Noesis

The Journal of the Mega Society

Issue #216, January 2026

About the Mega Society

The Mega Society was founded by Dr. Ronald K. Hoeflin in 1982. The 606 Society (6 in 10^6), founded by Christopher Harding, was incorporated into the new society and those with IQ scores on the Langdon Adult Intelligence Test (LAIT) of 173 or higher were also invited to join. (The LAIT qualifying score was subsequently raised to 175; official scoring of the LAIT terminated at the end of 1993, after the test was compromised.) A number of different tests were accepted by 606 and during the first few years of the Mega Society's existence. Later, the LAIT and Dr. Hoeflin's Mega Test became the sole official entrance tests, by majority vote of the membership. Then, Dr. Hoeflin's Titan Test was added. (The Mega Test and Titan Test were also compromised, so Mega Test scores after 1994 and Titan Test scores after August 31st, 2020 are currently not accepted; the Mega and Titan cutoff is 43 - but either the LAIT cutoff or the cutoff on Dr. Ronald K. Hoeflin's tests will need to be changed, as they are not equivalent.) The Mega Society now accepts qualifying scores on The Hoeflin Power Test and on The Ultra Test. Both tests are still being scored. The Mega Society publishes this irregularly-timed journal.

Answer sheets for The Hoeflin Power Test and The Ultra Test can be emailed to ultrapowertest@gmail.com; the scoring fee for each test is $10 USD, payable via Stripe.

https://megasociety.org/#admission

The society also has a (low-traffic) members-only email list. Mega members, please contact one of the Mega Society officers to be added to the list.

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

http://miyaguchi.4sigma.org/BloodyHistory/history.html

—and the official (designed) Mega Society page,

http://www.megasociety.org/

Noesis is the journal of the Mega Society, an organization whose members are selected by means of high-range intelligence tests.

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Editorial

Ken Shea, Richard May (R.I.P.)

The Mega Society learned via an email sent last July that Richard May, a loved and respected member of the extended high-IQ community, had passed away about a month prior. Hopefully, more information will become available in the near future, as the sender of the July email intimated might happen, so that *Noesis* can provide an update to readers.

Richard and I got along extremely well, and I genuinely understand the sentiment of others upset by the news of Richard's passing. As Rick Rosner noted, in the roundtable discussion previously published in *Noesis*, Richard May was both very funny and very smart.

Richard, I would add, was an original, a freethinker, insatiably curious about the world, and a great friend. Many in the extended high-IQ community had known Richard for decades. Richard had a quiet kindness and was a consistent pleasure to interact with: a beautiful soul.

If I might be permitted to share one anecdote: I recall sending Richard a *Noesis* draft, many moons ago, and Richard promptly responding with the superlative 'awesome!' - then asking quizzically, a few moments later, whether people still used the word 'awesome' in the same way these days. Richard, for the record, you were awesome.

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January's issue features content geared around: high-range test construction and administration, bespoke trading strategies, existential therapy for exceptional populations, a fable of wealth and wisdom, the psychology of war and peace, and quantum cosmology.

Toto, I have a feeling we're not in Kansas anymore….

The current installment of *Noesis* proper kickstarts with a quartet of eclectic discussions conducted by none other than Scott Douglas Jacobsen, who initially engages Dr. Kristóf Kovács with a discussion revolving around IQ, intelligence, and cognitive abilities.

Dr. Kovács runs the Cognitive Abilities Lab and wants to distinguish intelligence from cognitive abilities while weighing the pros and cons of IQ scores, as such, and potentially enveloping the oft-discussed *g* factor (yes, Spearman's *g*) within the framework of Process Overlap Theory.

Channeling the spirit of Winston Churchill, Dr. Kristóf Kovács quips: 'IQ tests are the worst instruments for measuring intelligence - apart from all the others psychology has ever tried.'

Mega Society Internet Officer Daniel Shea and professional colleague Nasrudin Salim, then, ease into a joint interview. Daniel Shea and Nasrudin Salim, co-founders of the trading platform Chatoyance, share their venture's ethos and battle-tested insights vis-à-vis a 'service that automates the construction of trading strategies based on current market conditions' (Daniel

Shea). Nasrudin Salim: 'We want to give clients a toolkit that doesn't lock them into a fixed view of markets. Instead, we shape a pipeline that constantly checks itself like adjusting parameters, evaluating signals, pruning weak strategies, doubling down on robust ones.' Sounds like a plan.

Piqued readers may consider visiting their revamped website: https://chatoyance.org

After that, psychotherapist Sapira Cahana, a New York-based mental health counsellor, shares her perspective of "Existential Therapy for the Gifted" in an interview with Scott Douglas Jacobsen. Developmental issues with gifted and talented individuals are addressed along with fluctuating senses of identity throughout the lifetime of exceptional individuals.

I will now let Scott Douglas Jacobsen handle synopsis duties for the next interview: 'The realm of high-I.Q. testing and society membership has long been fertile ground for both intellectual rigor and eccentric behavior. In this in-depth interview, Paul Cooijmans - a veteran test designer and administrator - shares an array of unusual experiences accumulated over years of administering tests, handling orders, and interacting with a diverse community of high-I.Q. individuals.' See, also, Scott's amusing 'Abstract' on page 28 to further manage expectations on this wild ride with Paul Cooijmans, or the more granular 'Discussion' starting on page 43.

Readers wide-eyed after Cooijmans's harrowing stories might well be soothed by the next entry.

Chris Cole has teamed up with L. Frank Baum, the author of the Oz books, and Claude to curate an intriguing fable titled "The Transformation of Gayelette, The Good Witch of the North." What constitutes real (alchemically-derived?) wealth/wisdom in a world turned inside-out?

Speaking of a world on the edge, the next (penultimate) interview by Scott Douglas Jacobsen spotlights neuroscientist and national security expert Nicholas Wright. Wright has worked with the government since Barack Obama's second term and advised the Pentagon's Joint Staff.

Wright's book *Warhead: How the Brain Shapes War and War Shapes the Brain* walks through the reciprocal geopolitical implications of psychology and conflict, including hybrid tactics.

(As an aside, I would also recommend - former RAND Corporation employee - Daniel Ellsberg's fairly-recent effort *The Doomsday Machine: Confessions of a Nuclear War Planne*r.)

The prolific quantum theorist Dr. İzzet Sakallı sits down with Scott Douglas Jacobsen for the issue's last entry, "Quantum Cosmology at the Frontiers of Observation."

Dr. Sakallı reports, 'I learned to appreciate how exact solutions in modified gravity theories could bridge the gap between pure mathematics and physical reality'; Dr. Sakallı provides a superb blueprint or 'study guide' for aspiring students of quantum cosmology, starting on page 58.

The next issue of *Noesis* will be published in July of 2026, thus culminating a quixotic cycle of publishing twelve consecutive issues in twelve different months: 9-2-8-3-10-4-11-5-12-6-1-7. The cycle started in September, in that the number nine stands for September, and so forth.

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On High-range Test Construction: Dr. Kristóf Kovács on Accuracy in IQ, Intelligence, and Cognitive Abilities

Dr. Kristóf Kovács & Scott Douglas Jacobsen

Abstract

This interview includes a detailed conversation between Scott Douglas Jacobsen and Dr. Kristóf Kovács, a Senior Research Fellow and Lecturer at the Institute of Psychology and the Department of Counselling and School Psychology. Dr. Kovács leads the Cognitive Abilities Lab, focusing on research in cognitive abilities, intelligence, psychometrics, and their measurement. He critiques the limitations of IQ tests in assessing creativity, sensorimotor skills, or interpersonal abilities, emphasizing the need for detailed profiles for diagnostics over societal "IQ fetishism." Dr. Kovács explores the importance of ethical and transparent research practices and provides a nuanced understanding of IQ scores and their applications. The discussion includes the historical context of IQ testing, its practical applications, and the sociological implications of the g factor as a statistical construct.

Keywords: Cognitive Abilities, Diagnostic Context, Educational Interventions, Fluid Reasoning, IQ Distribution, IQ Fetishization, IQ Measurement, IQ Tests, Multiple Intelligences, Percentiles, Psychometrics, Sensorimotor Abilities, Standard Deviation, Working Memory

Introduction

The document features an engaging interview with Dr. Kristóf Kovács, conducted in 2025 by Scott Douglas Jacobsen, as a recommendation from Björn Liljeqvist, former chair of Mensa International. Dr. Kovács, a Senior Research Fellow and Lecturer at the Institute of Psychology and the Department of Counselling and School Psychology, shares his insights on the measurement of intelligence, cognitive abilities, and psychometric tools. Leading the Cognitive Abilities Lab, Dr. Kovács critiques the limitations of IQ tests, emphasizing their inability to measure creativity, sensorimotor skills, and interpersonal abilities. He highlights the importance of providing detailed diagnostic profiles rather than relying on singular IQ scores. The interview delves into societal misconceptions, such as "IQ fetishism," and clarifies the statistical construct of the g factor, noting its utility in sociological studies but limited relevance for individual diagnostics. Dr. Kovács' work underscores the need for ethical and transparent research practices and the refinement of tools to better capture the complexities of cognitive abilities. His perspectives challenge conventional views on intelligence testing and advocate for a more nuanced understanding of cognitive profiles for practical applications, ranging from education to legal contexts.

Section 1: Introduction and Context: Setting the Stage

Scott Douglas Jacobsen: So, today, we are here with Dr. Kristóf Kovács. This interview is a recommendation from Björn Liljeqvist, so thank you, Björn. I interviewed with him a while ago. I have been interviewing many individuals from various groups, including Mensa. In high-IQ communities, I wanted to get a professional opinion about testing. So, I posed the first big question that people might have if they are stumbling upon this interview: How much do IQ tests measure intelligence? What is the overlap between IQ and intelligence? In other words, what is the overlap in this Venn diagram?

Section 2: Defining Intelligence: Beyond the Traditional Views

Dr. Kristóf Kovács: That is a very old question. Whether IQ tests measure intelligence is a controversial issue. I do not think it is a particularly useful question because, to a large extent, it depends on how we define intelligence. If intelligence traditionally meant some form of cognitive ability, then today, with enough research, one can find references to all sorts of intelligence.

There is a paradox I perceive here. People who are very critical of IQ tests and the concept of intelligence argue that IQ testing is flawed. Yet, simultaneously, they are quick to embrace the term intelligence. There is always an alternative concept proposed to counter IQ. The first major alternative was emotional intelligence, which, after 20-25 years of research, became a meaningful scientific construct, in my opinion. However, it does not necessarily need to be called intelligence - it could be termed emotional ability. Nevertheless, now we see references to concepts like spiritual intelligence, naturalist intelligence, and other types of intelligence.

Of course, IQ tests clearly do not measure intelligence if intelligence is defined broadly enough to include aspects such as one's relationship to spirituality. IQ tests do not assess spirituality, emotionality, one's connection to nature, interpersonal skills, self-awareness, or other qualities often labelled as intelligence today. Therefore, the extent to which IQ tests measure intelligence depends entirely on how intelligence is defined. Debates over definitions, in my experience, are not particularly useful.

I try to avoid using the term "intelligence" whenever possible. Interestingly, I used to work extensively with Mensa, which is probably how you found me through Björn. However, I am primarily a researcher specializing in individual differences in cognition. My academic work at the university involves a research position.

In my research, I cannot entirely avoid using the term "intelligence," particularly in contexts related to Mensa, but I prefer to frame my research interests as focusing on cognitive abilities rather than intelligence. When we discuss cognitive abilities, there is no meaningful way to include aspects like spirituality.

Section 3: Cognitive Abilities vs. Intelligence: A Conceptual Shift

My research lab is called the Cognitive Abilities Lab - it is not called the Intelligence Lab. In my work, I consciously use the term cognitive abilities because it is plural. Intelligence, by contrast, is singular. As a researcher, discussing a range of specific abilities, such as fluid reasoning or crystallized knowledge, is far more meaningful.

Working memory or perceptual speed, and so on, are more meaningful constructs than a single general intelligence. General intelligence, in my opinion, is an index derived from various specific cognitive abilities. Still, it is not an ability in itself. For this reason, I prefer discussing cognitive abilities rather than intelligence. This approach avoids the type of definitional debates you raised. That said, I don't want to circumvent the question completely.

IQ tests do a reasonable job if we define intelligence as cognitive ability. There's a famous saying from Winston Churchill that democracy is the worst form of government, except for all the others humanity has tried. When I teach this or present at conferences, I often draw a parallel, saying that IQ tests are the worst instruments for measuring intelligence - apart from all the others psychology has ever tried.

Jacobsen: That's good. A different way to frame it is from an empirical basis. If we're examining cognitive abilities, what has emerged from research over the past century or so regarding what IQ tests measure? Also, what do the tests not measure that we know fall under cognitive abilities?

Section 4: IQ Tests and Their Purpose: Strengths and Limitations

Kovács: That's an interesting question. If we consider creativity a cognitive ability, IQ tests do not measure it. Creativity is assessed using creativity-specific tests, but it is a much harder construct to define, operationalize, and measure with psychometrically sound instruments.

[Editor's Note: The famous twentieth-century psychologist Hans Eysenck found creativity was highly correlated with psychoticism, cf. low latent inhibition.]

Sensorimotor abilities are another relatively underexplored area in cognitive ability testing, especially in young children. In my lab, we are conducting a research project on this topic. Our findings suggest that in preschool children, sensorimotor abilities - such as balance or other basic motor skills - are strong predictors of cognitive abilities required in school settings. Interestingly, these correlations diminish after about age seven. However, in preschoolers aged four, five, and six, sensorimotor abilities are significantly linked to skills like memory and the ability to focus, which are crucial as children begin formal education.

Sensory motor abilities and creativity are two areas that, while reasonably considered cognitive, are not measured by IQ tests. IQ tests have historically focused on educational settings and later workplace applications. The military was among the first workplaces to use intelligence

tests to predict achievement or trainability. What schools and workplaces require has heavily influenced the development of these instruments.

Section 5: Standard Deviation and Interpretability of Scores

Jacobsen: People researching IQ might encounter terms like standard deviation, whether 15, 16, or other values, and lists of IQ scores - highest IQ score lists, historical figures, famous people, etc. What should people think critically about when they encounter these references? Regarding some of these popularized extraordinary IQ scores, what can we reasonably say about their accuracy? Specifically, how do high and low scores relate to rarity percentiles?

Kovács: That's a great question. There are two parts here: one about standard deviation and the other about the interpretability of the range. The most common standard deviation is the 15-point standard deviation, which was established with the Wechsler scale. This is the standard IQ distribution you'll find in textbooks. IQ is typically presented as a scale with a mean of 100 and a standard deviation of 15.

[Editor's Note: https://www.iqcomparisonsite.com/iqtable.aspx]

Here's how it works: your raw test score is standardized, converting it into a z-score, expressing your performance in standard deviation units. Then, we assign 15 points for every standard deviation. For example, if you score exactly one standard deviation above the mean, your IQ score will be 115. If you score two standard deviations above the mean, your IQ score will be 130.

You're right, though, that other standard deviations are in use. For instance, some tests historically used a 16-point standard deviation. However, I'm unsure if that is still true with the Stanford-Binet scales. The Cattell scale, on the other hand, used to have a standard deviation of 24. As someone who has provided feedback on IQ tests, I find this variability somewhat frustrating.

Many people, understandably, don't realize that IQ is simply a relative scale. Without a background in statistics, interpreting it can be confusing. IQ is not an absolute measure.

For example, you can express even something like height on an IQ scale. You do not need to, since height has an absolute zero, so we use absolute measures like centimetres. IQ, by contrast, lacks an absolute zero - it's purely comparative. Everyone is compared to the mean, and differences are expressed in standard deviation units before being translated into IQ scores. But if you really want you can express height using an IQ-style scale. In this case it becomes a relative score. For instance, let us assume that the average height for Canadian males is 175 centimetres, with a standard deviation of 6 centimetres. If someone is one standard deviation above the mean, their "height IQ" would be 115. This approach standardizes the data for easier comparison.

Jacobsen: Centimeters work - we're Canadian and use metric and imperial measurements.

Kovács: Perfect. So, if we continue with that example, a two-standard-deviation height above the mean - 187 centimetres - would correspond to a "height IQ" of 130. Of course, this is just an analogy to explain how IQ operates as a comparative scale rather than an absolute measure.

IQ scores can always be translated back to standard or z-score scores. For example, if you're just above one standard deviation above the mean, your z-score would be +1. If you're exactly as tall as the average Canadian male, your height in a standard z-score would be 0. If you're one standard deviation above the mean, your z-score is +1. Theoretically, you could translate that into an IQ scale, but why would you? There's an absolute zero with height, so you don't need to use a relative scale like IQ.

IQ, conversely, is purely a relative scale. If you know someone has an IQ of 150 but don't know the standard deviation being used; you can't determine if it's three standard deviations above the mean or slightly less than two. For example, with a standard deviation of 24, an IQ of 150 represents something different with a standard deviation of 15. People often don't realize the importance of standard deviation in interpreting IQ scores.

Section 6: Percentiles vs. IQ Scores: Simplifying the Complexity

At the same time, there's this strange IQ fetish in society. For example, you often hear claims from celebrities - actors or actresses - saying they have an IQ of 180. These numbers are thrown around, but they lack context. In my experience, percentiles are far more useful and comprehensible for the general public.

If you have a normal distribution of scores, any z-score can be converted into a percentile or an IQ score. Theoretically, these measures are interchangeable, but percentiles are much easier for most people to understand. For instance, if you tell a parent their 12-year-old outperforms 95 out of 100 children of the same age, they will understand what that means. Similarly, if you say, "Your child has a better vocabulary than 98 out of 100 children their age," it's immediately relatable.

If you tell the parent that the 98th percentile corresponds to a z-score of +2 or an IQ of 130, it becomes more abstract. If you say their child has an IQ of 130, most people won't know how to react. Should they be ecstatic? Perhaps they read in the paper that morning about a celebrity claiming an IQ of 190, and they might feel disappointed. In reality, an IQ of 130 is excellent - it's in the top 2% and qualifies for Mensa membership.

If I were in charge, I'd eliminate IQ scores entirely and only use percentiles. In my experience, IQ scores create more confusion than clarity. Unless someone in this field understands the statistical nuances, they often misinterpret the scores. Since IQ scores can always be converted to percentiles, the latter is more intuitive and effective for communication.

On the other hand, it couldn't be clearer to a parent if you say, "Your child outperforms 90 out of 100 peers," or, "Your child is weaker than 80 out of 100 peers." That immediately highlights whether a specific area is a strength or a weakness for the child.

Section 7: Diagnostic Contexts: The Importance of Comprehensive Testing

The other question was about the range of interpretable scores. Typically, all scores are normed against a sample, usually a few thousand people. For example, in a representative sample in the U.S., you might have 5,000 or 6,000 participants, with around 200 individuals for a specific age group, such as 12-year-olds. When you compare an individual to that age group, anything beyond one in 200 is based on extrapolation.

The more you project beyond your data, the less accurate the interpretation becomes. For instance, if someone claims a child is "smarter than one in a million," but the comparison is based on only 200 children, that projection is highly speculative. Typically, scores within plus or minus two standard deviations from the mean are interpretable. A third standard deviation can also be meaningful, especially for individually administered tests that take significant time to complete.

IQ scores are often calculated as scores derived from multiple subtests. If someone scores in the top 2% across five subtests, the likelihood of that occurring across all subtests is much rarer than 2%. To explain this with an analogy: imagine you're looking for people who are taller than 98% of Canadians and have driven more miles than 98% of Canadians. The probability of finding someone who satisfies both criteria is much smaller than 2%.

Similarly, if someone scores very highly on multiple subtests, it provides a stronger basis for interpreting their overall IQ as being exceptional. By contrast, if someone scores high on just one test, that result is more likely to be "noisy," with a larger margin of error.

In statistical textbooks, normal distributions are usually illustrated up to plus or minus three standard deviations because this range covers 99.7% of the entire distribution. Only 0.3% of scores fall outside this range - 0.15% on each end. For example, anything above three standard deviations would represent about 3 individuals out of every 2,000. That's why illustrations of normal distributions in textbooks typically stop at three standard deviations; beyond that, the probabilities become increasingly rare and harder to measure accurately.

Up to plus or minus three standard deviations is meaningful and reliable. I know there are groups like the higher sigma societies, but I don't want to comment. I'll leave that to someone you might interview from those societies. For the record, what I'm describing here is what you'll find in standard statistical textbooks. Reliable and valid testing generally falls within plus or minus three standard deviations. Beyond that, scores become far less reliable.

I'd be skeptical of scores above +3 standard deviations and specially above +4. A score of +4 can be equivalent to one in a million. For instance, someone claiming, "My child is smarter than 999,999 other children," raises the obvious question: how do you know?

Section 8: Multiple Intelligences and Alternative Theories

Jacobsen: These issues often tie into statistical limitations, such as sample size and whether the test was properly proctored. Then, there are potential conflicts of interest. For example, if someone takes a test designed by someone they know, the results could be biased. Setting aside those issues, we've covered a lot so far: definitions of intelligence, the scope of IQ tests, reframing to cognitive abilities, standard deviations, and reliable ranges. What about the context in which these tests are proctored? For example, tests developed with significant investment and large sample sizes are conducted in secure environments where answers aren't leaked - what is the importance of those measures when trying to measure what IQ tests aim to assess?

Kovács: In short, high stakes. Suppose you want an elaborate and thorough measurement, especially when the stakes are high. In that case, ensuring the test is secure, properly administered, and statistically sound is essential. This is particularly critical in diagnostic contexts.

One high-stakes example is the death penalty in the U.S. Individuals with an IQ below 70 cannot be sentenced to death. Determining whether someone's IQ is below this threshold becomes a matter of life and death - the highest stakes imaginable. While that's not my area of research, it's an extreme case where the reliability of IQ testing carries enormous weight.

More commonly, professionally proctored IQ tests are administered for diagnostic purposes, particularly in school settings. In the U.S. alone, millions of individually administered IQ tests are conducted yearly. These tests help identify cognitive strengths and weaknesses to guide educational and developmental interventions.

Section 9: The *g* Factor: Index, Not Ability

A comprehensive profile, derived from a range of subtests, is so important. It provides a detailed view of strengths and weaknesses. For example, one of the most common recommendations by school psychologists is to suggest that a child be given extra time on tasks or exams.

Imagine a child with a profile showing excellent fluid reasoning (nonverbal problem-solving), strong verbal ability, and strong spatial ability but only slightly above average working memory and average perceptual speed. This profile often leads to frustration because the child's abilities outpace their processing speed. In other words, their strengths cannot fully compensate for the slower speed at which they process information. This kind of detailed profile allows a school psychologist to make targeted recommendations to address the child's specific challenges.

Individually administered tests are resource-intensive, typically taking one to one-and-a-half hours of a psychologist's time in a one-on-one setting. This level of investment is far greater than administering a group test to 30 students, so it's generally reserved for high-stakes situations. For instance, if a child is underachieving, frustrated, or showing signs of learning difficulties, then creating a full-ability profile is worth the investment. A detailed profile highlights individual strengths and weaknesses. It is far more useful for diagnostic purposes than a single overall score.

When I teach this, I often use an analogy to explain the limitations of an overall IQ score. Imagine visiting your doctor and receiving a detailed lab analysis of your blood sample. You see values for glucose levels, cholesterol, vitamin levels, and so on. Imagine the doctor told you, "Your health IQ is 70." What would you learn from that? You'd know you're in trouble - only 2% of people your age are less healthy than you - but it wouldn't help you or your doctor determine what's wrong or how to address it.

That's the issue with relying solely on an overall IQ score. It's like receiving a "health IQ" score that says you're less healthy than 95% of your peers.

While that might motivate you to worry, it doesn't provide actionable insights. Similarly, while overall IQ scores can be useful to an extent - such as for Mensa membership, where the goal is to identify the top 2% of cognitive performers - they don't provide the diagnostic depth necessary to understand and address specific challenges.

A health quotient (HQ) might be useful if your goal is to create a society comprising the healthiest 2% of people. However, if someone is unhealthy, an HQ score won't help them. What they need is a detailed diagnostic to identify the specific problem. That's why we use detailed tests and invest significant resources and time to assess a child individually and create a profile of their strengths and weaknesses.

Jacobsen: These are important cautionary tales about interpreting results. What about multiple intelligences, Sternberg's triarchic theory of intelligence, and the *g* factor? While there's no general consensus, what is the prevailing view?

Kovács: These are all controversial topics. Regarding multiple intelligences, I think Howard Gardner's work critiques the educational system more than a true theory of individual differences. Gardner has never shown much interest in rigorously measuring these intelligences. Essentially, his theory advocates focusing on children who might not be conventionally "smart" but excel in areas like social skills or the arts. It's an example of extending the concept of intelligence, which is valuable in its own way. However, Gardner hasn't developed reliable assessment tools for most of this proposed intelligence.

Whether we should call someone "intelligent" for having exceptional interpersonal skills despite not being conventionally smart is a matter of perspective. I'll leave that judgment to others. As for the *g* factor, that's closer to my area of research. My work focuses extensively on

interpretations of the *g* factor, and I've published on this topic. We have a framework called the Process Overlap Theory, which explains the *g* factor without requiring the assumption of a general intelligence or overarching ability. Naturally, I'm biased because this is my research field. Still, I see the *g* factor as a summary or index score of separate cognitive abilities.

The *g* factor is statistically advantageous in many ways. While it doesn't represent a single ability, it's a latent construct useful for certain purposes. For example, suppose you're conducting large-scale sociological research and want to study how cognitive functioning predicts income. In that case, the *g* factor is a highly effective tool. In that context, it doesn't matter whether someone excels in working memory, perceptual speed, or vocabulary - the overall level of cognitive functioning matters.

However, the utility of the *g* factor depends entirely on your purpose. For diagnostics, the *g* factor is not particularly helpful. Like the HQ analogy - it provides an overall score but doesn't tell you much about specific strengths or weaknesses. If your goal is to diagnose and support individuals, identifying patterns of cognitive strengths and weaknesses is far more informative. On the other hand, if you're studying broad trends, such as the relationship between cognitive functioning and socioeconomic outcomes, the *g* factor is invaluable.

If you want to predict someone's salary based on their cognitive abilities, overall scores or indicators like the *g* factor are very useful. However, I don't see the *g* factor as a proxy for a single "general intelligence." Instead, it's an index score calculated from various distinct abilities.

Jacobsen: That's a very interesting perspective. I hadn't heard it framed as an index at a sociological level rather than as a generalized commentary on a larger sociological construct. Viewing it as an index aligns with your emphasis on cognitive abilities about different factors. That makes the research clearer, too.

Kovács: Exactly. I'm glad it makes sense.

Section 10: Final Reflections: Caution and Clarity in Assessment

Jacobsen: Any final important things people should remember when they look at scores or assessments?

Kovács: That topic would take over a minute to address, so I'll leave it at that for now. If that's okay with you, my part is complete. I look forward to seeing the transcript.

Jacobsen: Excellent.

Kovács: Thank you for your time and patience.

Jacobsen: I truly appreciate this conversation.

Kovács: Thank you so much. Cheers!

Discussion

The interview between Scott Douglas Jacobsen and Dr. Kristóf Kovács provides a detailed exploration of how modern psychology understands and measures cognitive abilities. Dr. Kovács challenges the traditional notion of "intelligence" as a singular construct, emphasizing instead the pluralistic nature of cognitive abilities such as fluid reasoning, crystallized knowledge, perceptual speed, and working memory. By moving beyond a single "IQ" score, he advocates for a more nuanced view that can guide targeted educational and diagnostic interventions. A recurring theme in the conversation is the distinction between intelligence as a broad concept and IQ scores as comparative, standardized metrics. Dr. Kovács underscores that IQ testing, while not perfect, remains one of the best available tools for evaluating cognitive performance - reminiscent of Winston Churchill's remark about democracy being the "worst form of government except for all the others." The interview critiques the widespread fetishization of extreme IQ scores, highlighting that many of these extraordinary claims lack robust statistical grounding, especially beyond three standard deviations from the mean.

Another significant thread is the question of what IQ tests fail to measure. Dr. Kovács points to creativity and sensorimotor abilities as cognitive functions often overlooked in conventional testing. Additionally, the conversation addresses multiple intelligences (e.g., emotional or spiritual intelligence) and how broadening the definition of "intelligence" can move us away from precise measurement, potentially conflating distinct skill sets under one umbrella term. The importance of standardized, proctored testing environments also features prominently. High-stakes scenarios - such as determining if an individual's cognitive functioning meets legal thresholds—demand rigorous procedures to ensure both validity and reliability. Dr. Kovács

illustrates how a more detailed cognitive profile, built from a series of subtests, can offer actionable insights. By examining strengths and weaknesses, educators and clinicians can better tailor interventions for individual needs.

Ultimately, the conversation highlights that while IQ tests serve as valuable predictors in large-scale sociological research - such as forecasting educational or occupational outcomes - their utility in diagnosing and guiding individuals hinges on deeper, more granular analyses of cognitive abilities. Dr. Kovács calls for a balance between recognizing the broad applications of IQ tests and acknowledging the complexity of human cognition, urging educators, psychologists, and policymakers alike to interpret scores with both caution and context in mind.

Methods

The interview with Dr. Kristóf Kovács was conducted in a semi-structured format on a date prior to its publication on January 10, 2025. Scott Douglas Jacobsen coordinated this conversation after receiving a recommendation from Björn Liljeqvist, former chair of Mensa International. Questions were designed to elicit detailed responses about IQ measurement, cognitive abilities, and the practical implications of test usage in educational and diagnostic settings. The session was recorded with the informed consent of both parties to ensure accuracy in transcription. Post-interview, the recording was transcribed verbatim and subsequently organized into thematic sections to align with the central topics covered, including the definition of intelligence, the role of standard deviations, and the limitations of IQ testing. This thematic organization aimed to provide readers with a coherent narrative, linking empirical research to real-world applications. By employing a semi-structured interview technique, Jacobsen allowed Dr. Kovács the flexibility to elaborate on specific areas of his expertise, while ensuring the conversation remained focused on key issues of interest to high-IQ communities, educators, and psychologists. This methodological choice facilitated a balanced dialogue, blending guiding questions with open-ended discussions that illuminate the complexities of measuring and interpreting human cognitive abilities.

Daniel Shea and Nasrudin Salim on Chatoyance

Daniel Shea and Nasrudin Salim & Scott Douglas Jacobsen

Daniel Shea, M.Sc. is the founder and CEO of [Chatoyance](#). Shea possesses a Master's degree in Computer Science from the University of New Hampshire, with several years of industry experience in software engineering. He has published freelance articles on foreign exchange market strategy analysis and has published software analyzing fractals in the foreign exchange markets. Leveraging his experience with software design and financial markets, he started Chatoyance with the intent of transforming the way independent investors approach the foreign exchange market.

Nasrudin Salim is the Co-Founder, COO and CTO of Chatoyance. He has worked in the financial trading and banking industry specializing in machine learning and previously headed the ML operations team in DBS Bank, led AI architecture in OCBC Bank, the 2 of the largest banks in Singapore and Asia and was VP of Engineering in Almanak which uses AI agents for on-chain trading in web3. His specialty is in building machine learning and AI systems at scale and also in real-time processing.

Scott Douglas Jacobsen: When did you two meet?

Daniel Shea: We first met in 2012 in a high IQ society called Torr. Nasrudin had posted an internal message to the group about his recent experiences trading on the foreign exchange market, and I followed up with my own. We discussed more offline, then started working on independent trading projects with each other. One such project was a platform that allowed us to automatically mirror each other's trades via a central server with which our separate trading platforms would communicate. We then realized we could scale this up to a wider audience, and Chatoyance was born.

Nasrudin Salim: In 2012, I was an 18 year old back then, having started trading at the age 14 with my parent's money. I did a bit of bitcoin and forex and found success during a time when the market was not as volatile and full of trading agents and bots like today. I posted some insights into a high IQ society called Torr which had a minimum IQ requirement to join at 146, percentile at the 99.87th. Dan replied to some of my posts and we realized we both approached trading from a systems engineering perspective. At first we did simple trading projects, and then later we came to the idea of building a sort of trade sharing collective. Dan did most of the work initially as I didn't know how to code much back then but grew rapidly later. We started building custom integrations to mirror each other's trades on the popular platform MetaTrader 4. Then eventually it was about mirroring everyone in a group, not just one-way but bidirectional as many-to-many communication.

Jacobsen: What was the origin of the idea for Chatoyance?

Shea: Chatoyance initially started as a social trading platform which, as mentioned, was itself started as a means for us to share trades in real-time. This gradually evolved into a platform that generated trading strategies based on predefined characteristics using genetic programming. Though these two services would seem quite distinct, there are some core similarities, chief among them being the idea that many strategies operating in parallel outweigh a lone strategy over time and that there is a constant need to reevaluate and cycle out strategies as market conditions evolve.

Salim: Early on, we thought, "why limit these mirrored trades to just us?" Both of us were layering signals, blending sentiment and quant metrics. The strategy seemed scalable and liquidity was deep. The original concept was basically a distributed, real-time signal exchange. It was like a sandbox where multiple strategies or traders could compete, evolve, and reinforce each other. As the system matured, we introduced genetic programming to shape custom strategies on the fly. So, from the start, the seed idea was that multiple concurrent approaches can minimize single-strategy fragility. That's how Chatoyance was born.

Jacobsen: How has the business and technology, and software, landscape for Chatoyance's focus changed in the last ten years?

Shea: There is certainly more competition in this space now than there was one decade ago. This is likely due to the lower barrier to entry and a hype cycle when it comes to AI. Some of the core tech has changed over time to reflect advances in the field. But another change has been the interest in different asset classes over time. Our software is designed to accommodate currency pairs, equities, commodities, cryptocurrencies, and more, but interest from clients has shifted over the years. Forex was the initial interest one decade ago. These days, equities and cryptocurrencies are asked about more regularly.

Salim: The stack is radically different. A decade ago, market data pipelines were heavier and less real-time. Now, I have a cheap feed of tick-level crypto, forex, equities and also options data and can run complex ML models, even LLMs directly on live streams. Cloud infra matured, open-source AI toolkits exploded, and more competition due to now a lower barrier to entry. We've seen forex become less sexy and crypto become standard for high-risk plays. I had to ensure the underlying architecture scales to new asset classes fluidly. We're definitely dealing with a more fragmented but also more flexible ecosystem.

Jacobsen: How is machine learning and AI built into the business?

Shea: The core product that we offer to clients is a service that automates the construction of trading strategies based on current market conditions. Additional tiers involve full portfolios, that is to say many strategies of different trading styles or risk tolerances per the desires of the client, and strategies that evolve as market conditions change over time, owing to the fact that any strategy which works in the short term is unlikely to hold for long. This is ultimately done by

leveraging AI. That is said with the full acknowledgement that the term "AI" can be quite loaded and overused these days, often used to placate certain audiences. Despite the current implications of the term, there is indeed no better term to describe what is being done. With that said, just about anyone could develop an application that outputs strategies by the end of a weekend-long hackathon. The breadth of technical indicators used, entry and exit strategy logic employed, optimization criteria supported, money management strategies considered, and robust filtering logic included all coalesces to form a more comprehensive offering than competing organizations.

Salim: We apply ML from the ground up. Every piece of the puzzle from market microstructure to anomaly detection, dynamic portfolio rebalancing. We mix between simple algorithms, genetic optimization to traditional machine learning, then to reinforcement learning and now LLMs. The key is continual learning. Strategies adapt as new conditions emerge and so do the humans who now build how these strategies are going to adapt. Like including meta-learning concepts, model ensembles, and reinforcement signals. The result is that you're not stuck with stale logic. It morphs as volatility regimes shift or as new liquidity venues pop up.

Jacobsen: How does Chatoyance build more social trading into the trader networks?

Shea: The first iteration of Chatoyance was a more social experience. The idea was that there would be different trading rooms, and members of these rooms would automatically copy each other's trades through our software. There would be safeguards in place, such as the option of enabling private rooms, muting certain traders so they could only receive trades but not contribute any to the group themselves, and so on. The idea was that, if you had a room of traders each interacting with the markets, the collective gains would outweigh the collective losses, resulting in everyone benefiting from the participants' engagement.

The business model was that users registered with an affiliated broker, and thus commission was collected on each trade. Since a single trade was replicated for each user in a trading room, this meant a single action from a user could result in wider commissions due to each member simultaneously opening or closing the trade.

In practice, this was not quite the case. Often, people would join trading rooms and wait for others to make the first move. Those who were more experienced did not feel a motivation to contribute trades without some clearer incentive. Some ideas, such as profit sharing on commission, were proposed, but ultimately, if someone is skilled at swing trading the markets, they are more likely to go into fund management themselves than potentially risk it all on some other member running a huge drawdown.

So the idea was ultimately scrapped after several months. However, the idea of many traders bringing their own strategies to a collective single trading room has a spiritual line to our later concept of automated strategy generation with distinct trading personalities, together constructing an automated portfolio.

Salim: We learned that simple social mirroring wasn't sticky. Traders either lurk or they just want someone's edge without giving their own. So instead, we integrated the "social" element into a collaborative network of AI-driven strategy modules. Each "node" in the network is like a trader with a personality. From maybe momentum-focused, or mean-reversion-heavy, and they collaborate by sharing signals and outcomes. It's less about people copying each other and more about these agent-like strategies feeding into each other's learning loops, evolving collectively to handle shifting regimes. It's social trading, but via synthetic participant strategies rather than pure human interaction.

Jacobsen: How do you do risk management?

Shea: Risk management is particular to the client, but there are many levers to pull when assessing one's risk tolerance. Risk management can range from high-level goals, such as drawdown thresholds and Sharpe ratio targets, to finer-grained details such as exit strategies, money management strategies, partial entries and exits, and more. Many times, people will state that they want a high-risk high-reward strategy, but suddenly get cold feet at the first sight of what that risk entails. There is an element of getting to the heart of one's true risk tolerance before crafting a template that generates appropriate strategies.

Salim: Risk management is programmatic and multi-layered. For crypto, for example, I might impose real-time volatility-adjusted position limits. For a more traditional asset, we might weigh by a blend of sector correlation risk and liquidity depth. The user sets broad tolerances like max drawdown or desired sorting ratio. From there, the ML system translates that into execution-level heuristics. The idea is we fuse top-down constraints with bottom-up adaptive strategies.

Jacobsen: How do fractals play into financial markets?

Shea: Fractals are one indicator among many that are baked into the product. The algorithm may use fractals depending on market conditions, but may not. The interest in fractals in particular comes from an old technical indicator that was published to the MQL Marketplace (https://www.mql5.com/en/market/product/4131). However, in the current iteration of the product, it is not highlighted any more prominently than additional indicators, ranging from the standard basket (ADX, ATR, CCI, EMA, MACD, RSI, etc.) to the more esoteric (candlestick patterns, Fibonacci retracements, Elliott Waves, etc.) depending on the interests of the client.

Salim: Maybe fractal-based signals matter in certain trending conditions or where micro-structure has repeating patterns. if the system thinks fractals add incremental predictive power given current conditions, it'll use them. As one of the architects of Chatoyance, I add it as just another tool that our systems could use, and the choice is autonomous. If not, it won't. We never rely on a single tool. Everything competes on a data-driven meritocracy.

Jacobsen: What are the challenges facing technology-driven financial companies?

Shea: At least from the conversations I have with others in this space, I notice that there is often an overreliance on technical indicators at the cost of fundamentals. This makes sense from a programmatic perspective as engineers can readily integrate these into their models. With that said, the fusion of technicals and fundamentals is necessary to arrive at a more holistic view of the market, all of which serves to only improve the outputs of the algorithm.

Salim: One of the big ones is bridging the gap between what's quantifiable and what's real. Pure technical systems might ignore underlying credit conditions, macro news, or liquidity crises until it's too late. Also, data noise, market manipulation, and wild regulatory shifts can break your models. It's crucial to design adaptive frameworks that don't assume static conditions. We're constantly at war with overfitting and model drift. Especially in cryptocurrency where a lot of the movements originate from insider activity and information found in web3 'Cabals' that exists as Telegram group chats, which can only be joined through connections or NFT purchases.

Jacobsen: What are the guiding principles of Chatoyance?

Shea: It is deceptively simple to say that one's financial goals are just to "make lots of money." As discussed earlier, people may feel confident moving forward with a high-risk high-reward strategy at first, only to recoil at the first drop. This isn't entirely unexpected; after all, a safer market experience would be to invest in a set-and-forget whole market ETF. To pursue these strategies is to expect higher reward at the cost of higher risk. However, even in this more narrow range of higher risk tolerance, there is a wide window of consideration and opportunity. We ultimately aim to reconcile this risk-reward trade-off on a per-client basis and arrive at a portfolio that doesn't fail to impress.

Salim: We want to democratize robust strategy generation. It's not just "make money fast." it's "craft a strategy that aligns with your true risk appetite and thrives under evolving conditions." We want to give clients a toolkit that doesn't lock them into a fixed view of markets. Instead, we shape a pipeline that constantly checks itself like adjusting parameters, evaluating signals, pruning weak strategies, doubling down on robust ones.

Jacobsen: Thank you for the opportunity and your time.

Shea: Thank you for giving us the opportunity to highlight what we have built! This space moves slow and then fast all at once. The journey has been edifying, humbling, and exhilarating. We have many years behind us and are looking forward to many more.

Salim: Happy to share what we're up to. It's been good to lay it all out.

Existential Therapy for the Gifted: An Interview with Psychotherapist Sapira Cahana

Sapira Cahana & Scott Douglas Jacobsen

Sapira Cahana is a New York-based mental health counsellor and is a chaplain-in-training specializing in existential and relational therapy.

Scott Douglas Jacobsen speaks with Cahana about the inner world of gifted and talented adults. Cahana explains why gifted individuals are often drawn to existential therapy: it addresses the tension between early messages of specialness and the realities of adult life. She describes how childhood gifted identities can fracture in competitive environments, creating imposter syndrome, alienation, and profound questioning of self-worth. Cahana distinguishes talent from intelligence, discusses how comparison with peers complicates identity, and emphasizes the need for therapeutic relationships grounded in authenticity and mutual recognition. She highlights that healing comes not from reinforcing exceptionalism but from cultivating a humane, grounded relationship with the world.

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Scott Douglas Jacobsen: Hi, hello, Sapira. How are you?

Sapira Cahana: I'm well, hi Scott.

Jacobsen: You're a psychotherapist who works with gifted and talented clients. I've interviewed many of these people. It's a diverse and unusual niche. What issues come up for them? What do they bring to you in terms of the services you provide when giftedness and talent intersect with their regular needs?

Cahana: People come to me as an existential therapist. Gifted and talented individuals are often drawn to an existential approach rather than a cognitive, behavioural, or psychoanalytic one because there's a dimension of *chosenness* that needs to engage with the world. That comes into the therapy. We use the world to inform the space between us. This is significant because gifted people often receive repeated messages that they're special and unique, and they internalize those messages. When life no longer corroborates that, or when they experience suffering or pain, or when the validation stops coming, their sensitivity - their openness - makes them acutely aware of the shift. They start feeling either special or not exceptional, which can lead to a profound existential crisis and questioning of their place in the world.

Jacobsen: What kind of questions do they ask?

Cahana: There are two categories of gifted people. Some are identified as gifted in childhood - sometimes for one talent, one skill, or a broader constellation - and they develop an ego structure that fuses with that identity. When they later encounter experiences in which that identity doesn't thrive or is in competition with others' identities - say, in Ivy League or other highly competitive environments - they often develop imposter syndrome. They question who they are, whether what they were told was true, whether they were just a big fish in a small pond, or whether they really are "chosen" in some way. That's very threatening to the ego. It can be shattering, and people can spiral into deep existential questioning that looks like depression, anxiety, or what some therapists might diagnose as a personality disorder. I typically don't pathologize it because I see the extraordinary pain involved, and I focus on staying with that pain rather than assigning a diagnosis. But it cannot be easy. Another dynamic appears depending on whether giftedness carries through into adulthood or stays rooted in childhood. When it stays in childhood and doesn't translate into adult life, there's often a rupture - a before-and-after - of what it meant to be special. Many people were exceptionally talented at math, for instance, seen as prodigies or geniuses in their youth. Then they go to university as physics or math majors and find they can't keep up. The pressure or context overwhelms them. Some people continue to excel for decades, and their identity as "gifted" remains stable. When that happens, it can be disorienting. They might continue to perform at a high level in math, but when relational conflict arises, their identity as a savant resurfaces. It doesn't always directly correlate with the domain where they're most skilled. Identity questioning can emerge in areas that seem unrelated but are, in fact, deeply connected.

[Editor's Note: The Jodie Foster-directed film *Little Man Tate* suggests itself here.

The film review by Roger Ebert: https://www.rogerebert.com/reviews/little-man-tate-1991]

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Jacobsen: Two things come to mind there. One, if many of these people are identified in childhood, they're taking on this identity infused with a child's mind. If they become adults and still hold the same identity, how does that integrate with an adult emotional and cognitive mindset, given that it was formulated in childhood?

Cahana: The reason psychologists and the field of psychology love studying exceptionalism is because it's an intensified version of what we all experience as humans. Giftedness highlights the hidden architecture of the brain, of experience, of a person, of a psyche. We all, without exception, carry things from childhood and form ideas about the world that must eventually be ruptured. And they do get ruptured as life progresses. Part of adulthood involves preserving the softness and tenderness of childhood - the wide eyes, the sense of wonder - and integrating new knowledge: that safety is limited, suffering endures, and cause and effect aren't always categorical. In gifted adults, it's often as if one area of giftedness or specialness remains preserved, corroborated, and re-enshrined in the psyche. But this isn't unique to gifted adults - it's a dynamic we all share.

Jacobsen: What about when these individuals meet others in adulthood who are also gifted similarly, but who may be more or less gifted than they are in that domain? What kinds of questions does that raise for them in terms of identity? Because encountering others like that makes the contrast effect less distinct.

Cahana: Not everyone internalizes giftedness as a form of competition, though being set apart can create a competitive environment. So it's not that the person is necessarily competitive, but giftedness can foster competition. Feelings of jealousy, envy, self-righteousness, and moralizing can arise to compensate or sublimate the other to elevate oneself. It creates a self-other dynamic where the other person becomes the capital-O Other, and the self becomes the reference point for knowledge and meaning - both in the positive and the negative. The other can be placed on a pedestal while the self diminishes, or the self can rise in righteousness while scrutinizing and critiquing the other. It's essentially the same dynamic in both directions.

Jacobsen: What would you consider a healthy adult integration - individually and socially - so they're not a burden to themselves or others? I mean a more authentic relationship with themselves - their sense of self - and with others. They're not denying their talents; the talents are real. But they can move through the world and relate to themselves and others in healthy ways.

Cahana: What makes the specific dynamic of giftedness easier to detect - and this is why psychology as a field has a particular fascination with giftedness - is that giftedness often has an external, concrete attribute. For example, someone might be a gifted flautist. They are virtuosic, have perfect pitch, and understand the flute completely - they can almost speak through it. Because the flute has an external dimensionality, it's easy to discuss the gift. But if someone is gifted in something abstract, like justice, it's much harder to externalize because justice doesn't exist materially in the world. You have to find examples, and it's not as concrete. The same goes for talents like complex computation - it's not physical, yet it can be reproduced again and again. This can even appear later in life, such as when someone ages or develops a chronic illness or disability, and their body can no longer produce the experience of the talent. Still, I want to avoid over-relying on virtuosic qualities - such as advanced computation, musicality, or rhythm in

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dance - as evidence of giftedness, because that's a mistake too. Giftedness is a complex, multidimensional dynamic, not merely a talent-based phenomenon. That's why we have measures of intellectual ability and organizations for intellectual giftedness - because it isn't always visible through small talents. It's important not to confuse talent or ability with intelligence. That conflation isn't accurate.

Jacobsen: But healthy relations between the self and society - when people have a talent, they usually lean on it because it's reinforced. That reinforcement can feel healing.

And if the talent benefits society in some way - say, someone who can do complex computations like Terence Tao, or a flautist trained and then they find themselves playing with someone like Evgeny Kissin - they see their talent respected and appreciated. People enjoy it, and they enjoy expressing it. There's a mutual benefit, a sense of shared positive regard. How can that be encouraged or made more likely?

Cahana: It's not about inculcating self-aggrandizement or self-absorption. It's about achieving a harmonious relationship between the self and the world. That feels extraordinarily important as a therapist. We don't explore the self to criticize it, and we don't validate to glorify it. The goal is to create corrective emotional experiences that build trust, so the person isn't entirely self-reliant on their own perception of themselves. This allows them to experience other facets of the world. It's about living in flexible harmony with the world. That's significant. A dynamic that arises quickly among gifted individuals is alienation - a self-alienation stemming from feeling separate from the world. There's a sense of specialness, of being the only one, a sense of *chosenness.* When they seek help, there's often a lack of trust and a hierarchy around authority and knowledge - what counts as knowledge and where it comes from. That has to be disentangled for there to be a direct phenomenological encounter between two human beings on equal footing, where real eye contact and honest conversation can happen. Maintaining a sense of giftedness while cultivating an equal, authentic relationship is very challenging in therapy.

Jacobsen: I like your phrasing about the gaze. There's a quote from Lawrence Hill that comes to mind: when you make eye contact with someone - when you honestly look into another person's eyes - you're asserting their humanity. I love that idea. Eye gaze feels like such an instinctual way to describe it. Without examples, though, I can think of many ways that things can go wrong.

Cahana: Yes. When a child is considered gifted but isn't given adequate social skills to relate to their peers, that dynamic can take root very early. It often leads to a kind of projective identification with authority - the child looks to those who recognize talent or giftedness - and a diminishment of the peer or parental relationship. This creates a deep need to seek validation internally: *Am I talented? Am I not?* Once that is settled, another question arises: *Is the world responding to me? Am I getting the recognition I deserve?* That requires finesse, and children rarely have that. It takes adulthood to refine the ability to seek validation naturally and in balance, since we all exist in relation to others. The internal self can become punitive and disciplinary; when it's out of harmony, a harsh inner voice can dominate.

On the other hand, if the ego becomes too strong or self-satisfied, conflict often shifts outward - toward the world. In such cases, behaviour tends to oscillate between alienation and a constant need for reassurance. In extreme cases, people either feel completely unseen or are constantly

seeking validation of their specialness. In both cases, suffering becomes a way to feel alive - adversity becomes proof of value, or validation becomes fuel for a fragile sense of self. Every human being has some version of this dynamic, but in gifted individuals, it's amplified by an added sense of specialness and chosenness. That's what makes it particularly intense. And this is true of any identity that marks someone as different. But yes, we can stay with giftedness for now.

Jacobsen: What are some quotes you like about giftedness and talent?

Cahana: Not a quote directly about giftedness or talent, but about the act of therapy with gifted and talented adults.

Ernest Hemingway once spoke about treatment and the role of the therapist - not to take on someone else's pain. Here's a longer quote often attributed to Hemingway:

> *In our darkest moments, we don't need solutions or advice. What we yearn for is simply human connection - a quiet presence, a gentle touch. These small gestures are the anchors that hold us steady when life feels like too much.*
>
> *Please don't try to fix me. Don't take on my pain or push away my shadows. Just sit beside me as I work through my own inner storms. Be the steady hand I can reach for as I find my way.*
>
> *My pain is mine to carry, my battles mine to face. But your presence reminds me I'm not alone in this vast, sometimes frightening world. It's a quiet reminder that I am worthy of love, even when I feel broken.*
>
> *So, in those dark hours when I lose my way, will you just be here? Not as a rescuer, but as a companion. Hold my hand until the dawn arrives, helping me remember my strength.*
>
> *Your silent support is the most precious gift you can give. It's a love that helps me remember who I am, even when I forget.*

What I take from this - and what I apply when working with gifted adults - is that the greatest service I can offer them is not to confirm their specialness, and not to deny it either, but to journey alongside them as they work through their struggles without feeding the dynamic of exceptionalism. This is true of all therapy, but it's especially vital when working existentially with gifted adults.

Jacobsen: Thank you very much.

Conversation with Paul Cooijmans on Strange Correspondence and Weird Experiences

Paul Cooijmans & Scott Douglas Jacobsen

Abstract

This interview presents a series of vivid, first-hand accounts by Paul Cooijmans, a longtime test creator and administrator in high-I.Q. circles, as recounted in conversation with Scott Douglas Jacobsen. Cooijmans details a variety of bizarre, humorous, and at times tragic anecdotes spanning several decades. Topics include inexplicable complaints about test language and delivery, elaborate instances of test fraud - including the case of a beheaded man and pseudonymous retesting - the misadventures of high-I.Q. society members (from a casino robber to a documentary subject whose life ended in tragedy), and curious occurrences involving death threats, spurious professorate offers, and wildly unorthodox interpretations of test instructions. These stories highlight not only the challenges of maintaining test integrity and clear communication in a multicultural, digital environment but also the human eccentricities that arise when intelligence testing intersects with personality, ambition, and occasional mischief. The interview ultimately underscores the unpredictable and often surreal landscape of high-I.Q. society interactions.

Introduction

The realm of high-I.Q. testing and society membership has long been fertile ground for both intellectual rigor and eccentric behavior. In this in-depth interview, Paul Cooijmans - a veteran test designer and administrator - shares an array of unusual experiences accumulated over years of administering tests, handling orders, and interacting with a diverse community of high-I.Q. individuals. From a customer who inexplicably complained about receiving an English test in lieu of a supposed "Netherlandic" version, to intricate fraud cases involving false identities and even a tragic tale of a beheaded test-taker, Cooijmans leaves no stone unturned.

The conversation also delves into episodes that range from the comically absurd - such as pseudonymous submissions by a so-called "South-African" who was later revealed to be a retest under a child's name - to the more serious implications of test misconduct, including death threats, elaborate attempts to manipulate test results, and the challenges of verifying scores in an era of instant communication. Anecdotes about high-I.Q. society members, including a rogue member involved in a casino heist, a spamming correspondent inundating Cooijmans with daily messages, and an overly ambitious "professorate" offer from a New Zealand student, further illuminate the unpredictable nature of this specialized community.

By presenting these narratives, the interview not only provides insight into the practical difficulties of administering and safeguarding intelligence tests but also paints a broader picture of the cultural and interpersonal dynamics that animate the world of high-I.Q. societies. This introduction sets the stage for a detailed exploration of both the humorous and cautionary dimensions of test administration, while inviting readers to reflect on the interplay between standardized measurement and the uniquely human quirks that often defy neat categorization.

Section 1: Test Orders, Language, and Delivery Complaints

Scott Douglas Jacobsen: What happened with the people who complained about the tests being in Netherlandic, or not arriving on time?

Paul Cooijmans: On one occasion, someone ordered an English test, and upon receiving it complained that he did not know Netherlandic. This was bizarre as there was no Netherlandic whatsoever in the test. Some time later, he explicitly ordered a Netherlandic test. Again, upon

receipt he complained that I had sent a Netherlandic test! Good-natured as I am, I sent him the English version for free, so that he now had two tests for the price of one.

Again later, this person ordered another test, and I sent it less than two hours after he had ordered it. To my astonishment, I then saw a public Facebook message from him in a group to which we both belonged; in it he was moaning that he had ordered one of my tests and I had not sent anything and was letting him wait for days and days. I studied the time stamps of the Facebook message and test order, and there were only minutes separating them. He must have written the whining Facebook message at the same time he ordered the test! But of course, minutes may seem days, depending on what one smokes.

Section 2: The Beheaded Man and the Fraudulent Retest

Jacobsen: What is the full story of the beheaded man, who took a test under a false name and would have won under his real name, regardless?

Cooijmans: In the early days of the Test For Genius, 1995, a Netherlander obtained a rather high score. Inexperienced as I was, I showed him the answers to the hardest problems, with explanations. To encourage people to take the test, I awarded 2000 guilders to the highest scorer before the year 2000. For some years, only a few submissions came in, mostly not high. Then in 1999, a very high score was finally achieved by a South-African who appeared to be a colleague of the high-scoring Netherlander, working there as an intern. This was around the time of the total eclipse of the sun, visible in England and France for instance. The high-scoring Netherlander had told me he was planning to travel to the area where the full eclipse was visible, and that he expected this to become a life-changing event. Come to think of it, I never heard from him again after the eclipse.

So the 1999-2000 year change arrived, and the South-African was the winner. I contacted him and suggested he come collect the prize, but he declined and asked me to transfer it to his bank account, which I promptly did. He wrote me that he was returning to South Africa and, as a parting gift, sent me some answers to a test by another Netherlander who had also awarded a monetary prize to the highest scorer, albeit a much smaller prize than mine (300 guilders, if I remember well). He suggested I use them to win the prize, which I of course did not.

Some time went by, until finally in 2001 the high-scoring Netherlander had an article published in the Netherlandic journal of a large I.Q. society. It was about the spirograph, a toy with which one can draw figures of intertwined circles with wheels that rotate inside each other. He likened this to the guilloche engine, and spoke of guilloche engines he had seen in a museum. For some length he went on about rotating wheels and guilloche engines. While reading his interesting piece, the telephone rang, and a member of this society informed me that the author of the article had been found near a railway tunnel, his head cleanly separated from his trunk by the wheels of a train. It was one of the finest examples I had ever seen of what one could call a macabre sense of humour.

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Since this was a mysterious event, I wrote the South-African about the tragic death, asking whether he had any idea why the Netherlander could have done such a thing. To my surprise, the next day I received a telephone call from the high-scoring Netherlander's sister, who confessed that the South-African colleague did not exist, and his name was that of her little son. The letter had arrived at her address. She told me that her brother had used her son's name to retest on my and other tests. Indeed, the "South-African" had informed me of his scores on Ronald K. Hoeflin's tests, which had been taken before by the Netherlander under his own name, then under his sister's name (he told me that at the time) and finally under the child's name as it now turned out.

I understood why the "South-African" score on the Test For Genius had been so high; after all, I had given the answers to the hardest questions (the "Short" version of the test) to the Netherlander some years before. In fact, I had had a very mild suspicion right away when receiving that test submission, which was written on the same paper as used by the Netherlander, in a vaguely similar style and handwriting. Out of piety I decided to let the Netherlander be the official winner of the Prize rather than the non-existent South-African; after all, he had the highest score after removing the fraudulent South-African one. He would have won without the pseudonymous retest, albeit that he had not registered for the Prize under his own name, which was a requirement. Around that time I also learnt of certain family circumstances that may have led to the suicide, but I believe it is not appropriate to relate those here. I did use this case when writing my novel "Field of eternal integrity", as well as in the "Test of the Beheaded Man". One could say that in selling those items, I am repaying myself the 2000 guilders he conned me for.

Section 3: The Casino Robber and "High Queue" Verbal Tests

Jacobsen: What happened with the high-I.Q. society member who ended up robbing a casino?

Cooijmans: This was a young man whom I had seen several times at meetings. Suddenly, an article by him appeared in the journal of a society to which we belonged, explaining he had tried to solve his financial problems by robbing a casino with a (not-loaded) handgun. Shortly after exiting the casino, he was caught by the police. I corresponded with him while he was in prison and sent him a test to take by way of extra punishment, which he completed. Even from prison, he kept organizing a large yearly summer feast, which he had been doing for years already. I believe his sentence was something like a year and a half. After his release he came to live in a town close to me, and died some years later of an illness.

Jacobsen: Who is "High Queue"? What were those verbal tests they sent?

Cooijmans: A decade or so ago, the pseudonym High Queue was used by someone who spread a number of verbal analogies tests among I.Q. society members. The analogies dealt with more or less known figures in the societies in a fun-poking way, and some people were offended. It has never been officially revealed who High Queue was, but I am as good as certain

it was two people. Originally only one, then another joined in and took over who was even more vitriolic. I know the names, but think it is better not to reveal them here. In private correspondence I have no objection to sharing them.

Section 4: The Documentary Subject and the Finnish Test Fraud Call

Jacobsen: What happened with the member who had a prize-winning documentary made about him and then later committed suicide?

Cooijmans: In the year 2000 I was in contact with this person, mainly about Asperger syndrome and related topics. This was both correspondence and telephone. He told me a lot about his suffering from extreme compulsions, depression, experience with being bullied, adaptations he was making to his apartment, self-administered forms of shock therapy he used to be temporarily rid of his otherwise untreatable state of compulsiveness and depression, and more. This was an extremely verbally inclined person who spoke fluently and rapidly, using a rich and high-brow vocabulary. He suffered extremely and assured me that his phenotype should under no circumstance be repeated.

Twelve years later a documentary about him, "De regels van Matthijs", was in the news for winning a prize in a film festival in Nyon, Switzerland. It showed the bizarre adaptations he had been making in his apartment, like a hole in the wall to be able to use the space between walls for storage, a vessel to retain the water of the shower while it was warm to keep the energy in, changes to the gas tubes, and so on. You saw him soldering or welding on those tubes, and showing medications he had hoarded for his self-administered treatments. The house owner was threatening to put him out of his apartment because of all the modifications. At the end of the documentary he died. It is not clear to me exactly what the cause was, whether it was suicide or a shock therapy gone wrong. The things he did were potentially deadly so I am not giving details, but the documentary does.

Jacobsen: What happened with the Fin who called you and asked to halt the "bloodhounds" going after him for test fraud?

Cooijmans: Some twenty-five years ago the telephone rang - in those days a lot was done via telephone calls - and a Glia Society member from Finland was on the line. He confessed he had cheated when taking a few tests, both a Hoeflin test and the Cattell Culture Fair, both of which had seen a lot of fraud already in the 1990s. Some people had found this out and were harassing him about it, and he believed I was behind that and desperately begged me to make them stop. "Call back the bloodhounds" were words he used. Sadly, I knew nothing of what was going on and had no means to end the merciless, cruel persecution of this poor soul. His haunted, breaking voice still disturbs my dreams after heavy meals. He was never heard of again thereafter.

Section 5: Conspiracy Theories, a Low-Scoring Cheater, and the Time Lords

Jacobsen: What did the person lecture about regarding conspiracy theories, UFOs, and the JFK assassination at the high-I.Q. society meeting?

Cooijmans: In the mid-1990s, a large I.Q. society organized a lecture by "John Hercules", whose real name was John Kühles; I see he has still been active in recent years. The lecture was about topics like crop circles, UFOs, and various conspiracy theories. The most remarkable thing I remember was a video of a film of the assassination of John F. Kennedy, on which you could make out that the driver of the car put his left hand over his right shoulder, holding something that looked like a gun. A shot was apparently fired, and Kennedy's head went back. John Hercules explained that secret agents are taught to shoot with one hand over the shoulder thus. This was the only time I have ever seen that video; I never even heard about it again after the lecture. It looked authentic to me though. If it was a forgery, I do not know how it could have been made.

Section 6: Cheating Confessions and Persistent Commercial Spam

Jacobsen: How did the low-scoring test cheater pose as a test designer?

Cooijmans: In 2006, this person scored zero on a test and disputed the result, claiming I had not reported the true raw score. Shortly thereafter another person took the same test and also scored zero. Right after I had reported the score to the second person, the first person responded angrily, saying, "You did not score that test honestly, I changed six answers so my score can not be zero again". Clearly he had let a friend of his send the retest.

Later in a Facebook group for test creators, I observed him spreading a test of his own hand. Or rather, someone else spread it for him as he was not on Facebook himself, it seemed.

Jacobsen: What was the phone call about the Time Lords in the future Giga Society? Who were these "White Masters" mentioned?

Cooijmans: In the 1990s I wrote a series of fictional stories in Netherlandic about the Time Lords, who were Giga Society members communicating with me from the future. After publication of one episode in a Netherlandic I.Q. society journal, a lady called me to ask if the Time Lords were the same as the White Masters she was in regular contact with. I think she referred to the White Masters of Anthroposophy. I kindly answered that I did not know if it concerned the same entities, and that I would ask them on the earliest convenient occasion. Somehow I have not got to that yet.

Jacobsen: What's the story behind the person who confessed to cheating and then begged remaining hidden?

Cooijmans: In the mid-1990s a Netherlandic I.Q. society member told me he had cheated by using dictionaries when taking the W-87, the admission test of the International Society for Philosophical Enquiry at the time. Since this test was vocabulary-based, in English, and disallowed dictionaries despite being unsupervised, this resulted in a score much higher than his real intelligence level. He also said that he would one day raise this matter in the I.S.P.E. and confess the fraud. It is unknown whether he ever did that.

Later in one of my satirical articles in the Netherlandic journal of this society (not the I.S.P.E. but the other one), I announced that the time of unmasking was nigh for test frauds. On the day of publication, he called me, almost panicking, begging me not to betray him, and claiming that what he had done was not fraud, even offering to help me take that test and get me into the I.S.P.E. that way. That is so revealing of the ethical level of such a person, that it can even occur to him that I would participate in such fraud.

Jacobsen: Who was spamming you persistently with commercial messages? How did you handle it?

Cooijmans: It is better not to name names, although in this case my hands are itching; this person sent me a friend request on Facebook and, after I accepted, at once commenced sending me commercial messages asking me to invest money in his projects. Every time I unsubscribed, he added me again. After a few such rounds I unfriended him. Some time later I saw him writing under a Facebook post about me that HE had unfriended ME because I had "annoyed" him… Such behaviour I find beneath contempt.

Section 7: A Cry for Help and a Request for Controlled Contact

Jacobsen: What is the story of the individual who sent a strange "help" message and then assaulted a pregnant woman?

Cooijmans: In the early 2020s I received an empty electronic mail message with an attachment that was a photo of a piece of paper with, barely legible, "help" scribbled on it. I ignored it for the time being. A few years or so later, I came across the message again in my absurdly large e-mail archive, and decided to look this person up on the Internet to see if nothing bad had happened. Just to reassure myself, so to speak. After all, one never knows. And so I learnt to my amazement that the person - referred to as a "woman" in some sources but looking like a male - had been arrested for assaulting a breastfeeding woman in her car (I mistakenly said "pregnant" before), seemingly trying to steal the baby. Video footage of the arrest can be found online.

So I suppose the lesson is, never ignore a cry for help! My bad, as one says idiomatically.

Jacobsen: What was with the request from the person who wanted you to test everyone seeking her contact information?

Cooijmans: This person felt overwhelmed with people wanting to contact her, and decided to go offline and in hiding for an undetermined period. On her request, we arranged this so that her web location would refer people to me, and I would administer a certain test to them, and only if they exceeded a particular very high score would I bring them in touch with her. She warned me that it would get busy with contenders.

No one ever showed up.

Section 8: Unconfirmed Test Scores and Shifting Identities

Jacobsen: What's the background on two unconfirmed Logima Strictica 36 scores of 32?

Cooijmans: One day, someone showed me his Logima Strictica 36 score report, and it reported 32 right. The report was fully authentic, as far as I could tell. Still, he told me that the test scorer and author, Robert Lato, had denied the score afterwards and sent him a new report with a much lower score, stating that the first report had been a "joke". The published statistics also never contained the score of 32. As an interjection, I remind the readers here that the "official" statistics and norms of L.S. 36 as found online are, in my perception, a clandestine rogue project by an individual who was not satisfied with his I.Q. on the test according to the official norms at the time, and made his own norms, giving himself a very much higher I.Q., and then aggressively pushing his norms as if they were the official ones.

Years later, a second candidate told me that he, too, had received a Logima Strictica 36 report with a raw score of 32. This score is missing from the published statistics as well.

Jacobsen: Why did somebody contact you under different names over the years?

Cooijmans: In the early 2000s when I had just acquired a computer and Internet connection, someone corresponded with me briefly and mentioned various personal circumstances, such as being sixteen years old, pregnant, and considering travelling to another country. Over the fifteen years or so that followed, this person resumed contact with me a few times after years-long interruptions, but under different names. I knew it was the same person because she referred to the circumstances mentioned during the initial period of correspondence, showed photos of the child growing up and so on, but for some reason she never wanted to confirm the name she used then, and which I remember well.

Section 9: Outlandish Academic Offers, Delusions, and Speed Dating

Jacobsen: What happened with the supposed "professorate" offer at a New Zealand university? The offer from someone who turned out to be a student.

Cooijmans: This person told me that his university would like to have me as a professor or something like that; I only needed to say "yes" and I was in. This struck me as rather strange, if only because I lived literally on the other side of the world so how could I ever get to my workplace in time each morning if I took on that job? It would take hours to get there! I did not get clear responses to my questions as to precisely how he had in mind I could work in New Zealand, and then seamlessly his text morphed into suggesting that I come study for a PhD there.

I pointed out I did not even have a Master's degree, so was not eligible for such a course, but he assured me that prior degrees were entirely unneeded: "You just read the books, take the exams, and you have a doctorate!" I was quite certain that doctorates are not conferred thus, but rather through doing research and writing a dissertation or series of articles; but then, this was not the first time that someone from Oceania presented me with this alternative PhD journey. Meanwhile it had become clear that this was just a student with a lot of imagination. In the dialect of the region where I live, such a person might be called a "lulleman". A bit later, after the advent of YouTube, he began sending me messages containing only hyper references to videos with the remark, "This video is awesome!" I did not know the word "awesome" at the time, and, seeing the videos he sent me, assumed it meant the same as "awful".

Again later when Facebook came up, I saw him writing unintelligent non-committal high-on-the-horse comments under messages of I.Q. society members; never have I seen him put out even one sentence that made sense.

Jacobsen: What was the deal with the person who experienced bizarre delusions of reference?

Cooijmans: This was in the early 2000s. By that time I had an Internet connection and electronic mail account, and this person, an I.Q. society member and author of a Netherlandic book on giftedness, corresponded with me for a while after I had provided information she needed for the book. She told me she always studied certain one-lined cartoons in a particular newspaper with great attention, as they tended to be about her. The cartoonist had hacked her computer, she said, and was using her personal life history as a basis for his daily strip "Sigmund".

But it got worse; she also claimed that the television series "Fantasy Island" – Ze plane! Ze plane! – was based on short stories written by her and stolen from her hacked computer. The catch is that this series was made in the late 1970s and early 1980s, so twenty years earlier, when she most likely was not writing on a computer yet. When I carefully pointed this out to her, she insisted, "But I am certain! I can see with my own eyes that every episode follows my story line to the smallest detail!" Just in case she reads this interview: No, this is not about you.

Jacobsen: How was the "speed dating" event of the high-I.Q. society?

Cooijmans: It was held in the open air in 2010, somewhere in the middle of the Netherlands. The females were seated in a very wide circle, dozens of metres removed from one another.

The males went round, spending five minutes or so with each female. You got a form on which to indicate if you were interested in each given candidate, and afterwards the organizers compared these forms to determine the "matches". Every participant received a list of one's matches to take home. I think I had about four.

In the days thereafter I was briefly in electronic mail contact with each of the "matches". While nothing came out of it, one case was particularly dismissive; when I reminded her of topics we had discussed at the "speed date", she downright denied them and said I must be mistaking her for someone else. I considered that thoroughly, mentally went through all the conversations I had had that day, but no, I was not mistaken. I suppose this is some people's way of saying, "I do not want further contact".

Section 10: COLT Misfires, Web Host Mayhem, Death Threats, and Final Oddities

Jacobsen: What is the case of the COLT misfiring? What were the consequences?

Cooijmans: In 2009 someone ordered the "Cooijmans On-Line Test – Two-barrelled version" and I sent him the login information. He protested that this was not the two-barrelled version, but the earlier one, for which he claimed to have already paid twice, the second time after losing his password.

I looked through my meticulously kept financial books and test database, and saw he had never ordered the earlier COLT version (but had ordered other tests), and had never had login information before. I explained to him that the COLT was originally freely available online for everyone, without logging in, and that the login system was introduced later on. And that he might have been on the COLT before the login system came, and later noticed he could not log in and wrongly thought he had lost his password. And that I would not let someone pay a second time after losing the password. And that this was definitely the two-barrelled version, and that the second barrel would appear as he advanced.

But he stubbornly maintained this was not the two-barrelled version, and that he had a login account earlier and had paid twice before for the same test. "You are an idiot and I resent you", he uttered after my kind explanation above. I deleted his account and refunded the fee. It is especially bizarre that someone can deny that a test is a certain test while I, as the creator, am the one who knows what test it is.

Jacobsen: What happened when your web host took down your site?

Cooijmans: This was someone who had been in contact with me about "Space, Time, and Hyperspace", a subtest of the Test For Genius. He claimed the test was invalid, and wanted some kind of credit for having proven that. I invited him to send answers, but he refused, apparently he first wanted some guarantee that he would receive a perfect score for showing

that the items were invalid (which he had not shown or explained at all at that point, he only stated that they were invalid but without arguments or explanations). There was a stubbornness and rigidity in his behaviour that is often associated with psychotic disorders, and later he indeed told me he was schizophrenic.

Since I was not willing to give him any credit or guarantee for simply stating the test was invalid, he went berserk and put the test with his alleged proof of invalidity online. But very soon thereafter he removed it again, regretting it. He also made a number of websites with domain names that referred to me or my tests, and that attempted to install malicious software on the visitor's electronic computer upon loading the page.

A bit later he offered to host my website for free. Forgiving as I am, I let him do that. For a while it worked, then suddenly my website was gone and I never heard from him again.

Jacobsen: What led to the death threat? How did you respond?

Cooijmans: To start at the likely beginning, in 2001 someone from Germany ordered the German version of the Test For Genius, which I sent him. A few months later he began to complain that what I had sent was not the German Test For Genius. Again, that was bizarre, given that I, as the creator of the test, am the one who knows which test it is. Perhaps he had expected it to be more similar to the English version, but of course one can not translate test problems literally, one has to find some adaptation that works in the other language. He maintained stubbornly and rigidly that this was not the German Test For Genius, and eventually I offered to refund the two dollars he had paid me (that was the test fee in those days). Suddenly he withdrew and refused to give his address, making it impossible for me to send the money back. I heard nothing from him for a long time.

Then in 2003, 51 minutes before my birthday, I received this friendly message from Germany by electronic mail. Although I have never been able to verify it with certainty, I suspect it came from the person in the previous paragraph:

Hello Paul,

How are you doing, old friend?

Well, I hope! For the moment.

I'll be coming to Helmond next month.

And I'll get rid of you.

I will take my time.

I know where you live.

I know where you go.

Do you remember me?

We met 2 years ago.

You stupid little prick.

Prepare to suffer.

Prepare to die.

See you soon,

mmmfred 196

A last test for you:

One of these people will die soon. Select this person:

1. Herold T – b. Peter Q – c. Arnold B – d. Paul C – e. Jon N

—

+++ GMX – Mail, Messaging & more http://www.gmx.net +++

Bitte lächeln! Fotogalerie online mit GMX ohne eigene Homepage!

[Editor's Note: Letter ends]

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I always find the "Bitte lächeln!" rather funny in this context. I reported this to the provider, gmx.net, and they replied, apologizing for the "virus" I had received! But it is not exactly a virus. I have kept this message on my web location, paulcooijmans.com, in the category "Ethics", with some more information.

Section 11: Sylvester Stallone and the Post-Modernist

Jacobsen: Who tried to emulate Sylvester Stallone? What was the end result?

Cooijmans: In the late 1990s, a former classmate of mine got back in contact. For a while he took guitar lessons from me, and had the habit of not wanting to leave when the lesson had ended, or at least not until my refrigerator was empty. On one occasion, he managed to eat an entire box of hagelslag (chocolate sprinkles) with the one slice of bread I had left to offer him. I made use of his presence by administering the Giga Test to him, an individual supervised test I had at the time. Remarkably, he had a perfect score on the mental arithmetic section.

He also told me that, after leaving school, he had developed a fixation on Sylvester Stallone, as in the *Rocky* films. He had trained for years to obtain a similar physique, and this included the use of anabolic testosteroids. He said he had beaten lamp posts in the streets with his fists until the bones in his hands broke, and had been hanging around in the nightlife, looking for people he could challenge to a fight. He had become a lot more aggressive and dominant than in our school days, and once when I tried to get him out of my house he refused and threatened to hit me.

At one point he became schizophrenic and ended up being hospitalized for long periods, sometimes under force for assaulting a psychiatric nurse. Once he escaped and walked all the way to my house late at night. When I opened the door, he said he wanted beer. I did not let him in, and he walked back again. He also had a habit of calling me on the telephone frequently, sometimes in the middle of the night so that I had to get out of bed and down the stairs, and then he said two words and hung up again. Once I changed my telephone number for that reason, but he found out the new number by calling my mother, whose number he still had from when we were classmates and I lived with my parents. He had become vengeful toward Stallone, and wanted to travel to the United States one day to give Sly a good beating.

He also spoke of a girl from our class, and said he had always been secretly in love with her. As it happened, she worked at the hospital where he was kept, and sometimes he waited for her to come out when her shift ended, which she did not like. He knew where she lived, and he had stood guard opposite the house to observe her and her husband, whom he was planning to murder he said; it never got to that, insofar as I know. On one occasion he confided that even in our school days, he had been fantasizing during class about the girls in our school; the details of his fantasies are not suitable for publication, but involve knives and female private parts.

Since he was not making progress on the guitar and never practised, I ended the lessons and refunded the remainder of the fee, which he had paid in advance. The last time I saw him was when I participated in a running race on the terrain of the psychiatric institute where he lived. He kept intrusively talking to me while I tried to register for the race, aggressively hushing up the lady of the race administration who tried to enter me.

Jacobsen: What was noteworthy about the post-modernist who attended a meeting in the 1990s?

Cooijmans: This was a university teacher - I do not know in which field, perhaps post-modernism? - who regularly attended a certain I.Q. society meeting where I was present a number of times; the same place that was frequented by the casino-robber. I remember he expressed amazement that we were not all as thrilled as he was about post-modernism (I had no idea what that was at the time). Occasionally, he jumped up mid-sentence, spread out his arms, and ejaculated, "I'm here, I'm queer, check me out!", whereupon a certain girl applauded enthusiastically, saying, "Hey, totally okay man!", while the rest continued their conversation as if nothing had occurred.

Section 12: Conclusion

Jacobsen: Why did the interviewer change the conditions of the interview after already agreeing?

Cooijmans: Years ago someone wanted to interview me, and I said I was willing to cooperate, provided my answers would be used verbatim. He agreed, so I told him we could go ahead as far as I was concerned. Then he suddenly changed the conditions, saying that if I answered something he did not like or that made him look stupid, he would want me to change the answer. Of course I could not agree to that, and called off the interview. In fact I broke off contact with him for some time, as I find such behaviour despicable. My understanding is that this person had a fear that his questions were rather stupid, and was afraid that my answers would reveal that to the world; and he may have been right.

Jacobsen: Who has been spamming you for nearly two decades, even ten or more messages a day?

Cooijmans: Of course I cannot name names in such cases, but one person has been sending an almost continuous stream of nonsensical messages, sometimes ten to twenty per day, since about 2005. I do not respond to most of them; occasionally I have to respond when he orders or takes tests. The messages make frequent mention of topics like the Central Intelligence Agency, China, some of the Giga Society members, hedge funds, hot girls, the Caribbean, and more.

Now and then the person also sends sensitive personal information, such as his street address, a photo of his identity card, login information of his e-mail account, medical information such as that he has schizophrenia, and so on.

Jacobsen: Thank you for the opportunity and your time, Paul.

Cooijmans: I never know what to say here. On second thought, I remember another weird occurrence; someone applied for membership in a society run by me, and I referred the person to the relevant society's web location for the qualification information and registration form. Somehow this did not agree with the person, and she began to ask me which society I meant and what the pass level was. This was backward because she was the one who was applying. After some writing up and down it turned out she had no idea to which society she was writing and what the entrance requirement was. Again, more writing up and down revealed she had been doing a mass application to many societies at once, so when I responded, she had no clue who I was and what societies I was involved in.

I subtly educated her to the extent that this was not how one applies for membership in I.Q. societies, and that one should study the information on a particular society's web location before applying to that society. Indignant, she began to lecture me about kindness and compassion, and I ceased responding.

Finally, in the early days of the Test For Genius again, a Netherlander who had ordered the test called me. He said he had a perfect score on the Cattell Culture Fair, so 50 right on both forms and "I.Q." 183. In his communication and further behaviour, he was a complete scatterbrain uttering mainly fast-flowing incoherent rambling. Since my test was typed on a typewriter (Olivetti) with hand-drawn pictures, he offered to computerize it for me. Out of curiosity, I let him send me his version.

I had rarely been so horrified. He had mangled literally everything: The instructions had been rewritten in a style I would consider patronizing toward primary school children, let alone intelligent adults. The verbal problems had been "corrected" in ways that betrayed he had not only not understood the problems, but had even not grasped the difference between the verbal analogies and the association problems. The spatial problems were simply missing as he possessed no computer graphics skills; he had left room for me to draw them in by hand, and even that room was immensely too small for the problems to fit there. I kindly thanked him for his efforts and reused the back of his printouts as scrap paper.

Discussion

The conversation with Paul Cooijmans offers a rare, firsthand glimpse into the unpredictable and often surreal world of high-I.Q. test administration and society membership. A recurring theme throughout the dialogue is the juxtaposition of rigorous testing procedures against a backdrop of personal eccentricities and unexpected human behavior. Several notable observations emerge:

Cooijmans recounts several instances where test recipients either misunderstood or manipulated the intended purpose of the tests. For example, the same customer who initially complained about receiving an English test despite ordering it, later insisted on a Netherlandic version - even though the test content remained unchanged. These incidents underscore the challenges that arise when language expectations, test administration, and individual perceptions intersect in a digital age where timing and communication can be easily misinterpreted.

One of the most dramatic episodes involves a candidate who submitted a fraudulent retest under multiple names - a maneuver that led to the infamous "beheaded man" case. This incident not only highlights vulnerabilities in test security but also reflects the lengths to which some individuals will go to manipulate outcomes. The fact that a high-scoring Netherlander eventually used pseudonyms (including that of a minor) to retake tests introduces ethical dilemmas that persist in high-stakes testing environments.

The narrative is replete with stories of individuals ranging from a would-be casino robber to a persistent spammer, and even to a person whose bizarre delusions of reference blurred the lines between personal identity and creative expression. These accounts suggest that within high-I.Q. circles, a combination of high cognitive ability and idiosyncratic personality traits can lead to both innovative contributions and, at times, destructive behaviors. The diversity of these experiences demonstrates that high intelligence does not uniformly translate to socially conventional behavior.

The interview highlights how digital platforms - such as Facebook and email - serve as double-edged swords. While they facilitate immediate feedback and rapid test delivery, they also enable misinterpretations (e.g., the exaggerated wait times) and provide avenues for both overt and covert manipulation of test results. The discussion of spamming and the misrepresentation of test conditions further illustrate the complexities inherent in administering tests in an era where online communication dominates.

The anecdotes raise important questions regarding ethical responsibilities and logistical challenges in test administration. Issues such as the proper handling of test fraud, maintaining secure communication channels, and ensuring that test takers have a clear understanding of what is expected of them are recurring concerns. The balance between being a benevolent test creator and maintaining strict quality control is shown to be delicate—often with humorous, yet cautionary, consequences.

In sum, the discussion elucidates the unpredictable interplay between standardized testing and human behavior. It emphasizes the need for clear protocols, robust security measures, and an understanding of the diverse motivations and behaviors of test-takers. While the high-I.Q. community is marked by intellectual brilliance, it is also subject to human foibles that can complicate even the most carefully designed assessments.

Methods

The interview with Paul Cooijmans was conducted in a semi-structured format on a date prior to its publication on January 22, 2025. Questions were designed to elicit detailed responses about oddities of experience of Cooijmans over many years in this area. Thematic question were sent based on prompts to Cooijmans who then provided typed responses.

The Transformation of Gayelette, the Good Witch of the North

L. Frank Baum, Chris Cole & Claude

In the days when Oz was young and the four countries had not yet learned to live in harmony, there dwelt in the purple mountains of the Gillikin Country a sorceress of remarkable beauty and terrible pride. Her name was Gayelette, and she possessed magic so powerful that the very stones would sing at her command and the winds would bow to her will.

Gayelette lived in a palace carved from a single ruby, its walls so clear that one could see the clouds passing through them like dreams. She wore robes of silver mist and a crown of crystallized starlight, for she believed herself to be the most magnificent being in all the land of Oz.

Now it happened that Gayelette fell in love with a handsome prince named Quelala, whose heart was as pure as mountain snow and whose laughter rang like silver bells across the valleys. But Quelala cared little for the trappings of magic and power that so delighted Gayelette. He preferred to tend his garden of ordinary flowers and speak kindly to the field mice.

"Beloved," said Gayelette one morning as they walked through his simple garden, "I shall create for you a wedding gift that will make you the envy of every prince in the four countries of Oz."

Quelala plucked a dandelion and blew its seeds into the wind. "But I am already the richest prince in all the world," he said, watching the seeds dance away, "for I have your love."

Gayelette, however, was determined to display her magnificent power. She summoned Joyero, the most skilled jeweler in all of Oz, to craft the most extraordinary wedding gift ever created. But this would not be mere goldwork - Gayelette intended to imbue it with magic beyond imagining.

She labored for forty days and forty nights, weaving powerful enchantments into the very threads of gold that Joyero spun. Day by day, she poured her magical essence into the cap, not realizing that with each spell, she was creating something both wonderful and terrible. The Golden Cap pulsed with raw magical power, ready to be shaped by its owner's will - but Gayelette, in her pride, did not foresee how such concentrated magic might be twisted to dark purposes.

As she worked, the wind spirits whispered warnings, and the mountain stones trembled with unease. Even the ruby walls of her palace seemed to dim, as if sensing the dangerous magic being wrought within. But Gayelette, drunk on her own power, heard only the song of her own magnificence.

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The cap cost her half her vast magical wealth to create, but she deemed it a worthy price. This cap, she declared, would be her wedding gift to Quelala, a vessel of pure magical potential that would demonstrate her love through the magnificence of her power.

At their wedding feast, she presented the Golden Cap to Quelala with great ceremony. The celebration was grand, with guests from all corners of Oz. Even the Winged Monkeys came, for they were merry creatures who loved festivities and meant no harm.

But as Quelala stood to receive his bride's gift, dressed in his finest silk clothes and a rich purple velvet coat, the King of the Winged Monkeys thought it would be amusing to play a prank. "See how fine the bridegroom looks!" he cried to his band. "Let us see how he looks when wet!"

And with that, the monkeys swooped down, seized Quelala by his arms, and dropped him into the nearby river with a great splash. His beautiful wedding clothes were ruined, his velvet coat dripping with muddy water, and he stood before all the guests looking like a drowned rat rather than a prince.

Gayelette's fury was terrible to behold. Her eyes blazed like lightning, and the very air crackled with her rage. "How dare you!" she thundered at the Winged Monkeys. "You have ruined my wedding day and shamed my beloved!"

The monkeys, realizing their prank had gone too far, cowered before her wrath. But Gayelette's anger was too great for simple apologies. She raised the Golden Cap high above her head and spoke words of binding and enchantment.

"For this insult," she declared, her voice echoing with magical power, "you shall serve whoever wears this Golden Cap, and serve them three times you must obey, whether the wishes be good or evil!"

Quelala, dripping and bedraggled but still gentle of heart, caught his bride's arm. "My darling," he said softly, "they meant no real harm. Perhaps the punishment is too severe."

But the enchantment was already woven into the very fabric of the Golden Cap, and Gayelette's pride would not let her undo it. "It is done," she said firmly. "Let this be a lesson to all who would mock the power of Gayelette!"

Yet even as she spoke, Quelala looked sadly at the glittering cap in her hands. He possessed the gift of seeing truth beneath beauty, and the cap now gleamed with more than gold - it pulsed with a dark hunger, a magic that demanded obedience rather than inspired it. "My darling wife," he said gently, "this gift troubles me deeply. What began as love has become vengeance. I fear this cap will bring sorrow to all who wear it, until someone wise enough to refuse its temptation sets its captives free."

But Gayelette, still burning with anger from the monkeys' prank, dismissed his words as peasant superstition. "They deserved their punishment," she declared. "And the Cap remains a token of my love and power!"

Years passed, and Gayelette's pride grew like a thorny vine. She used her magic to command and control, believing that her power made her wise. But Quelala grew sad, for he saw how her magic separated her from the simple joys of life. Though he never wore the Golden Cap himself, its very presence in their home cast a shadow over their happiness. The cap seemed to whisper to Gayelette in the night, feeding her vanity and her hunger for greater power.

Word of the Golden Cap's terrible magic spread throughout Oz like wildfire. The Wicked Witch of the West, whose heart was as black as a moonless night, heard tell of this artifact of immense power. She sensed its dark potential and knew that with such concentrated magic, she could conquer all of Oz and bend every living thing to her will.

One day, Quelala set out on a journey to the distant villages of the north, as was his custom, to bring aid to those in need. He carried with him only kindness and the Golden Cap - for though he rarely wore it, he kept it safe as Gayelette's wedding gift. It was meant to be a short journey, no more than a few days.

But the days stretched into weeks, and Quelala did not return. Search parties scoured every valley and mountaintop, every village and hidden grove. Gayelette sent her magic far and wide, calling to birds and beasts, asking if they had seen her beloved prince. But no trace of him could be found - it was as if he had simply vanished from the world like morning mist.

For months, Gayelette refused to believe the worst. She sent out fresh search parties, offered great rewards, and used every enchantment she knew to divine his whereabouts. Surely her magic was powerful enough to find one gentle prince.Surely love itself would guide her to him.

When at last a wandering peddler brought word to Gayelette's palace, her heart turned to ice. The man spoke in hushed tones of strange happenings in the western lands - of the Wicked Witch of the West commanding Flying Monkeys with a Golden Cap that gleamed upon her brow, using them to defeat armies and enslave the Winkies.

Gayelette knew with terrible certainty what had befallen her beloved. Only one Golden Cap existed in all of Oz - the cursed thing she had created in her pride. If the Wicked Witch now possessed it, then gentle Quelala, who would never have surrendered it willingly, was gone forever. The very power she had woven into that accursed cap had drawn evil to it like a flame draws moths, and her beloved had paid the price.

In her chamber, Gayelette found the single dandelion Quelala had picked for her before his journey - now withered on her windowsill, its seeds long scattered by the wind. Her heart broke like crystal shattering in winter's grip.

Though no body had been found, Gayelette finally accepted the truth she had fought so long to deny. She held a funeral for Quelala beneath the stars, laying his favorite dandelions upon an empty grave. As she wept, her tears fell upon the flowers like rain upon hope that would never bloom again.

In that moment of profound loss, she finally understood what Quelala had tried to teach her. The Golden Cap had not been a gift of love, but a curse born of her vanity. Her pursuit of power had created the very weapon that destroyed everything she truly valued. She had woven dominion into gold, and dominion had demanded its price.

As she knelt beside the empty grave where no body lay, Gayelette saw the truth with terrible clarity: every spell she had poured into the Golden Cap had been tainted with pride, and pride had made it a magnet for evil. The cap's tragic power was not merely to command the Winged Monkeys - it was to corrupt whoever possessed it, to whisper promises of control until its bearer lost everything worth controlling.

She stayed by that empty grave until dawn, surrounded by wilting dandelions, and wept until her tears washed away her palace of ruby. Then, removing her crown of starlight and her robes of silver mist, she dressed herself in simple gray and wandered into the northern wilderness.

For many years, Gayelette lived as a hermit, learning wisdom from the stars and kindness from the field mice. She discovered that true magic came not from commanding others, but from serving them. She helped lost travelers, healed injured animals, and spoke gently to frightened children.

Slowly, her hair turned white as mountain snow, and lines of compassion etched themselves upon her face. She no longer called herself a sorceress, but simply the Good Witch of the North.

And when a little girl from Kansas came to Oz, lost and frightened, it was this transformed Gayelette who kissed her forehead with a blessing of protection - a kiss that carried more power than all her former magic, for it was given freely from a heart that had learned the greatest lesson of all: that true strength lies not in ruling others, but in serving them with love.

Years later, when Princess Ozma returned to her rightful throne and all of Oz celebrated, Gayelette walked beside Glinda the Good in the grand parade. As the procession moved through the Emerald City, the other sorcerers and witches displayed their finest magic. But when Gayelette's turn came, she performed a wonder that left even Glinda amazed.

With gentle gestures, she transformed ten plain paving stones into ten singing birds, then into ten bleating lambs, then into ten laughing children who danced around Ozma's carriage. The crowd gasped in delight, for none of the other magical folk could breathe life into lifeless things as Gayelette could. But when the parade ended and the celebration was complete, Gayelette carefully transformed everything back exactly as it had been - ten ordinary paving stones lying peacefully in the street.

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"Why do you not let your magic endure?" asked a young girl who had watched in wonder.

Gayelette smiled, her aged face glowing with hard-won wisdom. "Because, dear child, true magic knows when to let go. Life that is forced cannot flourish, and beauty that disturbs the natural order brings only sorrow in the end."

Thus did Gayelette become the wisest of all the witches in Oz, not despite her loss of pride, but because of it. And though she appeared old and humble, those who looked closely could still see the ancient power shining in her eyes - power transformed by wisdom into something far more beautiful than it had ever been before.

Nicholas Wright on Democracy and Neuroscience

Nicholas Wright & Scott Douglas Jacobsen

Nicholas Wright is a neuroscientist and strategist who bridges brain science and national security. For more than a decade, he has advised the Pentagon's Joint Staff and other U.S. agencies, as well as counterparts in the United Kingdom, on how human decision-making shapes deterrence and defense. His research explores how the brain constructs perception amid uncertainty, how moral emotions fuel cooperation and conflict, and how leadership transforms fear into purposeful action. Wright also examines the ethics of information operations, democratic resilience, and what he calls the "identity–culture spiral" that enables large-scale cooperation. His recent work, *Warhead: How the Brain Shapes War and War Shapes the Brain*, probes how cognitive science illuminates great-power competition and the enduring risk of nuclear escalation.

[Editor's Note: https://www.intelligentbiology.co.uk/

https://www.intelligentbiology.co.uk/books]

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In this interview, Scott Douglas Jacobsen speaks with Wright about "neurostrategy" - the use of neuroscience to understand and influence nuclear and security decisions. Wright explains how perception is not reality but a brain-built model prone to deception; why 2014 marked a strategic inflection point with Russia and China; and how moral emotions and leadership determine a nation's will to fight. He draws ethical boundaries for information operations in democracies and argues that internal cohesion matters more than foreign interference. His guiding principle: avoid losing in three ways - do not lose a conventional war (for instance, over Taiwan), do not decay from within, and do not fight a nuclear war. Across all three, Wright contends, strategic success begins with self-understanding.

Scott Douglas Jacobsen: What was your inspiration for the work connecting neuroscience, security, and decision-making?

Nicholas Wright: Over ten years ago, I began applying new insights from neuroscience to decision-making about nuclear weapons - an enormously important area that had been neglected in public policy. When you consider atomic weapons, the goal is to influence how someone else will decide. If you are thinking about Vladimir Putin or Xi Jinping, you must consider how they make decisions about nuclear weapons, which involves understanding their thought processes and choices.

There are many sources of information, but the central fact is that they are human and thus have human brains. How do those brains work? For more than a decade, I have worked with the Pentagon's Joint Staff and others to address that question.

They aim to understand how the human brain makes decisions. In turn, I gain perspective as a neuroscientist - insight into problems where the brain meets the real world in life-and-death situations. We've had a productive collaboration with military colleagues in the United States and the United Kingdom for many years.

Jacobsen: Another critical factor is the ten years of working across U.S. administrations: the first Trump administration, the Biden administration, and the current second Trump administration. Administrations matter because they provide direction - a vector - beyond the geopolitical and military context, alongside the science of how the brain can be used for good or ill. How have you oriented your advising and learning across different administrations? Many assume the key differences lie in political changes.

Wright: I have worked with the U.S. government since the second Obama term. However, the most significant drivers are external. I began this work at the tail end of the post-9/11 counterterrorism era and in 2014 on issues such as Israel–Palestine that dominated U.S. security thinking at the time. Then came Russia's 2014 seizure and annexation of Crimea and the war in eastern Ukraine - often discussed in terms of "gray-zone" or hybrid tactics - followed by the full-scale invasion launched in 2022.

In 2014, we saw a turning point. Russia sent its so-called "little green men" into Crimea, and at the same time, China was shifting. It is difficult to pinpoint precisely when the change began, but it became apparent after Xi Jinping took office in 2013. By 2017, it was clear that he was

steering China in a different direction - more expansionist abroad and more authoritarian at home. With both China and Russia, something new was happening.

Many in the American government and, like me, in advisory roles recognized that these were profound shifts. They marked a sea change in the external environment we had to contend with. It was no longer primarily about terrorism. The United States had once been so overwhelmingly militarily superior that it did not need to worry about peer competitors. That is no longer the case. The most significant shift has been the resurgence of great-power competition. The issue is less about changes in U.S. administrations and more about changes in global realities that every administration must confront.

Jacobsen: With perception under uncertainty, there are factors like the "fog of war." Given the shortcuts in our sensory systems, how does uncertainty interact with perception in a war context, especially when so much is unknown and there are multiple dimensions to interpret?

Wright: The first thing to understand about perception is that our brains cannot process all the information constantly entering them. Each eye alone has tens of millions of light receptors, and in the center of the retina are millions dedicated to color and fine detail. Add hearing, taste, the position of every joint in the body, and the signals from the skin, and you realize the nervous system is bombarded with data. We cannot deal with that flood directly.

Instead, the brain uses a model of the world. Take vision as an example. You are not passively receiving information on some "television screen" in your head. You are actively constructing perception. What you see is not raw input - it is your brain's best model of reality, assembled from incomplete and uncertain information.

We know that perception is a model of the world - a simulation that takes place inside the brain. For example, if you fix your eyes on one point in the center of your visual field, the edges of your vision look full of color. But this cannot be raw input, because the periphery of your retina lacks the receptors for color vision. The brain is filling in the gaps, creating a simulation. That model is what you perceive.

In the context of the "fog of war," this means the model can be fooled or tricked. It must also constantly manage uncertainty. The model is controlled in two ways. First, it is anchored to reality through sensory input - your eyes, ears, and so on. Second, it is anchored by expectations about the world. For example, you expect a face to have two eyes, a nose, and a mouth. These anchors keep the model from collapsing into random hallucinations.

Still, the model is always an approximation, always one take on reality, never a perfect representation. Uncertainty is built in. And beyond perception, other brain systems - such as motivation, reward, and moral emotions - shape how we trust, cooperate, and respond to conflict.

[Ed. Note: Thomas Metzinger's 714-page *Being No One: The Self Model Theory of Subjectivity* ebook:

http://s3.amazonaws.com/arena-attachments/1521831/e0bbba50888859b8c9754bbacb86351c.pdf?1513786306]

Jacobsen: That brings me to status and dominance cues, as well as material incentives. How do moral emotions play into those dynamics? For instance, if there is a dominance-based conflict with potential for escalation, but a moral emotion - say, the sense of unfairness - enters the equation, can it buffer against the drive for dominance? Can moral emotions reduce conflict or support the role of a third-party intermediary, such as peacekeeping forces, to de-escalate tensions?

Wright: That is a crucial point. Just as your perceptual model simulates the world, your brain also runs models for emotions. These models help regulate how we interpret fairness, unfairness, and cooperation. They can serve as buffers against escalation by introducing constraints that are not purely material or status-based. In other words, moral emotions can redirect or soften conflict dynamics in ways that spreadsheets of costs and incentives alone cannot capture.

Rapid emotional responses, such as fear or anger, enable us to function in uncertain environments and respond appropriately. Without fear, for example, we would get into serious trouble; we need it to cope with rapidly changing conditions. The same applies to social motivations, such as the visceral rejection of unfairness. That instinct wells up inside us when we or those we care about are treated unjustly.

At the same time, we have other systems for planning. We can create forward-looking models of the world, projecting into the future in ways similar to planning moves in a chess game. In reality, the brain holds many different models, and these models work together like an orchestra. Fear might be the percussion, beating insistently in the background. Models of other people's intentions - whether to cooperate or compete - might be the violins. Each system contributes its part.

Together they produce the "symphony" of life. Sometimes one section dominates, while at other times another does, but overall, they must remain coordinated. At the highest level, this orchestra is conducted by the frontal pole - the region just behind the forehead. That area allows us to reflect on our own thinking: to assess certainty, to build a model of ourselves. It helps keep the orchestra in balance.

Warhead: How the Brain Shapes War and War Shapes the Brain by Nicholas Wright. 390 pp. St. Martin's Press

[Editor's Note: https://us.macmillan.com/books/9781250286871/warhead/]

Jacobsen: What about senses of identity? Not necessarily religious, political, or ethnic identity in detail, but how do these feed into the brain's mechanisms of in-group and out-group formation, the functions of bonding, and the tools of dehumanization in politics?

Wright: Humans can create groups far larger than those of any other primate. Chimpanzees, for instance, can manage groups of several hundred individuals. Humans, by contrast, can sustain groups numbering in the thousands, such as a tribe, or even in the billions, as with modern nations like China or India. The question is: how do humans form and maintain groups on such a remarkable scale?

This is a kind of social alchemy. In the Middle Ages, alchemists tried to turn base metals into gold. What humans do is something more powerful: we create coherent groups - groups stable enough to work together toward shared goals, providing security and cooperation on scales no other primate can match.

How do we achieve this? Through what I would call an identity–culture spiral. Individuals form identities - answering the question "Who am I?" - and those identities are reinforced and made consistent through culture. At the same time, individuals shape culture. Together, this spiral enables the emergence of large, coherent groups.

When discussing identity in the brain, there are several layers. First, there is the embodied self - the sense of being a human body, looking out from behind your eyes. Second, there is the narrative self - the story we construct about where we came from and where we are going. This narrative can be profoundly reshaped.

After World War II, for example, many Germans who had been active Nazis had to rewrite their identities using earlier parts of their lives to reconstruct themselves as citizens of a new West Germany, now conservative members of a democratic society.

A third layer is the social self, which involves belonging to a particular group. That might be a military unit, a social club, or a sports team. This identity tells you who you are by teaching you the rules of your group. Yankees fans, for example, wear certain clothes, use certain expressions, and care about particular things. At the same time, it defines the out-groups - those you expect to learn less from and often to compete against.

The embodied self, the narrative self, and the social self all work together to help us answer the central question: Who am I? That, in turn, is what enables humans to perform this remarkable social alchemy - creating coherent groups on a vast scale. Through the creation of shared identities and cultures, we form coherent groups. Those groups enable us to be the thinking, cooperative animals that we are.

Jacobsen: These dynamics seem less relevant to those in the Navy or Air Force, and more critical for soldiers on the ground. You've written about the experiences of American and Chinese soldiers, particularly how leadership and morale factor into this. I'm not speaking of propaganda or rallying cries, but of how proper leadership can inspire individuals to override the amygdala's primary fear response and instead make secondary or tertiary responses in the midst of combat, or even in anticipation of battle.

Wright: That can be reframed as the question: why do humans stand and fight instead of running away? In many situations, the more natural response would be flight. So why stand and fight? In my book, I look at examples such as the Chinese troops in World War II. During the Battle of Shanghai in 1937, large numbers of Chinese soldiers stood their ground against the Japanese invasion.

Part of this comes down to overcoming fear responses - not eliminating them, but controlling and harnessing them. Fear is valid if appropriately trained. Good training can transform fear, which might otherwise lead to panic and retreat, into a channeled response that enables soldiers to fight effectively.

Leadership is always central. Humans inevitably generate leaders because we are animals that form large groups through what I described as the identity-culture spiral, or social alchemy. Within these groups, leadership emerges, and people follow. This is built into how our brains operate.

Consider Admiral Horatio Nelson, the greatest naval commander of the age of sail. Contemporary accounts said he "infused his spirit" into his men. This meant he could create a model of the world and communicate it to others, enabling them to achieve things they could not have accomplished on their own. Leaders assume responsibility for others, communicate a clear vision, and provide their followers with a sense of purpose.

People follow leaders for two key reasons: dominance and prestige. Some follow those who are stronger. Others follow because of prestige - the recognition that a leader has knowledge or skills worth learning from. Humans are not especially strong compared to chimpanzees, but our survival depends on learning from others. That means prestige-based leadership is crucial.

So, there will always be leaders and followers. With practical training and capable leadership, those leaders can inspire people to stand and fight even in the face of overwhelming fear.

Jacobsen: Freedom House has noted that democratic and autocratic tendencies exist on a spectrum, shifting over decades. They do not simply label countries as "democratic" or "autocratic," but instead chart where societies fall along that spectrum. Over the past decade, their data shows a decline in democratic tendencies worldwide. This raises a concern: neurostrategy could be used by actors with constrictive aims, limiting human possibilities, or by those with expansive aims, enhancing them. In terms of balancing neuroscience, security policy, and ethics, what are the red lines? How do we prevent manipulation of citizens while still enhancing human security?

Wright: You're right that over the last fifteen years, many indicators show a reduction in democracy across several countries. But if you take the longer view, democracy has always advanced in waves. In the early nineteenth century, democracies emerged, then receded. After World War I, there was a rise in democratic states, followed by a collapse during the rise of Nazi Germany and other authoritarian regimes. In the 1980s, a surge in democracies occurred. We are currently living through what some call a "democratic recession."

So, yes, I agree that over the past fifteen years we've seen a reduction in democracy in many parts of the world. The question, as you've framed it, is about red lines - how to use knowledge responsibly, particularly from neuroscience and security policy, without violating human rights.

I'm cautiously optimistic. While we are in a democratic recession, history shows that societies can reverse such trends when they make good choices. We've done it before. If we prioritize freedom and democratic values, we can expand them again. The red lines, then, involve ensuring that any use of neuroscience or security policy strengthens human security and freedom, rather than constraining or manipulating citizens.

Jacobsen: So let's return to red lines. I mean specifically: with a broader neuro-based strategy, how should we set boundaries to ensure that knowledge is used to enhance human security rather than to manipulate citizens?

Wright: Take information operations, for example. These efforts involve influencing how people make decisions. In democratic societies - such as Canada, the United States, and the United Kingdom - we must be cautious. These governments already have powerful bureaucracies capable of influencing others, but the key red line is to keep those capabilities focused externally rather than internally. In other words, we should avoid turning those tools inward against our own citizens.

Another point: while China and Russia invest heavily in information operations designed to influence our societies, the bigger danger comes from within. If our democracies are going to weaken, it will not primarily be because of what they do - it will be because of the internal problems we create ourselves. The way we manage our own societies matters far more than foreign influence campaigns.

Jacobsen: Let's close with something forward-looking. Suppose a minister or general reads *Warhead* and becomes interested. What policy changes should they make first? And once those policies are in place, how should success be measured reliably and validly over time?

Wright: That's a great question. For policymakers today, success is about building societies that can thrive over the long haul. We are in an extended era of strategic competition, and winning that era is not about short-term battles. It's about decades of resilience. To do that, we need to avoid losing in three critical ways…

There's no simple answer about which of these three we must prioritize - we must avoid losing in all of them. First, we must avoid losing a conventional war, such as one over Taiwan. That is now a real possibility; the West could lose such a conflict. To prevent that, we need to harness our understanding of how the brain works. So we can, for instance, seize the initiative of surprise, cultivate superior will to fight, and manipulate adversaries' perceptions better than they manipulate ours.

Second, we must avoid losing domestically. Our societies could decay from within. To counter this, we need to ensure our societies remain healthy. This means preventing information operations from being directed inward, against our own citizens, and recognizing that the flourishing of our societies is ultimately more important than anything attempted by external actors, such as China or Russia.

Third, we must avoid losing in a nuclear war. It does not matter how many casualties the other side suffers; if tens of millions of Americans, British, or Canadians die in a nuclear exchange, then we have lost. We need nuclear weapons to deter others - and the goal must be to prevent atomic war.

I am optimistic that greater self-knowledge - understanding ourselves as humans with brains that work in predictable ways - can help us navigate all three of these existential risks. If we do that, I am confident we can endure and thrive in this new era of competition.

Jacobsen: Nick, thank you very much for your time today. I appreciate it.

Wright: Brilliant, excellent. Thank you so much.

Quantum Cosmology at the Frontiers of Observation

Dr. İzzet Sakallı & Scott Douglas Jacobsen

Professor İzzet Sakallı is a theoretical physicist at Eastern Mediterranean University whose research bridges quantum mechanics, general relativity, and observational astronomy. With over 180 publications exploring black hole thermodynamics, modified gravity theories, and quantum corrections to spacetime, his work sits at the exciting frontier where abstract mathematics meets observable reality. In this interview, he discusses the challenges of testing exotic gravity theories, the quest to observe quantum effects in astrophysical systems, and what the next generation of telescopes and gravitational wave detectors might reveal about the quantum nature of spacetime.

[Editor's Note: https://scholar.google.com/citations?user=3Bn4iSwAAAAJ&hl=en

https://inspirehep.net/authors/1047854

https://www.researchgate.net/profile/Izzet-Sakalli-isakalli]

Scott Douglas Jacobsen: How did you initially become interested in quantum cosmology?

İzzet Sakallı: My journey into quantum cosmology began with a deep fascination for the paradoxes that emerge when quantum mechanics meets gravity. During my graduate studies, I encountered Stephen Hawking's remarkable discovery that black holes aren't truly black - they emit radiation due to quantum effects near their horizons. This revelation struck me as profoundly beautiful and troubling in equal measure. Beautiful because it connected thermodynamics, quantum field theory, and gravity in an unexpected way. Troubling because it raised the information paradox: if black holes evaporate completely, where does the information about everything they swallowed go?

This puzzle captivated me because it sits at the boundary of our understanding. We have two extraordinarily successful theories - quantum mechanics describing the microscopic world, and general relativity describing gravity and spacetime - yet they seem fundamentally incompatible. Quantum mechanics operates on a fixed stage of spacetime, while general relativity tells us that spacetime itself is dynamic, curved by matter and energy. Reconciling these worldviews isn't just an academic exercise; it's essential for understanding the universe's earliest moments after the Big Bang and what happens at the center of black holes.

What drew me specifically to this field was the realization that we might actually test these ideas. Unlike some areas of theoretical physics that seem forever beyond experimental reach, quantum gravity leaves potential fingerprints in astrophysical observations. The incredible masses and strong gravitational fields of black holes, combined with quantum effects, create natural laboratories for exploring this physics. Working under Professor Mustafa Halilsoy, I learned to appreciate how exact solutions in modified gravity theories could bridge the gap between pure mathematics and physical reality.

Jacobsen: What is your advice for prospective students of quantum cosmology?

Sakalli: For students aspiring to contribute to quantum cosmology, I emphasize that this field demands both breadth and depth. You need to become fluent in multiple languages: the geometric language of general relativity, the probabilistic language of quantum mechanics, and increasingly, the computational language of modern astrophysics.

Start with a rock-solid foundation in differential geometry and tensor calculus - these are the tools for understanding how spacetime curves and how matter moves through it. But don't just manipulate symbols; develop physical intuition. Work through problems in classical mechanics until you can see the symmetries and conservation laws. Study thermodynamics thoroughly, because black hole thermodynamics beautifully parallels ordinary thermal physics, and recognizing these patterns will guide your understanding.

Equally important is developing computational expertise. Modern research requires numerical methods because most interesting problems in modified gravity cannot be solved with pencil and paper alone. Learn symbolic computation packages like Mathematica, and master numerical techniques in Python or C++. The ability to solve differential equations numerically, simulate gravitational wave signals, or analyze telescope data is increasingly essential.

However, I encourage students to maintain an interdisciplinary perspective. Quantum cosmology doesn't exist in isolation - it connects to high-energy particle physics, observational

astronomy, and mathematical physics. Read broadly. Understand the constraints from gravitational wave observations, X-ray astronomy, and particle accelerators. Theory disconnected from observation risks becoming mere mathematical recreation rather than physics.

Most critically, develop a questioning mindset. Many modified gravity theories make bold claims. Learn to evaluate them critically: Does mathematics hold together consistently? Do the physical predictions make sense? Can they be tested observationally? This skeptical, yet-open approach will serve you well, helping distinguish promising ideas from speculative constructs.

Finally, seek collaboration with observers and experimentalists. Some of my most fruitful research has emerged from conversations with colleagues who work with real telescopes and detectors. They bring a grounding perspective about what's actually measurable, which keeps theoretical work honest and relevant.

Jacobsen: Which shared benchmarks are most urgent for turning exotic-gravity claims into decisive, reproducible tests?

Sakalli: This question strikes at the heart of a crisis facing theoretical cosmology. We have an abundance of modified gravity theories - hundreds, perhaps thousands - each claiming to improve upon Einstein's general relativity or incorporate quantum effects. Yet we lack systematic standards to distinguish viable theories from mathematical curiosities. Establishing rigorous benchmarks is perhaps the most important task facing our field today.

The first urgent need is comprehensive waveform libraries. When gravitational waves ripple through spacetime from colliding black holes, the signal encodes information about the underlying gravitational theory. General relativity makes specific predictions about these waveforms. Modified theories predict different signals. We need catalogs of predicted waveforms for all major modified theories, calculated with sufficient precision that we can compare them meaningfully with observations from LIGO, Virgo, and future detectors. These "shadow libraries" of alternative signals would enable systematic searches through observational data, testing whether nature follows Einstein's predictions or reveals deviations pointing toward quantum gravity.

Equally critical is establishing uncertainty budget frameworks. Every theoretical prediction carries errors - from approximations in our calculations, from truncating infinite series, from choosing particular coordinate systems. Yet too often, papers present predictions without honest error estimates. We need standards requiring researchers to quantify theoretical uncertainties alongside observational uncertainties. This transparency would prevent false claims of detecting new physics when observations simply fall within the combined error bars of general relativity plus realistic uncertainty estimates.

We also need cross-theory comparison protocols - standardized tests that every modified gravity theory must pass before being taken seriously. These should include solar system tests, where we have exquisite precision measurements; binary pulsar systems, which have constrained gravity for decades; gravitational wave observations, our newest probe; and cosmological observations of the universe's large-scale structure. Any theory failing these

established tests should be reconsidered or modified, while theories passing them merit deeper investigation.

Particularly powerful are null tests - observations designed to distinguish general relativity from entire classes of alternatives without needing to test each theory individually. For instance, if gravitons have mass, they would travel slightly slower than light, causing gravitational waves and light from the same event to arrive at different times. Observing such time delays would rule out massless gravity theories in one shot. Similarly, tests of Lorentz invariance - the principle that physics looks the same regardless of direction or velocity - can constrain whole families of quantum gravity theories.

Reproducibility standards are equally vital. All computational codes should be publicly available with complete documentation. Independent groups should verify results using different numerical methods. This scientific hygiene prevents errors from propagating through the literature and builds confidence in robust findings.

For educational materials like textbooks, we need clear labeling distinguishing well-established physics from promising but speculative ideas. Students should learn what we know solidly, what we suspect tentatively, and what remains pure speculation. Mixing these categories without clear boundaries misleads the next generation.

Jacobsen: How do you enforce cross-paper comparability of assumptions across coauthorship networks?

Sakalli: Maintaining consistency across collaborative research requires systematic protocols and careful attention to detail. In our research group, we've developed several practices that help ensure our papers build coherently on each other rather than contradicting ourselves through subtle inconsistencies.

We maintain a living standards document that all group members reference. This specifies our notation conventions: Do we use a mostly minus or mostly plus metric signature? How do we define the Riemann curvature tensor's sign? What units do we adopt? These seemingly minor choices can cause major confusion if they vary between papers. By standardizing them, we ensure that someone comparing results from different papers isn't misled by notational differences.

For physical parameters, we document our assumptions explicitly in every paper. When studying black holes surrounded by quintessence dark energy, for instance, we record the assumed equation of state parameter, its range, and why that range is physically motivated based on cosmological observations. This documentation serves multiple purposes: it keeps us honest, helps readers understand our assumptions, and provides a reference when new collaborators join projects.

Regular group seminars play a crucial role. Graduate students and postdocs present their work in-progress, going through derivations step-by-step. This peer review within the group catches inconsistent approximations before they reach publication. When one student assumes weak field conditions while another works in the strong field regime, group discussions reveal whether their conclusions should match or legitimately differ.

We also practice computational validation - having different team members independently check numerical results using alternative methods. One person might use Mathematica's symbolic capabilities, while another writes custom Python code with different algorithms. When both approaches yield consistent results, confidence increases. Discrepancies flag potential errors for investigation.

Before beginning collaborative projects, we establish explicit agreements about fundamental assumptions, approximation schemes, and the domain of validity we're targeting. This preemptive alignment prevents the awkward situation where coauthors realize mid-project that they've been working under incompatible assumptions.

Literature alignment is another key practice. We systematically compare our parameter choices with established work in the field. When we need to deviate from standard choices, we document why explicitly in our papers. This transparency helps readers understand whether differences from earlier work represent genuine new insights or simply alternative approaches to the same physics.

Jacobsen: How does introducing Generalized Uncertainty Principle corrections change emission spectra across standard black holes?

Sakalli: The Generalized Uncertainty Principle represents one of the most intriguing predictions emerging from various approaches to quantum gravity. Standard quantum mechanics tells us there's a minimum uncertainty in simultaneously measuring a particle's position and momentum. The GUP modifies this, introducing a minimum measurable length - roughly the Planck length, about a billion billion times smaller than an atomic nucleus. This modification has profound implications for black hole physics.

For standard Schwarzschild black holes, Hawking calculated that they emit thermal radiation with a temperature inversely proportional to their mass. Massive black holes are cold; small ones are hot. The GUP modifies this relationship. The Hawking temperature gets corrections that depend on the black hole's size compared to the Planck length. For astrophysical black holes - even stellar-mass ones - these corrections are unimaginably tiny. But the corrections follow an interesting pattern: they're suppressed by the ratio of the Planck length squared to the horizon radius squared, which for a solar-mass black hole gives a factor around ten to the minus seventy-eighth power - utterly negligible.

However, the situation becomes more interesting when we consider spinning black holes and particles of different spins. Scalar particles, fermions, photons, and gravitons all interact differently with the curved spacetime near black holes. Each particle type has characteristic "greybody factors" describing how likely it is to escape the black hole's gravitational pull after being created near the horizon. The GUP modifies these factors differently for different particle spins.

For fermions - particles like electrons with half-integer spin - the GUP corrections depend on the particle's helicity, its spin direction relative to its motion. Co-rotating fermions, spinning in the same sense as the black hole, experience different GUP corrections than counter-rotating ones. This helicity dependence could, in principle, create asymmetries in the emitted particle abundances.

For higher-spin particles like photons and gravitons, the effects are even more complex. These particles can extract rotational energy from spinning black holes through a process called su perradiance - think of it as stimulated emission from atoms, but for black holes. The GUP modifies the conditions under which superradiance occurs, potentially changing which frequencies are amplified and how quickly the black hole spins down.

If we could actually observe these effects, they would manifest as deviations in black hole evaporation rates, altered ratios of different particles in the emission spectrum, modified superradiant instability timescales, and potentially even changes in the black hole's shadow - the dark silhouette seen by distant observers like the Event Horizon Telescope.

The sobering reality is that current observational limits constrain the GUP parameter to values that make these effects impossibly small to detect in astrophysical black holes. We would need sensitivity improvements of dozens of orders of magnitude. However, if primordial black holes - tiny ones formed in the early universe - exist and are evaporating today, their much smaller sizes would enhance GUP effects enough to potentially leave detectable signatures in cosmic ray observations.

Jacobsen: How much can Quasinormal Mode spectroscopy yield universal area quantization across modified-gravity backgrounds?

Sakalli: When you strike a bell, it rings at characteristic frequencies determined by its shape and com position. Black holes behave similarly. Perturbed by infalling matter or gravitational waves, they "ring down" by emitting gravitational waves at characteristic frequencies called quasi normal modes. These cosmic bells encode information about the black hole's properties and, potentially, about the nature of spacetime itself.

One of the most fascinating conjectures in quantum gravity suggests that black hole area might be quantized - coming in discrete units rather than varying continuously. Shahar Hod originally proposed that highly damped quasinormal modes might reveal this quantization. The idea is beautiful: just as atomic spectra reveal quantum mechanics at microscopic scales, black hole spectra might reveal quantum gravity at macroscopic scales.

In general relativity, the spacing between highly damped modes approaches a value directly related to the black hole's temperature. Bekenstein and others showed that if black hole area is quantized, the quantum of area should relate to the asymptotic mode spacing. The connection isn't exact - there are subtleties about numerical factors - but the possibility that quasinormal modes encode fundamental quantum gravity information is tantalizing.

Our research into modified gravity theories reveals that this connection is surprisingly robust but not universal. When we add quantum corrections - whether from dilaton fields, quintessence matter surrounding the black hole, or higher-order curvature terms - the quasinormal mode spectrum shifts. Yet in many cases, highly damped modes still show regular spacing patterns that relate to an effective area quantization.

However, the relationship between mode spacing and area quantization depends on theoretical details: boundary conditions at the horizon, the field content of the theory, and how we define geometric quantities in modified gravity. Not all theories preserve the connection between spectral properties and area quantization.

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The observational challenge is formidable. Current gravitational wave detectors can reliably measure only the first few overtones - the fundamental mode and perhaps the first couple harmonics. The asymptotic regime where universal behavior emerges requires observing dozens of overtones. Future detectors like Einstein Telescope and Cosmic Explorer may reach the fifth to seventh overtone for nearby mergers, but extracting highly damped modes remains extremely challenging.

The most promising approach combines multiple observational probes. Quasinormal mode spectroscopy from gravitational waves provides one window. Black hole shadow observations from radio interferometry provide another. X-ray timing from matter spiraling into black holes offers a third perspective. If quantum gravity corrections affect all these observables consistently, joint analysis could reveal signatures too subtle for any single observation to capture.

We should be realistic: directly observing Planck-scale quantum effects in astrophysical black holes probably exceeds foreseeable instrumental capabilities. However, quasinormal mode studies may reveal whether area quantization is a universal feature of quantum gravity or specific to certain approaches like loop quantum gravity. They might also detect if quantum gravity involves a characteristic length scale parametrically larger than the Planck length—something not currently ruled out.

Discussion

Sakallı's through-line is methodological realism with a contrarian streak: dream big about quantum spacetime, but keep your feet planted in what can be checked. He identifies a genuine structural problem in contemporary gravity research: theoretical supply has outpaced evaluative infrastructure. When hundreds or thousands of modified-gravity frameworks can be written down, novelty becomes cheap; what becomes expensive is decisive discrimination. His proposed remedy is not another "best" theory but a shared *testing culture*-waveform catalogs for alternatives to general relativity, community expectations for uncertainty quantification, and cross-theory protocols that force models to survive the full obstacle course of solar-system constraints, binary pulsars, gravitational-wave data, and cosmological structure.

That emphasis matters because it reframes "exotic gravity" from a marketplace of clever equations into a cumulative science. In his account, comparability is not an aesthetic preference; it is an anti-chaos device. Standardized sign conventions, explicit parameter ranges, internal seminar scrutiny, and independent computational replication are presented as the difference between a literature that self-corrects and one that merely accumulates. This is a quietly radical point: the next big leap in quantum gravity may arrive not only from new mathematics, but from better scientific hygiene.

On the physics side, Sakallı's discussion of Generalized Uncertainty Principle corrections and quasinormal-mode spectroscopy illustrates the field's core tension. The ideas are conceptually sharp-minimum length scales, helicity-dependent emission distortions, superradiance thresholds, spectral signatures that *might* hint at area quantization - but their detectability is, by

his own framing, brutally constrained for ordinary astrophysical black holes. The most interesting possibilities therefore concentrate in special regimes: tiny black holes (including speculative primordial populations), unusually precise ringdown measurements, or joint inference across multiple channels where consistent small deviations might accumulate into something statistically persuasive.

His position on quasinormal modes is especially instructive: the connection between highly damped mode structure and area quantization is "robust but not universal," which is exactly the kind of statement a maturing field should cultivate. It is neither hype nor dismissal; it is a conditional claim that points to the work that must be done - clarify boundary conditions, define geometric quantities consistently across modified theories, and understand where "universal" behavior actually survives. Observationally, he is frank that the asymptotic regime is hard to reach, but he also gestures toward a sensible strategy: treat gravitational-wave ringdowns, black hole images, and high-energy timing data as complementary constraints rather than rival camps.

The interview's broader implication is that the "quantum nature of spacetime" is no longer only a metaphysical slogan. It is becoming an empirically pressured research program - but only if the community builds shared benchmarks, publishes reproducible pipelines, and learns to prize null results and constraint-setting as highly as dramatic claims. In that sense, Sakallı's message is almost humanistic: nature is not obligated to reward our cleverness, but it does reliably reward our honesty.

Methods

The interview was conducted via typed questions—with explicit consent - for review, and curation. This process complied with applicable data protection laws, including the California Consumer Privacy Act (CCPA), Canada's Personal Information Protection and Electronic Documents Act (PIPEDA), and Europe's General Data Protection Regulation (GDPR), i.e., recordings if any were stored securely, retained only as needed, and deleted upon request, as well in accordance with Federal Trade Commission (FTC) and Advertising Standards Canada guidelines.

Data Availability

No datasets were generated or analyzed during the current article. All interview content remains the intellectual property of the interviewer and interviewee.

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This interview was conducted as part of a broader quantum cosmology book project. The responses reflect my current research perspective as of October 2025, informed by over 180 publications and ongoing collaborations with researchers worldwide.

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Note: This reference list includes representative works from Prof. Sakallı's extensive publication record (181+ papers) and foundational works in the field. For a complete bibliography, please consult the INSPIRE-HEP database or Prof. Sakallı's institutional profile.

'As kingfishers catch fire, dragonflies draw flame;
As tumbled over rim in roundy wells
Stones ring; like each tucked string tells, each hung bell's
Bow swung finds tongue to fling out broad its name;
Each mortal thing does one thing and the same:
Deals out that being indoors each one dwells;
Selves — goes itself; *myself* it speaks and spells,
Crying *What I do is me: for that I came*.'

-Gerard Manley Hopkins (excerpted from 'As Kingfishers Catch Fire')