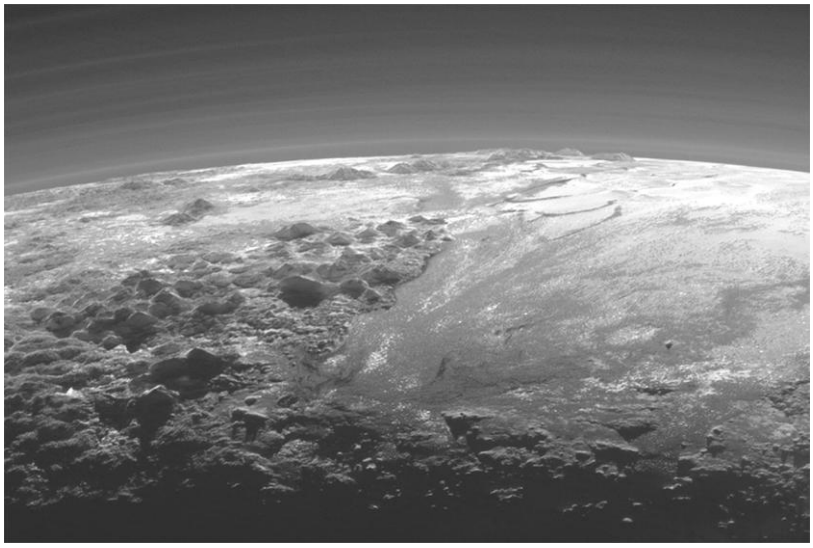

Noesis

The Journal of the Mega Society
Issue #199, September 2015

Contents

About the Mega Society

The Mega Society was founded by Dr. Ronald K. Hoeflin in 1982. The 606 Society (6 in 10^6), founded by Christopher Harding, was incorporated into the new society and those with IQ scores on the Langdon Adult Intelligence Test (LAIT) of 173 or more were also invited to join. (The LAIT qualifying score was subsequently raised to 175; official scoring of the LAIT terminated at the end of 1993, after the test was compromised). A number of different tests were accepted by 606 and during the first few years of Mega's existence. Later, the LAIT and Dr. Hoeflin's Mega Test became the sole official entrance tests, by vote of the membership. Later, Dr. Hoeflin's Titan Test was added. (The Mega was also compromised, so scores after 1994 are currently not accepted; the Mega and Titan cutoff is now 43—but either the LAIT cutoff or the cutoff on Dr. Hoeflin's tests will need to be changed, as they are not equivalent.)

Mega publishes this irregularly-timed journal. The society also has a (low-traffic) members-only e-mail list. Mega members, please contact the Editor to be added to the list.

For more background on Mega, please refer to Darryl Miyaguchi's "A Short (and Bloody) History of the High-IQ Societies"—

http://archive.today/K32e

—the Editor's High-IQ Societies page—

http://www.polymath-systems.com/intel/hiqsocs/index.html

—and the official Mega Society page,

http://www.megasociety.org/

Noesis is the journal of the Mega Society, an organization whose members are selected by means of high-range intelligence tests. Jeff Ward, 13155 Wimberly Square #284, San Diego, CA 92128, is Administrator of the Mega Society. Inquiries regarding membership should be directed to him at the address above or:

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Opinions expressed in these pages are those of individuals, not of *Noesis* or the Mega Society.

Editorial

Kevin Langdon

This would have been a very slim issue without the fourth part of Rick Rosner's long interview. That's because we're not getting enough publishable material from our readers (and because I'm trying to move *Noesis* from two to three issues per year).

If you have submitted something for publication and you haven't seen it appear or heard from the Editor please send it along again. Computer problems (several months ago) have made it difficult to keep track of this material.

Submissions are welcome, from Mega members and others. Please send them to:

Kevin Langdon <kevin.langdon@polymath-systems.com>

This issue contains:

- "Interview with Rick Rosner" (part four of eleven), by Rick Rosner and Scott Douglas Jacobsen of the *In-Sight* journal site—http://in-sightjournal.com/—where this originally appeared. As usual, Rick touches on many of the subjects that interest him in this wide-ranging interview.

- "Primate: A Card Game," by Kevin Langdon. One of the games from a book of games in preparation.

- "The Genuine Genius Test," by Jadzia Bashir. See how genuine *your* genius is.

- A report on the results of Jeff Ward's Obscure Words and Facts Analogies contest in *Noesis* #197.

- A selection of poetry from Ray Faraday Nelson ("Ray the Rhymer"), Richard Badke, and Kevin Langdon.

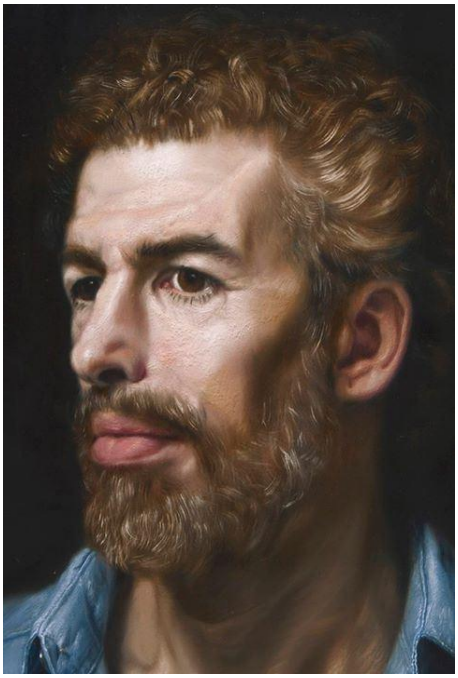
It's time for our yearly election of officers. If you are a Mega member and you're interested in running for Editor, Internet Officer, or Administrator, please send a statement of candidacy (up to two pages) to the Editor.

Cover: The surface of Pluto from NASA's New Horizons spacecraft, showing the unexpectedly complex surface of the "dwarf planet" (NASA/JHUAPL/SwRI).

If Pluto isn't a planet then Mickey Mouse isn't a star!

Illustration on page 4: A recent oil painting of Rick Rosner by Lance Richlin.

Interview with Rick Rosner by Scott Douglas Jacobsen (Part Four)



ABSTRACT

Part four of eleven, comprehensive interview with Rick G. Rosner. member of a number of high-IQ societies, ex-editor for Mega Society (1990-96), and writer. He discusses the following subject-matter: information processing as the basic operation of universe, 'transactional information processing', isomorphic operation and traits of humans and universe, operation through time, self-consistency and information processing as the traits, creation of a new field of endeavor called 'informational cosmology', and implications of informational cosmology; scientific study of the linkage with established scientific techniques, applying physics to thought and understanding of the mind and universe, mathematicising consciousness as a step to digitizing consciousness, implications of storable and transferable consciousness, the destiny of civilizations to make this linkage, and human civilization being one of them; calculated information-in-common/information-not-in-common based on various velocities (.15v and .3v), gravitational lensing across ultra-deep cosmic time, self-consistent and information processing areas of universe equating to subsystems and therefore consciousness, black holes not existing, "blackish holes" existing, considerations on consciousness of largely independently processing blackish holes, and complexity of the universe possibly taking the form of advanced civilizations; current theory of the universe composed of ~4.6% baryonic matter, ~24% non-baryonic/exotic 'dark' matter, and ~71.4% non-baryonic/exotic 'dark' energy, *argumentum ad verucundiam*, theories with correct or incorrect

nature based on the reasoning and agreement with the evidence; allowance for recycling of galaxies, young galaxies populating the expansive center of the universe (older galaxies on the outskirts), old galaxies as neutron heavy ("cooked"), and recalling of old galaxies to the center of the universe; *élan vital*, possible analogous ideas such as dark matter and dark energy, dark energy as a tweak on the inverse-square law of gravitation, steady scale of universe over billions and billions of years, "self-observing, self-defining universe" having flatness and in-built constant size, self-definition of universe maintaining a constancy of size, one cross-section of time or one moment and associated probabilities of history and possible futures; considerations on gravity; thoughts on the necessity or non-necessity for gravitons to have gravity; preliminary review of informational cosmology and interrelated concepts, commentary, calculations, and arguments for the field; discussion on informational cosmology and entropy; discussion on informational cosmology and subatomic particles; further extrapolations about black holes; linking the variegated concepts and arguments of the theory; the essential meaning of these linkages; discussion on informational cosmology and space & time; discussion on informational cosmology and the principles of existence ('laws'); concrete calculation about the age of the universe relative to the accepted canon age of the universe at ~13.77 billion years old, calculations based on estimations of human thought, unfolding of galaxies, structure for the universe, multibillion-year unfoldings of the universe, and the derivations up to concluding that the universe is not only ~14 billion years old; and the extension of informational cosmology to two new complementary fields called 'informational cosmogony' and 'informational 'eschatology', information internal to the universe arising external to it, and thoughts on such an armature external to the universe.

Keywords: billion, consciousness, correlation, cosmic time, cosmogony, cosmology, dark energy, dark matter, élan vital, electrons, eschatology, galaxy, gravitational lensing, information, information processing, informational cosmogony, informational cosmology, informational eschatology, isomorphism, isomorphic, Liebnizian monads, Mega Society, protons, Rick G. Rosner, self-consistency, self-self-observing, tautological, transactional information processing, unfolding, universe, writer.

28. You describe information processing for universe's substrate of operation. This implies transactions. For precision, this means 'transactional information processing'. I would like to plumb the well of reasoning. For example, ubiquitous information processing within and by universe. Consciousness emerges from self-consistency and information processing. Humans have self-consistency and information processing, and thus have consciousness. Therefore, we can extrapolate to universe based on isomorphism in operation *and* traits. Operation through time. Traits of self-consistency and information processing. An isomorphic geometry of universe and minds in universe. By extension, universe possesses localized and globalized consciousness. In addition to this, if we could provide an absolute measure of the degree of 1) self-consistency and 2) information processing capabilities of individual localized consciousness, then we could provide an absolute measure of global 1) self-consistency and 2) information processing capabilities of

universe. Precision of this metric limited by information quality, computational capacity, and efficacy of calculation methodology. Therefore, we might both 1) consider universe reposed with consciousness at the fundaments and 2) provide a metric of universe's degree of consciousness. You call this "informational cosmology." In a way, mind/brain sciences become physics/cosmology, and vice versa. A metric for the mind/brain could extrapolate – within reasonable consideration – into a metric of universe. Only differences in magnitude. Where else does "informational cosmology" lead us?

Informational cosmology smashes together two big areas of study – the mind/brain and the universe – in a way they've never productively been smashed together before – they're the chocolate & peanut butter, the Han Solo & Chewbacca, the mac & cheese, the Lennon & McCartney, the Key & Peele, the Beavis & Butt-head, the Spock & Kirk, the Mulder & Scully, the Felix & Oscar, the Holmes & Watson, the Thelma & Louise, the Jonah Hill & Channing Tatum of tough things to think about. Three hundred years ago, Bishop George Berkeley said something like, "The universe is an idea in the mind of God," but this didn't lead to anything. There wasn't yet enough scientific knowledge to work from.

But that was then. Now, linking information maps and thinking and the universe allows you to apply established scientific techniques across the linkage. We can apply physics to thought and information in the mind. We can apply understanding about the purpose and mechanisms of thought to the universe. We will soon be able to give mushy, loosely defined terms such as consciousness a solid mathematical basis.

And mathematicizing consciousness (developing a mathematical model of information processed in awareness) is the first step to digitizing consciousness (translating moments of consciousness into numbers) – to making it recordable, preservable, and transferable. That is a huge step – maybe the hugest step – towards saving our species and the planet. Storable, transferable consciousness eventually – within 100 or 150 years – frees us from the confines of our biological form. This is a big deal, if earth isn't going to become a giant dump suffering from the effects of a 23-billion-person population. Science fiction writer Charles Stross imagines a future where, among many other things, most people/semi-people/robots are only three feet tall. Half-height people use less than half the resources – maybe less than a quarter of the resources – of full-size people. You can cram a lot more of them on the planet, if that's what you want to do.

But that won't be all that we might want to do. Like-minded people might meld or marry minds and literally live as one. Many people will want to live almost exclusively in cyberspace, renting bodies when they need to go out into the real world. Population growth will slow. Maybe your rich grandma in a failing body offers you $50 million to let her consciousness ride piggyback on yours. (Steve Martin made a movie about something like this 30 years ago – *All of Me*.) These are pretty unsurprising ideas in science fiction – people who think about this kind of stuff are expecting things to get weird. Even if my attempt to join thought and the universe doesn't gain traction – even if it takes someone else theorizing similarly, years from now, it's still coming – it's pretty

much our destiny. It's the destiny of civilizations to make this connection and figure out the universe. (Just about every civilization figures out that its planet orbits its sun, that it's part of a galaxy, that there are other galaxies, that life evolved, etc. Figuring out that massively shared information-processing is essentially thought is another one of those things.)

There will still be plenty of normal human life. We'll still have the same drives (for sex, food, status, slightly taboo information), until we start messing with them. And then we'll have slightly more efficient and exalted drives, but nothing too terrible – ethical values will survive. People who want to live old-school will still be able to do it. But the drift will be towards control of our destinies via understanding ourselves and the universe – we'll improve consciousness, making it (and us) more informed and more complete, with fewer hidden biases. It'll be weird but also mostly great, and it's where we've been heading without knowing it since apes started using twigs to fish ants out of anthills.

29. You calculated the information-in-common/information-not-in-common based on various velocities (.15v and .3v). We can symbolize them: $I_c/I_{\sim c}$. Gravitational lensing across ultra-deep cosmic time could form pockets beyond expected, i.e. calculated, arithmetic mean of derived spheres from $I_c/I_{\sim c}$ at .15v, .3v, .45v, and so on. Insofar as calculated $I_c/I_{\sim c}$ spheres with extensive radii in excess of .3v, multiple dispersions of information might converge on pockets of uneven areas of universe (and sufficiently large to make the empirical point) for statistically significant outliers of calculated information with expansive distances from one another. In an information theoretic framework, areas of self-consistency in an information processing universe might count among other subsystems. Units of sufficient individuation with self-consistency and information processing. Indeed, you have mentioned black holes, but "blackish holes." You have said this for over 30 years. Moreover, you consider blackish holes universe's memory. If we fuse these arguments, we have outlier subsystems with capabilities for self-consistency and information processing called 'black holes' at present. Self-consistent and information processing subsystem equates to consciousness. Therefore, we have the possibility for sound consideration of consciousness emergent from blackish holes in universe.

If blackish holes are (largely) independently processing information, then there's the strong possibility that conscious entities are doing at least some of the processing. Perhaps a place for civilizations or advanced beings to survive galactic cycling would be in the massive million-solar-mass blackish holes at the centers of galaxies. The universe is huge, ancient, and unavoidably complex (in part because every star with orbiting planets is an open system that can shed excess energy, which works against entropy and disorder). Some of that complexity probably takes the form of long-lived structures and entities and civilizations (or whatever civilizations tend to turn into).

30. In the current theory of universe composed of ~4.6% baryonic matter, ~24% non-baryonic/exotic 'dark' matter, and ~71.4% non-baryonic/exotic 'dark' energy, your theory would shirk the current weight of astrophysical consensus. Although, we cannot disprove or by necessity deny the validity of the theory based on *argumentum ad verucundiam*, even authoritative authority. In addition to this, we cannot agree or disagree with the theory based on various high intelligence test scores, or credentials or lack thereof. Either correct or incorrect based on the reasoning and agreement with evidence. With these in mind, what do you make of dark matter and dark energy? Do they exist? How would your theory supersede present explanations?

I think the universe isn't inherently unstable in size, with overall stability being a characteristic of an information-based universe. That is, though parts of it can expand and contract, the universe isn't going to keep flying apart to some cold, thin oblivion or collapse into an infernal dot. (At least without some outside agency acting upon it. The loss or degradation of the physical structure which supports the universe would result in the loss of the information within the universe. As the universe loses information, it would become less well-defined, which might look like a collapse and heating up of the universe – a big bang in reverse.) The scale and size of the universe should be roughly proportional to the amount of information it contains (with local scale and size depending on the information/matter distribution as viewed from each particular neighborhood).

Are dark matter and dark energy needed to help with the gravitational bookkeeping of an inherently flat universe? I don't know. I'm more inclined to believe in dark matter than dark energy, with the dark matter made of non-exotic stuff – mostly old, burned-out, collapsed stars, many of which, I guess, would be orbiting on the fringes of galaxies, largely invisible except for their effect on the galactic rotation curve.

(Burned-out stars closer to the centers of galaxies could orbit the galactic center, largely undetected, or might collide with other stars (possible falling towards the massive black hole-like object at the galactic center), or during early-galaxy star formation might accrete enough hydrogen to light up again for awhile. I don't know how old stars mixed into a young galaxy would mess with the dynamics of galactic formation. Wikipedia says there might be 10^8 neutron stars in the Milky Way, compared to 10^11 regular stars. Red dwarfs, which have extremely long lifespans and are hard to detect, might make up three quarters of the stars in the Milky Way.)

What I'm saying is, if you allow for galaxies to recycle – to go through star formation, light up and burn out, over and over again – there's room and reason for there to be lots of non-exotic, hard-to-see dark and dark-ish matter in and around galaxies.

31. How would a burned-out galaxy be recycled?

Young, active galaxies occupy the expansive center of the universe. Old, burned-out galaxies find themselves in more collapsed neighborhoods on the outskirts of the universe, due to subsequent expansions (in which they don't participate). Old galaxies are neutron-heavy – they're cooked – they're done.

But conditions on the outskirts cause some old galaxies to become proton-rich again. Maybe an old galaxy gets flooded with neutrinos, which will be found in more profusion on the collapsed outskirts of the universe and which convert neutrons into protons. Maybe the hotter, denser outskirts have more free-floating hydrogen to accrete. Maybe the increased curvature of space in the collapsed outskirts reduces the depth of the gravitational wells which keep neutron stars under pressure, allowing the surface layers of these stars to decay back into protons. Maybe collapsed structures can reignite themselves, based on their own information and processes or when detecting information that they specialize in (that may not be visible to the rest of the universe – collapsed galaxy as smoke detector).

The outskirts of the universe are hotter, denser, more spatially curved, more bombarded with neutrinos streaming from the active center. Here, it's harder for neutrons to remain neutrons. Here, I'm guessing that the crusty, neutron-heavy surfaces of the stars in an old galaxy can be eroded into protons, like a Lifesaver in your mouth. A galaxy that gets hit with enough proton-producing forces is rejuvenated and can become part of an active, expansive galactic center. Perhaps most of the collapsed matter on the outskirts exists in a hair-trigger state, ready to light up again on a moment's notice (with that moment being billions of years long).

An information-processing universe can reactivate old, settled galaxies, recalling them to the center, where they participate in new processing. The processing in the center helps but doesn't exclusively determine which galaxies will be next to be recalled. (The galaxies in the active center co-evolve over a rolling cycle. They form a bubble that might merge with other bubbles. The active center is probably more balloon than neck. That is, most galaxies would experience themselves to be roughly at the center of the universe, the way every galaxy is central in a Big Bang universe.)

32. Science history presents examples of widely accepted substances. For a trite example, *élan vital* to explain the knotty operations of life. Time proved their possible veracity more or less false. Do you think dark matter and dark energy have analogous existence to older ideas like *élan vital*?

Some of the finer points of dark energy will go away – for instance, I doubt the universe is undergoing accelerating expansion.

Dark energy can be seen as a tweak to the inverse-square law of gravitation (or at least there are theories which account for large-scale phenomena by tweaking the inverse-square law). I believe that over a sufficiently long time scale, the universe as a whole

experiences very little net expansion – that the size of the universe is proportional to the amount of information it contains, and on the timescale of a few 14-billion-year cosmic blinks, the universe doesn't gain or lose that much information. I suppose the active center of the universe can vary in size quite a bit, but I doubt this is accomplished via dark energy.

Given that the overall scale of the universe should remain steady, the inverse-square law has to be violated – there's no stable solution to general relativity without throwing in a cosmological constant. According to GR, the universe can't just hang in mid-air (or mid-space-time-continuum).

But in a self-observing, self-defining universe, flatness and constancy of size are built in. I believe that the universe observes and defines itself quantum mechanically. It's as if the universe is an enormous gunfight – every particle in the universe helps figure out where every other particle is by all the particles shooting particles at each other.

Imagine a uniform universe consisting of regularly spaced particles (all shooting at each other). Over time, the wave functions of the particles spread out, as the universe itself spreads out (because the specifications of space itself are uncertain). There's not enough information from the gunfighting particles to keep them absolutely pinned down in space – they're fuzzy, and they get fuzzier. BUT the rate at which the particles get fuzzier is proportional to the rate at which the universe spreads out, so the scale of the universe – the ratio of the particles' fuzziness to the size of the universe stays constant. There's your stable universe, hanging in mid-air.

The universe defines itself, and, by defining itself with a constant amount of information (proportional to the number of particles in the shoot-out and the complexity of their relationships), the size of the universe remains constant (or grows or shrinks gradually as it gains or loses information).

(What collapses the wave function (if that's the way you want to talk about it)? Probability. Wave functions are either collapsed by observation or not. (I guess – it'd be nice if I'd studied advanced QM, but oh well.) Observation is done by the matter within the universe. (Sometimes people make the observations, but we're not particularly special in that capacity – we're part of the universe.) At each moment (as experienced locally, so you don't have simultaneity problems) particles are all in their various states, with their probabilities of interacting with each other or decaying or whatever else particles do. Subsequent moments reflect the playing out of these probabilities.

To be clear-ish: you have a moment, with its probabilities. This moment implies a set of possible subsequent moments, consistent with the information contained in the moment. Each subsequent moment (that is, an actual moment, not just a possible many-worlds moment) reflects the probabilities in the history that led up to it. But each moment is random and arbitrary to the extent that the universe has finite determinative information – a limited capacity to define the future. Every moment predicts the future, but not all the way. Each new moment has information that is filled in, not from out of nowhere, but

from outside of the universe's determinative information. Like this – an hour before the end of a football game, your personal information space determines that the game will almost certainly have a final score. But your information space – your mind – can't determine that score. It can assign probabilities, but the moment that contains the final score includes information that was previously unavailable to your information space and had to be filled in from outside.)

33. What about gravity?

In our evenly spaced universe, there's no experience of gravity – everything's hanging in mid-air. But move a couple of objects closer together. You've raised the mass density in their region above the universal average. (Been thinking about gravity a lot and have managed to confuse myself a little bit, but . . .) By being closer together, they're not seeing as much of the energy flux that holds space open (or something). The space between them will expand considerably less than between the evenly spaced objects, and hey! – you've got gravity (when the overall expansion due to uncertainty (and photon flux?) is cancelled out). (Given that the average mass density of the universe is about one proton per cubic meter, two protons separated by a meter (in our hanging-in-mid-air universe) should experience no net gravitational attraction. Good luck testing that – the force or lack of force is more than 10^40 times smaller than the smallest force ever measured.)

34. Do we need gravitons to have gravity?

There are arguments from quantum field theory in favor of gravitons, but if gravitation is an effect of the scale of the universe being information-based, gravitation might be entirely mediated by other forces and particles. Gravitation might be bookkeeping – other forces conduct their business, with the scale and shape of space (which includes gravitation) being a collective net result of this business. What I'm asking is – does the shaping of space require special space-shaping particles, or does the shape of space result from all other physics business? I guess this is the same thing as asking, "Does all the other business transmit all the information without the help of gravitation?"

This leads back to your question about dark energy. Dark energy seems like a spring-loading of empty space to make the universe conform to observation. I doubt that dark energy is a thing beyond that everything comes from the scaling of space based on information. In most of our observations, we see this as an inverse-square effect of gravity. But this doesn't make inverse-square the law – it's just the most observable effect. Overall, the universe probably stays roughly the same size over shortish periods of time (billions of years), which it couldn't under universal inverse-square gravity. Effectively, there's a cosmological constant. And there are probably a bunch of other tweaks to inverse-square gravity. But inverse-square and its tweaks all come from the same thing – the shape and scale of space being defined by the information it embodies. So, instead of a computationally very simple inverse-square law as a foundation, you have this principle that information shapes space which is probably computationally a pain in some of its aspects. In everyday situations, you can simplify it to inverse-square. In other situations, maybe it's helpful to do the math as if there is dark energy or a cosmological constant. Does that mean that dark energy actually exists? Could be that it doesn't – could be just a mathematical convenience.

35. Let's go through a few questions that have been prompted by your answers to previous questions. What would you call a field which links the structure of thought with the structure of the universe?

The idea that the universe is describable by information (is a humongous information processor) is called digital physics. I like "informational cosmology" better. (But suggesting a discipline be renamed is kind of a douche move.)

36. What about entropy?

In the words of a tweet from Christopher D. Long, "People shouldn't expect phenomena at scales and energies far outside normal experiences to be analogous to those experiences." We don't have an understanding of how entropy might work for the universe as a whole. I think that the universe has ways to dump or hide or attenuate energy-depleted, high-entropy volumes. As a formerly active part of the universe burns out, it collapses and gets pushed to the side as other parts of the universe light up and expand. The effect is no overall increase in entropy. (The pushing to the side is a relativistic rotation out of the active center. I like thinking of relativistic shifts as rotational. Objects with a high velocity relative to you aren't fully participating in your space-time frame, according to the equations of special relativity, which are trigonometric.)

Relativity, both special and general, has to do with information. Matter that (as information) has reduced relevance (that is, I guess, reduced information in common); the matter observing it is relativistically rotated – shortened, time-dilated, red-shifted. The Hubble redshift acts like a correlation quilt across the universe. Neighborhoods that are highly correlated with each other are close to each other, with low relative redshifts.

Which kind of leads to inertia. Mach's Principle says that inertia is due to the stellar background. (That is, movement relative to all the galaxies in the universe – at the time Mach was writing, the existence of galaxies beyond ours wasn't well-established. And way before Mach, someone else who kind of thought this was Bishop Berkeley, the "Universe is an idea in the mind of God" fella. That guy was good.) What if inertia is due to gravitational attraction being relativistically attenuated, so that an object in motion is less attracted to the matter in its immediate neighborhood and more attracted to the neighborhood whose apparent velocity matches its own? (A friend of mine asked Feynman about something like this, and Feynman said it didn't work – the calculation ended up with a sign-reversal – a plus where a minus should be, or something.)

37. What about subatomic particles?

Of the dozens of subatomic particles, only five – the electron, proton, neutron, neutrino, and photon – can last for a long time and travel across large distances. I consider these the workhorses of the universe and all the other particles their helpers. Protons and neutrons encode information and shape space, with protons opening up space and neutrons collapsing it.

Not all information in the universe can be in play at the same time. The universe doesn't have enough processing capacity, and most parts of the universe are highly uncorrelated with each other – they're in neighborhoods that are vastly separated (in distance and Hubble redshift). But even when not in play, information in collapsed neighborhoods may help define the universe, perhaps with their gravitational vectors acting as 4D tent pegs, helping hold the whole universe open.

If you examine the contents of your awareness from moment to moment, you don't know that much stuff at any given instant (the moment you wake up, for instance), but you don't panic, because you feel that you can recall just about anything you need to know almost immediately (and because it wouldn't make sense to be in a constant panic – you're used to always almost knowing things). There's all this knowledge on the tip of your brain – it's imminent – ready to go and perhaps providing structure without being fully in your awareness.

The universe could be set up the same way, with shadow information – collapsed neighborhoods on the outskirts – providing structural support and helping define space and the matter it contains. Maybe in a very low-information universe – young, hot, fuzzy – the ratio of the proton mass to the electron mass is closer to one-to-one rather than our 1,836-to-one.

Could be that neutrons, acting as closed-off variables, serve to increase the precision with which matter is defined. Protons are free to act on other matter via electric charge – they're active. Neutrons are decided – they're locked into fixed correlations in a nucleus or in gravitationally collapsed matter. They can't interact with the universe via charge. But by being fixed (generally for the many-billion-year time being) they can provide a stable background – a framework of frozen, decided (for the long now) issues – against which the active center of the universe can work out the issues in play. The frozen background is the framework of assumptions that more precisely define the terms in play. The terms in play are the protons in the active center, made heavy, small and precise (because the heavier the particle, the smaller the DeBroglie wavelength) by all the collapsed matter in the background. The proton-electron mass ratio is proportional to the amount of collapsed, neutron-rich matter on the outskirts of the universe compared to the amount of proton-rich matter in the active center. It's an old universe, with a lot of collapsed matter.

The frozen framework can be brought back into play, but only a small fraction of it can be in play at any one time. It sits, waiting, an array of imminent knowledge – things resolved and removed from active consideration until needed. (Your mind pings against its frozen background, warming it up just enough to give you the feeling of being at home in yourself.)

38. What about black holes?

Black holes. I don't believe in black holes as objects that must necessarily crush themselves into singularities. Instead, matter moving towards black hole status is a ball of information/matter which, as the matter collapses, increasingly correlating with the matter within its own sphere, shares less and less information with the outside universe. But the information it contains doesn't have to be crushed out of existence. Circumstances can vary, and a blackish hole's information should usually be retrievable.

The information within collapsed matter has to generally be repeatedly retrievable as parts of the universe cycle from active to burned-out/collapsed and back to active. The crushing forces of gravitational collapse might be countered by a shrinkage of the scale of space within a sphere of collapsing matter, with the matter growing heavier and smaller until stasis is achieved, with shrinkage of space equaling energy gravitationally gained, so that matter and the scale of space largely define themselves through interactions among the collapsed matter. The interior of blackish holes could be organized, which we couldn't see much of from the outside, or information could be lost, as the matter falls back into primordial chaos. (Wouldn't want too much of that. The universe would be losing its memory/framework.)

39. How does this come together?

Non-velocital redshift is an indicator of information not-in-common ($I_{\sim c}$) with the observer.

(On my birthday in May, 1981, when I first got the idea of mental information maps (in the Libby Hall dorm cafeteria at the University of Colorado (may have been eating cubes of red Jell-O – I liked my Jell-O), I imagined that the ease with which something can be recalled depended on the geometry of the information to be remembered. Are there a bunch of angles from which it can be accessed, or is there just one angle – only one set of associations which can be combined to get to it (which means you can't get to it at all if you can't come up with those associations)? Then I realized that an optimal mental information map might look like the universe itself.

And then I imagined a mental map of what you know about how you and other beings go to the bathroom. (It's just where my brain takes me – sorry!) You know a lot about how you go to the bathroom – that's at the center of your map. Close to the center, you may know (too much, even) about how family and friends go to the bathroom. Further out, you have generalized knowledge and assumptions about how Americans and Canadians go to the bathroom. Way further out (and redshifted), is how they go to the bathroom on other continents, such as China and Japan. You've heard about holes and places to put your feet – you don't really want to know any more than that. And then, way, way out in zero-knowledge land, is how they go to the bathroom on other planets. I suppose a more mature person would've simply pictured the classic March 29, 1976 New Yorker cover, which is kind of a Manhattanite's mental map of the world.)

Go ahead and figure information in-common (I_c) equals the square root of (1 – v^2), where v is the apparent recessional velocity over the speed of light. (It's a term from special relativity.) Everything in the universe is a mixture of information I_c and $I_{\sim c}$ with us. The farther a galaxy is from us, the greater its apparent recession, the less information it has I_c and more $I_{\sim c}$ with us. I think the proton-electron mass ratio is proportional to the $I_{\sim c}$-I_c mass ratio. In a young, small, nearly information-less universe, the proton-electron would be a lot smaller – possibly not one-to-one – a proton is much more complicated than an electron – it's a knot in space, while an electron is a twist in space. But the ratio would be much closer to one-to-one.

Information $I_{\sim c}$ is stored information – it's memory, not retrieved in the present moment. The universe has limited information-processing capacity – it can't know everything it knows all at once. (You don't know everything *you* know all at once.) Every galaxy, active or collapsed, in the universe has a combination of information I_c and $I_{\sim c}$ with us.

The cosmic microwave background radiation – the oldest, farthest-traveling radiation in the universe – has a z, a redshift, of nearly 1,100. A galaxy's redshift z is proportional to its $I_{\sim c}$-I_c ratio. This is ballpark for a $I_{\sim c}$-I_c-dependent proton-electron mass ratio of about 1,836. The picture is like this: near T = 0, you have a bunch of collapsed galaxies that aren't sharing much information with the active center of the universe. These blackish galaxies have $I_{\sim c}$-I_c ratios of 1,000 and higher, and there are enough of them to raise the $I_{\sim c}$-I_c ratio for the entire universe, as seen by us in the active center, to 1,000 or more, bumping up the proton-electron mass ratio.

To go into a little more detail – imagine a grid of galaxies with an apparent velocity of half the speed of light between adjacent galaxies.

(I first imagined this while posing for an art class in 1988 – gave me something to do while sitting naked, trying not to move. Instead of galaxies, I imagined spaceships piloted by the Brady Bunch. Greg pilots a ship going .5C away from earth. Marsha's ship goes away from Greg at .5C. Bobby's ship travels away from Marsha at .5C, and so on. I told my boss, Mike Armstrong, at *Remote Control*, the quiz show I wrote for, about it (because I'm weird). He said, "That's a whole new type of question!" and Brady Physics was born. We asked contestants to tell us the result of dangerous hypothetical experiments performed on the Bradys.)

When you add the velocities of a series of objects moving at half the speed of light relative to each other, you never reach the speed of light relative to the stationary observer (to any observer). The observer on earth sees ships moving at higher and higher fractions of the speed of light – 1/2, 4/5, 13/14, 40/41, 121/122, 364/365, 1093/1094…. To get a $I_{\sim c}$-I_c ratio of more than 1,000, you need an apparent velocity within one two-millionth of the speed of light, which takes a string of 14 spaceships. (You run through all the Brady kids and parents, Alice, Tiger, Sam the Butcher….)

So you have a grid of galaxies, with the most distant nearly redshifted into invisibility, but still providing scale and structure, in part by making protons fairly massive.

Remember how the universe is in a big gunfight with itself? Well, all the particles accumulated mass from all the bullets shot at each other over an incredible amount of time.

Now, all those collapsed galaxies with the huge redshifts should be black holes, according to current understanding. But I don't think so. I think they're blackish, not black, in that they still exchange some information with the rest of the universe. They also have inner structure, hidden from us. A blackish galaxy has cooked down, blasting away extraneous matter/information, until it's a largely self-informing, nearly closed-off system. If it's on the outskirts, it's not currently relevant and is nearly frozen in time – it's memory or an app that's not currently needed. If it's closer to the center, it might be a specialized system that's currently relevant but can largely do business independently – behind a blackish curtain. Seems as if most galaxies have million-star-sized black(ish) holes at their center. These might be specialized systems or recalled memories, with galaxies' 10^22 shining stars being the visible broadcasters – the active center's universe-spanning mega-processor.

But there's another step. In the active center, space is expanded – particles are very small in relation to the scale of space. Something must be precisely defining matter within space, and that something is photons. As long as protons are cooking down into neutrons and releasing fusion energy, space is expanded. When protons run out, the flux of photons that fills space peters out (over billions of years – it takes photons a while to cross the universe), and space deflates gravitationally (up to a point – objects might still have some leftover orbital energy, there's still redshift segregation, and scale invariance kicks in before particles can crush themselves out of existence).

Photons are fighting gravity – they specify space, making it fluffy. Without this specification, space contracts. Fluffy, expanded space facilitates large-scale information-sharing among active galaxies. Collapsed space tends to be opaque, making it tough to share information. (It's not like the universe was intentionally designed to have a transparent active center. Lucky accident? Seems doubtful.)

What would happen if all the galaxies burned out, and there were no active center? You'd have no widespread information-sharing/processing – no large-scale cogitating – and the universe would effectively be asleep. (Or at least something like this happens during certain stages of our sleep. And to a lesser extent when certain drugs are taken. LSD, for instance, seems to interfere with the normal functioning of systems that help interpret the world. For example, our software that processes faces is hampered, and you see half-processed lizard faces or semi-wire-frame polygon faces. Very annoying, not fun.

(Kids, don't do drugs, particularly LSD. It lasts for like 15 hours, and only the first hour or two is at all fun or interesting. You've broken your brain for an entire day, and you can't even sleep it off, especially if the LSD has been cut with something. If you absolutely want to slightly break your brain to see how it works, a light dose of shrooms is much better. Lasts like a third as long, isn't as debilitating, doesn't make you worry as much that your brain is gonna stay like this. Make sure you have babysitters to keep you

calm and to make sure you don't do anything stupid. But just don't do drugs in the first place. Better to observe your thoughts using your intact, non-broken brain.)

Anyhow, the universe is asleep (that is, it could be at some point). Little or no active center, not overly conscious. So what happens? It can wake up, just like we do. Something wakes it – could be external, could be internal – the effect is the same – galaxies are turned on, space expands around them, they form an active center.

Which brings up another thing – it takes hundreds of millions of years for clouds of hydrogen to coalesce into stars and light up. With not necessarily any stars lighting up the just turned-on galaxies, where's the energy flux that expands space? The thing is, you can get energy from both neutrons decaying into protons and protons fusing into neutrons. Hose down some burned-out galaxies with neutrinos, turning neutrons into protons; you're gonna release a bunch of energy. Half a billion years later, when some of those protons, now in stars, start fusing back into neutrons, they're gonna spit out more energy. Shweet!

40. What does this mean in a nutshell?

Collapsed galaxies on the outskirts of the universe (and, to a smaller extent, collapsed matter in the centers and on the outskirts of active galaxies) give scale and structure to the universe by adding mass to protons and neutrons.

Collapsed galaxies are the universe's memory and currently unneeded apps, able to be recalled when relevant.

Energy from protons fusing into neutrons expands space in the universe's active center (making space transparent and widespread information-sharing possible).

41. What about space and time?

Space and time are self-assembling according to some minimizing and maximizing principles. Space seems to be arranged to minimize the aggregate distance traveled by photons. Things that are going to interact a lot should be close to each other – space shouldn't be any bigger than it has to be. Minimizing distance maximizes the rate of interactions; time is as full of events as it can be. (Of course, events don't happen *in* time, as if time is this independently existing thing to be filled – the sequence of events *is* time. But still . . .) this probably means that information is maximized over time and that information is the engine of time.

(Here's where I further confuse myself.) The present moment is when information is gained through events which resolve probabilistic situations. (Time is a news-gatherer.) Time maximizes causality and the predictive power of correlations among matter.

42. Why these principles of existence ('laws')?

There's a tautological aspect to the principles of existence. (Why principles and not laws? Because laws seem like rules delivered from on-high, while principles can be emergent – nebulous until made tight and precise by the statistical behaviour of large amounts of organized matter.) Things that exist have to exist – they can't both exist and not exist (except when their existence or not is incompletely specified quantum mechanically). Right there, you have a principle, but not a very useful one until you draw some conclusions from it. A conclusion might be that existence includes duration – that for every existent moment, there's at least one related existent moment which can be seen as a subsequent moment.

Somehow out of this, you get the fairly tautological principle that persistent structures or processes are persistent – that they create a bias towards their own continued existence.

You get things which work like Liebnizian monads – little correlation engines whose main job is to be correlated with other engines at various times. These correlations pull the universe tight, giving it structure in space and time. I believe that protons (and the electrons which go with them) are the correlation engines. They're each like a little spatial axis – a dimension – and the variable that lies somewhere along that dimension, all in one. But the dimension doesn't extend to infinity – it fades – it only extends as far as it needs to for the correlations it's involved with, like a street. Streets only exist for their own limited length.

Protons are knots in our locally three-dimensional space. The knot in space is rectified by the point-wise inversion in space (kind of a cross-cap) which is the electron. Without an electron for every proton (but without electrons being assigned to specific protons), space doesn't work topologically.

Neutrons are locked-down dimensions. Proximity is like correlation – two protons coming close enough that they turn into a proton-neutron pair means that they're so correlated that two dimensions (or variables) can function as a single dimension (or variable). The universe prioritizes compactness – it stores dimensions/variables it doesn't need within neutrons.

Over billions of years, a star boils down a big ball of hydrogen – a stew of protons and electrons – into a bunch of neutron-heavy elements. It's a correlation machine – it links protons together, locking them down into closed-off neutrons. And the fusion energy it emits helps define and expand space in the active center as light streams across the universe.

43. Let's make a concrete calculation along the dimension of time, your novel framework for the structure of universe may gain clarity from such calculations. Using the accepted canon age of cosmos at ~13.77 billion years old as the referent, by your own theorizing and within your framework, how might we calculate universe's age? What age would the calculation produce?

If you didn't know how brains worked, and you saw a half-second PET scan of a thought unfolding across a brain, how would you estimate the age of the brain? It would be really tough. You might be able to assume that this processing of a thought isn't a one-time thing – assume that this is a function of the brain and, as such, happens again and again. But it would take a lot more knowledge to have any idea how many times it happens. (How many times *does* it happen? Estimate three thoughts a second. (How long does it take for your attention to shift and a thought to form? At least a tenth of a second and not more than two-thirds of a second. Observe your thoughts – see what you think.) Three thoughts a second is about 10,000 thoughts an hour times 16 waking hours a day times 80 years comes out to a human brain having about 5 billion thoughts in a lifetime.)

What if the universe is an apparatus that does what it does again and again – unfolding over and over, sending stars and galaxies through their life cycles, with those galaxies burning out and being squeezed to the outskirts by new unfoldings, where they wait to be part of a subsequent expansion?

If the universe is an information-processing entity (It is!), from within the universe, we're seeing only the information, we're not seeing the structure that supports the information-processing. Analogously, the mind is the moment-to-moment unfolding of information within consciousness, while the brain is the physical structure which supports this inter-play of information. When we look at the universe, we see the interplay of information; we don't see the physical structure which supports it. This makes it even harder to guess the age or lifespan of the universe.

We don't know the purpose of the universe. (We're so far from knowing that even asking seems a little preposterous.) We can't decode the information in the universe. (We're made out of it, but we can't read it. As we make our way onward, maybe we'll pick up some clues, perhaps from civilizations that have been around longer.) As we learn more, perhaps we get to participate in the business of the universe. The universe processes and stores information at all levels of complexity. Civilizations would be part of this). We don't know anything about the physical structure that might support it. So it's hard to guess how old it is.

(Imagine that, in the future, we find out with reasonable certainty that the universe has a purpose – to process information to help the universe's supporting structure or entity achieve its objectives in its external world (the world perceived and modeled by the universe). One way of dealing with this discovery would be to get with the project – to figure that we're all in this together – that if the universe prospers, we prosper. I'd guess that many entities within the universe are part of the program. Maybe the really advanced ones run galaxy-sized neutrino hoses that can reactivate dormant parts of the universe. (I know that seems goofy, but we don't know anything yet.) Maybe there are nihilistic or hedonistic civilizations that figure, "Everything's so big and old and, in a way, virtual, it doesn't really matter what we do.")

There might be some clues to the universe being older than its apparent age. If the universe undergoes repeated multi-billion-year unfoldings, there should be lots of stuff

that's older than the apparent 14-billion-year age of the universe. That stuff won't necessarily be in our immediate neighborhood – we're new – we came into being as part of the current unfolding.

Via repeated cycles (not cycles of the entire universe expanding and contracting – not an oscillating universe – more like a rolling boil) of galaxies lighting up and burning out, the dark matter we're looking for (to explain gravitational anomalies such as the outer rims of galaxies rotating faster than accounted for by the distribution of visible stars) might be a bunch of neutron stars and near-black holes. If anything could survive repeated cycles without being completely ablated away, it would be near-black holes. (Don't really believe in fully black holes.) A universe which has gone through a zillion cycles might have generated a bunch of burned-out junk (or, in an informational sense, massive settled or solved (for the moment) equations or clumps of correlations or memories or independent processors whose operations the wider universe doesn't much participate in/isn't very conscious of) hanging around on the outskirts of galaxies.

A brand-new universe – one that's unfolded after a single big bang – doesn't have much opportunity to form a bunch of collapsed matter. But a universe at a rolling boil – that is, a "continuing series of little bangs" universe – would generate lots of junk. It's that house with all the trashed cars and plumbing fixtures scattered across the front yard.

Just for fun, we could multiply the 14-billion-year apparent age of the universe by the 5 billion lifetime cycles of the human brain. There's no reason to assume that the universe goes through 500,000 or 5 googol rolling cycles. But anyhow, 5 billion times the apparent age of the universe gives you 70,000,000,000,000,000,000 years. That's based on not much. What if the expected duration of a self-contained system of information (in terms of rolling cycles) is proportional to the complexity of the system? What if the complexity, like the average distance from the origin of a random walk, is proportional to duration squared? The universe could be *really* old.

No way the universe unfolds just once. No way it's only 14 billion years old.

44. If I may extend the implications of informational cosmology, the discipline im-plies two complementary fields: informational cosmogony and informational eschatology. In your worldview of the universe's life cycle, how would the universe – if indeed the world corresponds to such a model – begin (Cosmogony), develop (Cosmology), and end (Eschatology)?

In my view, the information space that is the universe arose through processes external to the universe. There's a material framework – an armature – which provides the structure that allows the information-processing to take place. If the universe is the mind, then this armature is the brain. Our brains/minds exist within the context of the outside world. We can speculate or even assume that the universe similarly exists because of and within an outside context. Of course, we know nothing about any armature for the universe, but if it exists, its fate determines the fate of the universe.

We're used to our brains being able to store a steady stream of information over many years. An information-space model of this would look like a universe becoming more complicated, perhaps expanding like a Big Bang universe (but over a long series of rolling cycles, not just a single original push plus various inflational add-ons) with more and more matter gradually falling into visibility from the farthest reaches – the outskirts close to T = 0, the apparent beginning of time. But as we age, we can lose information. Instead of our information space becoming bigger and more complex, with the primordial background radiation spreading out and getting cooler and cooler, the information space would heat up, becoming smaller, hotter, and less complex. Information melts away, lost in background noise. As information drops to zero, we have an information space that's hot and fuzzy, with a short horizon.

An information space is dependent on the integrity of its armature. There are statistical arguments to be made on the future size of the information space, based on its current size, but that math doesn't exist yet. And that math is just a statistical bet about conditions in a world external to the universe that we, as yet, know nothing about. (How might we learn about this external world? Perhaps by making contact with older civilizations which have had more time to suss out what the universe is up to. Scary. I suspect that old entities who know what's up might be found at the galactic center. Eventually, our strategy might be to tiptoe towards the galactic center to take a look, but very stealthily, so as not to get our asses kicked. But really – how would we outsmart entities that might be billions of years old? Will Smith and Jeff Goldblum with a computer virus won't do it.)

Primate: A Card Game

Kevin Langdon

Number of players: 5

Average playing time: 30 minutes

Equipment required: A standard deck of 52 playing cards (with Jokers removed) or a deck of Tarot cards (with the Major Arcana removed) or Rook cards (with the Rook removed; Rook is a deck of 14 numbered cards in each of four colors, plus a Rook card, analogous to a Joker, published by Hasbro).

Preparation: Each player secretly chooses a partner from among the other players. The name of the partner is written on a piece of paper, which is then folded; the player writes his or her own name on the outside of the folded paper. The papers are put aside until the end of the game.

Note: If you write your partner's name on the top half of the paper and fold it toward you the secret name will be facing downward, making it unlikely that anyone will accidentally see what you wrote.

The cards are dealt out to the players clockwise around the table. Each player will receive 10 cards with a standard deck (the two cards left over are put aside face down) and 11 cards with a Tarot or Rook deck (with one card left over).

Primate is a trick-taking game. Eldest hand leads to the first trick and play rotates clockwise around the table. Subsequent players must follow suit if able; if not able to follow suit a player may play any card.

After each player has played a card, the highest card of the suit led wins the trick, unless it is *factored* by two or more other cards played to that trick. A card is factored when two or three other cards can be multiplied together to equal the point value of the card, but in order for a factoring to count in Primate at least one of the factoring cards must be of the suit led.

As is the case in many games played with the Rook and Tarot decks, the Ace counts as 15. The Page (in the Tarot deck; not present in the standard deck) is 11, the Jack or Knight is 12, the Queen is 13, and the King is 14. The point count for all other cards is their index value (number: 10 for the ten of spades, etc.).

The winner of a trick earns a score of 12. When the high card played to a trick is factored, the player with the high card scores nothing and each of the n players whose cards are included in the factoring earns a score of 12/n. If the high card can be factored more than one way a "natural" factoring (one which does not include cards not of the suit led) takes precedence. When there are multiple natural factorings, or multiple nonnatural

factorings in the absence of a natural factoring, the points are split evenly among all players participating in these factorings, even if one player's card participates in more than one different factoring.

The winner of a trick leads to the next trick—except that when the high card is factored, the player who played it still leads to the next trick.

Factoring may be for naught if a higher card than the one factored is played (but the higher card may also be factored).

When a card played to a trick is higher than any other played so far and cards whose product is equal to its point count have already been played, it is factored, just as if the factoring cards had been played after it, and the same tie-breaking criteria are used if there is more than one possible factoring..

To make it easier to follow the action, it is recommended that the card played to a trick by each player be placed directly in front of the player rather than tossed into the center of the table, until the trick is completed.

After the final trick, players' scores are added up. Each player's total score is his own score plus the score of his or her secret partner. If two players have chosen one another each receives a 25-point penalty. The highest adjusted total score wins. Ties are ties and are not resolved.

The Genuine Genius Test

1. Fill in the next number in the series:

   1 ∞ 1 _____

2. If you have 14 cats and one dies of old age, one runs away, one is taken up in a UFO, and one goes to live with the old lady down the block, what is the probability that you will still own 14 cats?

   A. 1
   B. 1
   C. 1
   D. 1
   E. 1

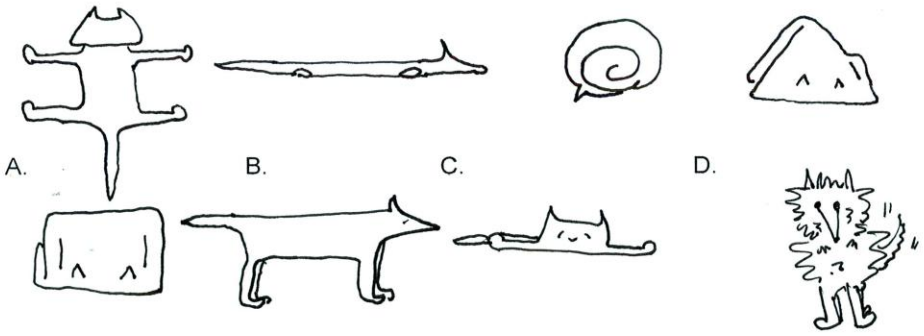
3. How many geniuses does it take to change a light bulb?

   A. An infinite number.
   B. 14
   C. One, but he must be married so that he can order his wife to do it.
   D. That's not funny!
   E. 2.5

4. If you are in an FTL vehicle (not equipped with warp drive) traveling to the Alpha Centauri region, at what point will you pass yourself going back the other way?

   A. Never.
   B. In a drugstore in Tonopah, Nevada, before you leave Earth.
   C. At 6.3 light years out.
   D. You can't get to the Alpha Centauri region without a warp drive.
   E. All of the above.

5. Pick the figure that best completes the series:



6. Light is to abstinence as

   A. Rug is to doorknob.
   B. Flatulence is to despair.
   C. Noodle is to philosopher.
   D. Toaster is to crudescence.
   E. Enigma is to boll weevil.

OBSCURE WORDS AND FACTS ANALOGIES: ANSWERS

Jeff Ward

Jeff's "Obscure Words and Facts Analogies" appeared in *Noesis* #197, November 2014.

1. wet : dry :: hydric : xeric
2. mountain surrounded by water : island :: mountain surrounded by ice : nunatak
3. October 31 : Halloween :: April 30 : Walpurgis
4. male : straw man :: female : Aunt Sally
5. man and horse : centaur :: lion and eagle : griffin
6. serial killer of husbands : black widow :: serial killer of wives : bluebeard
7. dog : canine :: peacock : pavonine
8. China : Sino- :: Portugal : Luso-
9. evening : nocturne :: morning : aubade
10. 1 : Sicily :: 2 : Hispaniola :: 3 : Borneo

Bonus

dog : canine :: dodo : didine

I had four entries. The top score was 9 of 10 by Marcel Feenstra. The other scores were 8, 8, and 7 correct, so everyone did rather well. No one answered the bonus question correctly.

Notes

3. Also known as Walpurgisnacht. (the other Halloween)
4. Primarily British
5. Also spelled “griffon” and “gryphon”
10. The territory of Borneo is divided between three countries: Brunei, Malaysia, and Indonesia; Hispaniola, two countries: Haiti and the Dominican Republic; Sicily is entirely within one country: Italy.

Poetry

Truth

Ray the Rhymer

The Truth, if you find it,
Don't whisper aloud.
The nearer The Truth,
The further the crowd.

Free Enterprise

Ray the Rhymer

Captain Kirk thought
He had gone
Where no man
Went before,

Until he saw,
Along the road,
These jingles
By the score.

Burma Shave.

An Emptiness Is Never Filled

Richard Badke

“I“ wasn’t there one summer night
which left an emptiness, replete
with sound and scent and sight.
With taste and touch, it was complete.

My Neighbor's Passing

Richard Badke

He lived maybe half a mile up Camden Way.
Half way up the hill but below the trees.
Maybe where the summer's scent of new mown hay
mingles with the elder blossoms on the breeze.

An older gentleman was he, who wore simple clothes
and a white, close trimmed beard. Slower than most
walked 'round here, he'd lean on an old, worn post
next to the garden's gate, where the pear tree grows.

He was a man of few words who never spoke
of where he came nor how he came to be here.
We never heard him mention if he had any folk.
A lady friend would come and go a few times a year.

In the city, I saw his name on books.
The missus and me once saw a play he wrote.
Who would have thought, by way of his looks,
his words on paper made him a well known poet?

After supper, we watched him slowly walk,
with Earnest, past the fields of oats in late July,
stopping now and then, to watch purple martins fly
or, maybe just remembering the day with small talk.

The lights woke me, flashing all around.
When they came I wouldn't know.
Then they left, not in any hurry though.
Tuesday's paper is where his notice was found.

When we entered the church, they were all there.
Even Earnest and Mae. I heard a woman cry,
heard more than one cough, heard another sigh.
Heard someone piously, quietly, say a prayer.

The missus and me walked to where he laid
wearing a simple suit so many years had frayed.
We crossed ourselves, said a prayer and bade
him farewell. With that our respect was paid.

As the missus and me walked home
I remembered his latest poem
and recited it to a passing cloud
and the scarecrow in a field, newly plowed.

My missus said, "Beautiful words," and bent her head
as we passed the garden fork with a broken tine.
A fork he'd use to till the earth, then stop and sip red wine.
Where flowers once bloomed burdock grows instead.

The deer stood round the pear tree,
next to the post at the garden's gate.
Some stood still, just looking at me,
while others bowed their heads and ate.

Nowless Now

beyond any date

Kevin Langdon

(A response to May-Tzu's "Taoless Tao,"
Noesis #198, May 2015)

I am not here.
I am everywhere.
But there is no everywhere anywhere;
There is no where, no when, not nohow.
No somethingness, no nothingness, no nessness.

What does this mean?
Is meaning meaningful?
Is there meaning anywhere, at any time?
Is there any use asking these questions?
No questions, no answers, no no no no.