

CARDINAL CLASSIC XII: Beware the Esker
Stanford University
February 2, 2002

Packet by Paul Tomlinson

Toss-Up Questions

1. Not many men would sell their wife and daughter for 5 guineas. (*) Small wonder he swears off drinking for 21 years. This vow helps the title character prosper as a corn factor though he eventually loses all to Donald Farfrae. FTP, Michael Henchard holds what title office in a novel by Thomas Hardy.

Answer: Mayor of Casterbridge

2. When indexing this crystal system it is common to add a 4th number to the Miller index. Elements with this structure include magnesium and cobalt. Its atomic packing factor (*) is 0.74 and it is non-cubic. Lattice parameter commonly reported are a and c, since b equals a and the angles are fixed at 90, 90 and 120. FTP, name this close-packed structure that indicates six sides.

Answer: hexagonal

3. In 1961 a poolroom was broken into and money stolen, and the man arrested was sentenced to 5 years in prison. In prison he wrote (*) a petition to the Supreme Court and was granted a hearing. The Court agreed with court-appointed counsel Abe Fortas, to overturn *Betts v. Brady*. FTP, name this case guaranteeing counsel in state courts as well.

Answer: *Gideon v. Wainwright*

4. It is told by the title character to Echecrates, a Pythagorean, which is probably intentional as the two main interlocutors, Simmias (*) and Cebes are themselves Pythagoreans. The most important arguments defend the immortality of the soul. FTP, name this Platonic dialogue which also gives an argument for the existence of Forms and ends with Socrates' death.

Answer: *Phaedo*

5. He was heavily influenced by Rubens, evidenced by works like *1845's Christ on the Cross*. (*) In 1815 he submitted his first work to the Paris Salon, *Dante and Virgil in Hell*. Picasso made many studies of his *Women of Algiers*. FTP, name this painter of *The Death of Sardanapalus* and *Liberty Leading the People*.

Answer: Eugene Delacroix

6. The story begins with the title character bidding farewell to his wife, whose blue ribbons are an important symbol. (*) After meeting an evil character in the forest, he comes upon a witch's meeting containing many familiar people, including the minister, Deacon Gookin, Goody Cloyse, and finally his wife Faith. FTP, these events happen in what short story by Nathaniel Hawthorne?

Answer: *Young Goodman Brown*

7. Since they are optically active, a common technique to distinguish them is to use plane-polarized light. (*) Unless a racemic mixture is used, dextrorotatory or levorotatory isomers will be distinguished. Molecules of this type are said to be chiral. FTP, name these isomers that are mirror images of one another.

Answer: enantiomers (accept chiral early)

8. During his reign, Mauretania was made a Roman province along with Judea and Thrace. His administration was dominated by his wife Messalina (*) until he had her killed in 48 CE. He then married

his niece Agrippina the Younger, who is thought to have poisoned him. FTP, name this nephew of Tiberius, uncle of Caligula, and adoptive father of Nero.

Answer: Tiberius Claudius Drusus Nero Germanicus I

9. In 1824 he, along with archaeologist Ippolito Rosellini, co-directed a scientific expedition to Egypt. (*) Upon his return, he became the first chair of Egyptian antiquities at the Collège de France. He founded the field of Egyptology and wrote a dictionary of ancient Egyptian. FTP, name the man who translated the Rosetta Stone.

Answer: Jean François Champollion

10. "Women and Men", "Minimum Wage", "Dead, Hot Cha", "Twisting", "We Want a Rock", (*) "Whistling in the Dark", "Your Racist Friend", and "Lucky Ball and Chain" are some of the tracks on this album. FTP, name this 1991 They Might Be Giants album also including "Birdhouse in Your Soul" and "Particle Man".

Answer: Flood (prompt on early They Might Be Giants)

11. The play begins in St. George's Park Tea Room on a wet and windy Port Elizabeth afternoon. (*) Sam and Willie are discussing the upcoming ballroom dance competition. Hally comes in, and complains of school, and his alcoholic father, among other things. These three characters make up the title of, FTP, what Athol Fugard work?

Answer: "Master Harold" ... and the Boys

12. The Greeks had two names for it, due to the fact it's seen only at early morning and twilight. The 8th brightest (*) object in the sky, this planet has the second most eccentric orbit. In 1974, Voyager 10 discovered that it had a magnetic field, suggesting a liquid core. FTP, identify this fastest planet named after the Roman messenger god.

Answer: Mercury

13. While a concubine in the imperial house, she murdered her own daughter and then claimed a rival did it. Five years after marrying the emperor, (*) she took over administrative duties when he had a stroke. In 690 she became took the throne when her youngest son stepped down. FTP, name this only female to hold the title of Chinese Emperor.

Answer: Empress Wu Zetian

14. Her name means "house of Horus," and she was often regarded as mother of the pharaoh. She was often symbolized by the papyrus reed and the snake. (*) Daughter of Re and Nut, she was the goddess of women, fertility, and childbirth. FTP, name this Egyptian goddess commonly depicted with the head of a cow.

Answer: Hathor or Athyr

15. He entered the studio of Katsukawa Shunsho (*) and learned the technique of woodcut printmaking. The free curved lines of his style developed into a series of spirals found in his *Raiden, The Spirit of Thunder*. He is best known for his 13-volume sketchbook and his *Thirty-Six Views of Mount Fuji*, which includes *The Great Wave Off Kanagawa*.

Answer: Katsushika Hokusai

16. Patricia Paiwonski is a heavily tattooed stripper, Gillian Boardman (*) is a nurse, Ben Caxton is a reporter, and Digby is a Fosterite bishop. This novel inspired the pagan group The Church of All Worlds.

The most important male characters are Jubal Harshaw and Valentine Michael Smith. FTP, name this Heinlein novel about a man from Mars.

Answer: *Stranger in a Strange Land*

17. This prefix prior to electricity names a behavior found in barium titanate and characterized by domains of polarization. (*) Add it to magnetism to describe the behavior of cobalt, which includes hysteresis on a magnetization vs. field diagram. FTP, identify this prefix that comes from the Latin word for iron.

Answer: ferro

18. In the 12th century it was replaced by the tallage, as it was a major source of royal revenue. Under Æthelred (*) it became a regular tax, but was first collected by Alfred in 868 CE. Used to finance wars, its original purpose was defensive in nature. FTP, name this English tax first collected to pay off invading Vikings.

Answer: Danegeld

19. The Hebrew name for it was figuratively applied by Isaiah to the Babylonian king Nebuchadnezzar. (*) It is the ancient name of the planet Venus as the morning star but has come to have a better known meaning. FTP, give the name Satan had before he was cast from heaven.

Answer: Lucifer

20. It includes the songs "Shipooi" and "Lida Rose." The story involves the town of River City, Iowa, (*) a traveling con man/salesman and the heroine, a librarian. The fella, Professor Harold Hill, sells bands, boy's bands, but he falls in love with Marian. FTP, name this Meredith Wilson musical best known for the song "76 Trombones."

Answer: *The Music Man*

21. The chorus consists of slave women that take part in the central conspiracy. The play opens with the return of the main character with his friend Pylades (*) to Argos. They visit the tomb of Agamemnon in disguise and see Electra and the chorus in mourning. FTP, name this play by Aeschylus which is second in the *Oresteia*.

Answer: *The Libation Bearers* or *Choëphoræ*

22. In 1935 Wendell Meredith Stanley crystallized it and showed it was only composed of RNA. It was first dubbed a virus by Dutch botanist Martinus Beijerinck (*) in 1898. However, it was Dmitry Ivanovsky who first discovered it in 1892. FTP, name this first known virus.

Answer: tobacco mosaic virus or TMV

23. He died in El Paso in 1916 in the custody of the US government. Educated at Chapultepec Military College, he served in the Mexican Army and was promoted to brigadier general by Porfirio (*) Diaz in 1902. In 1913 he forced the resignation of Francisco Madero. FTP, name this anti-US president of Mexico.

Answer: Victoriano Huerta

24. The name of Superman's archenemy Zod is invoked after the security guard Laforge gets clocked on the head. (*) Fifteen-year old Trish compiles a study on the sex habits of men and Willem has trouble seeing a 3D image sailboat. The guy from The Fashionable Male clothing store is finally bested by comic book loving Brody thanks to help from Stan Lee. FTP, identify this second Kevin Smith movie.

Answer: *Mallrats*

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Bonus Questions

1. Identify these composers from works FTPE.

- a) *The Wooden Prince; Mikrokosmos Suites*

Answer: Bela Bartok

- b) *Sadko; Antar; The Golden Cockerel*

Answer: Nikolai Rimsky-Korsakov

- c) *Piano Concerto No. 1; Vanessa; Adagio for Strings*

Answer: Samuel Barber

2. Identify these anthropologists FTPE.

- a) His writings include *Stone Age Africa* and *Olduvai Gorge*. He discovered *Proconsul africanus* in 1948 and *Homo habilis* in 1960.

Answer: Louis Seymour Bazett Leakey

- b) Her most important fieldwork was done on trips to Native American reservations, but she is best known to quizbowlers for 1960's *The Chrysanthemum and the Sword*.

Answer: Ruth Fulton Benedict

- c) This Norwegian is famous for his theories of migration and for voyages made in craft such as the Kon-Tiki and the Ra II.

Answer: Thor Heyerdahl

3. Given the name of a Jane Austen novel, give the surname of the main character's family FTPE.

- a) *Sense and Sensibility*

Answer: Dashwood

- b) *Pride and Prejudice*

Answer: Bennet

- c) *Emma*

Answer: Woodhouse

4. Identify these functional groups from organic chemistry FTPE.

- a) This class of compounds contains a carbonyl group attached to a hydroxyl group.

Answer: carboxyl

- b) Name the class of compounds containing a sulfur bonded to a hydrogen atom on one side and a carbon atom on the other.

Answer: thiol

- c) A carbonyl group in the middle of a carbon chain is known as this type of functional group.

Answer: ketone

5. Name these ancient tribes FTPE.

- a) These inhabitants of Scotland and northern Ireland are believed to have arrived from the Continent in 1000 BCE. They were finally defeated in 850 by Kenneth I of Scotland.

Answer: Picts

- b) Their greatest king, Theodoric, invaded Italy in 488 CE and slew Odoacer. He ruled the western empire until his death in 526 CE.

Answer: Ostrogoths

- c) This German confederation lived between the Main and Danube rivers as early as the 3rd century. They were defeated by Clovis in 496.

Answer: Alemanni

6. Answer the following questions concerning the online computer game Everquest FTPE.

- a) Name the most popular class in the game, a wisdom caster usually worshipping Tunare or Karana. It receives healing spells, snare, SOW, and damage spells.

Answer: druid

- b) Name this least popular continent in the game, which included the starting cities for the Erudites. It also contained the high-level dungeon The Hole.

Answer: Odus

- c) Name the most recent expansion to the game, which added zones on the moon, the beastmaster class, and the Vah Shir race.

Answer: Shadows of Luclin

7. Identify these terms from Hinduism FTPE.

- a) A hermitage, retreat or place of quiet and solitude, often in a forest, where a Hindu sage lives alone or with his disciples.

Answer: ashram

- b) This term loosely translates as “duty” and describes all things right for the self.

Answer: dharma

- c) This term is defined as the illusion of the transient, impermanent, phenomenal world.

Answer: maya

8. Name the American poet from works FTPE.

- a) *The Buck in the Snow; The Ballad of the Harp Weaver*

Answer: Edna St. Vincent Millay

- b) *Shaker; Why Don't You Sing; I Shall Not Be Moved; I Know Why the Caged Bird Sings*

Answer: Maya Angelou (Marguerite Johnson)

- c) *Luke Havergal; Miniver Cheevy*

Answer: Edwin Arlington Robinson

9. Identify these neurotransmitters FTPE.

- a) This most common neurotransmitter is concentrated in the hippocampus.

Answer: acetylcholine

- b) It is an 11-amino acid peptide important as a neurotransmitter in the pain fiber system. It may also be important in eliciting local tissue reactions resembling inflammation.

Answer: substance P

- c) This term refers to the neurotransmitters dopamine, epinephrine and norepinephrine that are active both in the brain and the peripheral sympathetic nervous system.

Answer: catecholamines

10. Name the following African empires FTPE.

- a) At its height it consisted of 3 freely allied kingdoms and 12 garrisoned provinces. The most famous ruler of this empire was Mansa Musa.

Answer: Mali

- b) This empire arose sometime before the 8th century with a capital at Kumbi Saleh. A present day African republic takes its name from this kingdom.

Answer: Ghana

- c) This empire was most powerful during the 15th and 16th centuries. Its most famous rulers were Sunni Ali and Askia Muhammad.

Answer: Songhai

11. Name the European artists from clues FTPE.

- a) This resident of Nuremberg is best known for his woodcuts and engravings, such as *St. Jerome in His Study* and *Knight, Death and Devil*.

Answer: Albrecht Dürer

- b) This Swiss member of the Der Blaue Reiter taught at Bauhaus with Kandinsky and is known for his *Twittering Machine*.

Answer: Paul Klee

- c) This Mannerist settled in Toledo, Spain and is known for his elongated figures and use of Toledo as a background. His most famous work is *Burial of the Count of Orgaz*.

Answer: El Greco or Domenicos Theotokopoulos

12. A group of Pakistani terrorists have recently kidnapped an American reporter. Identify the following FTPE.

- a) Identify the reporter.

Answer: Daniel Pearl

- b) Identify the newspaper for which Daniel Pearl wrote.

Answer: The Wall Street Journal

- c) The terrorists claim that Pearl works undercover for this group.

Answer: Mossad

13. Name the German novel from descriptions FTPE.

- a) Han Castorp visits the sanatorium Haus Berghof intending to stay 3 weeks, but remains there for 7 years.

Answer: *The Magic Mountain* or *Die Zauberberg*

- b) This Gunter Grass novel spans 4000 years with the narrator appearing throughout always married to Ilsebill. In the 1970s the title creature is thrown back to sea.

Answer: *The Flounder* or *Der Butt*

- c) Harry Haller is torn between his own frustrated artistic idealism and the inhuman nature of modern reality. The title refers to Haller's loneliness and isolation.

Answer: *Der Steppenwolf*

14. Identify the following from fluid mechanics FTPE.

- a) This quantity is equal to the characteristic length times the velocity times the density divided by the viscosity. It is a measure of fluid flow through a pipe.

Answer: Reynolds number

- b) This term describes flow that is completely non-turbulent.

Answer: laminar

- c) This type of fluid has a constant density everywhere.

Answer: incompressible

15. Name these battles from the American Revolution FTPE.

- a) The only time after the fall of New York where Washington risked his army against the main British army, he was outflanked on September 11, 1777 by Howe's forces.

Answer: Battle of Brandywine Creek

- b) Sir Henry Clinton acted with Vice Admiral Marriot Arbuthnot captured the main Revolutionary army in the South under Gen. Benjamin Lincoln here on May 12, 1780.

Answer: Charleston, South Carolina (accept Charles Town)

- c) Daniel Morgan defeated Banastre Tarleton with approximately 1,000 Continentals and militia in the January 17, 1781 battle in South Carolina.

Answer: Battle of Cowpens

16. Given a description, identify the book of the *Wu Ching*, or *Five Classics*, FTPE.

- a) Perhaps the most famous book, this work details the use of hexagrams for divination.

Answer: I Ching or Book of Changes

- b) This work deals with the principles of conduct, including those for public and private ceremonies. It was destroyed in the 3rd century, but later recompiled.

Answer: Li Chi or Book of Rites

- c) This work is the only one reputedly compiled by Confucius himself. It is a chronicle of major historical events from the 8th century BCE to his death.

Answer: Chunqiu or Spring and Autumn Annals

17. Identify these card games from descriptions FTPE.

- a) Each player takes turns discarding cards from ascending ranks, face down. Other players may challenge the discard, if the cards aren't of the called rank the player must pick up the pile.

Answer: Bullshit or Cheat or I Doubt It

- b) It is primarily for two people who are dealt 6 cards each. The goal is to play your cards in a manner to peg 121 points before your opponent. A board helps keep track.

Answer: Cribbage

- c) Commonly played with 3 people, only 9's and higher are used. Players bid for cards in the blind, and points are scored by melding combinations and taking point cards in tricks.

Answer: Pinochle

18. Identify the following works of Asian literature FTPE.

- a) This Japanese romance was written during the Heian period by Murasaki Shikibu. It centers on the title Prince and his affairs while delineating courtly life.

Answer: *The Tale of Genji* or *Genji monogatari*

- b) This semiautobiographical novel by Chinese author Ts'ao Hsueh-ch'in depicts the decline in fortunes of the Chia family.

Answer: *The Dream of the Red Chamber or The Story of the Stone or Hung lou meng*

- c) This novel by Kawabata Yasunari details the downfall of the main character Ogata Shingo.

Answer: *The Sound of the Mountain*

19. Identify these moons FTPE.

- a) The eighth of Jupiter's moons, it is the 2nd largest. It has a thin atmosphere of carbon dioxide, and there is evidence of an underground ocean.

Answer: Callisto

- b) This second largest of Uranus's moon is the outermost. Discovered in 1787 by William Herschel, it contains many craters.

Answer: Oberon

- c) Discovered in 1949 by Gerard Kuiper, this is the second largest moon of Neptune. Its orbit is the most eccentric of any moon.

Answer: Nereid

20. Identify these British Prime Ministers FTPE.

- a) A representative at the Congress of Vienna, he was a Tory PM from 1828-30 and again in 1834. He forced passage of the Catholic Emancipation Act.

Answer: Arthur Wellesley, 1st Duke of Wellington (accept either name)

- b) He allied with Newcastle to obtain his first term, from 1757-61. During this time France was defeated in the Seven Years' War. In 1766 he was made 1st Earl of Chatham.

Answer: William Pitt the Elder

- c) He served as secretary of state for war and minister of foreign affairs for Churchill, and in 1955 was named PM. In 1957 the Suez Canal crisis forced his resignation.

Answer: Robert Anthony Eden, 1st Earl of Avon (accept either name)

21. Identify the following from Norse myth FTPE.

- a) His brothers were Hel and the Midgard serpent and his parents were Loki and Angrboda. He represented the goading of a guilty conscience.

Answer: Fenrir or Fenris wolf

- b) Fenris-wolf is expected to swallow this god at Ragnarok, who once tried to chain him.

Answer: Odin

- c) This Norse god of war lost a hand to the Fenris-wolf, as he had placed his right hand in the wolf's mouth as a pledge.

Answer: Tyr

22. Identify these feminist authors from descriptions FTPE.

- a) She is best known as the first French woman to write professionally. Her most famous work is *The Book of the City of Ladies*, written in 1405.

Answer: Christine de Pizan

- b) This Canadian won acclaim in 1969 with her first novel, *The Edible Woman*. She is best known for her *The Handmaid's Tale*.

Answer: Margaret Eleanor Atwood

- c) This African-American author and poet wrote most of her first volume of poetry, *Once*, after a trip to Africa in 1964. She is best known for 1982's *The Color Purple*.

Answer: Alice Malsenior Walker

23. Identify these types of particles FTPE.

- a) This is a particle with half integer spin quantum number.

Answer: fermion

- b) This particle is a fermion that is not acted on by the strong force.

Answer: lepton

- c) This lepton was discovered at SLAC in 1975 by Martin Perl, and is heavier than previously discovered leptons.

Answer: tau particle

24. Given the year, name the war that each Treaty of Paris ended FTPE.

- a) 1763

Answer: Seven Years' War (prompt on French and Indian War)

- b) 1856

Answer: Crimean War

- c) 1898

Answer: Spanish-American War