Steven R. Van Hook, PhD Nonprofit Commons Seminar

January 26, 2024 / 9:00 AM PT SLT

'Hope on the Horizon'

Abstract & Bio



- Abstract: As worldwide disasters and destruction may confound us in a sea of despair, a sea-wise scan of the horizon spots some islands of hope ahead. Along with the epochal shifts of today, we all also share common bonds that tie us to the unlimited possibilities in technologies, economics, education, and shared abundance. Let's look beyond today's disorienting headlines into the solutions already at hand -- and yet ahead in decades to come -- as experts in media, technology, academia, science, business, and society shed rays of hope.
- Bio: Dr. Steven R. Van Hook has taught communication and culture classes for universities in the USA and abroad for 25 years, developing one of the first hybrid virtual courses for UCSB in 2000. He has led in academic positions including faculty senator, ombudsman, curriculum development, accreditation review, and instructor mentoring. He is President of Educare Research, a nonprofit program serving international educators and students. He's been a newspaper columnist, radio reporter, TV news anchor, and science podcast host. He was a television producer and bureau chief in Moscow, USSR from 1989-91; and for three years directed public education media programs in Ukraine through the United States Agency for International Development (USAID). He has served as a trainer and officer for organizations including VISTA, Head Start, as a licensed Master Captain by the US Coast Guard, and a private pilot. He has a PhD specializing in transcultural learning, and is published in scholarly journals including UNESCO's Prospects, and by SAGE. He has presented on virtual world education to administrators and groups at UCLA, UCSB, VWBPE, VWEC, The Science Circle, and elsewhere. Research website: http://wwmr.us

Rules of Sea



Capt. Van Hook US Coast Guard Licensed Master Captain (retired) ASA Certified Sailing Instructor Credentialed Chaplain

Island Weddings & Memorials



- Keep one hand on the boat
- Keep one hand on yourself
- Keep your head in the crises
- Keep a weather-eye on the horizon
- Keep hope alive

Brain's Negative Bias



Our Brain's Negative Bias

- Brain built more attentive and sensitive to unpleasant news, keeping us out of harm's way
- Negative bias exploited by news, politics, interpersonal relations
- Small positive acts to counter negative in life spheres: 'Magic' ratio of 5-to-1

From <u>Psychology Today</u> by Hara Estroff Marano

Don't Be So Hard on Yourself

 Negative bias self-criticism harms self, interfering with productivity

Negative bias hacks:

- 1. Practice self-compassion
- 2. Meet your self-criticism with same kindness offered others
- 3. Reduce ratio to *x* and *y*: Make immediate contrast between *feelings of self-criticism* and *letting it go.* Brain will choose the less painful.

From <u>New York Times</u> by Charolette Lieberman

Article: The Right Way to Respond to Negative Feedback

Steve Van Hook :: Media Work ::



TV Anchor Circa 1987



О УДОСТОВЕРЕНИЕ иностранного технического персонала

№ 002142

Steven R. Van Hook Sun World Satellite News/Moscow

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 Radio Reporter
Circa 1985
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Russia TV Bureau Chief Circa 1990

Transcultural Themes & Images



- Babies & Children
- Pets & Animals
- Sports
- Love, Marriage, Relationship Conflicts
- Self-image
- The Birth-Life-Death Cycle
- Water







UNESCO Journal "Prospects"

Van Hook, S.R. (2012, June) Hopes and hazards of transculturalism

Article

Transcultural Research

We Are (mostly) Good People

People Are More Generous Than You May Think *by David Brooks*

- In seven nations of study, 200 participants on average secretly spend free \$10,000 more on other than themselves (family, friends, strangers, charity)
- About 30% of people do behave selfishly
- Self-Fulfilling Prophecy: By telling people that they are innately selfish and surrounded by others who are innately selfish, we have encouraged one another to magnify the selfish side of our natures.
- We build inhumane systems in which material incentives blot out social and moral incentives. And we've made ourselves miserable along the way.
- A lot of our public thinkers have vastly underestimated the importance of the moral and social motivations woven into human nature.

The New York Times



<u>Article</u>

We (almost) All Cry Tears of Joy

- 'Tears of Joy as an Emotional Expression of the Meaning of Life'
- A study published in the journal Frontiers in Psychology in 2022 found that 92% of participants had cried tears of joy in the past year. The study also found that there are four main types of tears of joy: amusement, affection, beauty, and achievement.



ORIGINAL RESEARCH article

Front. Psychol., 08 March 2022 Sec. Cognitive Science Volume 13 - 2022 | https://doi.org/10.3389/fpsyg.2022.792580



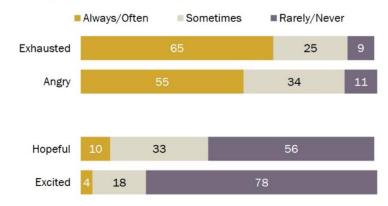
'Americans' Dismal Views of the Nation's Politics'

- Just 4% of U.S. adults say the political system is working extremely or very well; another 23% say it is working somewhat well. About six-in-ten (63%) express not too much or no confidence at all in the future of the U.S. political system.
- Majorities say the political process is dominated by special interests, flooded with campaign cash and mired in partisan warfare. Elected officials are widely viewed as selfserving and ineffective.
- Positive views of many governmental and political institutions are at historic lows. Just 16% of the public say they trust the federal government always or most of the time.



How Americans feel when they think about politics

% who _____ feel each of the following when thinking about politics these days



Note: No answer responses not shown. Source: Survey of U.S. adults conducted July 10-16, 2023. "Americans' Dismal Views of the Nation's Politics"

PEW RESEARCH CENTER



Work Sucks Everywhere

'Grim survey finds workers around the world have a toxic relationship with their jobs'

HP surveyed 15,000 employees in 12 countries and asked them about their relationship with work. Overall, the picture is grim. Across the globe, in every industry and every country surveyed, employees say they have an unhealthy relationship with work, one that impacts their physical or mental health negatively.

Few employees are flourishing: Only 27% of knowledge workers say they have a healthy relationship with work. India leads with 50% of employees saying they have a healthy relationship with work, while only 28% of employees say the same in the United States, and Japan lags far behind with only 5% of employees saying their work relationship is healthy.

What unhealthy looks like: 55% of employees say they struggle with self-worth and <u>mental health</u>, and report feeling like a failure. More than 60% say they struggle with their <u>physical health</u>—poor sleep, exercise, and eating habits.

This impacts the quality of work: 76% of people with an unhealthy relationship with their work consider leaving the company, 39% say they are disengaged, and a third are less productive.

Employees are willing to take a pay cut for happiness: 83% of employees said they'd be willing to earn less to be happier. Specifically, they'd give up 11% of their salary to work somewhere where employees are engaged and leadership is emotionally intelligent, and they'd give up 13% of their salary to work where or when they want.







Burnout For Most





'Burnout: The New Pandemic'

- Expectations are higher than ever, while money, support staff and even basic rest and recuperation have not kept pace
- Burnout affects decision-making skills, memory, the ability to focus, and fine motor control
- A fix: "Structural focus on employees' well-bring, clear processes and workflows, and a commitment to organizational justice"

Article

'People at Increased Risk of Burnout Due to More Demanding Workplace'



Article

- A 'perfect storm' for work intensity: worker surveillance tech, unsustainable targets, staff shortages, low pay, excessive workloads
- 40% required to do more work or spend time out of contracted hours
- Women more likely to feel exhausted in overrepresented areas of education, health care, social work

'State of the Global Workplace'

- Majority of world's employees are 'quiet quitting'
- Employee stress at record high
- More than half of us are jobseeking elsewhere
- Engagement matters more than where we work



We're All Screwed



- Health and the climate are inextricably linked, and today the health of billions is endangered by the climate crisis.
- Climate change is undermining not just the health of our planet, but the health of people everywhere - through toxic air pollution, diminishing food security, higher risks of infectious disease outbreaks, extreme heat, drought, floods and more.
- Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year from malnutrition, malaria, diarrhea and heat stress, according to the World Health Organization. And by 2030, the direct health costs caused by climate change are estimated to be between US\$2 billion and 4 billion a year.
- Climate change also exacerbates many social and environmental risk factors for mental health. Exposure to extreme weather events, displacement, famine, malnutrition, anxiety and distress associated with climate change are all contributing to mental health issues.

United Nations Climate Action















Water

Water and clima

inextricably linked

Learn more about ho limate change affect the world's wate

hange are





















Greenwashing s an obstacle to ackling the clima

Channel Your Anger

The New York Times

'Don't Shut Down Your Anger. Channel It'

According to research published this week in the "Journal of Personality and Social Psychology," anger is more helpful at motivating people to overcome obstacles and meet their goals than a neutral emotional state.

The researchers found that anger helped the students solve more puzzles. When they were asked to play a challenging computer game and it was rigged to be nearly impossible to win, this angered the students. But in those moments, they moved faster and their reaction time decreased. The other experiments also showed that anger could be beneficial.

"For a long time, there was this idea that being positive all the time was a life well lived, and that's what we should strive for," Dr. Lench said. "But there's more and more evidence that it's actually a life that's balanced by a mix of emotions that seems to be more satisfying and positive long-term."

Many of us have been taught to push away our so-called negative emotions and focus on the positive. But experts say that being relentlessly positive and leaning on happy platitudes, also known as "toxic positivity," can harm us.

Venting can feel good, but it doesn't generally produce solutions, Dr. Kross said. Try to get social support from people who are objective and can help reframe your circumstances.

<u>Article</u>

Righteous Anger



Righteous indignation, also called righteous anger, is anger that is primarily motivated by a perception of injustice or other profound moral lapse. It is distinguished from anger that is prompted by something more personal, like an insult.

Aristotle considered righteous indignation as a virtue

In some Christian doctrines, it is considered the only form of anger which is not sinful. Article

P AMERICAN PSYCHOLOGICAL ASSOCIATION

'Anger Has Benefits'

Across studies, anger compared to a neutral condition resulted in behavior that facilitated greater goal attainment on tasks that involved challenges.



Sad Isn't All Bad

'It's Okay to Feel Sad'

- Everyone's situational sadness is *not* chronic clinical depression
- Sadness is a normal part of everyone's ups and downs
- We can learn to manage sadness
- Acknowledge your sadness and the cause
- Sadness can prompt choices for improvement

Better Health Channel





Inside Out Joy / Sadness / Fear / Anger / Disgust Pixar / 2015





And it feels so good to hurt so bad And suffer just enough to sing the blues <u>Sad Songs Say So Much</u> Bernie Taupin / Elton John

Love Heals Us



(EE)
1

The University of Texas at Austin UT Health Austin

'The Surprising Health Benefits of Love'

- You don't have to be in a romantic relationship to benefit from love
- Increases life expectancy
- Maintains healthy heart
- Lowers blood pressure
- Decreases anxiety
- Reduces stress levels
- Eases chronic pain
- Improves sleep
- Helps the gut
- Reduces depression

Article



'The Incredible Benefits of Pets & Plants on Our Health'

- Lower blood pressure
- Reduced stress
- Lower chance of heart disease
- Better and faster recovery after hospital stay



How to Fix Earth

'How to Unscrew a Planet'

Bill Weir, CNN Chief Climate Correspondent

- 117-billion people who have ever lived have created tech miracles and screwed up natural law. Big Time.
- Salvation perhaps in removing carbon from in sea and sky; solar travel (aviation, boats, cars); climate intervention; global awareness of what works.
- Baleen whales and their waste in near extinction created starved ocean deserts. Trial of artificial whale poo made from volcanic ash, rich in nutrients (nitrates, phosphates, silicates, iron). In four days, phytoplankton; five days after that, it's full of fish!



YouTube

Transcript





A new climate change report offers something unique: hope

Electric vehicles and solar power are growing quickly and offering hope the world could still meet climate change goals. **Read in <u>NPR</u>**



Health for Body & Mind

'Suddenly, It Looks Like We're in a Golden Age for Medicine'

- 'We may be on the cusp of an era of astonishing innovation
 the limits of which aren't even clear yet'
- Limitless horizon for Crispr-powered therapies and cures rewriting the code of life
- Vaccines for world's most infectious diseases, cancer treatment, weight loss
- You can't imagine what we'll see over the next 30 years the pace of advancement is in an exponential phase'

The New York Times Magazine



Article



Electronic Energy Migration in Microtubules ACS Journal Article

Researchers:

R. Penrose, Nobel Physicist S. Hameroff, MD J. Tuszynski, Physicist 'Your Consciousness Can Connect With the Whole Universe, Scientists Say'

A recent follow-up (2023) experiment suggests consciousness is a quantum wave process facilitated by microtubules in nerve cells of the brain, that connects us with the rest of the universe. Like every quantum wave, it has properties such as superposition (the ability to be in multiple places at the same time) and entanglement (the ability for two very distant particles to join).





Article

- Global Trends the Next ~20 Years 'A More Contested World into 2040'
 - Need to adapt and bridge divisions, tensions, imbalances, fragmentation, disequilibrium
 - Rapidly aging and contracting populations
 - Newer populations wellinformed and express demands
 - Rise in democracies and new models of governance
 - High quality, low-impact living
 - Technological divide

The NIC's National Intelligence Officers founded 1979 — drawn from government, academia, and the private sector — are the Intelligence Community's senior experts on a range of regional and functional issues.



Global Trends Report



How the World Keeps Getting Better

23 Charts & Maps that Show the 'World is Getting Much, Much Better'



<u>Article</u> by Dylan Matthews / Vox.com

Extreme Poverty Has Fallen

Extreme poverty is defined as living with per capita household consumption below 1.90 international dollars per day (in 2011 PPP prices). International dollars are adjusted for inflation and for price differences across countries. 60% 50% Sub-Saharan Africa 40% 30% 20% World 10% Latin America and the Caribbean East Asia and Pacific Middle East and North Africa 0% 1995 1987 1990 2000 2005 2010 2013

Share of the population living in extreme poverty, by world region

Our World in Data

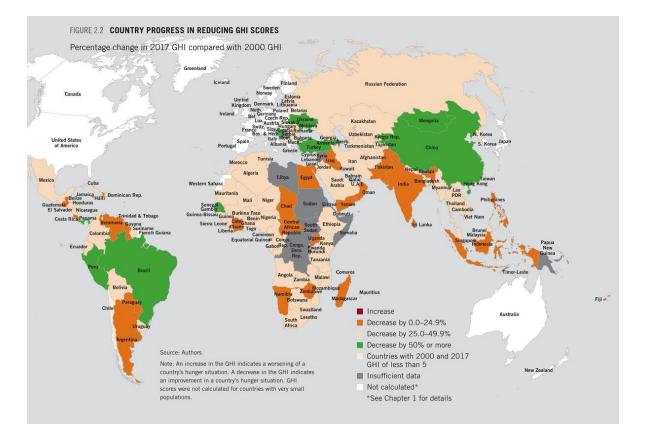
Source: Share of the population living in extreme poverty by world region - PovcalNet World Bank Note: Consumption per capita is the preferred welfare indicator for the World Bank's analysis of global poverty. However, for about 25% of the countries, estimates correspond to income, rather than consumption. Our/WorldInData.org/extreme-poverty/ • CC BY-SA

Subsistence living on less than \$1.90 a day:

1987: **35%** 2021: **9%**

Hunger Is Falling

Between 2000 and 2017, hunger has decreased by half or more in green countries

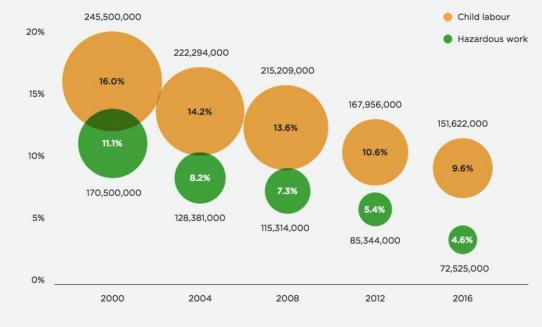


Child Labor on Decline

Reduction of 40% in child labor at hazardous work

Children's involvement in child labour and hazardous work, 2000-16

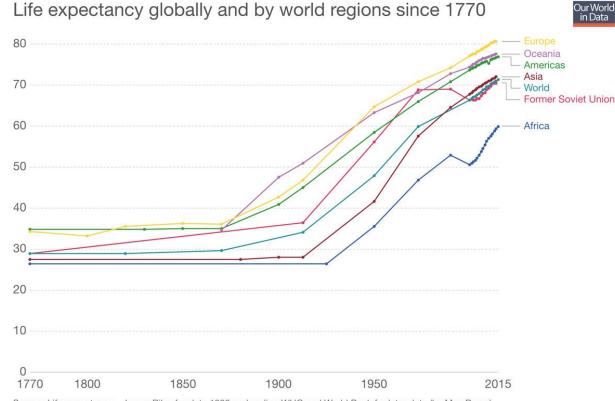
Percentage and absolute number of children in child labour and hazardous work, 5-17 years age range, 2000 to $2016^{(o)}$



Note: (b) Bubbles are proportionate to the absolute number of children in child labour and hazardous work.

Life Expectancy is Rising

Global life expectancy increased by six years between 1990 and 2016.

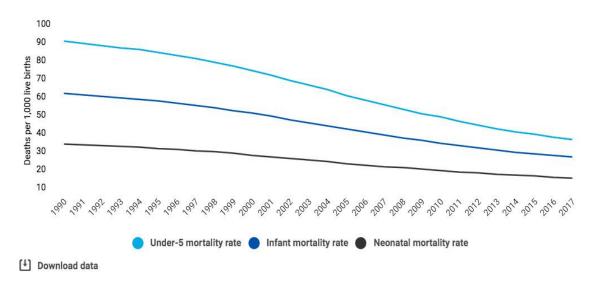


Source: Life expectancy – James Riley for data 1990 and earlier; WHO and World Bank for later data (by Max Roser) OurWorldInData.org/life-expectancy/ • CC BY-SA

Child Mortality is Down

The under-five mortality rate has fallen by more than half since 1990

Child deaths by age 5 have fallen by half since 1990

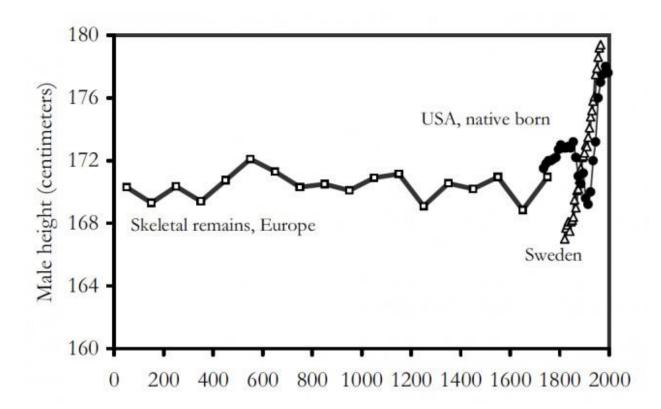


Global under-five, infant and neonatal mortality rates, 1990-2017

Source: United Nations Inter-agency Group for Child Mortality Estimation (UN IGME) 2018

People are Getting Taller

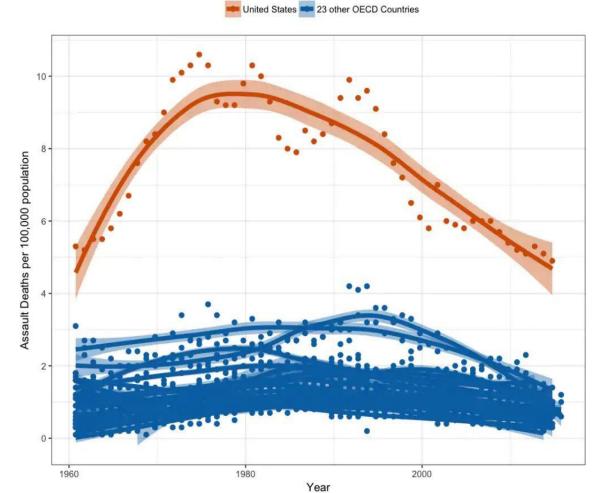
Better nutrition and living standards have contributed to human height shooting up since the industrial revolution



Homicide Rates Have Fallen

Assault Death Rates in the OECD, 1960-2015

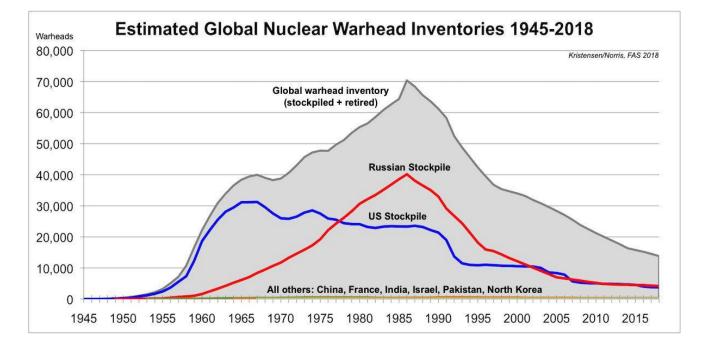
Sharp decline in homicides per 100,000 from 1980 - 2015



Data: OECD. Excludes Estonia and Mexico. Figure: Kieran Healy http://kieranhealy.org

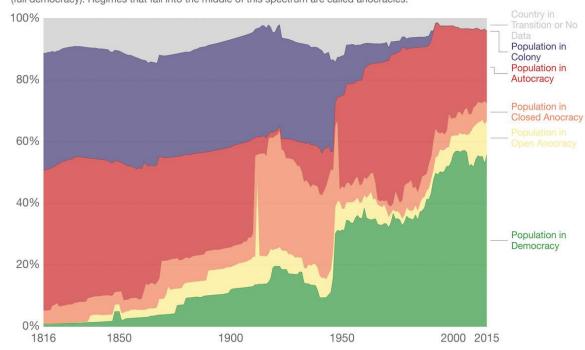
Global Nuclear Weapons Declining

Stockpiles peaked in 1986 at 70,300 warheads; to sharp drop towards 2018



More People Live in Democracies

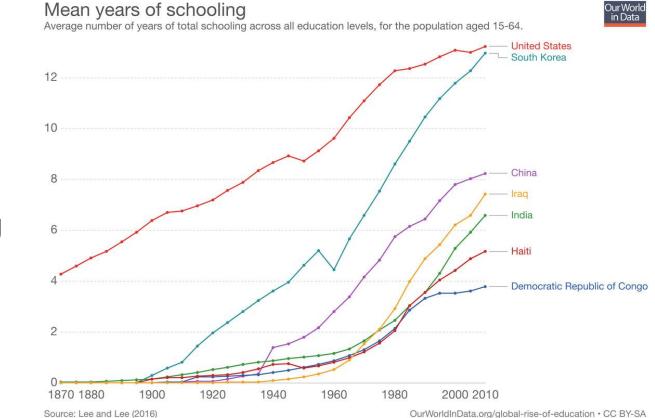
Percentage of democratic countries has climbed to record highs since 1950



Number of world citizens living under different political regimes The Polity IV score captures the type of political regime for each country on a range from -10 (full autocracy) to +10 (full democracy). Regimes that fall into the middle of this spectrum are called anocracies. Our World in Data

Source: World Population by Political Regime they live in (OWID (2016)) OurWorldInData.org/a-history-of-global-living-conditions-in-5-charts/ • CC BY-SA

More People Go to School for Longer



Education rates rise swiftly in many developing nations

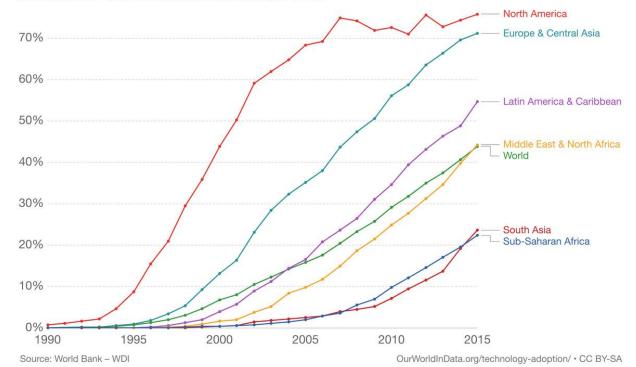
Access to the Internet is Increasing

Share of individuals using the internet

Our Worlc in Data

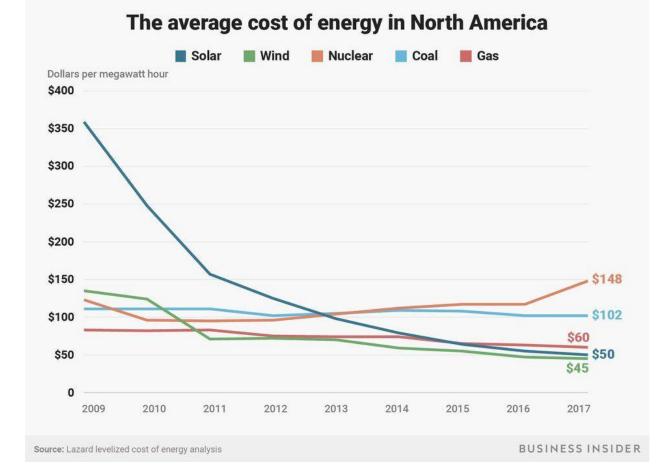
Share of individuals using the internet, measured as the percentage of the population. Internet users are individuals who have used the Internet (from any location) in the last 3 months. The Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV etc.

Internet access rises rapidly in developed and developing nations



Solar Energy is Getting Cheaper

Solar and wind power now cheaper per megawatt hour than gas or oil



A New 'Useless Class'

66

By 2050 a new class of people might emerge the useless class. People who are not just unemployed, but unemployable



"Economically redundant people might spend increasing amounts of time within 3D virtual reality worlds, which would provide them with far more excitement and emotional engagement than the 'real world' outside."

Technology

The meaning of life in a world without work

As technology renders jobs obsolete, what will keep us busy? Sapiens author Yuval Noah Harari examines 'the useless class' and a new quest for purpose



humans become less useful. Photograph: Jeff J Mitchell/Getty Images



Our New Purpose

'Instead of taking our jobs, what if AI just lets us give our lives more purpose?'

Fast Company

Emerging technology offers the real potential for humans to achieve a post-professional era where we are not defined by our jobs, but a new purpose to enhance the human condition and the world.

The focus today should be what we can do now to make sure the path is set towards an optimistic future.' 'In a future where machines could replace our need to contribute to the labor market, there is potential for us not to be defined by our jobs, but by a newer purpose to enhance humanity and the planet.

The more "productive" we become in a shorter period of time, the more time we can dedicate to purposedriven endeavors that prioritize planet and people over profit.'

BY CORMAC Ó CONAIRE





'They Know Social Change is Coming'

'... a shift in worldview from the autonomous individual of hypercapitalism and social Darwinism to a recognition of both the natural and social worlds as orchestras of interdependence, of survival as an essentially collaborative and cooperative business.'

'Disciplines from neuropsychology to economics have shifted their sense of who we are, what works, and what matters.'



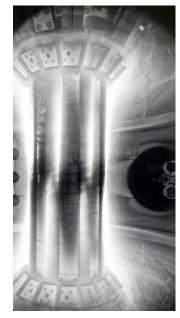
Rebecca Solnit

The Guardian

A 'love ethic' includes 'a global vision wherein we see our lives and our fate as intimately connected to those of everyone else on the planet' - bell hooks



Cheap Abundant Power



Nuclear Fusion Edges Toward the Mainstream

'You'd be surprised how much energy is in a beam of light."" – Prot in K-Pax



The <u>Manatee Energy</u> Storage Center able to deliver 900 MWh of energy – enough to power 329,000 homes for two hours.



A solar panel in space could beam energy anywhere on Earth



Wireless 5G Power Grid

Cell phone providers could start beaming out electricity to power all kinds of small electronics, from delivery drones to tracking tags for pallets.



'Insanely cheap solar energy ... It's a fundamentally different world' *The Guardian*

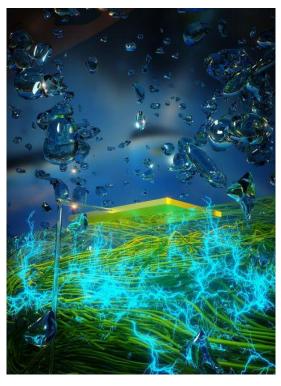
'Electricity Out of Thin Air'

Scientists in Amherst, MA are developing a new technology that will use the moisture from the air to create a charge.



The current Air-gen device can power small devices. Photos courtesy: UMass Amherst / Yao and Lovley labs.





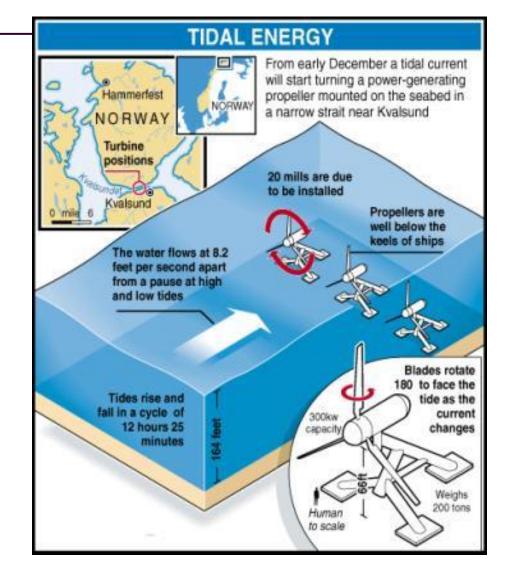
Graphic image of a thin film of protein nanowires generating electricity from atmospheric humidity.

Tidal Energy: Power from the Sea

In a novel use of clean energy, the world's most northerly town will soon be the first to get electricity from a sub-sea power station run on tidal currents tugged by the moon.

Gigantic forces in the oceans -- waves, currents and tides -have often proved too costly or awkward to harness, compared to wind or solar power in global efforts to cut reliance on nuclear power or on fossil fuels blamed for global warming.

This Reuters graphic shows how giant underwater propellers will use currents to create electrical power.



<u>Article</u>

Wind Energy Takes Flight

The global wind energy industry is expected to enjoy continued strong growth in coming years with total installed capacity seen to be ever increasing. - Reuters







Giant wind turbines dot the sky at dawn near Honrrubia, Spain

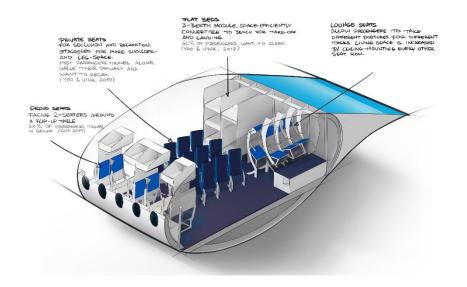
An offshore wind turbine off the coast of Fukushima, Japan

Flying V Plane Planned for 2040

A blended wing body aircraft, with no distinct wing and a body structure like more conventional aircraft, reducing drag and fuel, powered by electric fans

- Arstechnica





Air Cars & Taxis



'The new electric aircraft use one-fifth the energy of conventional helicopters. Unlike helicopters, they will be largely inaudible from the ground and have multiple rotors and backup systems, making them much safer.'

Article Che New york Eimes





'Flying cars will be a reality by 2030, says Hyundai. Urban air mobility could free up congestion and help with emissions in cities.'

<u>Article</u>



Solar Floating Home



WaterNet 100: Ecological floating habitat

- * 1,000 square feet
- * 12 meters in diameter 4 meters tall
- * Roof topped with 60-square-meter photovoltaic array generating 4kWp
- * Suitable for home, office, exhibition space, shop, café ...
- * Nearly 100% recyclable







<u>Article</u>

Printed Homes

- Printed on site using local clay
- Zero waste product
- WASP 3D printers create homes 21'x10'
- Several homes build at once using multiple crane printers













Prefab self-sustaining floating city by AT Design Office.

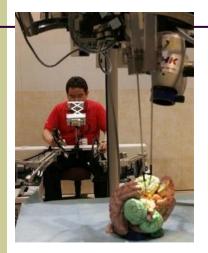
As the world's most populous nation, China has serious concerns about overcrowding in its cities. Chinese construction firm CCCC commissioned AT Design Office to create an attractive floating city solution that took the form of a sprawling buoyant landmass made from prefabricated hexagonal modules. The self-sufficient island is designed to be zero-carbon, energy efficient, and would include vertical farms and fish hatcheries to produce its own food.



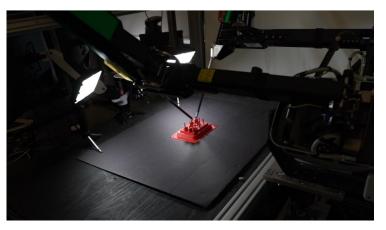
Harvest City by Tangram 3DS and E. Kevin Schopfer

When Haiti was hit by the devastating 2010 earthquake, architect E. Kevin Schopfer and Tangram 3DS developed an innovative floating city design to bolster the country's recovery. The collection of artificial islands, called Harvest City, envisioned a new Haiti made up of tethered floating modules. The center of the floating city would be dedicated to urban functions like office space, education, and light industry, while the outer areas comprised agricultural lands.

Surgical Robots



A researcher at Tokyo University operates a surgical robot with microsurgical hands that can operate effectively in a deep surgical field.





'Despite the lack of evidence that robotics is better than true open surgery ... the shift to robotics has already occurred.'

<u>Article</u>

'Doctors could perform surgery across distances far greater than the width of the operating room — from miles or more away, perhaps, helping wounded soldiers on distant battlefields ... operating on people on the moon.'

Robot Performs First-Ever Surgery Inside Human Eye

"Even highly skilled surgeons can cut too deeply and cause small amounts of hemorrhaging and scarring, potentially leading to other forms of visual impairment ... The pulsing of blood through the surgeon's hands is enough to affect the accuracy of the cut."

-- NBC News



The technique is being called "a vision of eye surgery in the future."

Article



Bionic 60/20 Eye Implants

- Bionic implant can be injected into eye, correcting vision and allowing user to see 60' clearly from 20'
- Remedies cataracts





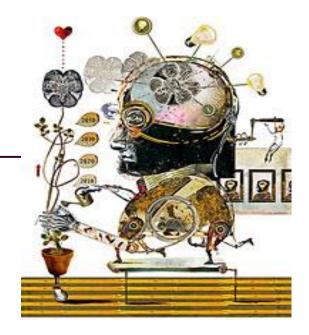


Ocumetics' Bionic Lens

 Bionic implant potential Wi-Fi and Bluetooth interactivity

Kurzweil's Singularity

- A couple decades from now, a superior intelligence will dominate and life in an altered form that we can't comprehend in our current, limited state.
- Human beings and machines will so effortlessly and elegantly merge that poor health, the ravages of old age and even death itself will all be things of the past.
- A great leap will occur when industries like medicine and energy start moving at the same exponential pace as I.T.



- Rapid bursts of innovation and may pave a path to a 700-year lifetime.
- By the 2030s, most people will be able to achieve mental immortality by similarly backing up their brains, Mr. Kurzweil predicts.

"Merely Human? That's so Yesterday" / New York Times

Brain Content Avatars

"By 2045, mass production of lifelike, low-cost avatars that can be uploaded with the contents of a human brain, complete with all the particulars of consciousness and personality." ~ New York Times

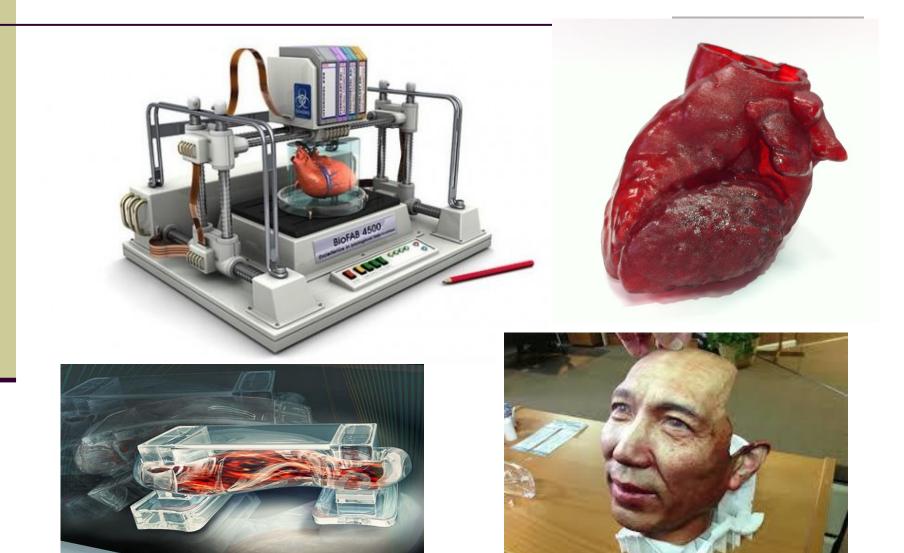




Robotic model of head will use 36 motors to reproduce facial expressions and voice.



3D Printed organs, flesh, faces ...



Quantum Computing Is Coming

Article

- With transmons and entanglement, scientists strive to put subatomic weirdness to work on the human scale
- In three minutes it performed a highly technical and specialized computation that would have taken a regular computer 10,000 years





-NY Times

LifeStraw



- At any given moment, about half of the world's poor are suffering from waterborne diseases, of which over 6,000 – mainly children – die each day by consuming unsafe drinking water.
 - LifeStraw® offers relief from the waterborne diseases such as Typhoid, Cholera, Dysentery and Diarrhea. A personal mobile water purification tool, designed to turn surface water into drinking water.
- Price: ~\$3.00 each. From Denmark.

Designs That Help the World's Poor



A 20-gallon rolling drum for transporting water.

Homes in a Bottle



Matthew Naples and Peter Zummo designed bottles that, once empty, snap together for housing in developing countries.





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