Ode to E Pluribus Unum for Sunday October 9 2022



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Pears With a Crate



Louisa Wallace Jacobs

Louisa's "Pears with Crate", received an Honorable Mention Award in the Santa Paula Society of the Arts 84th Annual Art & Photography Exhibit in Sept. 2022. Her works continue to gather well-deserved attention in exhibits around the nation.

The Pear series goes back to at least the Pleistocene...only slightly short of the foundation of our friendship. Keep on stunning the judges Weezie.

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The Epitome of Art on the Hoof



Roy Stafford via Brad Tillman

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Lucky Flucky and the Hokkaido Express



https://youtu.be/PKklyvxw8QU

The USS Barb sank the most Japanese tonnage during World War II and the count does not include the train its intrepid captain and crew sent to the bottom in Karafuto Bay near Sapporo on Japan's northern island, Hokkaido on July 18, 1945. Do you suppose the train was loaded with beer, and if so whether the loss was the true cause of the surrender a month later? Just asking.

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New Life for Hubble?

SpaceX, NASA look at launching Dragon to service Hubble Space Telescope



https://www.space.com/nasa-spacex-possible-dragon-mission-hubble-space-telescope?utm_campaign=58E4DE65-C57F-4CD3-9A5A-609994E2C5A9

The senior eye in the sky may be long in the tooth, but with a few tweaks and a boost, Hubble can still do things JWST can't. I hope the possibility gets a good hearing.



From Eric Berne's most famous book, Games People Play:

Greenhouse

Thesis. This is a variation of 'Psychiatry', which is played hardest by young social scientists, such as clinical psychologists. In the company of their colleagues these young people tend to play 'Psychoanalysis', often in a jocular way, using such expressions as 'Your hostility is showing' or 'How mechanical can a defense mechanism get ?' This is usually a harmless and enjoyable pastime; it is a normal phase of their learning experience, and with a few originals in the group it can become quite amusing. (This writer's preference is, 'I see National Parapraxis Week is here again.')

As patients in psychotherapy groups some of these people are apt to indulge in this mutual critique more seriously; but since it is not highly productive in that situation, it may have to be headed off by the therapist. The proceedings may then turn into a game of 'Greenhouse'.

There is a strong tendency for recent graduates to have an exaggerated respect for what they call 'Genuine Feelings'. The expression of such a feeling may be preceded by an announcement that it is on its way. After the announcement, the feeling is described, or rather presented before the group, as though it were a rare flower which should be regarded with awe. The reactions of the other members are received very solemnly, and they take on the air of connoisseurs at a botanical garden.

The problem seems to be, in the jargon of game analysis, whether this one is good enough to be exhibited in the National Feeling Show. A questioning intervention by the therapist may be strongly resented, as though he were some clumsy-fingered clod mauling the fragile petals of an exotic century plant. The therapist, naturally, feels that in order to understand the anatomy and physiology of a flower, it may be necessary to dissect it.

Antithesis. The antithesis, which is crucial for therapeutic progress, is the irony of the above description. If this game is allowed to proceed, it may go on unchanged for years, after which the patient may feel that he has had a 'therapeutic experience' during which he has 'expressed hostility' and learned to 'face feelings' in a way which gives him an advantage over less fortunate colleagues. Meanwhile very little of dynamic significance may have happened, and certainly the investment of time has not been used to maximum therapeutic advantage.

The irony in the initial description is directed not against the patients but against their teachers and the cultural milieu which encourages such over- fastidiousness. If properly timed, a sceptical remark may successfully divorce them from foppish Parental influences and lead to a less self-conscious robustness in their transactions with each other. Instead of cultivating feelings in a kind of hothouse atmosphere, they may just let them grow naturally, to be plucked when they are ripe.

The most obvious advantage of this game is the external psychological, since it avoids intimacy by setting up special conditions under which feelings may be expressed, and special restrictions on the responses of those present.

Not too hard to translate this into the hypersensitivity that has attracted a lot of attention on college campuses. The perps all want the world to know how "sensitive" they are. To everything, much of which is imagined.

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Ray Collins Captures the Ocean's Mercurial Nature

The Australian photographer, who is based in Wollongong, is known for his dramatic images that capture the diversity of textures and forms that emerge from the water.



https://www.thisiscolossal.com/2022/09/ray-collins-oceanphotos/?utm_source=join1440&utm_medium=email

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Water Use in the West: What's the Beef and a Possible Answer



https://youtu.be/f0gN1x6sVTc Something to think about

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The Hoofin' Art Never Dies



https://youtu.be/WjjArvo0kic

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Take a Tour of Chicago's Wrigley Field in a Drone



Here's the place in 1938...before drones. https://youtu.be/9Xqdj1TBOtU

I don't know about the stadium, but the drone work is stunning.

Upcycling Plastics to Reduce Greenhouse Gas Emissions

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https://chbe.illinois.edu/news/stories/plastic-upcycling-JACS-2022?utm_source=join1440&utm_medium=email

Polypropylene Pros and Cons

Polypropylene is an excellent injection molding material. Apart from its typical plastic applications, polypropylene excels in fiber applications, which expands its range of applications beyond injection molding to include packaging materials for hopper bins, boxes, sheets, rolls, and custom applications that need rigid dividers. As with any other polymer, polypropylene has several benefits and limitations that make it more appropriate for some applications than others.

Pros

• It's a less costly material.

- It's very resistant to moisture.
- It possesses high flexural strength because of its semi-crystalline nature.
- It has good chemical resistance over a wide range of bases and acids.
- It contains good fatigue resistance, thus having a good impact strength.
- It's resistant to electricity and is, therefore, an excellent electrical insulator.
- It is more easily repaired from damage.

Cons

- Its high thermal expansion coefficient precludes it from being used in hightemperature applications.
- It is photodegradable by ultraviolet light.
- It has a low resistance to chlorinated solvents and aromatics.
- It is difficult to paint due to its weak adhesion capabilities.
- It is very flammable.
- It is susceptible to oxidation.

Despite its flaws, polypropylene is an excellent material. It has a unique combination of characteristics not found in any other material, making it an ideal option for various tasks.

Polyethylene Pros and Cons

Polyethylene is the world's most widely used plastic to make shopping bags, toys, and shampoo bottles. MDI is an expert at manufacturing and extruding poytheylene to create double and single faced rolls / sheets, trays, totes, bins and boxes. Polyethylene benefits and cons include the following:

Pros

Polyethylene has several advantages, so it has been used to manufacture various plastic items.

- Polyethylene is durable and water-resistant, making it last longer when exposed to the elements compared to other polymers.
- Although its strength and hardness are low, it is very malleable and has a high impact strength, making it stretch rather than shatter.
- Depending on its, it can be almost transparent to opaque.
- While polyethylene is an excellent electrical insulator, it may get electrostatically charged.
- Its low density makes it suitable for packaging.
- Polyethylene can be recycled into other products.
- Its heat-resistant properties enable it to be used in high and low temperatures.

Cons

Despite its widespread use, polyethylene has a few drawbacks that may dissuade manufacturers and consumers from its utility.

- It takes a long time to degrade and may remain in landfills for decades.
- Polyethylene is mainly derived from petroleum or natural gas, with limited resources.
- Producing polyethylene consumes a significant amount of energy and results in considerable carbon dioxide emissions, a greenhouse gas that contributes to global warming and climate change.
- The recycling process is complex and may take a long time.

From the reuse standpoint this is a good step forward.

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Bell's Theorem Proved 'Spooky Action at a Distance' Is Real

The "spooky action" that bothered Einstein involves a quantum phenomenon known as entanglement, in which two particles that we would normally think of as distinct entities lose their independence.



https://www.quantamagazine.org/how-bells-theorem-proved-spooky-action-at-adistance-is-real-20210720/?mc_cid=01ad52b213&mc_eid=636bc88d2e

Ok, how'd he do it?

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Among My Favorite Tranes



John William Coltrane (1926 -1967) was an American jazz saxophonist, bandleader and composer. He is among the most influential and acclaimed figures in the history of jazz and 20th-century music.

Coltrane helped pioneer the use of modes and was one of the players at the forefront of free jazz. He led at least fifty recording sessions and appeared on many albums by other musicians, including trumpeter Miles Davis and pianist Thelonious Monk.

My Favorite Things https://www.youtube.com/watch?v=8d9cD_Es9k4&list=RD8d9cD_Es9k4&start_radio=1

Blue Train https://youtu.be/HT_Zs5FKDZE

In my humble opinion Trane was more than just important, without him modern jazz as we know it flat wouldn't be...nor would Miles Davis.

Equinox https://www.youtube.com/watch?v=w5QGBHavF0U

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Franz Schubert and his 88-Key Playground



Franz Peter Schubert, (1797 - 1828) the Austrian composer who bridged the worlds of Classical and Romantic music, noted for the melody and harmony in his songs and chamber music.

Schubert was musically educated at the "Hofkapelle" in Vienna where he sang as a boy but then had to quit in order to help his father at school. Four years later, he became an independent composer and was destined to live in poverty from then onwards. Having an introverted personality, Schubert played his songs mostly amongst a couple of friends who shared his romantic passion. Within his short life Schubert composed many pieces of music, including eight symphonies.

Seranade (Arranged by Liszt)

https://youtu.be/lv5xPlm6etI

Serenade (Ständchen), by Schubert. Written two years before his death, this work is a perfect example of the melancholic writing Schubert was so well known for. Being one of his many lieder this piece was originally written for voice and piano.

Ave Maria <u>https://youtu.be/2H5rusicEnc?t=1</u> This leaves little to be said.

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What Makes Physics Beautiful According to Frank Wilczek



In 2004 he won the Nobel Prize for his work on the Strong Force—that within atomic nuclei. In this new video, Wilczek reflects on his life's work and describes what he believes to be the most beautiful equations in physics.

https://youtu.be/KORIhgAHMF8

A man I would really like to meet. So should you.

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Scientists Discover a New Set of Blood Groups

The 'Er' grouping could help doctors identify and treat some rare cases of blood incompatibility, including that between pregnant mothers and fetuses.



The unborn baby was in trouble and its mother's doctors at a UK hospital knew there was something wrong with the fetus's blood so they decided to perform an emergency C-section many weeks before the baby was due. But despite this, and subsequent blood transfusions, the baby suffered a brain hemorrhage with devastating consequences. It sadly passed away.

It wasn't clear why the bleeding had happened. But there was a clue in the mother's blood, where doctors had noticed some strange antibodies. Some time later, as the medics tried to find out more about them, a sample of the mother's blood arrived at a lab in Bristol run by researchers who study blood groups.

They made a startling discovery: The woman's blood was of an ultrarare type, which may have made her baby's blood incompatible with her own. It's possible that this prompted her immune system to produce antibodies against her baby's blood— antibodies that then crossed the placenta and harmed her child, ultimately leading to its loss. It may seem implausible that such a thing could happen, but many decades ago, before doctors had a better understanding of blood groups, it was <u>much more common</u>.

Through studying the mother's blood sample, along with a number of others, scientists were able to unpick exactly what made her blood different, and in the process confirmed a new set of blood grouping—the "Er" system, the 44th to be described.

You're probably familiar with the four main blood types—A, B, O, and AB. But this isn't the only blood classification system. There are many ways of grouping red blood cells based on differences in the sugars or proteins that coat their surface, known as antigens. The grouping systems run concurrently, so your blood can be classified in each—it might, for instance, be type O in the ABO system, positive (rather than negative) under the Rhesus system, and so on.

Thanks to differences in antigens, if someone receives incompatible blood from a donor, for example, the recipient's immune system may detect those antigens as foreign and react against them. This can be highly dangerous, and is why donated blood needs to be a suitable match if someone is having a transfusion.

On average, one new blood classification system has been described by researchers each year during the past decade. These newer systems tend to involve blood types that are mind-bogglingly rare but, for those touched by them, just knowing that they have such blood could be lifesaving. This is the story of how scientists unraveled the mystery of the latest blood system—and why it matters.

It was back in <u>1982 that researchers first described</u> an unusual antibody in a blood sample that hinted that this mystery blood type was out there. The scientists couldn't go much further than that at the time, but they knew that the antibody was a clue pointing toward some unknown molecule or structure that prompted the person's immune system to generate it.

In the years that followed, more people with these unusual antibodies turned up—but only now and again. Generally, these people surfaced thanks to blood tests containing the mysterious and rare antibodies. Eventually, Nicole Thornton and her colleagues at NHS Blood and Transplant in the United Kingdom decided to look into what might be behind the antibodies. "We work on rare cases," she says. "It starts off with a patient with a problem that we're trying to resolve."

But so rare were the mysterious antibodies in the latest work that when the team started their investigation, they had historical blood samples from just 13 people—gathered over 40 years—to analyze. Other recently established systems have been found thanks to similarly small numbers of people. Back in 2020, Thornton and her colleagues described <u>a new blood group called MAM-negative</u> that at the time was confirmed in just 11 people worldwide. And some of the most recently discovered blood groups have been found in single families, she adds. Both "MAM" and "Er" are obscure references to the names of the patients whose blood samples first sparked the possibility of a new blood group discovery.

It turns out that the new, 44th grouping system, detailed in the journal *Blood*, is tied to a particular protein found on the surface of red blood cells.

Originally, Thornton had an inkling this protein, called Piezo1, was involved after she compared the genomes of patients in the study. She and colleagues noticed how the gene responsible for this protein varies across people with different Er blood types. Due to those genetic differences, a small number of people have alternative amino acids, or building blocks, in their Piezo1 protein. Blood cells with the more common Piezo1 protein seem foreign to their bodies' immune systems as a result.

The team then checked to see whether antibodies reacted with lab cultures that either did or did not contain mutant versions of the Piezo1 protein, which they created using gene editing. That allowed them to confirm that variation in Piezo1 really was the driver of blood incompatibility in the people whose samples they were looking at. "It was something you couldn't have done a few years ago," says coauthor Ash Toye, professor of cell biology at the University of Bristol.

There are five Er antigens in total—five possible variations of Piezo1 on the surface of red blood cells that can lead to incompatibility. Two of the antigens were newly described by Thornton and her fellow researchers, and one of those was found in blood from the pregnant woman in the UK who lost her baby.

The results of the study will likely be officially ratified as defining a new blood group system later this year, at a meeting of the International Society of Blood Transfusion. The effort required to make the discovery was "massive," says Neil Avent, honorary professor in the blood diagnostics group at the University of Plymouth, who was not involved in the work. It also revealed complexities about this rare blood—for instance, that there are multiple genetic mutations associated with it.

Across the Atlantic, a separate team of researchers had also been trying to unravel the secrets of the new Er blood group, but were beaten by the British team. "That happens in this field," says Connie Westhoff of the New York Blood Center, who was part of the US research. "We often know that we're racing to find the solution in several different laboratories."

She says she and her colleagues have additional blood samples that appear to be from people with a rare Er blood group. And the research may not be over, she suggests—there are possibly more genetic mutations associated with this rare blood to uncover.

"Discovering a new blood group system is like discovering a new planet. It enlarges the landscape of our reality," says Daniela Hermelin at the Saint Louis University School of Medicine, who was not involved in the study. It adds to our knowledge of how blood incompatibility can affect pregnant mothers and their babies, she explains. And now that cases of blood incompatibility can potentially be attributed to the Er blood group, it increases the chance that doctors can correctly diagnose such a problem and treat it—by giving the baby a blood transfusion in the womb, for example.

It will also be possible to look out for and identify patients who have this troublesome blood. For example, someone might go to a hospital for a transfusion and have a preliminary blood test that reveals the presence of some unusual antibodies. Doctors could send the blood for analysis, and it might turn out that they have the rare Er blood described in the paper. "We have our testing set up to be able to do that," says Thornton. Rare blood might then be required for that person's transfusion, she adds. In the future, scientists in a lab might be able to grow red blood cells that could be offered to these patients for transfusion purposes.

It's very, very unlikely that you'd have an incompatibility with someone else's blood due to Er antigens, says Avent. But "if you do, it's something you want to know about."

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Today's Thang



BARN OWL THANG

In Greece there was a goddess of wisdom, Athena, Seen often in temples and sometimes arenas. In Rome she was goddess of wisdom, Minerva, Where she counseled the Romans on their habitual inertia. On her shoulder there rode a pie-faced owl, A better companion than all other fowl, Because of superior keen eye sight and hearing His advice to Athena kept her audiences cheering. A monkey face and a sharp curved beak And smaller than his cousins but no pipsqueak. His home is in barns and attics everywhere And there's much to be caught by his long steady stare. His eyes and his ears are key to this small owl's success And his place in history is Barn Owl Thang's noblesse.

Francie Troy

Bella Hadid's Spray-Painted Coperni Dress

Coperni's Spring/Summer 2023 collection's final piece has become a talking point of Paris Fashion Week; a dress was created onto Bella Hadid's body on the runway

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https://www.boredpanda.com/bella-hadid-coperni-spray-ondress/?utm_source=join1440&utm_medium=email

Ok ladies, here's a chance to get more room in your closet. Of course there'll be those two guys with the spray guns but maybe they'll sleep in the kennel.

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Scientists Puzzled by Two Huge Masses Inside the Earth

Scientists who studied them call the blobs Large Low-Shear-Velocity Provinces (LLSVPs).



https://futurism.com/the-byte/earth-blobs-puzzle-scientists

Why Do Some Kids Take Bigger Risks than Others?

Socioeconomic factors influence children's risk-taking, says new study, and bad calls are not always the fault of poor judgment or lack of self-control

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https://bit.ly/3fxBx5x

Researchers found children from families with lower socioeconomic status were more likely to take a bigger risk in hopes of winning a big reward than were children from higher status families.

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2021 Chemistry Nobel Prize: Technique for Building Molecules



Benjamin List of the Max Planck Institute for Coal Research and David MacMillan of Princeton University have been recognized for their contributions to the development of organocatalysis with the 2021 Nobel Prize in Chemistry.

https://bit.ly/3SCZOG7

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Last 747 is Off the Line

The last ever built Boeing 747 has rolled out from the Everett factory in Washington state.

By Russ Niles



The last Boeing 747 has rolled off the assembly line and is now being readied for service with cargo carrier Atlas Air. The 747-8F freighter was completed to the green stage on Oct. 4, but no formal announcement was made. A planespotter captured the historic event and AirAlive reported it. The revelation came as Atlas took delivery of the third-to-last 747. The company bought the last four 747s in 2021, briefly delaying the inevitable. The \$1.6 billion deal brought Atlas's 747 fleet to 57 aircraft, making it by far the biggest jumbo jet operator in the world.

The 747 enjoyed a 55-year run with at least 1,572 built. The last version is the biggest ever built and can carry 20 percent more than the previous design, the 400. At the same time it burns 16 percent less fuel. "We are pleased to receive this additional 747-8F, and to add more capacity and value to our customers. Atlas' investment in these new aircraft underscores our commitment to environmental stewardship through the reduction of aircraft emissions, resource consumption and noise," said Atlas CEO John Dietrich.

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What a Fast Moving Storm Surge Looks Like



Pinterest.com

As with real estate, with hurricanes and airports, location is everything. This security camera footage from Ft. Myers, Florida, during Hurricane Ian on Sept. 28 obtained by CNBC dramatically shows how fast storm surge can inundate normally dry land.

https://youtu.be/ozqGvyTWeAg

Ft. Myers and Naples were, unluckily, located on the southern eyewall of Ian as it came ashore. This pushed water from the Gulf and bays onto the mainland, creating record levels of flooding.

Although Naples Airport is protected by a barrier island, the onshore wind drove the bay's water completely over the airport, whose elevation is 6 feet. Further north, Venice Airport benefited from being in the northern outer eyewall. The winds were out of the east, pushing the water away from the airport, which is about 12 feet above sea level. As of Sunday, both airports had reopened.

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My Walking Thoughts

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For October 9 2022

Thoughts from a Professor Who Stopped Assigning Grades and Taking Attendance

Walking may be a misnomer this week since my lumbar region has limited my efforts to comedic stumbles but I read something that struck a chord that I'd like to hear your opinions on.

Does a student's GPA really give us a window into their aptitude or learning—or potential as a future worker?

https://bit.ly/3rArort



I spent my first two years in college thinking that it was about learning only to find I was mistaken. Thereafter I played the game and gave the profs what they wanted and came out with a white collar work permit. Whoopie, but in retrospect not areally satisfying experience.

It wasn't anyone's fault but mine, yet might there be something of value in Professor Traphagan's approach that merits consideration?

What are your thoughts on this? Should we as proposed by the article's author be challenging our traditional approaches to college level education? Maybe Secondary as well? What the hell, why not look at the entire process and see what falls out.

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Here's an interesting response to the week-before-last's Walking Thoughts on Political Correctness:

Well John, this is the best I could do with your request for feedback on political correctness. All the below touches on my view of where we are at the moment in the most liberal part of the State but may not hit the nail. Political correctness is a symptom and what I point out are changing attitudes that may impact this symptom.

Lincoln got it right, "You can fool all the people some of the time and some of the people all the time, but you cannot fool all the people all the time."

Here are my observations from the liberal baston of the State.

If you were living in Northern California, you would see several signs that the political\correctness syndrome is changing. Some examples are, 1) San Francisco just recalled their extreme alt-left City Attorney for refusing to prosecute criminals; 2) San Francisco voters also recalled three School Board members for wasting money on trying to change the names of several schools that honored historical figures; 3) Oakland, after a rising murder rate and gang shootings, is going to vote on replacing their defund the police program which took \$18 million out of the police budget. This, after six people at a high school were wounded in a gang crossfire. And finally, Marin County, the home of the Anti-Vax movement, is now a leading vaccination county since Covid-19 hit.

As the respondent points out, after a while even the emperor has a hard time hanging out with no clothes.

I plan a reprise on the topic after I complete some research into the roots of the present version...perhaps completed in a week or two.

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