers have largely been displaced by newer devices, they are now being used in detecting these things. Bubble chambers are useful because they are insensitive to ionizing background noise, but are sensitive to these things that can cause nuclear recoil.

ANSWER: <u>WIMP</u>s [accept <u>Weakly Interacting Massive Particles</u>; prompt on "dark matter"]

- 19. This hero avenges his cousin Malgrenant by slaying the Red Knight, but marries the Red Knight's wife and takes the knight's armor for himself. For 10 points each:
- [10] Name this knight who also befriends a lion that accompanies him into battle.

ANSWER: Yvain [or Owain]

[10] In most versions, Yvain's mother is this sorceress, a half-sister of Arthur who serves as the nemesis of the Knights of the Round Table.

ANSWER: Morgan le Fay [or Morgane; or Morgan; do not accept or prompt on "Morgause"]

[10] In *Yvain*, the Red Knight is the guardian of one of these locations, where he is summoned whenever a challenger performs a ritual to summon a storm. The knight's wife Laudine is known as the "Lady of" this place. ANSWER: a **fountain** [or a **spring**; do not accept other sources of water, such as "lakes" or "rivers"]

- 20. According to this theory, mental events have a token-identity with physical events, but mental events as a set do not have a type-identity with them. For 10 points each:
- [10] Name this theory advocated in the paper "Mental Events," which argues that psychology cannot produce rigid causal laws analogous to the laws of physics.

ANSWER anomalous monism [prompt "monism"]

[10] Donald Davidson's anomalous monism resembles the "parallelism" theory advanced by this author of *Tractatus Theologico-Politicus*.

ANSWER: Baruch Spinoza [or Benedict de Spinoza]

[10] This ethical philosopher and author of *Essays in Quasi-Realism* criticized Davidson's use of the supervenience theory in defenses of anomalous monism.

ANSWER: Simon Blackburn

EXTRAs:

It contains the Berg Strait, which joins two of its arms separated by the Kokaral island. Its southern ports include Muynoq, which sees frequent dust storms, lying in the area of Qoraqalpoghiston. West of it is the Ustyurt plateau, and projects for restoring its "small" region has focused on efficient irrigation. One of the river that connects to it flows from the Fergana valley near the Alai mountains, while another river that drains to it also goes to lake Sarykamysh, and rises from the Pamirs flowing northward past the Garagum canal, which is responsible for diverting water away from this body. Lying south of Kazakhstan and north of Uzbekistan, it receives the Syr Darya and Amu Darya, but is quickly receding. For 10 points, name this "lake" of central Asia found west of lake Balkhash and east of the Caspian Sea.

ANSWER: Aral Sea

One of the commanders in this battle was earlier arrested for plotting the overthrow of the Protectorate, and was later made earl of Tyrconnell. For 10 points each.

[10] Richard Talbot was the second in command who led the Jacobite retreat following this battle near Drogheda, in which William III scared the shit out of James II.

ANSWER: Battle of the Boyne

[10] The Jacobite position on Killcommadan hill was destroyed after the death of Marquis de St. Ruth in this decisive battle in Ireland of the Glorious revolution.

ANSWER: battle of **Aughrim**

[10] The lack of magistrates at Fort William to receive the oath of the MacDonald clan led to this massacre led by Archibald Campbell, earl of Argyll on the heel of the battle of the Boyne.

ANSWER: Glencoe massacre