## **CMST II**

## Packet 7

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In a film by this director, a protagonist screams "Goddamnit lady, you don't throw oranges on an escalator!" at a woman he duped into betting on the wrong horse. For another film, this director had cinematographer Vilmos Zsigmond ("VIL-mosh ZHIG-mund") employ a "post-flashing" technique to give the film a washed-out, pastel look. In that film by this director, a criminal shockingly beats his own girlfriend with a glass bottle to intimidate the main character. That film by this director opens with a fifteen minute scene of the protagonist getting (\*) food for his cat. In that film by this director, the theme song recurs diegetically in numerous genres, and the source material was changed to have the protagonist kill Terry Lennox. This director conceived of that protagonist as "Rip van Marlowe," a 50s detective stuck in a 70s world, played by frequent collaborator Elliot Gould. For 10 points, name this director of California Split, The Long Goodbye, and Nashville. ANSWER: Robert (Bernard) Altman

<JM - Arts: Film>

This country is home to an extremely successful romantic comedy troupe called Heartstrings [this country], while a one-act set here centers on the ex-prostitute Mariana's attempts to invent new initiation rituals. For 10 points each: [10m] Name this country home to the author of *The Scar*, Rebeka Njau, as well as to Francis Imbuga and Micere Mugo. Its government shut down a 1977 play where Ahab Kĩoi ("KEH-oy") uses a church wedding to swindle Kĩgũũnda ("keh-GOHN-duh") out of his land.

ANSWER: (Republic of) Kenya [or Jamhuri ya Kenya]

[10e] That play, I Will Marry When I Want, was co-written by this Kenyan author of A Grain of Wheat and Petals of Blood.

ANSWER: Ngũgĩ wa Thiong'o ("GOH-geh wuh thee-YONG-ah")

[10h] The Kenyan government later shut down Ngũgĩ's theater troupe in 1982 over this musical he co-wrote with its amateur cast. This play dramatized resistance to the Kipande forced labor system in the twenties and thirties.

ANSWER: *Mother, Sing for Me* [or *Maitũ Njugĩra* ("MYE-toh JOO-guh-ruh")]

<JG - Literature: World>

2. After its author's death, T.M. Knox published a book on this discipline that lambastes "scissors-and-paste" approaches. Certain rigorous methodological standards in this discipline are critiqued in the 1991 book *Dead Certainties*. A self-critical subdiscipline named the "Conceptual" form of this subject was spearheaded by Reinhart Koselleck. A 14th-century book on this discipline developed a notion of social solidarity called (\*) 'Asabiyyah. "The Idea of" this field was R.G. Collingwood's posthumous masterwork. After attempting a seven-volume account of this entire subject, a philosophical introduction to this discipline, *Muqaddimah*, was written by Ibn Khaldun. Undue focus on specific powerful individuals is derided as the "Great Man Theory" of—for 10 points—which field that studies past events?

ANSWER: <u>history</u> [accept <u>historiography</u>; accept "the philosophy of <u>history/historiography</u>;" prompt on <u>philosophy</u> before "*Dead Certainties*" (by Simon Schama) is read by asking "the philosophy of what other discipline?"]

<JM - Thought: Soft Social Science>

According to the Weidner Chronicle, the fisherman Utu-hengal overthrew a dynasty of this people after they literally snatched a fish from his hands just before he could offer it to Marduk. For 10 points each:

[10h] Name this people called the "fanged snake of the mountains" in Utu-hengal's "Victory Stele." Utu-hengal's son-in-law died battling them, but not before solidifying their replacement by the Third Dynasty of Ur.

ANSWER: <u>Guti</u>ans [accept <u>Gutium</u>; accept <u>Kuti</u> or <u>Kutian</u>s] (Utu-hengal's son-in-law was Ur-Nammu.)

[10m] Several Mesopotamian chronicles credit the rise of the Gutians to this ruler's own insults to either Marduk or Enlil. This grandson of Sargon the Great ruled the Akkadian Empire at its height, but it declined rapidly after him.

ANSWER: Naram-Sin

[10e] Nearly two millennia later, the Neo-Babylonian king Nabonidus excavated several artifacts from Naram-Sin's reign shortly before this founder of the Achaemenid Empire captured Babylon and deposed him.

ANSWER: <u>Cyrus the Great</u> [accept <u>Cyrus II</u> or <u>Cyrus the Elder</u>; accept any answer that uses <u>Kyros</u> or <u>Kurush</u> in place of "Cyrus;" prompt on partial answers]

<JG - History: Ancient/Other>

3. A key result of this theory, found by integrating tanh ("tanch") x over x, where x substitutes for free energy over twice kT, shows that the ratio of two quantities central to this theory equals pi times e to the negative Euler-Mascheroni constant, or approximately 1.76. Applying this theory to QCD predicts a color-flavor-locked phase at high quark densities. The ground state in this theory corresponds to the vacuum of Bogoliubov quasiparticles. This theory predicts an exponential increase in (\*) heat capacity due to the bridging of a small band gap. The Hamiltonian of this theory contains a quartic, phonon-mediated attractive interaction between electrons near the Fermi surface. This theory successfully explained the 1950 discovery that heavier isotopes of mercury had a smaller critical temperature. Lev Gor'kov showed that the phenomenological Ginzburg-Landau theory can be derived from this microscopic theory. Electrons form Cooper pairs in, for 10 points, what triply-eponymous theory of superconductivity?

ANSWER: **BCS** theory [or **B**ardeen-**C**ooper-**S**chrieffer theory]

<DE - Science: Physics>

A bare-chested woman with a leopard on a chain leash forms the letter L in this artist's *Alphabet* paintings, a series in which each letter is composed of stylized human bodies. For 10 points each:

[10h] Name this Russian-French artist and designer known mononymously by a French pronunciation of his initials, a key figure in the popularization of Art Deco. His works include over 200 covers for *Harper's Bazaar*.

ANSWER: <u>Erté</u> ("AIR-TAY") [or Romain de <u>Tirtoff</u>; or Roman Petrovich <u>Tyrtov</u>]

[10e] Before moving on to Hollywood, Erté produced celebrated costumes, sets, and program designs for revues like the Zigfield Follies and George White's Scandals in this theatrical scene named for a street in New York City.

ANSWER: **Broadway** Avenue

[10m] Erté spent the entirety of the 1920s as a designer for this Parisian cabaret theater at the height of its popularity. In 1926, Josephine Baker outrageously danced at this Belle Époque venue wearing only a skirt of artificial bananas.

ANSWER: Folies Bergère ("foh-LEE beh-ZHEH")

<JM - Arts: Misc>

4. In his *Oro de Indias*, José Santos Chocano stated that this man "has the north, but I have the south." A writer said that the only non-pre-Columbian poetic things in America are from this "democratic" man in his *Prosas Profanas*, and in another work called him "beautiful like a patriarch" in an "iron nation." That *Medallón* about this man from Rubén Darío's *Azul* coined his Spanish nickname, "el gran viejo." An 1887 essay in *La Nación* by José Martí began the "cult" of this poet among Latin-American modernists, and ended by quoting (\*) "disembodied, triumphant, dead" from his poem "So Long!" Darío began, "It is with the voice of the Bible, or verse of" this man "that we should reach you" in "To Roosevelt," and elsewhere often quoted a poem by this man that opens by stating that "our fearful trip is done." For 10 points, name this poet who influenced Latin American writers with works like *Leaves of Grass* and "O Captain! My Captain!"

ANSWER: Walt Whitman <JM - Literature: World>

When an interviewer asked why he studies religion, Jonathan Z. Smith recounted a Brazilian myth in which the universe is green semen ejaculated by one of these creatures. For 10 points each:

[10m] Give this type of creature. In Japanese folklore, the Jorōgumo transforms from one of these creatures into a beautiful woman to seduce unwitting victims, and in Akan myth a god of this form has knowledge of all stories. ANSWER: **spiders** [prompt on arachnids] (The Akan god is Anansi.)

[10h] In *The Implied Spider*, this scholar argued that, although postcolonial critiques of comparative mythological and cultural studies are valid, a less universalizing approach to comparison can still be productive.

ANSWER: Wendy **Doniger** (O'Flaherty)

[10e] *The Implied Spider*'s title was inspired by this thinker's statement that humans are animals trapped in webs of significance they themselves have spun. This thinker's *Interpretation of Cultures* used Gilbert Ryle's term "thick description" to describe his ethnographic method.

ANSWER: Clifford (James) <u>Geertz</u> ("GERTZ") <JM - Thought: Soft Social Science (Mythology)>

5. In later accounts, this skill originated from the folk hero Kettil's theft of three calendar staves from a deity. Historians debate whether the term erilaz referred to experts in this skill or to political leaders. A poem states "It is best that man remain silent" after announcing "now is answered what you asked of" this skill, which often involved the "thistle mistletoe formula." In his namesake saga, Egil ("AY-gill") foils a poisoning with this skill. Of three sons originating social classes, Heimdall taught this skill to Jarl alone. This skill, often described as (\*) reginkunnr, or "originating from the gods," complemented galdr and seiðr ("SAY-thir"). The speaker of the Hávamál recounts "they gave me no bread, they gave me no mead" while he learned this skill, often used apotropaically, by hanging from a windy tree for nine nights. An artifact named for Rök evidences both its Younger and Elder Futhark systems. Odin's wisdom partly comes from—for 10 points—knowledge of what symbols often found on namesake stones?

ANSWER: reading/writing/knowledge of <u>rune</u>s [accept word forms or <u>rune</u>stone(s); accept <u>Futhark</u> until mentioned; prompt on <u>writing</u>, <u>alphabet</u>, <u>literacy</u> etc.; prompt on <u>magic</u>, <u>incantations</u>, <u>apotropaic</u> charms, or answer describing a form thereof with "in what form or using what medium?"; prompt on <u>riddles</u>, <u>cyphers</u> or any answer describing a form thereof with "using what symbols?"]

<JM - History: Ancient/Other (Mythology)>

Some terrestrial gamma-ray flashes are produced by this process between two electrons. For 10 points each: [10m] Name this process, the emission of a photon from an electron that is deflected by another charged particle. The power radiated by this process is proportional to the Lorentz factor to the 4th power in synchrotrons.

ANSWER: bremsstrahlung [or braking radiation]

[10h] The emission spectrum of a target bombarded with high-energy photons consists of a bremsstrahlung background and peaks from these emissions, which occur when an outer-shell electron jumps to an inner-shell vacancy. These phenomena are distinct from the Auger effect, in which the target instead emits an electron.

ANSWER: **characteristic X-ray**s [prompt on <u>x-ray</u>s]

[10e] If a high-energy photon instead interacts with a *loosely*-bound electron, the photon will undergo this scattering process. This process results in a change in the photon wavelength proportional to 1 minus the cosine of the scattering angle.

ANSWER: **Compton** scattering [or **Compton** effect]

<DE - Science: Physics>

6. This poem praises a man whose boat "the little fishes throng / As at the morning toast that floats along," although "toast" is actually referring to sewage. A character in this poem describes preparing the way for another through "the lute I whilom strung, / When to King John of Portugal I sung." This poem references the play *The Virtuoso* when promising "Sir Formal's oratory will be thine," and when alluding to a prank that Bruce and (\*) Longville play upon a king who ponders "which of all his sons was fit to reign" before giving a mug of ale and copy of *Love's Kingdom* to his even duller successor. The opening lines of this poem warn, "When fate summons, monarchs must obey" because "all human things are subject to decay." The "true blue Protestant poet" Thomas Shadwell is mocked in—for 10 points—what satire by John Dryden?

ANSWER: *Mac Flecknoe* <CS - Literature: British>

Izhevsk ("eezh-YEVSK"), this region's capital, features a monument depicting their national dish Pelmeni—a rye-or buckwheat-based dumpling filled with meat and cabbage—on a huge fork. For 10 points each:

[10h] Name this federal subject of Russia whose indigenous people are the most red-haired ethnicity on earth.

ANSWER: <u>Udmurta</u> [or the <u>Udmurt</u> Republic; or <u>Udmurtskaya Respublika</u>; or <u>Udmurt Elkun</u>]

[10m] The Udmurts speak a Uralic tongue related to the languages of *these two* countries. With Estonia, these are the only countries in mainland Europe with a non-Indo-European majority language.

ANSWER: <u>Hungary</u> and (Republic of) <u>Finland</u> [or <u>Magyarország</u> and <u>Tasavalta <u>Suomi</u>; prompt on only one answer; accept <u>Hungarian</u> and <u>Finnish</u>, or <u>Magyar</u> Nyelv and <u>Suomen</u> Kieli]</u>

[10e] Much like St. Louis, Elista—the capital of the Russian Republic of Kalmykia, whose plurality follows Tibetan Buddhism—hosts many international events in this board game, which is currently undergoing a cheating scandal.

ANSWER: **chess** [or **shakhmaty**]

<JM - Geography>

7. The linguist Tom Roeper argued that the "discourse" form of this phenomenon will not be discovered in natural languages in the essay "The Minimalist Microscope." In the minimalist program, children are observed to undergo a "two-word" stage before they learn that Merge exhibits this property. An article by Hauser, Fitch, and Chomsky argued that the "Faculty of Language, Narrowly Defined" or "FLN" consists only of the capacity for *this* phenomenon. Such Chomskyans argue that this feature of natural languages implies they have an (\*) unbounded number of possible sentences. Daniel Everett controversially claimed that Pirahã ("pee-rah-HAHn") lacks this feature in order to argue that Universal Grammar theory is false. In English, this phenomenon occurs when clauses are connected by the determiner "that." For 10 points, give this linguistic phenomenon in which clauses can become units embedded in other clauses, as in a sentence like "I think that sentences can be nested."

ANSWER: **recursion** [accept word forms like **recursive**; accept specific forms of recursion like syntactic **recursion**; prompt on <u>self-reference</u> or <u>nesting</u> or word forms before mention; prompt on (center) <u>embedding</u> and word forms by asking "which is an instance of what more general linguistic phenomenon?"] <JM - Hard Social Science: Linguistics>

This musician, who somehow died young in a freak chiropractic malpractice incident, adopted his pseudonym after realizing on a peyote trip that he was a reincarnation of a namesake poet. For 10 points each:

[10h] Name this folk guitarist and singer who, along with John Fahey, developed American Primitivism in the 60s and 70s on records like *Venus in Cancer* and *Visions of the Country*.

ANSWER: Robbie **Basho** [or Daniel R. **Robinson**, Jr.]

[10e] Basho and Fahey drew from the classical music of this country, with Basho saying he wished to introduce a raga tradition to American music and imitating instruments like the sitar and sarod.

ANSWER: (Republic of) <u>India</u> [or <u>Bhārat</u> Gaṇarājya; accept answers of "<u>Hindustan</u>i classical music"] [10m] American Primitivist guitarists imitate the drone strings of South Asian instruments by using this technique on their instruments and playing them fingerstyle, using schemes such as DADGAD or DGDGBD.

ANSWER: **open tuning**s [accept descriptions like "**tuning** to a(n open) chord;" prompt on answers like "alternative" or "non-standard" tunings]

<JM - Arts: Other Music>

8. Other than "How Can You Face Me Now," a song titled for this place is the only jazz cover on Béla Fleck's debut record Crossing the Tracks. That song titled for this place features the progression (read slowly) G major 7, F#7, 2-5 to D major 7, C sharp 7 F sharp 7, B minor B7, and is sung without Al Jarreau's lyrics by Bobby McFerrin as the first track on a duet record with its pianist composer. Jelly Roll Morton called a right-hand syncopation motif this place's "tinge." The final track on (\*) Return to Forever's Light as a Feather is a Chick Corea composition titled for this place. A record partly named for this place features the tracks "Saeta" and "Solea." Performances of a song titled for this place often begin by quoting the adagio from Joaquin Rodrigo's Concierto de Aranjuez. Gil Evans orchestrated that piece for a 1967 Miles Davis album titled—for 10 points—"Sketches of" what place?

ANSWER: **Spain** <JM - Arts: Jazz>

One signer of this lopsided treaty relied on Alexandre Millerand's representations that its terms were provisional, while all the members of the Little Entente made territorial gains in it. For 10 points each:

[10m] Name this treaty imposed after the end of the Lenin Boys' "red terror." Its reversal was advocated by a party symbolized by four arrows emerging from an H and a modern party whose name puns on the phrase "right choice." ANSWER: Treaty of **Trianon** [or **Trianon** [or **Trianon** békeszerződés, **Trattato** del **Trianon**, or **Traité** de **Trianon** (the parties mentioned are the Arrow Cross Party and Jobbik, respectively)

[10h] Despite the Allied Powers' nominal ideals of self-determination, only *this region* was permitted to hold a plebiscite voting on their territorial status under the Treaty of Trianon, choosing to remain in Hungary.

ANSWER: **Sopron** (area) [accept "**Sopron** (area) Plebiscite" or **Sopron** i népszavazás]

[10e] The Treaty of Trianon is named for a building in this palace complex where the Paris Peace Conference developed an eponymous larger treaty ending the First World War.

ANSWER: (Treaty of) **Versailles** ("ver-SAI")

<JM - History: European>

9. Two soldiers in this conflict named Tomier and Palaizi co-wrote a song that repeats "we are certain and confident of mighty aid" against attackers. A two-part account of this conflict switches which side it backs after an unknown author takes over from William of Tudela. Romanus Bonaventura instituted an income tax called this conflict's "tenth." After a marriage alliance brought him into this conflict, a disguised Peter II of Aragon was killed in his much larger force's second line by a cavalry pincer whose commander was awarded the (\*) Trencavel family's land. The consolamentum characterized one side in this conflict, which included the Battle of Muret. The order "Kill them all! God will know his own" preceded a slaughter at Béziers ("bez-YAY") in this conflict, which was precipitated by the murder of Pierre de Castelnau and the subsequent excommunication of Count Raymond VI of Toulouse. For 10 points, name this campaign initiated by Pope Innocent III to eliminate a namesake gnostic dualist movement.

ANSWER: <u>Albigensian Crusade</u> [or <u>Cathar Crusade</u>; or <u>Croisade des albigeois</u>; or <u>Crosada dels albigeses</u>] (The commander mentioned in the sentence about Peter II was Simon de Montfort the Elder; the cavalry maneuver/death of Peter II described there occurred during the Battle of Muret.)

<JM - History: European>

Andrey Kolmogorov ("kohl-muh-GOR-ov") predicted that in fluids displaying this phenomenon, the energy spectrum falls to the -5/3 power of the wavenumber within an inertial range. For 10 points each:

[10e] Name this phenomenon that produces eddies and vortices and is contrasted with laminar flow.

ANSWER: **turbulence** [or **turbulent** flow]

[10m] The 1968 Kansas experiment provided a decisive test of Kolmogorov's power law by using J. Chandran Kaimal's improved design for one of these devices that measures wind velocity.

ANSWER: sonic anemometer

[10h] The Kansas experiment was also a key test for this theory named for two Soviet scientists, which is often used in large eddy simulations to model surface layer fluxes. This theory predicts dimensionless wind and temperature profiles in terms of a length scale defined as the height where buoyant and shear production of turbulence are equal. ANSWER: **Monin-Obukhov** similarity theory [or **M-O** similarity theory; or **MOST**; prompt on similarity theory] <SK - Science: Other>

10. These phenomena can cause damaging pressure spikes called Gifle peaks. Chabchoub, Hoffmann, and Akhmediev experimentally produced a dangerous type of these real-world phenomena consistent with a model of them based on the "Peregrine breather." That type of these natural phenomena are thought to be caused by nonlinear effects like the modulational instability or diffractive focusing, both of which can be captured by the Ursell number. A behavior of these phenomena is characterized by the (\*) Iribarren number, which divides them into subtypes like collapsing and plunging. Scientists thought one type of them existed only in folklore until a recording of one that exceeded twice a namesake "significant height" at the Draupner Platform near Norway. These phenomena slow down and increase in height in shallower regions, a phenomenon called shoaling. For 10 points, huge "rogue" examples of what phenomena are likely responsible for the disappearances of many ships?

ANSWER: ocean waves [accept any other type of body of water, or just water, in place of "ocean;" accept surface waves, (surface) gravity waves, wind waves, breaking waves, or breakers; prompt on waves with "in what medium?"; prompt on solitons with "what natural phenomena are those modeling?"]

<JG - Science: Earth/Environmental>

In a set of interviews published as *Stepping Stones*, a poet described spending a full day in Glanmore writing a poem about one of these objects, whose speaker "lay waiting / between turf-face and demesne wall" as her "diadem grew carious." For 10 points each:

[10h] Name these objects. In a poem from the collection *Wintering Out*, the narrator imagines, "Some day I will go to Aarhus," where the sight of one of these objects "in the old man-killing parishes" will make him "feel lost, unhappy and at home."

ANSWER: **bog bodies** [accept "**Bog Queen**"; prompt on <u>cadavers</u> or <u>corpses</u> or human <u>bodies</u> or <u>mummies</u> or equivalents; prompt on "The Tollund Man"]

[10e] P. V. Glob's study *The Bog People* inspired a sequence of "bog poems" by this Irish poet of *Death of a Naturalist*, who wrote a celebrated 1999 translation of *Beowulf*.

ANSWER: Seamus (Justin) Heaney

[10m] The speaker of this Heaney poem reflects that his grandfather achieved more in a day "than any other man on Toner's bog." This poem's speaker analogizes his father's work to his own use of a "squat pen."

ANSWER: "<u>Digging</u>" <TM - Literature: British>

11. This country's pre-colonial royal court is the traditional origin of a sexual practice aimed at female orgasm and ejaculation called "Kunyaza" promoted by contemporary public health experts. The martial dance tradition of "Intore" originates with a minority ethnicity in this country, which is also home to an artform where women produce colorful geometric designs using cow dung mixed with sanitizing ashes, called "Imigongo." It's not Australia or Poland, but this country features abundant milk bars where citizens consume it hot, cold, and fermented, exploding in popularity after its government's "Girinka" program began giving (\*) free cows to every family in 2006. This country's northwest border runs through the volcanic Virunga mountains adjacent to Lake Kivu to this country's west. This country's rapid development under a relatively benevolent dictatorship garnered it the nickname "the Singapore of Africa" under Paul Kagame's administration. For 10 points, name this country ravaged by a 1990s genocide against its Tutsi minority.

ANSWER: (Republic of) **Rwanda** [or (Republika y'u) **Rwanda**, (République du) **Rwanda**, or (Jamhuri ya) **Rwanda**]

<JM - Geography>

Answer some questions about the policy feedback effect, the tendency of past government programs, especially welfare schemes, to create new interest groups rather than the other way around. For 10 points each:

[10e] The article "When Effect Becomes Cause" cites this lobbying group for the elderly as a classic product of policy feedback, since gaps in Medicare and other weak welfare provisions created an organizing opportunity.

ANSWER: **AARP** [or **American Association of Retired Persons**]

[10m] That article also points to the New Deal-created American Farm Bureau Federation's promotion of big agribusiness as a canonical example of policy feedback. The AFBF is also analyzed in this magnum opus of Mancur Olson, which describes the title activity in terms of free-rider problems.

ANSWER: The Logic of Collective Action

[10h] "When Effect Becomes Cause" is by this political scientist known for his study of welfare retrenchment and formal model of path dependency as increasing returns. He co-wrote *Winner-Take-All Politics* with Jacob Hacker.

ANSWER: Paul **Pierson** 

<JG - Hard Social Science: Misc>

## - HALFTIME -

12. This composer's longest work closes with a 39-note melisma on the word "porrigat," symbolizing God the Father stretching forth His hand, and is preserved in the ginormous Riesencodex. This composer commemorated St. Ursula's 11,000 virgin martyrs with the O Ecclesia sequence. Emma Kirkby features on an album of this composer's music by Gothic Voices entitled A Feather on the Breath of God. The only male voice in a work by this composer yells and grunts instead of singing because the (\*) Devil is incapable of divine harmony. Kristin Hayter takes her stage name from this composer's conlang, Lingua Ignota. This composer, whose works are collected as the Symphonia armoniae celestium revelationum, composed the Ordo Virtutum, which is considered the earliest extant morality play. For 10 points, give this composer nicknamed the "Sibyl on the Rhine," also known for her mystical writings.

ANSWER: (Saint) <u>Hildegard</u> von Bingen [or <u>Hildegard</u> of Bingen; or <u>Hildegard</u> is Bingensis] <CS - Arts: Classical Music>

At the beginning of a novel, the Melekhov farm is described as having one gate open toward this entity. For 10 points each:

[10m] Name this geographical feature, where "serfs" who "ran away from the landowners" settled. A storm on this geographical feature, which "flows quietly" in the title of one novel, is used as a metaphor for the brewing affair between Grigory and Aksinya.

ANSWER: the **Don** river [accept And Quiet Flows the **Don**]

[10e] Mikhail Sholokhov's novel *And Quiet Flows the Don* describes the lives of Don Cossacks during the Russian Revolution and this earlier conflict. Alexander Solzhenitsyn described the Battle of Tannenberg during this conflict in his novel *August 1914*.

ANSWER: **World War I** [or the **Great War**]

[10h] This earlier poet described the "Cossack fame of yore" in his poem "Night of Taras." This Ukrainian national poet frequently described his Cossack heritage in poems such as his epic "Haydamaky."

ANSWER: Taras <u>Shevchenko</u> <VA - Literature: European>

13. This philosopher used a divided hexagon chart to schematize all possible ontological theories in "The Seven Systems of Metaphysics." Thinking the word "phenomenology" had become too loaded, this thinker coined the term "phaneroscopy." This philosopher argued that humans have no introspective faculty and can only think symbolically in a paper on "Four Incapacities." This philosopher claimed that ideas naturally tend to spread, gaining generality and losing intensity, in a notion that he called "The (\*) Law of Mind." In that paper, this thinker argued that all thought and consciousness must be fully continuous, a position he called "synechism." Building upon an effort to derive a "New List" of transcendental categories that yielded his central concepts of "firstness," "secondness," and "thirdness," this thinker differentiated signs into icons, indexes, and symbols in his "Semiotic." For 10 points, name this author of "How to Make Our Ideas Clear."

ANSWER: Charles Sanders Peirce ("PURSE")

<JM - Thought: Philosophy>

At the start of this text, the Buddha turns 500 gifted umbrellas into a single universe-sized one. For 10 points each: [10h] Name this early Mahāyāna text centered around a title character who, despite being an often ill and/or drunk layperson, performs miracles and shares enlightened teachings with an audience of arhats and bodhisattvas. ANSWER: **Vimalakīrti** Nirdeśa ("vih-muh-luh-KEER-tee nir-DEH-shuh") [or **Vimalakīrti** Sutra] [10e] In the Vimalakīrti sutra, when Śāriputra ("shah-ri-PUH-tra") asks a deity why it remains in *this* supposedly inferior state, it switches their bodies, much to his horror. Some Theravāda sects teach that these people cannot reach enlightenment until they are reborn in another form.

ANSWER: women [or female, etc.]

[10m] The text ends with Vimalakīrti doing *this* in response to a question about non-duality. Gautama Buddha's reaction to a certain set of questions is known as the "Noble" *this*, which is a strict practice in Vipassana retreats. ANSWER: being <u>silent</u> [accept other answers indicating that Vimalakīrti is <u>silent</u> or does <u>not respond</u>; accept "Noble <u>Silence</u>;" unfortunately, do not accept if the team is silent] (The questions mentioned are the "Unanswered Questions.")

<JM - Religion>

14. This man frequently clashed with his mentor's widow, Edna Rose Ritchings, over control of that mentor's organization. This man fabricated threats to his life on "White Nights" to avoid a custody battle against Timothy and Grace Stoen. After being mistakenly placed in a hospital's black ward, this then-director of a Human Rights Commission refused to move, made other patients' beds, and emptied their bedpans, leading to desegregation. This man adopted a part-Native American girl and three Korean-American children to create a (\*) "rainbow family." This self-described "only true heterosexual" advocated an "Apostolic Socialism." This man was appointed Housing Commissioner of San Francisco for helping George Moscone get elected. Leo Ryan became the only congressman killed in the line of duty when he went to investigate this man's commune in Guyana. For 10 points, name this cult leader who forced his followers to commit ritual suicide via poison-laced Flavor-Aid in a "town" named for him.

ANSWER: Jim **Jones** [or James Warren **Jones**] (The "mentor" in the first sentence is Father Divine.) <CS - History: American>

In Hill–Robertson interference, the presence of this phenomenon allows two beneficial mutations to fix faster by giving them access to the same genetic background. For 10 points each:

[10m] Name this process whose frequency increases with the distance between loci on a genetic map. Historical instances of this process can be identified by counting SNPs with four distinct alleles in the four-gamete test.

ANSWER: <u>recombination</u> events [accept <u>crossing over</u>]

[10h] These structures contain all information about past recombination events among a set of individuals. The emergence of fast approximations to these structures using the sequentially Markovian coalescent has led to an explosion in their use in population genetics problems like inferring demographic history and detecting selection.

ANSWER: ARGs [or ancestral recombination graphs [or ARGs]

[10e] ARGs incorporate recombination into these branching graphs that are used to show evolutionary relationships between species.

ANSWER: phylogenetic **tree**s [or **phylogenies**; accept **cladogram**s, **phylogram**s, or **chronogram**s] <AF - Science: Biology>

15. At the end of a play by this author, an old woman exclaims, "Have mercy on us!" after the title group of people gradually realize that their priest caretaker has actually been dead the whole time. This author, who developed the idea of "static theater" in his essay "The Tragical in Daily Life," wrote about a party of six blind men and six blind women who have been abandoned in the wilderness in his one-act play *The Blind*. This author wrote about Ygraine's failed attempts to protect her brother in his play *The Death of* (\*) *Tintagiles*, which was one of his many plays for marionettes. Golaud kills the title couple of another play by this author after discovering their affair. In one of this author's plays, Berylune the fairy gives a magical gemstone to Mytyl and Tyltyl so that they can find the title animal and achieve happiness. For 10 points, name this Nobel Prize-winning Belgian symbolist who wrote the plays *Pelléas et Mélisande* and *The Blue Bird*.

ANSWER: Maurice <u>Maeterlinck</u> [accept Count <u>Maeterlinck</u> or Comte <u>Maeterlinck</u>]

<WJ - Literature: European>

Georg Solti conducted the music for a Bernard Rose film of this title in which Anton Schindler tries to figure out to whom this phrase refers. For 10 points each:

[10m] Give this two-word phrase drawn from an unsent 1812 letter that Beethoven wrote while convalescing in Teplitz. Its possible referents include Josephine Brunsvik, Antonie Brentano, and Julie Guicciardi.

ANSWER: Immortal Beloved [or Unsterbliche Geliebte; prompt on partial answer]

[10h] It is not hard to link Beethoven's lack of romantic success to this musicologist's controversial comment on the "murderous rage of a rapist incapable of attaining release" that she heard in Beethoven's ninth, reproduced in her book *Feminine Endings*.

ANSWER: Susan (Kaye) McClary

[10e] Perhaps the most famous expression of Beethoven's romantic feelings is this A minor bagatelle that opens with alternating notes E and D-sharp.

ANSWER: "Fur Elise" <CS - Arts: Classical Music> 16. Due to interactions with carbonic anhydrase VI, disorders of this phenomenon are a common symptom of zinc deficiency. Oddly, the primary receptor for one form of this property is found in bronchial epithelial cilia, where it serves an antimicrobial function. The PAV and AVI haplotypes determine whether or not the compound PTC has this property. A proteolyzed form of the ENaC ("EE-nack") channel may contribute to a form of this property largely driven by direct binding of a certain (\*) ion. This property is mostly transduced by the chorda tympani, with roughly a third transduced by the glossopharyngeal nerve. Denatonium is the strongest known compound with a subtype of this property, thereby making it useful as an aversive additive. This property is transduced from fungiform and foliate papillae via the GPCR gustducin. For 10 points, name this property which can be perceived by the tongue as bitter or salty.

ANSWER: bitter <u>taste</u> [accept specific tastes such as <u>bitter</u>ness before mention, accept <u>flavor</u>] <SS - Science: Biology>

Paul Horwich began a debate against the traditional view of Timothy Williamson's book on *The Philosophy of* this discipline, arguing it is a "mistake" to think this field should be fully systematic or aspire to a scientific character. For 10 points each:

[10e] Name this discipline that Alfred North Whitehead called "footnotes to Plato" after turning from mathematics to a process-oriented form thereof.

## ANSWER: philosophy

[10m] This thinker provocatively claimed that philosophy is just a "genre" of "literature" and argued that dominant questions in philosophy are "pseudo-problems" in a book titled for a metaphorical object that reflects the world. ANSWER: Richard (McKay) **Rorty** (The book is *Philosophy and the Mirror of Nature*.)

[10h] Williamson replied that Horwich's critique betrayed his own "minimalist" variant of this theory of truth, which generally asserts that "truth" is not a property predicated of propositions, so saying "it is true that snow is white" adds nothing to "snow is white."

ANSWER: <u>deflation</u>ary theory of truth [or <u>deflation</u>ist theory of truth; or <u>deflation</u>ism] <JM - Thought: Philosophy>

17. Strabo and Dio Cassius attest that a Śramaṇa ("SHRA-muh-nuh") traveler named Zarmanochegas performed this practice in Athens during Augustus's reign. In East Asian Mahāyāna, the emergence of this practice is traced to an episode where the Medicine King performs it in the Lotus Sutra. Like the 6th century Montanists, after the Raskol schism, apocalyptic fever among Old Believers led to this practice's widespread adoption, sometimes by entire villages. One form of this practice gets its name from a myth in which a character of the same name responds to Daksha by performing it after approaching his (\*) yajña without her husband Shiva. The performance of this action by South Asian women to avoid invaders' capture is known as Jauhar, and by widows as Sati. For 10 points, give this extreme religious practice depicted in a photo of the monk Thích Quảng Đức protesting the persecution of Buddhists under Diệm.

ANSWER: <u>self-immolation</u> [accept clear equivalents or descriptions like "<u>burning yourself</u>" or "<u>lighting yourself</u>" on "<u>lighting yourself</u>" on "<u>lighting yourself</u>" or "<u>lighting yourself</u>" or "<u>lighting yourself</u>" on the sating answers of "<u>suicide</u>" or "<u>self-harm</u>" by asking "by what means?"; prompt on "<u>immolation</u>" "<u>lighting a fire</u>," "<u>burning</u>," etc. by asking "what is being lit on fire?"]

<JM - Religion>

After revolutionizing the firearm industry with the invention of the pistol slide and the telescopic bolt, this man literally died at his workshop table while designing his namesake "Hi-Power." For 10 points each:

[10h] Name this inventor of a firearm nicknamed the "Ma-Deuce" that is still in use today. This "Edison of Firearms" created the first commercially successful auto-loading and gas-operated firearms.

ANSWER: John (Moses) **Browning** (The "Ma-Deuce" is the M-2 Browning .50 Caliber machine-gun.) [10m] Browning's pioneering gas-operated M1895 machine gun, known as the "Potato Digger," was infamously used by the Baldwin-Felts agency against striking Colorado coal miners and their families at this massacre.

ANSWER: **Ludlow** Massacre

[10e] Browning created several designs for Winchester and Colt, which both claimed to have created "the gun that won the West." Colt's was one of these pistols with a rotating cylinder, highly associated with cowboy duels.

ANSWER: <u>revolver</u>s <JG - History: American>

18. Eric Ormsby documented a multi-century debate over the statement by a thinker from this non-Leibniz family that "there is nothing in possibility greater than what is." Drawing on al-Hallāj, a thinker from this family first popularized a trope by writing "whoever does not learn tawḥīd ("tow-HEED") from Shayṭān ("shay-TAWN") is a heretic." The Sawānih, a work by that teacher of 'Ayn al-Quḍāt ("eye-nel-koo-ZAHT") Hamadānī, elevated love or 'ishq to a principle of reality and inspired 'Aṭṭār's Conference of the Birds. That thinker from this family subbed in for his (\*) brother's lectures after he, a student of al-Juwaynī, found that "God put a seal on" his "tongue." That latter member of this family argued that since God could choose any time to create the world, there cannot be a "pre-eternity." That teacher at the Niẓāmiyya recounted his nervous breakdown in Deliverance from Error. For 10 points, name this family including Aḥmad and the author of Revival of the Religious Sciences and Incoherence of the Philosophers.

ANSWER: al-**Ghazālī** family (The first sentence is about Abū Ḥāmid, while everything else in power refers to Aḥmad; the statement in the first sentence occurs in several works but most prominently in *Revival*.) <JG - Thought: Other Philosophy>

*Description acceptable.* One class of reactions proceeds through this mechanistic step after a nucleophilic attack via the formation of a Meisenheimer complex. For 10 points each:

[10h] Name or describe this unfavorable step which causes molecular orbitals to lose the ability to share energy levels. Empty bonding or filled antibonding orbitals on a Frost circle indicate this mechanistic step has occurred. ANSWER: **losing aromaticity** [accept any answer that indicates that a molecule's **aromatic** properties are being broken]

[10e] The aforementioned Meisenheimer complex is formed as aromaticity is broken in the nucleophilic aromatic type of this general reaction class, in which one functional group is replaced by another.

ANSWER: nucleophilic aromatic substitution

[10m] Burnett and Kim discovered an alternative nucleophilic substitution mechanism that breaks aromaticity without forming a carbon ion; instead, it proceeds via one of these intermediates, as exemplified by the Sandmeyer reaction.

ANSWER: free <u>radical</u>s <SS - Science: Chemistry>

19. A syncretistic theocratic movement in this country founded by messianic claimant Ezequiel Ataucusi Gamonal, commonly called the "Israelites," won 15 seats as the FREPAP party in the 2020 election and lost them all in 2021. It's not Taiwan, but in this country's 2021 election Milagros Juárez bizarrely cosplayed as Asuka from Neon Genesis Evangelion for an ad representing the indigeno-nationalist "Ethnocacerist" movement. Militias called rondas opposed an insurgent group in this country. This country's current president wears a signature chotano (\*) hat and was elected following a crisis triggered by the ousting of Martín Vizcarra and his successor's resignation after 6 days. That former schoolteacher president's party, represented by a yellow pencil, defeated the Popular Force candidate. That candidate was the daughter of an ex-president who embezzled millions for the Grupo Colina death squad that repressed "Chairman Gonzalo" Guzmán's Shining Path. For 10 points, name this country where Pedro Castillo defeated Keiko Fujimori in a 2021 election, with capital at Lima

ANSWER: (Republic of) Peru [or (República del) Perú]

<JM - History: World>

Lydia Huntley Sigourney wrote of these things "on your waters, / Ye may not wash it out," such as where "Ontario's billow / Like Ocean's surge is curled" in a poem titled for "Indian" ones. For 10 points each:

[10m] Identify these things. The speaker falls in love with the title "American" examples of these things in a Stephen Vincent Benet poem that ends with the plea to "bury my heart at Wounded Knee."

ANSWER: names [accept "Indian Names;" accept "American Names"]

[10e] Though "Waitie and Boudinot" "may be forgot," this man's name "shall descend in every age" per an ode that Alexander Posey wrote to this creator of the Cherokee syllabary.

ANSWER: <u>Sequoyah</u> [or George <u>Gist</u>; or George <u>Guess</u>] (Posey was part of the failed effort to found the State of Sequoyah in the polymath's honor.)

[10h] This Acoma Pueblo, who wrote of having "both Indian and American names" and "so many names now we don't know them all" in "Becoming Human" and penned the Pushcart-winning book *From Sand Creek*, is a leading name in the "second wave" of the "Native American Renaissance."

ANSWER: Simon J. <u>Ortiz</u> <CS - Literature: American>

20. The activity of an enzyme that acts on this compound can be assayed via forming a complex with ammonium molybdate, or directly with UV-vis spectroscopy at 240 nanometers in a method developed by Hugo Aebi that somehow has 25000 citations. The Riedl-Pfleiderer ("REE-dle FLY-derer") process is used in the main industrial synthesis of this compound, which produces it via the oxidation of AHQ. Addition of this compound is used to distinguish between (\*) Streptococcus and Staphylococcus colonies based on the presence of an enzyme that decomposes this compound. Enzymatic reactions that involve this compound are typically assayed by detecting a chemiluminescent reaction between this compound and luminol. This compound is the heavier product of an enzyme that disproportionates the damaging radical superoxide, and is broken down by catalase. For 10 points, name this highly reactive compound, the simplest to feature an oxygen-oxygen single bond.

ANSWER: **hydrogen peroxide** [or **H2O2**]

<JM - Science: Chemistry>

Michaelangelo artificially aged a sculpture of one of these figures sleeping so it would look ancient and sell better, but it seems to have been destroyed by the Great Fire of London. For 10 points each:

[10m] Name these two mythological figures, one of which is depicted "*Reviving*" the other with a kiss in a Neoclassical sculpture. Jacques-Louis David ("dah-VEED") depicted them on an ornate bed, and William-Adolphe Bouguereau ("bow-zhur-OH") painted the "*Abduction*" of one by the other wrapped in purple cloth.

ANSWER: <u>Cupid</u> and <u>Psyche</u> [accept in either order and prompt on partial answers; accept <u>Love and Psyche</u> or <u>Psyche Revived by Cupid's Kiss</u>]

[10e] Psyche Revived by Cupid's Kiss was created by this Italian sculptor of Napoleon as Mars the Peacemaker and Pauline Bonaparte as Venus Victrix.

ANSWER: Antonio Canova

[10h] This artist sculpted *Cupid and Pysche* in his signature terracotta, which he used to model an unrealized monument to the invention of hot air balloons and sculpt three nymphs supporting a clock in his *Dance of Time*.

ANSWER: <u>Clodion</u> [or Claude <u>Michel</u>] <JM - Arts: Painting and Sculpture>

21. Description acceptable. Janet V. Haedicke claimed that the pursuit of this object symbolizes "a process of power through subjection or 'raping'" in an essay about the gendered linguistic implications behind lines like "The only way to teach these people is to kill them." After hiding from the police, a character recounts how a man who took this object left behind a "beat-up mirror, an old kid's toy, and a shaving mug." In response to one character apologizing profusely about this object, another character advises him, "Action talks and (\*) bullshit walks." Shortly after entering the stage, a character in a play titled for this object angrily mutters "Fuckin' Ruthie" six times. Confusion over the specific name of a local hospital leads two characters who are in pursuit of this object to mistakenly believe that a Mexican gang actually did not rob Fletcher. Bob accidentally loses track of a briefcase-carrying man in possession of this object, leading Don and Teach to plan a burglary. For 10 points, name this title object of a David Mamet play.

ANSWER: Donny Dubrow's <u>American buffalo</u> nickel [accept answers describing a <u>nickel</u> or <u>coin</u> from <u>American</u> <u>Buffalo</u>; accept any answers describing a <u>nickel</u> or <u>coin</u> previously owned or sold by <u>Don</u>ny Dubrow or Don <u>Dubrow</u>; prompt on answers just describing <u>coin</u>s or <u>nickel</u>s by asking, "From what work?"]

<WJ - Literature: American>

Diogenes Laërtius ("lay-UR-shee-us") claimed that this thinker believed there are infinitely many worlds that don't overlap in space or time. For 10 points each:

[10m] Name this pre-Socratic philosopher best known for a critique of anthropomorphizing the divine, noting that different peoples depict gods with skin like their own, and joking that if horses had gods, they would be horses too. ANSWER: **Xenophanes** (of Colophon) [reject "Xenocrates"]

[10h] Xenophanes may be the first thinker to distinguish *these two* concepts. The modern "swamping problem," which asks whether one has additional value over the other, is often traced to a dialogue in which Socrates and the title character debate these two concepts when discussing how to get to Larissa.

ANSWER: <u>true belief</u> AND <u>knowledge</u> [accept in either order; accept "<u>true belief</u> AND <u>true opinion</u>;" accept "<u>true belief</u> AND <u>justified true belief</u>;" prompt on <u>belief</u> AND <u>knowledge</u> in place of <u>true belief</u> by asking "what kind of belief?"; prompt on just one answer by asking "and which other concept?"]

[10e] According to Aristotle, this pre-Socratic from Miletus said that "all things are full of gods" and concluded that water is the cosmological first principle or *arche* ("ARR-kay").

ANSWER: **Thales** of Miletus ("TAY-leez")

<JM - Thought: Other Philosophy>

According to a "General History" by Charles Johnson, the followers of this place's founder decided that "all should be in common" and hence shared all wealth and practiced a form of direct democracy. For 10 points each: [10h] Name this legendary colony founded by James Misson in the late 17th century after being persuaded by the worldview of a "lewd priest." Its inhabitants used a white flag and claimed to wage war for "the Oppressed." ANSWER: **Libertatia** [accept **Libertalia**]

[10e] Libertatia was thought to be located on this island off the eastern coast of Africa. Despite its proximity to the continent, its Malagasy inhabitants are descended from Austronesian migrants from the east.

ANSWER: (Republic of/*République de*) Madagascar [or (*Republikan'i*) Madagasikar(a)]

[10m] Madagascar was largely ruled by this kingdom during Libertatia's supposed existence. Ruled by three queens named Ranavalona in the 19th century, this polity was the last indigenous state before French colonization.

 $ANSWER: \underline{Merina} \ Kingdom \ [or \ Kingdom \ of \ I\underline{merina}; \ or \ \textit{Fanjakan'I}\underline{\textit{merina}}]$ 

<JM - History: World>