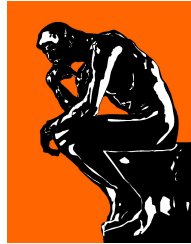


# MEANDERING SOBRIETY

Quan-Hoang Vuong

AISDL



# CONTENTS

[Title Page](#)

[Meandering Sobriety](#)

[MEANDERING SOBRIETY](#)

[Special sale: food for thought](#)

[Purposes, audiences and uses](#)

[About the Author](#)

[SCIENCE SOBRIETY](#)

[The problem of a problem solver is... the problem](#)

[A mathematician and his rest point](#)

[Cheapest scientific material ever!](#)

[Humans' alcoholic pride damaged](#)

[The devotion of the lazy](#)

[Forget smartphones; we have smart cells](#)

[Trust no one, not even yourself](#)

[Cool orangutans running around](#)

[Masters of hoaxes](#)

[Say yes to hardship](#)

[Beware the hive mind](#)

[Negligent homicide of birds](#)

[Primitive willpower](#)

[Invading in moderation](#)

[New brain, new you](#)

[Chaos and creativity](#)

[Get high for science](#)

[BUSINESS INTELLIGENCE](#)

[The bittersweet victory of humans over AI](#)

[Divinatory UAV](#)

[Surprise mechanics](#)

[Yijing-style strategic planning](#)

[The long-lived technology](#)

[The One](#)

[Not everything about academics is... useless, after all](#)

[A structure needs a structure](#)

[Information versus data needs: water, water... but no drop to drink](#)

[ChatGPT, help!](#)

[Will a martingale process help with the sales?](#)

[MEANDERING THOUGHT](#)

[A beautiful logic of problem-solving](#)

[A little underemployed, the Tversky way](#)

[Thinking at the speed of the tongue](#)

[Another shade of laugh](#)

[Old versus new](#)

[Ageless data](#)

[His ideas aren't worth a penny; mine is](#)

[Fighting against freedom also requires blood](#)

[Honoring honesty](#)

[Advice straight from the heart](#)

[Secret medicine](#)

[Glands of love](#)

[Oh man... traffic jam!](#)

[The increasing cost of reforestation](#)

[Lies-powered ethics](#)

[Miraculous pledge, more miraculous belief](#)

[A moment of meandering sobriety](#)

[When the wisdom of Sheep shines](#)

[Starving nature for gluttonous “nature-loving” humans](#)

[References](#)

# MEANDERING SOBRIETY

---

*(Third edition, with additions)*

Quan-Hoang Vuong



Hanoi, Vietnam

December 12, 2023

# MEANDERING SOBRIETY

Quan-Hoang Vuong

*The Centre for Interdisciplinary Social Research, Phenikaa  
University*



Copyright © 2023 The Author

Cover illustration: Bui Quang Khiem

# SPECIAL SALE: FOOD FOR THOUGHT

*(I know this does not sound like a Preface, but it is.)*

Thinking is a fundamental activity of our species – those that give names to other creatures and call themselves humans. Textbooks tell us that there is about 1.2 kg of matter called the brain inside the human body. It sounds small but actually is proportionally the biggest among all animals on Earth.

I became more aware of thinking at around 5th grade upon hearing about an ancient paradox. It can be summarized as follows.

□

Once upon a time, there was a stupid king. In his kingdom lived a sage who was highly respected for his intelligence. The King did not appreciate this fact. Maybe the Sage made fun of the King's intellect, but I am not so sure. Anyway, one day, the King summoned the Sage, intending to kill him.

The King said, "Wise man, I heard you earn a living by thinking and arguing. Now, I give you two options to die."

The Sage said, "Please tell me the choices, Your Majesty."

The King continued, "You live by your tongue, so I will let you say one sentence before you die. If what you say is true, you will die by hanging. If what you say is false, you will die by beheading."

Little did the King know that this was a stupid order. After a short while, the Sage confidently spoke his "last words", which actually were what saved his life:

“Your Majesty, I am about to be beheaded!”

□

As a “wild animal” going out into life from a young age, my brain spent a lot of time and energy looking for food. Now that I have become older, my body no longer needs so much sustenance. However, my mind craves a different type of nourishment: food for thought.

Food for thought can directly lead to food (on the table). My main job as a scientist exemplifies what I have just stated. Maybe we were wrong. Maybe it has been “thought for food” all along, like in such a sequence as:

TFFTTTTFTFFTTFFFT...

In the hyper-chaotic infosphere today, we are surrounded by the noises of information, not only as wavy shores or waterfalls but also mega-tsunamis through Twitter, Facebook, TikTok, Instagram, Youtube, etc. More than ever, tranquility and calmness are necessary. Like what you have seen in wilderness video clips, predators such as lions, bears, and alligators act lightning-fast when catching prey. But when food is served, the natural world returns to its peaceful, soothing silence.

This short book is in its own tidy infosphere, where each little story is also brief and self-contained. Despite this small appearance, I hope the content inside carries the value of tranquility and life observation. The book is petite, but I’m pretty sure it’s not malnourished. A not-too-small detail is that the way the content was shaped and distilled reflects some innovations of mine and my research team: the mindsponge theory, a new theory of serendipity, the *bayesvl* R package, the BMF analytics, as well as other experiences from working in the field of science. After all, scientific works are my main source of food (before this book sells well – if it does).

Welcome to the priceless sober moments — with a chicken burger price tag!

I hope this book will bring readers some moments of calmness, peaceful smiles, and maybe a couple of good laughs.

□



*\*Acknowledgments:* I thank my family and colleagues who have helped me survive, grow, work, and complete this book: Dam Thi Thu Ha, Vuong Thu Trang, Vuong Ha My, Nguyen Minh Hoang, Ngo Bao Chau, La Viet Phuong, Nancy K. Napier, Nghiem Phu Kien Cuong, and Bui Quang Khiem.

December 12, 2023

Hanoi, Vietnam

Quan-Hoang Vuong

# PURPOSES, AUDIENCES AND USES

## *Purposes*

This book is written to promote and advocate nuanced thinking in everyday life as well as in professional activities, which may require deeper thinking or even complex thinking like the so-called “devil’s advocate.”

The stories try to achieve the goal mentioned above by encouraging information processing, taking into account the co-existence of the world’s diverse cultural value systems.

In a world of rapidly and overwhelmingly flowing information quanta, which often generates chaos and risk-inviting decisions, we may wish to attain better sobriety and calmness. These qualities help us see more useful and valuable patterns of information, data and solutions we seek to solve our issues.

In short, the book helps show that thinking is worth... thinking about!

## *Audiences*

The content of the book sees no limits concerning audiences. It has three parts to enable me to better structure the content with some required focus only.

Specifically, the first part mainly uses ideas from real-world scientific research evidence, representing my lifelong interest in academic information and insights. I think sharing them benefits wider audiences than academics only. The second part presents snippets from the business world, but their insights can also be useful for both academics and general audiences. Finally, the last part contains stories from daily life. It has no specific target

information, just stories and information that might be fun and worth thinking about.

### ***Uses***

This book can be a reasonable choice for anybody who likes reliable information and fun moments while working on or thinking about information processing, cultural values and the like.

Situations and outcomes described in the book might make a reader think, then smile or laugh. That is the first use: consumption of information.

But more than normal consumption, a reader can also distill the stories to work out key mathematical elements, as George Pólya (1945) presented: specialization, generalization and analogy.

The final use is an informatics-like concept: reusability (programmers like this very much). For this, I will say a little more. Mark Twain is loved by so many people not just for his great works but also for anecdotes relating to his sense of humor, smart (and very fast) responses, and getting himself out of uncomfortable situations without sacrificing his dignity. The following anecdotes, attributed to Mark Twain, exemplify this.

*Anecdote 1.* In a talk about literature, Mark Twain and another writer made speeches about their writings, philosophies of life, and future works. At one point, the other writer wanted to say a few sarcastic words about Mark Twain. He said that, unlike Mark Twain, who kept talking about money, commercial values, and royalties, he would spend time focusing on literature's humanities and ethics issues. He wanted to tell the audience that he cared about humanities and ethics, so he was not a mediocre writer paying attention only to materialistic gains. Mark Twain calmly responded in no time: "It turns out that this gentleman and I share the philosophy. We only talk about things we lack."

*Anecdote 2.* Mark Twain entered a party room and sat with several unfamiliar people at a table. He politely saluted the only (seemingly classy) lady among diners, saying it was fortunate for him to sit beside a beautiful and noble lady. Instead of returning a polite welcome, the lady said: "Thank you, but unfortunately, I cannot say the same thing about you." Mark Twain still

calmly responded: “Madam, I believe you can do the same thing as I just did: Tell a lie.”

It is hard to imagine that Mark Twain could respond so efficiently, effectively and elegantly without a very efficient information-processing mechanism. I hope investing in the book will earn the reader some dividends in a not very distant future.

# ABOUT THE AUTHOR

Quan-Hoang Vuong, Ph.D. (Université Libre de Bruxelles, 2004), is Distinguished Scientist at Hanoi-based Phenikaa University. Dr. Vuong spent many years in industries, including ING Barings and World Bank/IFC. During 2003-2015, he became an entrepreneur, starting several ventures, including the first online domestic entrepreneur community, which he successfully sold during 2008-2009. His current private business is Vuong & Associates, an advisory firm providing boutique analytics-based services.

In 2017, he founded the Centre for Interdisciplinary Social Research at Phenikaa University and has since directed its research operations full-time. He also serves as an associated member of the Vietnam Institute for Advanced Study in Mathematics and the National Foundation for Science and Technology Development (NAFOSTED), the science funder of the government.

Dr. Vuong has published over 200 academic papers and books with leading publishers. He was awarded the National Book Prize (2008) and the National Journalism Prize (2011). A special event occurred in 2021 when his co-author in one of Vietnam's most-read books in economic history became the Vietnam Prime Minister, Prof. Pham Minh Chinh.

In 2019, he and his engineering colleague La Viet Phuong successfully developed the *bayesvl* R package for implementing MCMC simulations, leading to various contributions to interdisciplinary research in the humanities and social sciences. The *bayesvl* package was later approved and published by the R Core Team on CRAN, becoming an official R library. The open-source program has since enabled numerous researchers to take on their research problems.

# SCIENCE SOBRIETY

# THE PROBLEM OF A PROBLEM SOLVER IS... THE PROBLEM

This essay, originally written on January 4, 2016 (i.e., before all of the pieces presented in this book), reflects my thinking through research and professional work with the academia, politics and business communities. Whether right or wrong, it's up to your judgment, but I am honestly writing what I observe and think. This piece serves to start the journey.

□

We are all problem-solvers of some sort. We solve problems to earn a living, get promoted, show that we are smart and deserve colleagues' respect, and contribute to human progress. Yes, problem-solving is important; the better solution-maker we are, the brighter future we expect.

But we are not such good problem solvers for simple reasons: it is hard to define a genuine problem.



*Illustration:* Incompetent problem-solver

First, we do not have a real problem to solve. Nearly 20 years ago, when I encountered the Black-Scholes problem involving second-order partial differential equations, I got stuck for a while. So I rushed to consult with my uncle — a nuclear physicist — for he had been known as a good problem-solver. He helped me learn how to get over them. Done. Then he said:

“Ah, these guys are tricky. They tweaked the long-standing problem (which had been perfectly solved) to show that a close connection exists with their problem in economics. That’s all they did.”

So, that became clear to me: the power of defining the problem. The “guys” my uncle — a super-smart superman-physicist — mentioned are Nobel laureates in economics with time-tested solutions so well known that later on, all Texas Instrument had to install a ready-built solution in every electronic calculator for finance and business students...



My super-smart uncle did not have a genuine problem to work on, so he continued living as a Vietnamese university physics professor, making a living by teaching computer programming skills. (He did make awesome physics discoveries in the Soviet Physics school of thought, but that was back in the 1960s and early 1970s).

Second, we choose the wrong problem to work on. In Rene Descartes' philosophy of science, we know complex problems should be able to be decomposed into smaller and less complex (but interconnected) ones so that problem-solving will become less challenging and more manageable. Everyone has to do just that. So, by "wrong," I do not mean the problem we choose is NOT the right one, but how we decompose the complex one is inefficient and ineffective. In short, we are not capable of deriving a set of smaller, less challenging and less complex problems to solve.

In fact, while trying to derive smaller and less complex problems, some of the smartest even make them harder to solve. While in high school, we attended a class for the gifted who were supposed to learn lots of math to compete in the city of Hanoi and then the national competition. Some of my classmates were brilliant. The most brilliant faced exactly the same problems I just mentioned: They complicated the original problem by using the wrong way of deriving small problems.

So one of our math teachers at the day was angry to conclude:

"The smart make the most difficult problem easier to solve. And stupid ones make the easiest problem harder to solve. Unfortunately, one of the stupid is my nephew."

Yes, his nephew was in our class at the time.

Third, we fool ourselves that we have no problem with our intellectual capacity, skills, perseverance, or all other calibers. That means we assume we have no problem with problem-solving at all. In fact, we all do.

Watch a man being interviewed by a television reporter. Everyone tries to say

something, hopefully showing his great intellectual qualities, without knowing that his answer betrays him so bitterly. The same goes for our illusion of problem-solving skills.

Those illusions impede us from seeking collaboration, true learning and true working. A kind of self-indulgence that brilliant scientists try to stay away from, but the rest want to embrace.

# A MATHEMATICIAN AND HIS REST POINT

The two following stories are connected through the lens of mind exploration.

The first story was told by Kelsey-Sugg and Morrow (2022). It is about Dr. John Francis – often called by the title “Planet Walker” due to his journeys on foot for 22 years. But he has an even more special feat: choosing to communicate with “silence” for 17 years.

ABC News reported that the man did not recognize his voice the first time he spoke again. He looked around to find who was speaking and, in a peculiar way, thought, “There’s someone behind me saying what I’m thinking”.

And then, he realized that he was speaking and started laughing at this discovery.

In the case of John Francis, it all started with the following problem. As an environmentalist, he tried to urge people to act when he witnessed the San Francisco Bay environmental disaster in 1971. But words alone were not effective. His walking for environmental purposes led to controversy, skepticism, quarrels, etc., which were also ineffective. And then, it was a moment of serendipity when John decided to try “a day of silence” – or, in his own words: “I’m just going to shut up for the day”. Unbeknownst to him, the decision to try it for one day led to a complete change in the perception of the value of silence –to stop making noise. That one-day experiment turned into a long silence.

This is a great example of finding the value of silence after deciding for yourself to stop the “noise production”.

Now, let's talk about the second interesting story – a conversation between brilliant minds.

The person who told me a few years ago was an “authoritative source” – Professor Ngo Bao Chau, the French-Vietnamese mathematician who won the Fields Medal in 2010. Prof. Chau has an uncle who made great contributions to Vietnamese mathematics since the early days of the nation's science development: Prof. Ngo Thuc Lanh (1923–2019).

One day, Prof. Chau returned to work in Vietnam and visited his uncle, who was quite old then. At one point, he was severely deaf. In today's world, the use of hearing aids is no longer a strange thing, and the cost is no longer an issue. However, it seems Prof. Ngo Thuc Lanh did not want to use it.

After talking for a while, what left a deep impression on Prof. Chau was that his uncle opened his eyes to a new realm of value. It was very different than how people usually try to convince others. Prof. Lanh had that kind of persuasion with just one sentence:

“... Being deaf is truly a blessing, my dear Chau!”

This is the joyful cheer of a person being freed from the chains of the compulsion to “consume” artificial noise.

This shift in value, through the lens of the dynamic system of the mindsponge theory, can now be explained clearly, using both logical reasoning and analytics. A binary value, 0 or 1, is favorable for usual perceptions (such as true or false, good or evil, etc.). However, cultural values do not change like that. Rather, each is a continuum. The rate at which the potentiometer turns to create changes depends on factors such as knowledge background, impactful events, serendipity moments, and the proactive manner of conducting feedback-seeking experiments.

Nonetheless, social phenomena with certain depths in terms of their cultural value, when viewed through the lens of the mindsponge theory, become very interesting and often contain many underlying educational implications.

The old mathematician died a few years later.

The story makes me think that he had found peace before he rested in it.

# CHEAPEST SCIENTIFIC MATERIAL EVER!

This is an old story from 2022, but every time I read it again, I laugh.

According to a CNN report, renowned French physicist Étienne Klein shared some scientific information with his nearly hundred thousand followers on Twitter as follows.

“Picture of Proxima Centauri, the nearest star to the Sun, located 4.2 light years away from us. It was taken by the James Webb Space Telescope. This level of detail... A new world is unveiled everyday.”

This astrophysicist was clearly praising the valuable image provided by the famous and hideously expensive James Webb space telescope. The mentioned scientific material introduced to the community is the image below.



*Figure.* The space photo presented by Étienne Klein (Owoseje, 2022).

Modern science is becoming increasingly expensive, and the investment amount is enormous, according to Shkliarevsky (2019). It is a major concern of even rich countries and not just a problem of developing countries, as discussed in my article in *Nature Human Behavior* in 2018.

However, the funny thing is that Étienne Klein was actually playing a prank. He wanted to tell the fake aficionados in their pursuit of “glorious science” that the universe is not just some ecstatic pictures.

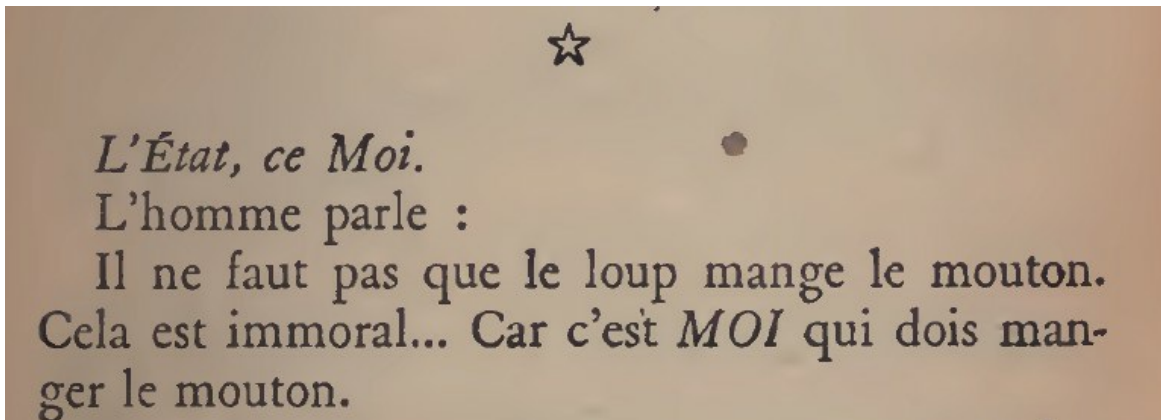
The “space” image, which many thousands of people had praised, was, in fact, the cheapest “scientific material” ever seen. Étienne Klein cut a slice of chorizo (a kind of Spanish pork sausage) and took a photo of it on a black background. That was all!

This chorizo slice was enough to make many science devotees marvel at the greatness of advanced science.

The French have good humor. And French scientists are no exception.

# A MOMENT OF MEANDERING SOBRIETY

I now borrow an extremely short piece by Paul Valéry in *Tel Quel* (1941).



The Human said:

« Il ne faut pas que le loup mange le mouton. Cela est immoral ... Car c'est MOI qui dois manger le mouton. »

Literally, the sentence means:

“The wolf must not eat the sheep. It is immoral... because I am the one to eat the mutton.”

And the Human did not say that just to sound intimidating. He meant it. Nowadays, wolves must be protected worldwide in dedicated, preserved forest areas.



□

\**Remarks:* The piece uses information from Valéry (1941) and Kuijper *et al.* (2019).

# WHEN THE WISDOM OF SHEEP SHINES

The original idea of this narrative came from a cartoon I stumbled upon on the Internet some time ago. But the writing could only be done after I had learned about the name of the Greek cartoonist who drew it, Panos Maragos, thanks to Suzanne Berger (2017).

α

Sheep have had several serious problems to deal with over the years. One issue is that Sheep have always been managed by Mr. Berger the Shepherd. Berger is grouchy and grumpy. Not to add that when he gets irritated, he bites the Sheep on their buttocks, which is incredibly upsetting and inconvenient. Berger is not likable or worthy of friendship in the caring, peace-loving Sheep community. However, Berger possesses the ability to herd Sheep.

Sheep now have the choice to select a happy future. This is a challenging decision that demands serious consideration. Furthermore, Sheep are aware of the possible prospect that Sheep will be herded, guarded, and managed by Berger again in the future. As a result, greater thought must be given to the decision. Regardless, Sheep have a viable option: elect Wolf to replace Berger as manager for the next term.

But, in the end, the Philosopher of Sheep's wisdom shows through, leading to the conclusion that can be summarized as follows:

“I think I'll vote for Wolf. That will really make Berger think.”



**Illustration:** « Je pense voter pour le loup; ça fera réfléchir le berger »

The reasoning behind this “wise” decision is presented below to help you understand its profound meaning.

1. Berger the Shepherd has been misbehaving; Sheep have officially protested about Berger’s management tactics.
2. Sheep have the option of deposing Berger.
3. Wolf is one potential replacement for Berger.
4. If Wolf is chosen to replace Berger, Berger will certainly be forced to rethink and behave more responsibly.
5. As a result, Sheep should vote for Wolf to be their next manager.

□

Do you agree with the Sheep Philosopher’s brilliant logic?

# REFERENCES

- Amamoto, R., *et al.* (2016). Adult axolotls can regenerate original neuronal diversity in response to brain injury. *eLife*, 5, e13998. <https://doi.org/10.7554/eLife.13998>
- Aravind NA, *et al.* (2022). Niche shift in invasive species: is it a case of “home away from home” or finding a “new home”? *Biodiversity and Conservation*, 31, 2625–2638. <https://doi.org/10.1007/s10531-022-02447-0>
- Backwell, P. R. Y., *et al.* (2000). Dishonest signalling in a fiddler crab. *Proceedings of the Royal Society B: Biological Sciences*, 267(1444), 719–724. <https://royalsocietypublishing.org/doi/10.1098/rspb.2000.1062>
- Berger, S. (2017). Populism and the Fate of Globalization. *Le Libellio d’AEGIS*, 13(1), 7-15.
- Caspermeyer, J. (2016). ASU faculty part of national summit tackling the lack of reproducibility in science research, a \$28 billion problem in the U.S. alone. *ASU News*. <https://news.asu.edu/20160215-solutions-biopolitics-summit-reproducibility-science-research>
- Charbonneau, D., Sasaki, T., & Dornhaus, A. (2017). Who needs ‘lazy’ workers? Inactive workers act as a ‘reserve’ labor force replacing active workers, but inactive workers are not replaced when they are removed. *PLoS One*, 12(9), e0184074. <https://doi.org/10.1371/journal.pone.0184074>
- Coral Coast. (2023). Rates. <https://www.diveawayfiji.com/rates/>
- Corrigan, H. (2019, Jun. 20). EA Defends Loot Boxes, Calls Them ‘Surprise Mechanics’. <https://www.ign.com/articles/2019/06/20/ea-defends->

[loot-boxes-calls-them-surprise-mechanics](#)

- Czechowski W, Rutkowski T, Stephan W, Vepsäläinen K. (2016). Living beyond the limits of survival: Wood ants trapped in a gigantic pitfall. *Journal of Hymenoptera Research*, 51, 227–239. <https://doi.org/10.3897/jhr.51.9096>
- Department of Justice, U.S. Attorney’s Office for the SDNY. (2023, Jan. 30). U.S. Attorney Announces Settlement Of Civil Fraud Lawsuit Against Former Hunter College Professor And Hunter College For Fraudulently Using Federal Research Funds. <http://bit.ly/3YI6iqn>.
- Dudley, R. (2000). Evolutionary origins of human alcoholism in primate frugivory. *The Quarterly Review of Biology*, 75(1), 3-15.
- Fomin, S. V., et al. (2023). Sea Otters (*Enhydra lutris*) Found in the Stomach of a Stranded Killer Whale (*Orcinus orca*) in the Commander Islands, Western North Pacific. *Aquatic Mammals*, 49(5), 462-467. <https://doi.org/10.1578/AM.49.5.2023.462>
- Gal, A., & Kronauer, D. J. C. (2022). The emergence of a collective sensory response threshold in ant colonies. *Proceedings of the National Academy of Sciences*, 119(23), e2123076119. <https://doi.org/10.1073/pnas.2123076119>
- Gibbons, M., Sarlak, S., & Chittka, L. (2022). Descending control of nociception in insects? *Proceedings of the Royal Society B: Biological Sciences*, 289(1978), 20220599. <https://doi.org/10.1098/rspb.2022.0599>
- Hoàng, V. Q., et al. (2006). Phương pháp thống kê xây dựng mô hình định mức tín nhiệm khách hàng thể nhân. *Vietnam Journal of Mathematical Applications*, 4(2), 1-16.
- Ho, M. T., Mantello, P., & Ho, M. T. (2023). An analytical framework for studying attitude towards emotional AI: The three-pronged approach. *MethodsX*, 10, 102149. <https://doi.org/10.1016/j.mex.2023.102149>
- Hochella Jr., M. F. (2005). The Cost of Science. *Elements*, 1(4), 187.

- Hockings, K. J., *et al.* (2015). Tools to tipple: ethanol ingestion by wild chimpanzees using leaf-sponges. *Royal Society Open Science*, 2, 150150. <https://doi.org/10.1098/rsos.150150>
- Hwang, F. J., *et al.* (2022). Motor learning selectively strengthens cortical and striatal synapses of motor engram neurons. *Neuron*. <https://doi.org/10.1016/j.neuron.2022.06.006>
- Jin, R., *et al.* (2023). An analytical framework-based pedagogical method for scholarly community coaching: A proof of concept. *MethodsX*, 10, 102082. <https://www.sciencedirect.com/science/article/pii/S2215016123000857>
- Keller, E. F. (1995). Science and Its Critics. *Academe*, 81(5), 10-15.
- Kelsey-Sugg, A., & Morrow, J. (2022, Sept. 8). John Francis decided not to speak for a day. It turned into 17 ‘wonderful’ years of silence. *ABC News*. <https://www.abc.net.au/news/2022-09-08/john-francis-planet-walker-17-years-of-silence-22-years-walking/101394038>
- Khuc, Q. V., *et al.* (2023). Improving energy literacy to facilitate energy transition and nurture environmental culture in Vietnam. *Urban Science*, 7(1), 13. <https://doi.org/10.3390/urbansci7010013>
- Kim, Y. J., & Zhong, C. B. (2017). Ideas rise from chaos: Information structure and creativity. *Organizational Behavior and Human Decision Processes*, 138, 15-27. <https://doi.org/10.1016/j.obhdp.2016.10.001>
- Kuijper, D. P. J., *et al.* (2019). Keep the wolf from the door: How to conserve wolves in Europe’s human-dominated landscapes?. *Biological Conservation*, 235, 102-111. <https://doi.org/10.1016/j.biocon.2019.04.004>
- La, V. P., & Vuong, Q. H. (2019). bayesvl: Visually learning the graphical structure of Bayesian networks and performing MCMC with ‘Stan’. *The Comprehensive R Archive Network*. <https://cran.r-project.org/package=bayesvl>
- Lallanillam, M. (2023, Aug. 31). Just 12% of Americans — mostly men —

are eating half of our beef supply: new research.  
<https://nypost.com/2023/08/31/50-of-us-beef-is-eaten-by-just-12-of-americans-mostly-men-study/>

Lameira, A. R., *et al.* (2022). Sociality predicts orangutan vocal phenotype. *Nature Ecology & Evolution*, 6(5), 644–652.  
<https://www.nature.com/articles/s41559-022-01689-z>

Loss, S. R., *et al.* (2014). Bird–building collisions in the United States: Estimates of annual mortality and species vulnerability. *Ornithological Applications*, 116(1), 8-23.  
<https://academic.oup.com/condor/article/116/1/8/5153098>

Madigan, J. (2019, Aug. 19). What The Heck Are Surprise Mechanics?.  
<https://www.forbes.com/sites/jamiemadigan/2019/08/19/what-the-heck-are-surprise-mechanics/?sh=407a08de6e80>

Mervis, J. (2004). The cost of science advice. *Science*, 306(5702), 1667.

Michalak, L., *et al.* (2020). Microbiota-directed fibre activates both targeted and secondary metabolic shifts in the distal gut. *Nature Communications*, 11, 5773.

Nakano, T., & Yamamoto, T. (2022). You trust a face like yours. *Humanities and Social Sciences Communications*, 9, 226.  
<https://www.nature.com/articles/s41599-022-01248-8>

Nandan, A., Das, A., Lott, R., & Koseska, A. (2022). Cells use molecular working memory to navigate in changing chemoattractant fields. *ELife*, 11, e76825. <https://doi.org/10.7554/eLife.76825>

Nguyen, M. H., & Jones, T. E. (2022). Building eco-surplus culture among urban residents as a novel strategy to improve finance for conservation in protected areas. *Humanities and Social Sciences Communications*, 9, 426. <https://www.nature.com/articles/s41599-022-01441-9>

Ohashi, H., & Sakai, T. (2018). Leucokinin signaling regulates hunger–driven reduction of behavioral responses to noxious heat in *Drosophila*. *Biochemical and Biophysical Research Communications*,

499(2), 221–226. <https://doi.org/10.1016/j.bbrc.2018.03.132>

Owoseje, T. (2022, Aug. 7). Top scientist admits ‘space telescope image’ was actually a slice of chorizo. <https://edition.cnn.com/2022/08/05/europe/scientist-space-image-chorizo-intl-scli-scn/index.html>

Pare, S. (2023, Oct. 19). More than 10 billion snow crabs starved to death off the coast of Alaska. But why?. <https://www.livescience.com/animals/crustaceans/more-than-10-billion-snow-crabs-starved-to-death-off-the-coast-of-alaska-but-why>

Pólya, G. (1945). *How to solve it*. Princeton University Press. [https://books.google.com/books?id=z\\_hsbu9kyQQC](https://books.google.com/books?id=z_hsbu9kyQQC)

Pope, P. (2021). The Surprising Complexity of Nurturing a Healthy Gut. <https://www.scientificamerican.com/custom-media/the-surprising-complexity-of-nurturing-a-healthy-gut/>

Rose-Wiles, L. M. (2011). The high cost of science journals: A case study and discussion. *Journal of Electronic Resources Librarianship*, 23(3), 219-241.

Tonooka, R. (2001). Leaf-folding behavior for drinking water by wild chimpanzees (*Pan troglodytes verus*) at Bossou, Guinea. *Animal Cognition*, 4, 325-334. <https://doi.org/10.1007/s1007101001>

Schwanemann, K. (2023, Aug. 5). Researchers say vital seagrass is dying off at rapid rates in Florida. <https://www.nbcmiami.com/news/local/researchers-say-vital-seagrass-is-dying-off-at-rapid-rates-in-florida/3085526/>

Seiden, D. (2023, Jan. 30). Professor Who Scubaed on US Funds Agrees to Settlement. <https://news.bloomberglaw.com/federal-contracting/college-professor-who-scubaed-on-federal-funds-agrees-to-payback>

Sheingold, B. H., & Hahn, J. A. (2014). The history of healthcare quality: The first 100 years 1860–1960. *International Journal of Africa Nursing Sciences*, 1, 18-22.



<https://www.sciencedirect.com/science/article/pii/S2214139114000043>

Shkliarevsky, G. (2019). The Cost of Science. <https://intpolicydigest.org/the-cost-of-science/>

Springer Nature. (n.d.). Research Digests with Scientific American. <https://www.springernature.com/gp/researchers/campaigns/research-digests-with-scientific-american>

Sweeney, M. M., *et al.* (2022). Comparison of psychedelic and near-death or other non-ordinary experiences in changing attitudes about death and dying. *PLoS One*, 17(8), e0271926. <https://doi.org/10.1371/journal.pone.0271926>

Valéry, P. (1941). *Tel Quel*. Paris: Gallimard. <https://books.google.com/books?id=fA5MAAAAMAAJ>

Van Huu, N., & Hoang, V. Q. (2007). On the martingale representation theorem and on approximate hedging a contingent claim in the minimum deviation square criterion. In: Jeltsch, Li & Sloan (Eds.) *Some Topics in Industrial and Applied Mathematics* (pp. 134-151). World Scientific. [https://www.worldscientific.com/doi/abs/10.1142/9789812709356\\_00](https://www.worldscientific.com/doi/abs/10.1142/9789812709356_00)

Verma, I. M. (2015). Impact, not impact factor. *PNAS*, 112(26), 7875-7876. <https://www.pnas.org/doi/10.1073/pnas.1509912112>

Vuong, Q. H. (2018). The (ir)rational consideration of the cost of science in transition economies. *Nature Human Behaviour*, 2(1), 5. <https://www.nature.com/articles/s41562-017-0281-4>

Vuong, Q. H. (2019). The financial economy of Viet Nam in an age of reform, 1986–2016. In: *Routledge Handbook of Banking and Finance in Asia* (pp. 201-222). Routledge. <https://www.taylorfrancis.com/chapters/edit/10.4324/9781315543222-12/>

Vuong, Q. H. (2019b). Breaking barriers in publishing demands a proactive attitude. *Nature Human Behaviour*, 3(10), 1034. <https://www.nature.com/articles/s41562-019-0667-6>

- Vuong, Q. H. (2020). Reform retractions to make them more transparent. *Nature*, 582(7811), 149. <https://www.nature.com/articles/d41586-020-01694-x>
- Vuong, Q. H. (2023). *Mindsponge Theory*. De Gruyter. <https://books.google.com/books?id=OSiGEAAAQBAJ>
- Vuong, Q. H. (Ed.) (2022). *A New Theory of Serendipity: Nature, Emergence and Mechanism*. De Gruyter. <https://books.google.com/books?id=2wdsEAAAQBAJ>
- Vuong, Q. H., & Napier, N. K. (2014). Resource curse or destructive creation in transition: Evidence from Vietnam's corporate sector. *Management Research Review*, 37(7), 642-657. <https://doi.org/10.1108/MRR-12-2012-0265>
- Vuong, Q. H., & Napier, N. K. (2014). Making creativity: the value of multiple filters in the innovation process. *International Journal of Transitions and Innovation Systems*, 3(4), 294-327. <https://dx.doi.org/10.1504/IJTIS.2014.068306>
- Vuong, Q. H., & Nguyen, T. K. (2016). Data on Vietnamese patients' financial burdens and risk of destitution. *Data in Brief*, 9, 543-548. <https://doi.org/10.1016/j.dib.2016.09.040>
- Vuong, Q. H., Nguyen, M. H., & La, V. P. (Eds.) (2022). *The mindsponge and BMF analytics for innovative thinking in social sciences and humanities*. De Gruyter. <https://www.amazon.de/dp/8367405102>
- Vuong, Q. H., Le, T. T., La, V. P., & Nguyen, M. H. (2022). The psychological mechanism of Internet information processing for post-treatment evaluation. *Heliyon*, 8(5), E09351. [https://www.cell.com/heliyon/fulltext/S2405-8440\(22\)00639-9](https://www.cell.com/heliyon/fulltext/S2405-8440(22)00639-9)
- Vuong, Q. H., et al. (2018). Cultural additivity: Behavioural insights from the interaction of Confucianism, Buddhism and Taoism in folktales. *Palgrave Communications*, 4, 143. <https://doi.org/10.1057/s41599-018-0189-2>
- Vuong, Q. H., et al. (2019). Artificial intelligence vs. natural stupidity:

Evaluating AI readiness for the Vietnamese medical information system. *Journal of Clinical Medicine*, 8(2), 168.  
<https://doi.org/10.3390/jcm8020168>

Vuong, Q. H., *et al.* (2019b). Cultural evolution in Vietnam's early 20th century: A Bayesian networks analysis of Hanoi Franco-Chinese house designs. *Social Sciences & Humanities Open*, 1(1), 100001.  
<https://doi.org/10.1016/j.ssaho.2019.100001>

Vuong, Q. H., *et al.* (2022). Covid-19 vaccines production and societal immunization under the serendipity-mindsponge-3D knowledge management theory and conceptual framework. *Humanities and Social Sciences Communications*, 9, 22.  
<https://www.nature.com/articles/s41599-022-01034-6>

Vuong, Q. H., *et al.* (2023). Near-suicide phenomenon: An investigation into the psychology of patients with serious illnesses withdrawing from treatment. *IJERPH*, 20(6), 5173.  
<https://doi.org/10.3390/ijerph20065173>

Wetzel, C. (2022, March 23). Orangutan's Vocabularies Are Shaped by Socializing With Others, Just Like Humans. *Smithsonian Magazine*.  
<https://www.smithsonianmag.com/smart-news/orangutans-vocabularies-are-shaped-by-socializing-with-others-just-like-humans-180979778/>