PHENOMENON

The Magazine of the World Intelligence Network (Issue 28)

EDITED BY GRAHAM POWELL AND KRYSTAL VOLNEY

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INTRODUCTION

Dear readers,

It is a significant moment as this edition of Phenomenon recognises the 20 years of magazine production in the name of the World Intelligence Network.

I am thankful for all the wonderful contributions that have come in over the decades. The editorial team has also developed well, especially since the addition of Krystal Volney, plus the renaming of the magazine as "Phenomenon".

As we proceed into the next decade, we shall be ever more vigilant in creating modern, innovative, thought-provoking content from around the world, whilst always doing our best to be respectful and polite.

In this edition, we have fascinating contributions from a creative writing expert, artists, an engineer (who is also a motorbike enthusiast) whilst our resident interviewer Scott Douglas Jacobsen explores a plethora of topics with one of the most intelligent men in the world, Rick Rosner.

Some of the discussion with Rick is about reality and simulation, aspects of life that are destined to be questioned more and more as AI proliferates across the world, maybe even across the galaxy. We shall try to keep up with the trends and adapt accordingly.

Here's to the next 20 years!

Graham Powell

AN INTERVIEW WITH LAWRENCE HILL

Author: Scott Douglas Jacobsen

An interview with Lawrence Hill. He discusses: geographic, cultural, and linguistic family background; familial influence on development; parents' love story; influence on parents' relationship on him; influences and pivotal moments in

major cross-sections of life; being read to each night by his mother; journalistic experience influencing writing to date; self-editing for writers; number of drafts; singer-songwriter brother, Dan Hill, influence on professional work; recommended songs for listening pleasure by Dan; affect of Karen Hill's mental illness and death on him; advice for coping with the emotional pain; Café Babanussa (2016) and an essay inside called On Being Crazy; and Karen's written work and impact on him.

An Interview with Lawrence Hill: Professor, Creative Writing, University of Guelph, and Author, Novelist, and Writer (Part One)

1. To begin at the beginning, you were born in 1957 in Newmarket, Ontario, Canada. Now, you're one of Canada's greatest novelists. Let's explore your story. In terms of geography, culture, and language, where does your familial background reside?

It is complicated, like most people. My early ancestors came from Europe and Africa. On both sides, they have been in the United States for many generations. My parents met in 1952 and married interracially the next year. My family culture spans Africa, Europe, Canada, and the United States. In terms of my family cultural background, Canadian, American, and black and white cultures.

Language-wise, I was raised in an Anglophone family who spoke only English, but my sister and I became enthusiastic language learners. Learning other languages and living in them has become central in my life.

2. How did this familial history influence development from youth into adolescence?

It is difficult for a person to look inside of their own life and say, "This is how my family history influenced my development from childhood to adolescence." However, a vivid interest in identity, in belonging, in the ambiguity of culture and race, in moving back and forth between different racial groups: all of these things marked my childhood and adolescence.

3. You mentioned your parents married in 1953. What was the origin and nature of your parents' relationship with each other? Their love story.

They met in '52 in Washington, D.C. and fell in love, quickly. My father had just completed an MA in sociology at the University of Toronto. He went back to live in Washington and to teach at a college in Baltimore for a year. My parents met and married that year. The day after they married, they moved to Canada. They became ardent Canadians and never looked back. They never moved back to live in the United States, although they visited often and took my brother, sister and me with them.

4. How did this relationship influence you?

For one thing, they loved each other. They were opinionated and argumentative, not about domestic things, but about political and social issues. There was always debate around the kitchen table. I was steeped in that culture. A lot of talk, especially around meal time.

5. When looking at formal development, in standard major cross-sections in life, what about influences and pivotal moments in kindergarten, elementary school, junior high school, high school, undergraduate studies (college/university)?

I had a fabulous Grade 1 teacher named Mrs. Rowe. She told us stories every day. I longed to get to school to be sure I didn't miss any of her stories. My father was a great storyteller. My mother read every day to us. We came – brother, sister, and I – to love the readings.

My parents instilled a love of language and story. I had other great teachers. In high school, they encouraged me to write. I wanted to do it. I told them. They encouraged me, but they didn't make me.

I was an avid runner and had a track coach. In addition to being my coach, he was a reporter for the Toronto Star. He was the first professional writer that I met. He encouraged me to write better and to expand the range of my reading. These were early formative developers. Adult figures looking on and leading me toward the excitement of writing.

6. I'm thinking about your mother reading these stories each day to you. Was there a common author for each night?

She read one a lot. I memorized it. It is by A.A. Milne. One of her favourite poems that we memorized quite young called Disobedience. It says:

> …James James Said to his Mother,
> "Mother," he said, said he;
> "You must never go down
> to the end of the town,
> if you don't go down with me…

On it goes, it is this crazy story about a woman who loses it. It is quite a story.

(Laugh)

(Laugh)

It is quite a dark story, actually. Also, it is playful, language-wise. Of course, we ate up Dr. Seuss. The crazier and more playful the language, the better.

7. Following that influence from the first professional writer that you met, you were a journalist for The Winnipeg Free Press and The Globe and Mail. How did the time as a journalist at these publications inform the work writing to date?

It helped me learn, quickly. I learned to edit myself. I was able to call people 'out of the blue' and say, "Hey, there's something I need to understand. You're apparently an expert

in the field. Can you explain it to me?" It made me feel confident approaching strangers and asking them to help me get my head around things that I needed to know as a novelist.

I also learned that words aren't sacrosanct. That is, my world wouldn't come to an end if people altered words of mine. I realized everyone can be edited. First and foremost, we can edit ourselves. I learned to write more rapidly and to allow the natural rhythms of thought to percolate unfettered onto the page, and then to come back and edit myself. Those lessons come from journalism.

8. Would you consider self-editing one of the most important skills for writers?

Certainly, it is for me. Unless you're born Mozart, your first drafts will be sloppy. Mine certainly are, so I have to rewrite my work and work it into shape. Editing is fundamental to progressing through the drafts of a novel.

9. How many drafts?

In a novel, I easily work through ten drafts.

10. Now, back to the family, your brother, Dan Hill, is a singer-songwriter. Has this relationship influenced professional work at all?

First, it influenced me as a person, which influenced professional work in every imaginable way. He is (and was)

totally passionate with art. He lived for it. It was exciting to see my brother as an artist doing his thing.

I could see the personal fulfilment for him. It normalized the possibility of achievement in the arts. The idea of going for it, pursuing the dream, and believing in its achievability. His most important influence: being there, seeing him, and showing the possibility for me too.

11. Any recommended songs by him for listening pleasure? Songs that you enjoy by your brother.

I love the song Hold On. It came out in the 70s.

12. Your late sister, Karen, suffered from bipolar disorder. She went to a restaurant, choked, lost consciousness, and died in the hospital 5 days later. How did this life battle with mental illness and then the death affect you?

It affected me in all the imaginable ways. It took my sister from me. I lost one of the people that I most love in the world. It was a visceral, immediate, loss. Many will face it. It is hard to lose a loved one unexpectedly far before their time. It affected me by taking someone from me that I love very deeply.

13. For those that might read this in the future with family members suffering from mental illness, any advice for coping with the emotional pain that might coincide with it?

My advice: don't be alone. It is tremendous work emotionally, intellectually, and financially to help somebody

who suffers from mental illness. It is alienating if you have to do that alone. If you have a community of people to come and work together in supporting the ill person, it can help.

If you are alone, it can be brutally alienating, lonely, and crushing. However, if you have institutions, nurses, social workers, psychiatrists, friends, family members and neighbours involved with the ill person, everyone can help in their respective ways. It can become less overwhelming. That's one of the most important things: to build a network. If you are helping an ill person, you will need help too.

14. She wrote a book entitled Café Babanussa (2016) and an essay inside called On Being Crazy. You have read these.

Yes, I read them.

15. Did her written work impact you?

I have been reading Karen's fiction and non-fiction for decades. It has been a lifelong process. Karen worked on Café Babanussa for 20 years. I've been reading it, tuning into her life, commenting on it, encouraging her, and being a brotherly figure by reading her stuff for a long time now. The book was intertwined with her own life. Discussing it became an extension of our sibling relationship.

Danielle Blau, Process, Poetry, Aloneness and Fear, Weeping, and Philosophy

Author: *Scott Douglas Jacobsen*

Danielle Blau's Rhyme and Reason: Poetry, Philosophy, articles, and interviews by Blau can be found in such publications as The Atlantic and the Art of Living the Big Questions is forthcoming from W.W. Norton. Her collection *mere eye* was selected for a Poetry Society of

America Chapbook Award and published in 2013 with an introduction by poet D.A. Powell, and *her poems* won first place in the 2015 multi-genre Narrative 30 Below Contest. Poetry, short stories, online, The Baffler, Black Clock, The Harvard Review, The Literary Review, Narrative Magazine, The New Yorker's book blog, The Paris Review, Ploughshares, Plume Poetry, The Saint Ann's Review, The Wolf, the Argos Books poetry anthology Why I Am Not a Painter, and Plume Anthology of Poetry. A graduate of Brown University with an honors degree in philosophy, and of NYU with an MFA in poetry, she curates and hosts the monthly *Gavagai Music + Reading Series*, and teaches at Hunter College.

Scott Douglas Jacobsen: If you reflect on the process, how have you developed a method for writing poetry? Did you learn from someone else, develop your own and then refine it, some admixture of the two, or something else?

Blau: I've always written and loved to write, but for a while I didn't actually know what it was I was writing. And at a certain point, I began to worry. Because even though, as a reader, I still wanted to lose myself in the sumptuous folds of a highly plotted novel, my tastes as a writer seemed to be growing increasingly eccentric. So I noticed I had ever less patience for getting down to the crucial business of plotting, say—but ever more patience for mulling over the benefits of ending a particular sentence on a trochee versus a spondee,

say, or for deciding whether the made–up brand of HIV self–testing kit bought by a particular character should be named HemoGenuine Diagnostics or Ora⬦cular.

And this—my compulsion to be sidetracked, as it seemed then—was kind of worrisome, until I found myself reading more and more books of poetry, in my spare time, at some point during college. Which is how it suddenly dawned on me: Hey, they haven't been hobbled and misshapen pieces of fiction, what I've been writing all my life; they've been poems!

Once I knew I was writing poetry, I didn't have to beat myself up over what had seemed like my excessive preoccupation with detail; I was free to throw myself into the sideshow—because it wasn't a sideshow, I now understood, but the heart of the matter. That's one of the things I so love about poems: how shiftily and how deviously they can arrive at the heart of things.

Jacobsen: Often, poetry speaks to the heart, and to the heart of things. What have been some common themes in your poetry?

Blau: Aloneness is a big one for me, and the fear of being blotted out—the Lone Human Voice vs. the Vast Obliterating Void. And then (this has always been a theme, but it seems to have become ever more present in my writing these past odd eight or so months): how this particular fear

of ours, this deep human fear of going cosmically unheard—of not mattering—seems to lie at the heart of what is most ungenerous and most evil in us, too. So much of our small-mindedness and xenophobia and racism seems rooted in this fear, and in the bizarrely misguided notion that mattering is a sort of zero-sum game.

Jacobsen: Is there a poet who makes you weep? Who?

Blau: Oh, so many poets make me weep— I guess I must be a weeper. But most recently I think it was John Clare: "And e'en the dearest—that I loved the best— / Are strange— nay, rather stranger than the rest."

It doesn't help matters that when he wrote these lines, Clare was in the Northampton General Lunatic Asylum, and that this is where he ended up living out the last twenty years of his already-tragic-enough existence, in total isolation from his family and friends—but, then again, it does help matters, in a way. Or rather, it makes matters (and the nature of my weeping) more complex.

Because there is also something astonishingly hopeful (maybe almost joy-inducing?) about the fact that this man who was born to illiterate farm laborers in turn-of-the-eighteenth-century England, who spent the good part of his life ploughing and threshing, and the rest of it in a mental hospital—that this man and I can be so close. Because that is definitely how it feels when I read him; when I read his poem "I Am!" it seems clear beyond reasonable doubt: not only do

I have intimate knowledge of Clare, but Clare has intimate knowledge of me.

It's one of those things that poems sometimes manage to do, somehow—to shatter our metaphysical solitude (or very nearly) in a way that precious else can. **The poet Stevie Smith has this quote I love:** "The human creature is alone in his carapace. Poetry is a strong way out. The passage out that she blasts is often in splinters, covered with blood; but she can come out softly."

Jacobsen: What was the benefit of the philosophy undergraduate degree for your own personal philosophy, ethical stance, and worldview?

Blau: My undergrad training in and continued preoccupation with philosophy has definitely upped my generalized astonishment levels throughout these however many years; it has made me more generally astonished and more uncertain (that much is certain).

And I think maybe it has made me generally sadder, too, to be honest—but sadder in a good way, in a way that also makes me kinder and more generous, more loving, I think. Because it's never far from my mind: how at odds the individual human perspective is with the (distant and indifferent) View from Nowhere: how little we all are: how all alone: how much we all just want to matter.

So it's made my view of human life more ultimately tragic

(or, in my lightest of moods, more ultimately absurd), I guess. But that has only made me feel more bone-deeply how much we are all of us in this thing together: Here we all are, a vast collection of tiny this's, each of us wishing the world would make us feel as infinite and infinitely necessary as we feel to ourselves. So why not just allow each other that, if and when at all possible? It seems, given the circumstances, the least we can do.

Cory Efram Doctorow Interview

Author(s): Cory Efram Doctorow and *Scott Douglas Jacobsen*

Abstract

Cory Doctorow is an Activist, Blogger, Journalist, and Science Fiction Writer. He discusses: geographic, cultural, and linguistic background; the influence on personal development of the background; pivotal moments in life;

the ability to travel by bus and intellectual development; advice for gifted and talented youths; and an honorary doctorate from Open University.

1. Scott Douglas Jacobsen: Duly noted, the biographical information on the website remain out of date because the information appears update on July 30, 2015 – about an eternity ago.[4] With this in mind, and before the in-depth aspects of the interview, let's cover some of the background. Those with an interest in more detailed information can review the footnotes and references provided throughout and at the end of the interview. In terms of geography, culture, and language, where does your personal and familial background reside?

Cory Doctorow: Geography, culture, and language, well, my father's parents are from Eastern Europe. My grandmother was born in Leningrad. My grandfather was born in a country that is now Poland, but was then Belarus, a territory rather, that is now Polish but was then Belarusian. My father was born while his parents were in a displaced persons camp in Azerbaijan and his first language was Yiddish. My mother's family are first and second generation Ukrainian-Russian Romanians. Her first language was English, but her mother's first language was French and was raised in Quebec. I was born in Canada. My first language is English. And I attended

Yiddish school at a radical socialist Yiddish program run by the Workman's Circle until I was 13.

I was raised in Canada. I moved to Central America – the Costa Rican-Nicaraguan border – when I was in my early 20s and from there to California, and I ping-ponged back-and-forth between Northern California and Canada for some years, and then I re-settled in Northern California, and then in the United Kingdom, and then in Los Angeles, and then back in the United Kingdom, and then back in Los Angeles, and then back in the United Kingdom, and I am currently residing outside of Los Angeles in Burbank, and seeking permanent residence in of the United States.

2. Jacobsen: In terms of the influence on development, what was it with this background?

Doctorow: I guess there is some influence. It is hard to qualify or quantify. I have written fiction about some of my family's experiences. My grandmother was a child soldier in the siege of Leningrad. It was something that I did not know much about until I visited Saint Petersburg with her in the mid-2000s and she started to open up. I wrote a novella called After the Siege that's built on that. I guess I have always had a sense that rhetoric about illegal immigrants or migration more generally was about my family.

All of the things that people say illegal immigrants must and mustn't do were about the circumstances of my grandparents' migration. My grandfather and grandmother

were Red Army deserters, and they destroyed their papers after leaving Azerbaijan in order to qualify as displaced people and not be ingested back into the Soviet population. Maintaining that ruse, they were able to board a DP boat from Hamburg to Halifax, and that was how they migrated to Canada. If they had been truthful in their immigration process, they would have almost certainly ended up in the former Soviet Union and likely faced reprisals for deserting from the army as well.

3. Jacobsen: What about influences and pivotal moments in major cross-sections of early life including kindergarten, elementary school, junior high school, high school, and undergraduate studies (college/university)?

Doctorow: I went to fairly straightforward public schools. My mother is an early childhood education specialist, and she taught in my elementary school. When I was 9, we moved to a different neighbourhood, not far away, but far enough away that I could not walk to that old school anymore. At that point, I enrolled in a publicly funded alternative school called the ALP, the Alternative Learning Program. It was also too far away to walk. So, I started taking the bus on my own, which was significant in terms of my intellectual development later in life, and my ability to figure out the transit route, and jump on the bus, and go wherever it was that I wanted to go. It turned out to be extremely significant in my intellectual development. The alternative learning

school, learning program rather, grouped kindergarten through grade 8 in one or two classes.

Older students were expected to teach the younger students. There was a lot of latitude to pursue the curriculum at our own pace. That was also significant in terms of my approach to learning. The school itself, when I was in grade 6, I think, or 7, and was re-homed in a much larger middle school that was much more conservative. A number of students there were military cadets. I had been active as an anti-war activist and an anti-nuclear proliferation activist that put me in conflict with the administration. I was beaten up and bullied by the students at the larger school. I was also penalized by the administration for my political beliefs. They basically did everything they could to interfere with our political organizing. We ran an activist group out of the school, and attempted protests and so on.

They would confiscate our materials, and they would allow, tacitly, those kids who were violent against us to get away with it. When I graduated from that program, my parents were keen on my attending a gifted school for grade 9. I found it terrible, focused on testing and rigid. much the opposite of the program that I had gone into and thrived in. So, after a couple months of that, I simply stopped going. Grade 9, I started taking the subway downtown and hanging out at the Metro reference library in Toronto, which is a giant reference library. At the time, they had a well-stocked

microfiche and microfilm section with an archive going back to the 18th century, and I basically spent two or three weeks browsing through the paper archives, going through the subject index and then finding things that were interesting, and then reading random chapters out of books that were interesting and so on, until my parent figured out I was not going to school anymore. We had a knockdown, drag out fight. That culminated with my switching to a publicly funded alternative secondary school called AISP, Alternative Independent Study Program.

I went there for two years, and then enrolled in a school downtown called SEED school. SEED school was a much more radical, open, and alternative school, where attendance was not mandatory, courses weren't mandatory. I took most of the school year off to organize opposition to the first Gulf war. I took most of another year off to move to Baja California, Mexico with a word processor and write. I took about 7 years altogether to graduate with a 4-year diploma, and then I went through 4 undergraduate university programs. None of which I stayed in for more than a semester.

The first was York University Interdisciplinary studies program. The second was University of Toronto's Artificial Intelligence Program. The third was Michigan State University's graduate writing program, which I was given early admission to, and then the fourth one was University

of Waterloos independent studies program. After a semester or so at each of them, I concluded they were a bit rigid and not to my liking, and after the fourth one, after Waterloo, I figured I was not cut out for undergraduate education. The tipping point was that the undergraduate program with a thesis year. It is a year-long independent project. I proposed a multimedia hyper-textual project delivered on CD-ROM that would talk about social deviance and the internet, and while they thought the subject was interesting, they were a little dubious about it. But they were four square that anything that I did would have to show up on 8.5×11, 20-pound bond and ALA style book. And I got a job offer to program CD-ROMs from a contractor that worked with Voyager, which was one of the largest and the best multimedia publishers in the world.

I thought, "I can stay here and not do hypertext and pay you guys a lot of money, or I can take this job that pays more than I have ever mad e in my life and do exactly the work that you're not going to let me do here." When I thought about it in those terms, it was an easy decision to drop out and I never looked back.

4. Jacobsen: At the outset, you did mention that the ability to travel by bus was an important moment for you in terms of your intellectual development. Can you please expand on that?

Doctorow: Sure, as I went through these alternative schools, I had a large degree of freedom in terms of my time, and how I structured my work, and so, for example when I was 9 or 10, we did a school field trip to a library that was then called the Spaced Out Library, a science fiction reference collection, and now called the Merril Collection. It was founded by the writer and critic Judith Merril. She left the United States after the Chicago 1968 police riots, and moved to Canada in protest. She brought her personal library with her, which she donated to the Toronto library system, where she was the writer-in-residence. After going there once, and finding this heaven of books and reference material, and lots of other things, I started jumping on the subway whenever I had a spare moment and going down there. Merril herself, being the writer-in-residence, would meet with writers like me and critique our work. And from them, I discovered the science fiction bookstore, which I later went on to work at.

I would add that to my daily or weekly rounds, and go and raid their news book section, and their 25 cent rack, and began reading my way through the field. At the same time, my political activism and work in anti-nuclear proliferation movement, and the reproductive freedom movement, working as an escort at the Toronto abortion clinics to escort women through the lines of protestors. As I became more and more knowledgeable about the city, and all of its ways of getting around, I also found myself engaged with all of these different communities.

5. One of things that seems like a trend to me, and you can correct me if I am wrong, please. In the sense that, you have the rigid part of the educational system that you did go through. So, for instance, the earlier gifted program that you disliked, but when you had more freedom you did not note any general dislike of that, and, in fact, your general trajectory seems to indicate a trend towards more open-source information and in terms of educational style, too. That seems to be your preference, and that does seem to reflect a lot of gifted and talented students' experiences in the traditional educational system. Any advice for gifted and talented youths that might read this interview in terms of what educational resources that they can get too?

Phew. I do not know., one of the things that going through the gifted and talented program, which was called gifted back then, taught me is that gifted is like this incredibly – it is a – problematic label. It privileges a certain learning style. I mean I did not thrive in a gifted program. I did terribly in a gifted program because the gifted program seems largely about structure, and same with the undergraduate programs, imposing structure on the grounds that if kids were left to their own devices, they would goof off. For me, although, I did my share of goofing off. If I was left sufficiently bored, and if I were given enough hints about where I would find exciting things that would help me leave that boredom, I was perfectly capable of taking control of my own educational experience, and because it was self-directed it was much more

meaningful and stuck much more deeply than anything that would have been imposed on me.

It is like intrinsic vs. extrinsic motivation. The things that I came to because I found them fascinating or compelling. I ended up doing in much more depth, and ended up staying with me much longer, than the things that I was made to do, and the things that the grownups and educators did for me was laid out the buffet, but not tell me what I had to pick off of it and in what order, and that was super beneficial to me. I think that when we say gifted and talented we often mean pliable or bit-able, as opposed to intellectually curious or ferocious. Although, I think we have elements of all of those in us. The selling of a gifted and talented program often comes at the expense of being independent and intrinsically motivated in your learning style.

6. You earned an honorary doctorate in computer science from the Open University (UK). What does this mean to you?

It meant rather a lot. More than I even thought it would. My parents were upset at my decision to drop out of undergraduate programs and not finish them. A decade after I dropped out of Waterloo, after I had multiple New York Times bestsellers under my belt, they were still like, "Have you thought about going back and finishing that undergraduate degree? For me, I think that undergraduate degree signified an escape and also was of becoming who

they were. My grandparents were not well-educated. My grandfather was functionally illiterate in five different languages. [Laughter]. My grandmother too. My parents were arguably the first people in their family to be literate. Being the eldest of their cohort, respectively, they were the first people to become literate, not the last by any stretch, but finished a doctorate in education. For them, formal structured credentializing education was a pathway to an intellectual freedom. For me, it was the opposite, and yet it was clear that my parents – no matter what I did – were less than delighted with my progress. There would always be something missing in my progress for so long as I did not have a formal academic credential. So, they were awfully excited when I got the degree. I had some vicarious excitement. Plus, I thoroughly enjoyed to riff them on why they did it the hard way and spent all that time and money on their degree, when all you needed to do was hang around until the someone gave you one. Of course, I have more respect for the Academy that that. [Laughing]

[Laughing]

But it also meant that instrumentally gave me a lot of advantages. I have been a migrant on many occasions into many countries and have suffered from the lack of formal academic credentials. Immigration systems of most countries rely on credentialing as a heuristic of who is the person they want to resettle in their territories, and the lack

of an academic credential meant that, for example, to get my O1 visa in the United States is an alien of extraordinary ability visa, which is typically only available to people with doctorate or post-doctorate credential. I needed to file paperwork that demonstrated the equivalent. My initial visa application was 600, and 900 pages in my second renewal and 1,200 pages in my recent one.

They were that long in order to convince the US immigration authorities that what I have done amounts to a graduate degree, so, that instrumental piece of it was nice, but then, finally, it was a connection to the Open University, which is an institution that I think very, highly of. Their commitment to a distance education, individualized curriculum for lifelong learning matches with my own learning style, and the way I think about pedagogy more generally. I was honored to gain this long-term affiliation with the university with what amounts to a lifelong affiliation with the university. It was exciting.

[End Part 1 of interview]

Abstract

Cory Doctorow is an Activist, Blogger, Journalist, and Science Fiction Writer. He discusses: philosophies appealing to him; a good grasp of the near future or lack thereof; Participatory Culture Foundation; the Clarion Foundation; the Metabrainz Foundation; The Glenn Gould Foundation; Alice Taylor and their love story; marriage and its change for

personal perspective; Poesy Emmeline Fibonacci Nautilus Taylor Doctorow; three biggest changes in the next 50 years; timeline for the modification of more than half the human population; and the potential for the levelling off the accelerating technological changes.

Interview with

Madeleine Thien

Author: Scott Douglas Jacobsen

1. In terms of geography, culture, and language, where does your family background reside? How do you find this influencing your development?

My parents speak different dialects of Chinese (Hakka and Cantonese) and so our common language was always English. Although, often, my parents would speak their own dialect to each other – so two languages simultaneously – and they would understand. My mother was born in Hong Kong and my father in Malaysia, but they rarely spoke about life before Canada. I think, for different reasons, and with different degrees of success, they both tried to forget. They couldn't afford to return home, and so they had to accept that it was gone or else feel the constant pain of being cut off. For a long time I felt an incredible sadness when I thought about the sacrifices my parents made for us. Now that I'm older, I see their courage, selflessness and their extraordinary reinvention.

2. How was your youth? How did you come to this point? What do you consider a pivotal moment in your transition to writing?

It was chaotic. We moved a lot and my parents were under constant financial stress. My siblings left home at very young ages, and my father left when I was sixteen. That was probably one of the earlier pivotal moments, because for a while he simply disappeared. I was living with my mother, but we were really cut off from one another emotionally. I lived in my head. Writing became a way to express things that were unsayable, either because they were private and confused, or because they might injure another person, or because I didn't

know what the truth was. Writing was a space to lay things down.

3. Where did you acquire your education? What education do you currently pursue?

I studied contemporary dance at Simon Fraser University (SFU) and, later on, creative writing at The University of British Columbia (UBC). My devotion to books, reading and learning is intense but also exhausting. I'm deeply interested in 20th century history, particularly transitional times; I'm utterly fascinated by the Silk Road, and also the post-independence years in Southeast Asia, and lately, Communist China. I'm also working on documentary projects, art installations, and I occasionally choreograph. I want to live about a thousand lives! I think that's why the novel, and fiction, have been the mainstay in my life.

4. At present, you hold the 'Writer-in-Residence' position at Simon Fraser University. What does the position provide for you?

Yes, I'm incredibly lucky. The English Department is full of creative, questioning, and generous scholars. And SFU has brought me back to Vancouver where I grew up, but where I haven't lived for more than twelve years.

5. You have written four major works: Certainty, Dogs at the Perimeter, The Chinese Violin, Simple Recipes: Stories. Most recently, Dogs at the Perimeter, I read it. I urge readers to go

and purchase the book. For those interested, what inspired this book? What is the overarching theme?

I had been spending months at a time in Cambodia, and the country preoccupied me more and more. For me, Cambodia is like nowhere else – inhabiting his seam between the ancient cultural reaches of India and China, all filtered through a formidable Khmer culture. The Cambodian genocide happened when I was a child and has been largely forgotten by the rest of the world; or, if remembered, is remembered almost abstractly. That our governments played an undeniably large role in the de-stabilization of Cambodia and its civil war, and that the ensuing genocide claimed the lives of 1.7 million people, and that hundreds of thousands of Cambodians had to seek refuge outside of their country – has become a footnote of history. I wanted to think about how people begin again, how they remember and how they forget, and how these acts change over the course of a life. The Cambodians I know live both inside and outside their memories, they carry ruptured selves and also, in their own philosophy, multiple souls.

6. If you currently work and play with a piece of writing, what do you call it? What is the general theme and idea behind it?

It has no title as of yet. I've finished a draft and am fine tuning now. The centre of the book is the story of three young musicians studying at the Shanghai Conservatory in the 1960s. They're Chinese musicians studying Western classical

music, trying to express themselves through Bach, Beethoven, Prokofiev, Debussy, and also trying to express the tenor of the times. Because of Mao's extremism during the Cultural Revolution, this expression proves not only to be untenable, but it alters their lives forever. This novel is about how ideas and artistic practices move from East to West and West to East, what it means to speak in another language (be that music, ideology or literature), and it's also about copying, repetition and the desire, however illusory, for transcendence, to be outside of one's time.

7. If any, what do you consider the purpose of art? More importantly, what role do artists play in shaping, defining, and contributing to society and culture?

To be a witness to this time and place, and to each other. I don't see it as a record of one's self. I want my art to be a record of the people and the world around me. A complicated questioning of what is, and a way to learn how to see more than I do now.

8. If you had sufficient funding and time, what would you like to write?

I think it would be the same. I think of funding and time almost solely as a means to write, and so I try to create the conditions for this in my day to day life.

9. What do you consider the most controversial topic in writing at the moment? How do you examine the issue?

Race. It makes everyone afraid. A few decades ago we could talk about race, but now even saying the word is difficult, in both national and geopolitical contexts.

10. In terms of representation of 'minority populations' in literary circles, presentation of awards and honours, and media time provided, what do you consider the present conditions? What do you think and feel about these conditions?

I think literary culture in Canada and America has been adversely affected by the closing down of bookshops and the merging of publishers. It's extremely competitive, and bookshops and publishers are simply looking to survive. It makes sense that, with such fine margins, they support (financially, emotionally, intellectually) work that has the potential to be mainstream. But how do we imagine mainstream? Sadly, I think that we mean white middle- or upper-class. So this audience (or the way a publisher envisions this audience and what they want) is reflected, in some way, in the novels that are published and supported. A Chinese novelist might sell a million copies in China, but a publisher here may still see that work as foreign, other and unlikely to appeal.

I think we should widen our understanding of the reader.

I'm a pretty stubborn person, and so these conditions make me want to push back the boundaries even more.

11. Furthermore, in concrete, or practical and applied, terms, what needs doing? How might these aims come to fruition? What about their short- and long-term implications for impacting the literary culture in the Lower Mainland, in Canada, and abroad?

Deeper engagement and from those of us who have another perspective. Acknowledgement that

New York literary culture is an echo chamber and increasingly narrow.

I'm teaching an Asian Literature course in the US right now, I teach in a Master of Fine Arts (MFA) program in Hong Kong, where I work with writers from around the world, and I'm helping to develop the curriculum for a fine arts university in Zimbabwe. I love the responses I get when I ask this younger generation why literature matters, why they are studying it, and why bookshops are shelved with stories that are already familiar to us. Does it matter to us as individuals or as a society if our literature supports singular concepts of national identity, or when celebrated literature is narcissistic or apolitical, or when the majority of the world is invisible in 99% of the literature we read and discuss? We have a stake in trying to see what the system makes invisible, and then articulating these gaps in forthright and intelligent ways.

12. Who most influenced you? Why them? Can you recommend any books or articles by them?

James Baldwin. Cees Nooteboom, *All Souls Day*. Alice Munro. Michael Ondaatje, *Running in the Family* and so many other books. Dionne Brand. Ma Jian, *Beijing Coma* and *Red Dust*. Liao Yiwu. Sven Lindqvist. Tsitsi Dangarembga, *The Book of Not* and *Nervous Conditions*. Hannah Arendt. Antonio Damasio and Oliver Sacks. Shirley Hazzard, *The Great Fire* and *The Transit of Venus*. Colin Thubron, *The Hills of Adonis* and *In the Shadow of the Silk Road*. Dostoevsky and Chekhov. The literature, memoir and reportage around Cambodia, from Vaddey Ratner to Bree Lafreniere, Loung Ung, Elizabeth Becker, Francois Bizot, Jon Swain and Peter Maguire. Bao Ninh, *The Sorrow of War*. Kazuo Ishiguro, *The Unconsoled*, *The Remains of the Day*, *Never Let Me Go* and *When We Were Orphans*. All these writers break form and enlarge content, they are humane and, in my eyes, fearless.

13. Where do you see writing, the teaching of writing, and publishing in the near and far future? How does, and will, the internet change the landscape?

I'm curious about the publishing worlds of India and China. I wonder how they'll influence and alter the English-language market, how soon will they become centres of influence alongside London and New York. I hope the internet will break down some of the stagnation in the way we talk about books, and which books we encounter.

14. What advice do you have for young writers?

Fiction is not outdated or tired. Fiction is what you make of it, what you bring to it, how far you're willing to travel both into yourself and outside yourself. Don't knock the imagination.

15. What worries and hopes do you have for the world of literature regarding the older and younger generations – writers and readers?

I'm not worried. I think that even when things seem stagnant or narrow, fissures always appear. I love multimedia and the experimentation with the new forms available to us via our laptops and phones and interconnectedness. But I also value closing all that down, turning inward, reading a book, and giving time, attention and focus to the interpretation and engagement with story.

16. Besides your own organizational affiliations and literary interests, what associations, writers, and even non-/for-profits can you recommend for interested readers?

The Documentation Centre of Cambodia (DC-CAM) and the Bophana Centre. And, in Vancouver, the extraordinary Thursdays Writing Collective.

Rick Rosner on a Data-Based Physics at the Large-Scale

Author: *Scott Douglas Jacobsen*

According to some semi-reputable sources gathered in a listing here, Rick G. Rosner may have among America's, North America's, and the world's highest measured IQs at or above 190 (S.D. 15)/196 (S.D. 16) based on several high range test performances created by Christopher Harding, Jason Betts, Paul Cooijmans, and Ronald Hoeflin. He earned 12 years of college credit in less than a year and graduated with the equivalent of 8 majors. He has received 8 Writers Guild Awards and Emmy nominations, and was titled 2013 North American Genius of the Year by The World Genius Directory with the main "Genius" listing here.

He has written for Remote Control, Crank Yankers, The Man Show, The Emmys, The Grammys, and Jimmy Kimmel Live!. He worked as a bouncer, a nude art model, a roller-skating waiter, and a stripper. In a television commercial, Domino's Pizza named him the "World's Smartest Man." The commercial was taken off the air after Subway sandwiches issued a cease-and-desist. He was named "Best Bouncer" in the Denver Area, Colorado, by Westwood Magazine.

Rosner spent much of the late Disco Era as an undercover high school student. In addition, he spent 25 years as a bar bouncer and American fake ID-catcher, and 25+ years as a stripper, and nearly 30 years as a writer for more than 2,500 hours of network television. Errol Morris featured Rosner in the interview series entitled First Person, where some of this

history was covered by Morris. He came in second, or lost, on [Jeopardy!](), sued [Who Wants to Be a Millionaire?]() over a flawed question and lost the lawsuit. He won one game and lost one game on *Are You Smarter Than a Drunk Person?* (He was drunk). Finally, he spent 37+ years working on a [time-invariant]() variation of the [Big Bang Theory]().

Currently, Rosner sits tweeting in a bathrobe (winter) or a towel (summer). He lives in [Los Angeles](), [California]() with his wife, dog, and goldfish. He and his wife have a daughter. You can send him money or questions at [LanceVersusRick@Gmail.Com](), or a direct message via [Twitter](), or find him on [LinkedIn](), or see him on [YouTube](). Here we talk about some co-developed ideas that originated with Rick decades ago as a young man, which has a further precedent in Digital Physics with Edward Fredkin.

Scott Douglas Jacobsen: So, this is the ultimate frisbee of virtual realities. You go first, please.

Rick Rosner: Ok, so, from time to time, we've casually kind of discussed how it's interesting/possibly important that the issue of whether the universe is real or a simulation. In pop culture you have *The Matrix*, which is a huge trilogy of movies. Blockbusters, that center around the universe being simulated and in pop culture in the future the issue's going to be, I think, bigger and bigger because of video games. Maybe, other forms of entertainment will simulate reality with greater and greater verisimilitude.

Jacobsen: That's right.

Rosner: The simulations will get better and better. But then I was thinking about it a little bit and realize that just saying casually say, "You can't tell whether the universe is real or a simulation." Or if you couldn't tell did, what would you mean when you talk about simulation? It turns out to be. Well, I don't know if it's not simple, but it certainly needs pinning down. Because you have issues like, "Who is the simulation for? Is it for the video game? Is it for the consciousnesses in that world? Is it the whole universe or is it just a chunk of it?" And all those things have implications for reality. It is naturally arising, but exists in an artificial armature – well, not necessarily artificial.

That's another issue, but our minds are supported by our brains. You'd call that a natural armature versus a consciousness that would be supported by an information processing device that's been built by people who are built by individuals who learned how to create consciousness. And then, of course, you have the problem of the turtles all the way down thing. What's supporting each of these worlds – the hardware world and all that stuff? And it probably leads to what you were talking about, which is you kind of like you said, 'Who cares?" Simulated versus natural, because in the end, it was a stack of turtles. The whole thing may become moot at some point. Anyway, it doesn't seem trivial or simple to me. What do you think?

Jacobsen: Yes, I don't think it's trivial. I do think it's simple because you don't have a lot of options. So, let's say, you have a naturally rising universe. Okay, let's say, you get a civilization. They perform various virtual reality simulations of their universe and other possible universes. So, there you have a virtual universe arising out of the universe. Let's say, you have some kind of not quite existent, not quite nonexistent universe; that is very quantum mechanical, just extremely virtual in its existence, because it's not fully manifested insofar as it can exist and cannot exist. It's at that edge between kind of solidity and not. You have others start off natural and have an entire timeline, a world line of the entire universe. There's no need for a simulation in the first place. So, in that case, okay, you have a natural universe running all the way through. And the first case, you have a natural universe running into a virtual simulation. You could also have this iterative effect where you have extraordinarily long-lived universes, where you start off natural or you start off kind of quantum mechanically virtual. Then it becomes natural, then that civilization in that natural universe that happens to evolve simulates a universe in which you have other little mini civilizations that then themselves do simulations and you have this kind of matryoshka doll situation of simulations.

Rosner: You have that even with the natural universe, because every armature needs to itself to be part of a material world that is made of information that's being stored in, so

the turtles all the way down. And also, there's another issue which gets back to your point of "who cares?"; if the better a simulated universe is, the less it's going to violate the rules of a natural universe.

Any decent similar universe? Go ahead.

Jacobsen: Or any simulation in our natural universe or another natural universe, the laws of physics that govern the computation of that computational device, doing the simulation will limit the type of simulations it can do.

Rosner: Yes, and also, the probability of discernible divergences from apparent naturalness in a decent simulation is low.

So, like, well, just doing naive math, there are eight billion people in the world and you find out. And one person is magic because it's a simulation. The odds against that are one in eight billion. And of course, in practical and more realistic terms the odds that you see violations of natural physics revealing that you're in a simulation are just super low because it's just there are probability arguments to be made. For one thing, we live in a world where there's no good evidence of the world; we live in now, being a simulation. The same way, there's no evidence of there being time travelers visiting us, right? There have been no probabilistic arguments to be made. So, based on the evidence of our world and the history of the universe as we know it, it's

apparently highly probable that the rules of the universe are not being violated, right?

Jacobsen: Yes. I mean, for that simulation, for any simulation to exist, which is grounded on a natural universe, that simulation, the computation behind it must rely on that natural universe physics. You can't get out of that.

Rosner: But it's easy to imagine a series of 50 years in the future. One hundred and fifty years in the future. It's easy to imagine video games that are convincing simulations. And you can enter into them. And it's even possible to imagine that you can have your awareness abridged so that when you're playing the video game, you think you're actually living in the world, the simulated world. You can also imagine that this video game has characters like free guy that are conscious and not realizing that they're in a video game.

Jacobsen: Absolutely. And to say, that it's limited by the physics. That its computation is based on the virtual universe. It's not to say it can't have its own variables and kinds of laws. It's just the computation behind it will limit what is possible there. And it may be such that when we talk about computers as universal computation machines, like a universal Turing machine or something; these are only limited by our experience of this kind of computation in our universe. I mean, so, "Yes."

Rosner: Yes, it's certainly easy to build from our physics.

Jacobsen: Yes. So, our computers might not be universal. They might be general in this context.

Rosner: Yes, but the deal is, it's possible to imagine a future that has a whole bunch of video games that are convincing simulations. Where within the games, the rules, some of the rules of reality would be violated. You can imagine a convincing simulated world video game in which you can fly, for instance.

Jacobsen: Gravity is reversed.

Rosner: Or something, it's easy to imagine that these kind of games will be pervasive in the future. So, yet, we live in a world. The world we live in now doesn't have any of those violations of reality. So, what's the deal, probabilistic? You find yourself being a conscious being in the world that you're in. And what are the odds that it's a natural world? We, apparently, are in or it's a simulated world. That you're part of a game that runs for three weeks or three hours. You become conscious. You've got backs in your awareness. You've got a history. All these issues need to be addressed scientifically and philosophically, ideally scientifically. Are there probabilistic arguments to be made about whether you're more likely to find yourself in a natural world or a simulated world?

And, of course, the simulated world you assume is an offshoot of the natural world, and as we've been talking of a natural world; it's that assumption of legitimation. We have

talked about, "I think, therefore, I am." Within the context, given the extreme complexity and self-consistency of the worlds of our minds or an individual's mind with its memories and its ability to mentally simulate the world, given the extreme consistency in the amount of information involved, that's a statistical argument for the existence of the possessor of that consciousness. So, analogously, are there probabilistic arguments to be built around natural versus simulated worlds? Also, the extent of the simulated world.

Jacobsen: They are, in some sense. Any evolved mind in a natural universe is running a simulation of it. And this is not digital. Like my own mind is running a simulation of my little environment here, in front of the laptop. Similarly, with you in front of your Skype machine, it's just the way things are. So, you could say simulation is the dominant strain of quantity of computation. Although, natural is the dominant quality of it. I mean, we're only in a finite volume. We have seven or eight billion people running all these simulations based on their own minds. But those are very small volumes in the entirety of the Universe, the natural universe. I think you make the same argument where in any other universe where they have these simulations, even massive galactic-scale simulations. Computational devices of that scale, they would themselves be limited in that natural universe, which is bigger.

So, there's one split there. Maybe, in that argument, it's not usually made, which is that natural universes are the ground state. They're much bigger. So, there's a lot more computation happening with regard to them. Any kind of simulation that's happening within them, whether it's what we call digital or evolved consciousness, either case evolved or constructed. They're far more plentiful. Because once the natural universe is already set up, then you have a simpler setup to kind of run different simulations.

Rosner: Yes, so, I mean, there's that argument that we think can be made, which is that it's just much more likely that we're in a natural universe.

Jacobsen: Yes. Even though, the number of "simulated universes," are arguably much more plentiful.

Rosner: Yes, so, it's a mess.

Jacobsen: I mean, just the human species is a hundred billion simulations at various kind of world lines.

Rosner: We intuitively think that it's much more probable. We're in a natural universe, but we don't know the framework to do any kind of calculation.

Jacobsen: You can throw a ballpark even by saying one planet in one universe for one species amounts to one hundred billion simulations. So, 100 billion little tiny world lines within that one natural universe.

Rosner: At that point, I am still finding myself confused. There's another level. There are plenty of issues around simulation. Another issue, though, is that if the universe is a vast information processing entity. It is not necessarily aware of structures such as ourselves and our planet that have originated, that are built out of the matter that is made of the information in that information process. That the information in the processor is manifest as matter and space. And the whole thing is as our universe, but that the information processor gets the information out of the process that we experience as the universe without necessarily any awareness that this universe exists. Without any specific idea:: If it's a sufficiently sophisticated entity, if I see this is anything like true, then that entity will have a general idea that there's a universe made of the information in processing without any specific knowledge of what happens in that universe.

Jacobsen: I mean, consider the consciousness of an ant. Who knows how many ants in the world? What I am calling simulations in a natural universe, I am including those. I am not just talking digital; I am talking evolved. And so the non-conscious, so to speak, like an ant.

Rosner: So, we're talking about two different things. There's another issue with simulation, which is intentional simulation for a video game, and a simulation you're talking about, which is a mental picture of the world.

Jacobsen: So, an objective simulation and a subjective simulation. Subjective can have a lot more flavors.

Rosner: I mean, that's another like framework that needs to be fairly well defined.

Jacobsen: Maybe, in an intrinsic simulation and extrinsic simulation? Something like that.

Rosner: Well, I mean, like the simulations I am talking about are meant to emulate a world.

Jacobsen: You mean the simulations where you have two black holes processed virtually in these massive supercomputers and trying to see what happens when two black holes collide?

Rosner: No, I am not. I am not talking about that. I am talking about simulations that lead somebody in the simulation to potentially ask the question whether they're living in a natural world or a simulated world. So, I guess, to be more clear, I am talking about simulated worlds, simulations.

The simulation we have in our minds are not intentional. They're not constructed worlds. I mean, just talking about it shows that there are issues that need to be pinned down.

Jacobsen: You're talking at a high level of simulation in my mind.

Rosner: It's not just high level. It's something different. It's like the simulation that makes free guy think he's living in a natural world. But it's just as the simulation in a video game.

Jacobsen: So it's an as if natural universe.

Rosner: There's external intention there. Somebody built that world with the intent of making it seem real for their own purposes. Simulations we have in our minds. I mean, we didn't intentionally build them. They're a product of our evolved minds. They're not there. For nearly every organism on Earth, they are meant to simulate the real external world.

Jacobsen: So right there. So, you're talking at three layers. You have a universe, a really sophisticated simulation. And then the subjective impression, the mental map that simulated being has in that simulated universe.

Rosner: Yes. And I want to bring up one more point. So, if the universe is a giant consciousness, it's not aware of the specifics of the material manifestation of the information in its consciousness. You can still argue that a system that's possibly aware of that universe that is contained within the information. And an external world, an armature could tweak the events. Within the information universe it contains, it seems unlikely. But maybe also not by that, the quantum of events in our universe, the outcomes of when an open quantum frame becomes closed. Because an event, a quantum event has happened, you would think that the outcome of that quantum event reflects something that

happened. For that outcome contains information about the world that the information is about, and those things should be… anyway. I've done myself a whole lot of lack of clarity and would just be wasting more time to go further into it, but anyway. This discussion, at least in my mind, is that the simulated worlds and universes need a lot more clarity in pinning down what they're about in order to discuss them effectively.

Jacobsen: And we can both agree the ground state has to be a natural universe.

Rosner: Yes, but no. I mean, the easiest universe to imagine is one that has a timeline where every quantum event that has a complete timeline representing an actual history, and that the events on that timeline… Although, all the gazillion quantum events are randomly operating, according to the rules of quantum mechanics in a natural way. That's the easiest universe to imagine.

Jacobsen: Any simulation that comes out of that has to be based out of some processing unit grounded in that universe. I think those are two points. So, any kind of simulation coming out of that universe or any type of simulation, virtual reality, coming out of that universe will have to be grounded in the physics of that universe, which will have a particular kind of computation.

Rosner: Not necessarily video games now that have alternative physics.

Jacobsen: That's not what I mean. I mean, the physics for the actual computation to take place. So, in our case, we have digital computers, so you can simulate any kind of physics, but that type of range of simulation is grounded in competition.

Rosner: Objects.

Jacobsen: Yes.

Rosner: Is actually generating the simulation, the computer's operating in our world, which we naturally assume to be natural.

Jacobsen: Yes. So, in that sense, that's a point of huge clarity, where the material object in our universe that is the computational unit is constrained by a particular physics. But the virtual reality that it creates can have all sorts of physics. But it's constrained by that original physics.

Rosner: Yes, although, I don't know if that's a big deal.

Jacobsen: Well, I think it might clarify the difference with the armature in our universe. This sort of thing.

Rosner: So, in the armature, the whole idea of the armature and the turtles all the way down is itself a mess. In that, we're assuming that you can have this implied infinity because it's an infinity that is informationally moot.

Jacobsen: Yes.

Rosner: That, even though it's implied, it's so distant in terms of having any possible effect on our world that you can just kind of wave it away. It seems like a terrible way to reason, though they're in like Feynman type physics. There is similar hand-waving to get rid of troublesome infinities.

Jacobsen: As far as I am aware, that's common in physics to hide infinities in various places.

Rosner: Yes, and it's mathematically ugly. It's philosophically ugly.

Jacobsen: Which makes it unlikely to be true because typically the true is beautiful.

Rosner: No, I was just reading. Somebody was writing about that whole true as beautiful thing and was debunking it. When physicists like Einstein say that beautiful is true, that's based on many years of work in physics. And so, that's a very educated aesthetic if you want to call it an aesthetic. But it might be more legitimate to call it a scientific intuition that what Einstein would find beautiful isn't what somebody who finds astrology, somebody who believes in astrology, would find beautiful.

Jacobsen: I see.

Rosner: So rather than call it beauty, call it educated intuition.

Jacobsen: Makes sense. Okay, that's fair.

Rosner: So, I don't know that any further discussion on this stuff will be productive.

Jacobsen: Well, I think a wrap up would be helpful.

Rosner: My wrap up is that there are lots of issues around what we mean when we talk about simulation and the different types of simulation we might talk about. And it would be helpful to get that stuff more pinned down before we talk about the implications of simulated vs. natural universes and worlds. Because there's a difference between a simulated universe because you could set up a randomized quantum universe within a computer and let it play out; it would be very small and it could be a whole universe.

Jacobsen: We should make that distinction.

Rosner: What's that?

Jacobsen: Maybe, we should make the distinction.

Rosner: Distinction between an entire simulated universe and a simulated part of the world?

Jacobsen: Yes.

Rosner: Matrix. Because The Matrix doesn't simulate the entire universe.

Jacobsen: Yes, I mean, in a sense.

Rosner: It simulates like the surface of Earth for all the people who are imprisoned in the simulation. And it simulates the stars and the sky and everything. But it dispenses in the

interest of efficiency in The Matrix simulation. Does not give a shit about what might be happening on planets and some other galaxy. The simulation, matrix simulation, you have the images of other galaxies. And they appear to behave as distant galaxies might. But beyond that level of simulation, the prison keepers aren't going to go to the trouble. The computational trouble of fully simulating distant galaxies.

Jacobsen: Well, in that sense, I think it'd be very, very rare to come across a true universe simulation. I think in that sense. You can make a distinction. This is a placeholder. That when you're speaking of universes; you're speaking of natural universes and you're speaking virtual universes. You're talking about worlds because it's very likely only to be part. It's going to be very partial.

Rosner: Again, just for me to wrap up, is just to say that this whole area is something that needs pinning down.

Jacobsen: Yes, I don't even know what the terminology would be properly set forth to limit when we're talking about that simulation of a world versus that subjective simulation.

Rosner: And what's kind of weird is that, probably, the people building the universe will become the accepted terminology for, at least, some of these ideas that are going to be video game makers.

Jacobsen: Also, there's another part of this, which is, "Do we simulate agents without agency?" Like bad guys in video

games, they don't have any agency. They're just sort of these 3D.

Rosner: Right now, in video games, the only characters with agency are the characters being played by actual people.

Jacobsen: Yes.

Rosner: There may be characters within video games that are sufficiently complicated. I don't know, because I don't play video games. They might have like a sub-ant like level of agency. Because it's a question as to "How much agency?"

Jacobsen: Very little.

Rosner: OK. But even so, an ant probably has more agency because an ant brain, probably, has like a hundred thousand neurons, which is not much compared to humans, 80 billion neurons. But it's still a shitload of neurons enough to generate some behavioral complexity. And I am sure there's no engine that runs a bad guy in a video game that has even the complexity of an ant brain. But in the future, it's easy to imagine video game characters with the agency of an ant.

Jacobsen: And it's different in what we have with those videogame characters because it's a coding around which they behave as a 3D figurine, but ants have built into them – with ants that's built into their system. It's unified. There's a central processing unit in them. In the simulated characters we have now in video games, that's not even close to what is the case.

Rosner: No, but you got me. I am sure, like some of the non-playable characters and video games have very complicated decision trees.

Jacobsen: Sure. But it's built. It's distributed into the whole system and then played out through that little 3D figurine. In the end, it's intrinsic to it. It's much more tightly closed off.

Rosner: Yes, I think one thing we can say, at least in terms of this discussion, is that agents to have agency: Yu need to have consciousness.

Jacobsen: Yes.

Rosner: I think that in general, that seems. Well, that's right.

Jacobsen: Yes, and maybe, also, there's that sense of agency that has to come with a certain closed offness to the rest of the universe, where the only channels of information are getting in from your own little sensory apparatuses – whatever it is.
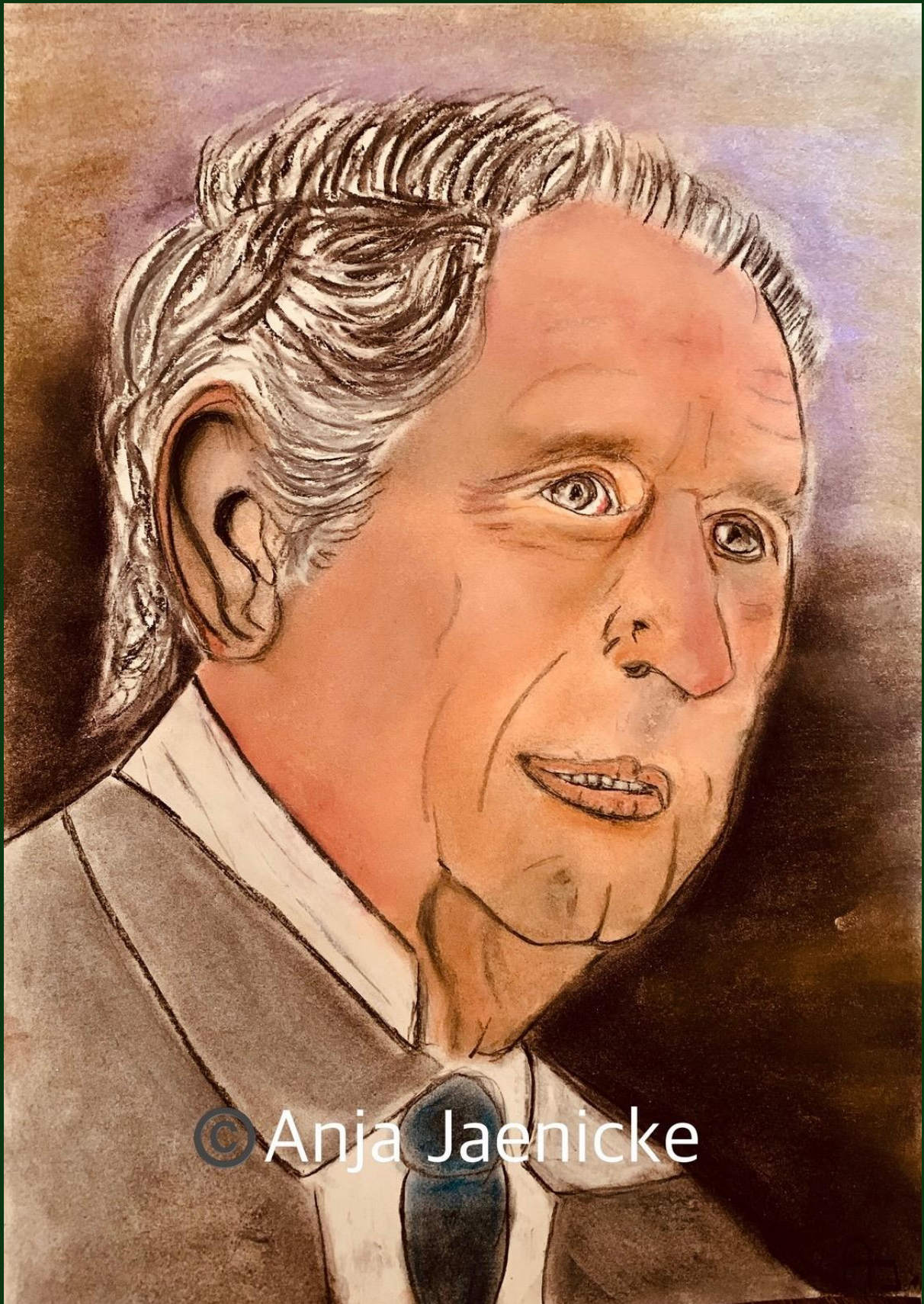
Rosner: Alright, I am tired. My voice is raspy.

Jacobsen: Ok, yes.

Immortality Rocks, (pastel on paper) 297 x 420 mm

© Anja Jaenicke

King Charles III

The Phenomenal Quiz
By Krystal Volney

1. Who was Bruce Boston from Phenomenon Magazine Issue 17?
2. What was the name of the article by Nomar Norono in Win One Magazine Issue 15?
3. What was the name of the paper by Marco Ripà in Win One Magazine Issue 5?
4. What did Paul Edgeworth name his paper in Phenomenon Issue 18?
5. What was Graham Powell's poem in Phenomenon Magazine Issue 22?
6. What was a poem by McDonald Dixon the poet in Phenomenon Magazine Issue 23?
7. What was the name of an artwork by Anja Jaenicke in Phenomenon Magazine Issue 24?
8. What is the initial page number of the "Sigma Test Extended" by Hindemburg Melão Jr. in Phenomenon Magazine Issue 25?
9. What did Paul Edgeworth write about in Phenomenon Issue 26?
10. Was the 'Golden Ratio' part of the Fibonacci sequence in Eric Trowbridge's article "In the Grungiest Corner" from Phenomenon Magazine Issue 27?
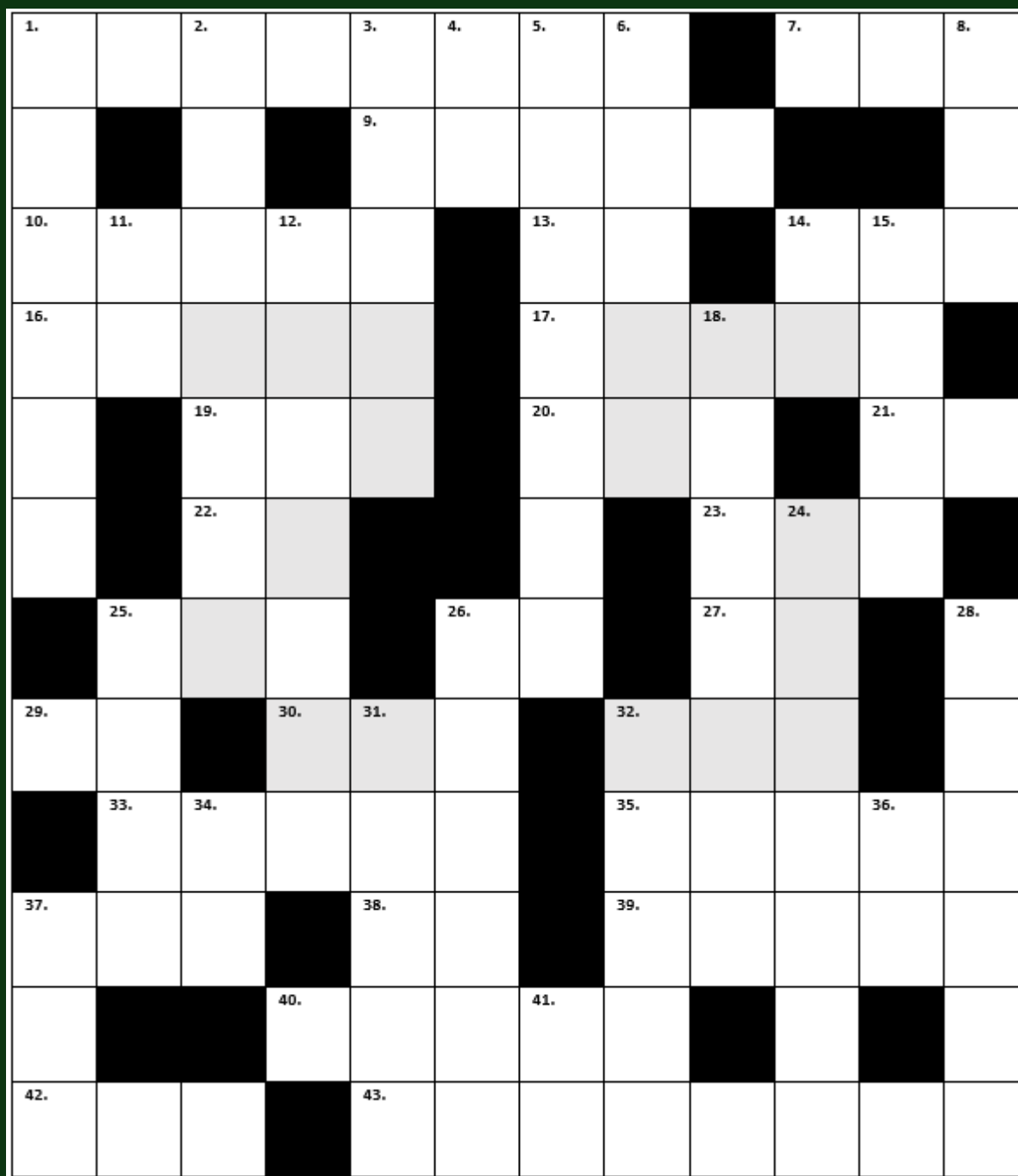
Poem

by Graham Powell

The Cave

A message sent, like that of a child,

craving support, as beguiled,

by the insubstantial, tedious grey

of a mind's reluctant epiphany.

A mind-mirror, held,

cold and cavernous, to meld

and reflect the louche reality,

with platonic perspicuity.

Clues

Across

1. Giving a sense of happy satisfaction. (8)

7. An exclamation of amazement. (3)

9. A beautiful Muslim female in Islamic paradise. (5)

10. First name of the Season 1 Love Island contestant surnamed Morrison. (5)

13. A homonym of two. (2)

14. The time zone 5 hours behind GMT. (3)

16. Hebrew first name akin to the name of the father of Jesus. (5)

17. Describing a capacious place in a building. (5)

19. A young child. A small quantity of strong alcohol. (3)

20. In medical circles, an abbreviation for contamination, defence, & checks. (3)

21. An expression of pleasure, surprise, sympathy, or realisation. (2)

22. Present simple third person singular of the verb 'to be'. (2)

23. No 'T' in this team of Enterprise Asset Management. (3)

25. What a film performer will do in front of the camera. (3)

26. Something you say when you refuse. (2)

27. A Latin-based abbreviation for a year after the birth of Christ. (2)

29. Letters that indicate a first degree from Law School. (2)

30. An alcoholic drink that in Medieval times was brewed without hops. (3)

32. Draw a vertical LINE within the French Measurement Certification Laboratory? (3)

33. Remove harmful substances from your body. (5)

35. A 'vile' Norwegian Christian name, plus another 'E'. (5)

37. In a Spaghetti Western, with the Good and the Ugly. (3)

38. Put a dot in front of these letters and your website is from Malta. (2)

39. Boudicca was queen of this variant of Iceni. (5)

40. A Tagalog word that means 'known'. (5)

42. A more than warm adjective that can also mean 'sexy'. (3)

43. A ridiculous thing, of no valuable meaning. (8)

Down

1. Someone who practices football, tennis, etc. (6)

2. A physical property whereby a substance can spring back to its original shape. (7)

3. A seventies police film title and a place where miners descend. (5)

4. Put a dot in front of this and the domain is from Angola. (2)

5. A popular health brand that sounds like a lepton. (7)

6. A group of dancers or soldiers. (5)

8. Opposite of dry. (3)

11. Definite article in Italian, used, for example, before scolaro. (2)

12. A smart thermostat. (7)

14. The unit of the width of a piece of type as wide as it is tall. (2)

15. First name of the Indian scriptwriter Pushkaran, born 6th September 1984. (4)

18. Relating to Oceania. (7)

24. Music title by Cody Martin. A female first name. (7)

25. Surname of Alan, who played Captain "Hawkeye" Pierce in MASH. (4)

26. A preposition. (4,2)

28. Pleasing, delightful, God-like. (6)

31. Surname of the protagonist in Arthur Miller's "Death of a Salesman". (5)

32. Yorkshire city noted for its Elland Road stadium. (5)

34. First name used by Messrs Sheeran, Byrne, and Harris, for example. (2)

36. Suffix added to adjectives dark, bright, etc., to create verbs. (2)

37. Noise made by sheep. "_____, humbug". (3)

41. The opposite of 'out'. (2)

Crossword produced by Graham Powell

Puzzle Answers on page 71 onwards

Ten questions put to Sirilak Menakanit, Engineer & Adventurer

1. **Sirilak, you are a Material Science Engineer, and you have qualifications in Business Administration. What attracted you to these areas of study?**

I have loved science since I was in middle school, and I earnestly attended science classes while studying in high school. Upon graduation from high school, I enrolled in Material Science Engineering at Chulalongkorn University, Thailand.

After graduating with a bachelor's degree, it was an honour to receive the Royal Thai Government Scholarship from the Ministry of Science to extend my study for a master's degree in Materials Science and Engineering in the United States. This field is about studying the fundamental physical origins of material behavior and to thereby optimize properties of the materials through structure modification and processing. Basically, we design and evolve new and better materials. It's an exciting and versatile field and enables us to study materials in many different applications.

After graduation, I worked in both science and engineering jobs for several years until I established SPJS Engineering. I spent a decade growing the SPJS business and its affiliated companies. As a business owner, however, I realized that my technical knowledge was insufficient to run the company, hence I started to pursue an MBA degree and to focus more on management, administration, and human resources.

This made me realise that technical and business areas of study and work have major differences. While science and engineering are logical, definitive, theoretical, objective, and about knowledge, including the principles that apply to most situations, business administration requires more of an artistic skillset. It is considered descriptive, conceptual, subjective, and requires soft skills, common sense, and deep human understanding.

Both areas are interesting, and I found that sometimes at work, when combining science, art, knowledge, and experience, they would bring different aspects to the identification of problems, or even lead to finding different routes to solutions in some situations.

2. **Sirilak, you have become a director of a company with the word "Kaizen" in it – the concept of continuous improvement. How much does kaizen, as such, feature in your life?**

Kaizen is an amazing concept. It makes small things change naturally to something better, starting by observing things around you which you would like to change for the better. It can become a mindset or habit once we are used to it and are able to adapt to it within everyday life. We can make anything in life better, by small, daily progress, which can later lead to a major change. I consider Kaizen to be my daily improvement of everything, from exercise to weight loss, gaining muscle, and even in motorbike racing and practice. I don't focus on drastic change overnight but on getting better every time I do something. All these small-scale improvements eventually lead to a profoundly positive change over time.

3. **What gives you the most satisfaction in your professional life?**

I think I have almost reached the point where I am quite satisfied with my professional life, as I can see things through quite easily, plus I am able to solve things most of the time. These results come from a combination of knowledge, skillsets, technical experiences, along with administrative and management skills. It feels amazing to understand things more from various points of view, and from where I think few people do. I also feel valued on many occasions for my dedication and contributions at work, and recognized for my achievements, e.g., for inventing new procedures, creating 'leaner' processes, etc., and I like to come up with new ideas and methods, then implement them. It's good to feel that I can bring value to the organization where I work.

4. **Clearly, too, Sirilak, racing motorbikes is a large aspect to your life. When and how did that begin?**

From where I am now, racing was not my passion, nor an intention at the beginning, but it developed over many years of riding motorbikes. It started from my passion for classical style motorbikes, like HD - Harley Davidson, though back then, what I was passionate about was not the motorbike itself, but rather, the lifestyle of owning this iconic symbol of America.

The first motorbike I bought 10 years ago was an HD, and back then, I could not even ride a motorbike. It ended up sitting there in the garage for many years, until one day I decided to find a way to make use of my dirt covered brand new HD. I tried to search for 'big bike' instructors and took riding courses offered by them. Back then, my motorbike preference was only limited to the cruising and touring types. I never once considered racing or sports-type motorbikes as I thought these motorbikes were too fast and risky.

Then, one day, while practicing my big-bike riding with fellow expensive big bike-owners on a race circuit (which I was new to) I saw a group of kid racers practicing on very old Honda sports bikes in full racing suits. Their cornering skills were fascinating and indescribable to me. So, I decided to walk there and to ask for their instructor. And that's the day when I put myself into the motorcycle racing circle. I have trained at racing circuits since mid-2022 and have attended several racing competitions this year.

5. **What makes motorbikes good for racing and what makes them good for road usage, and are there any overlaps?**

Both racing and road use motorbikes serve different purposes to begin with. While standard road use motorbikes take into account safety, riders' comfort, as well as compliance with legal regulation, such as noise control and ABS, the racing motorbikes require bikes with great speed and agility. Normally, racing bikes feature suspension settings that are extremely stiff, or will vary depending on the racetrack and weather conditions, as well as the gradients and the number of corners found on a certain circuit. These bikes also require special tyres for optimal performance in race conditions.

When we talk about motorbike racing, there are several types of races, the major ones are, for example, drag races, circuit races or adventure/endurance races. Although every race requires the same bike conditions, that is, maximum speed, the type of bikes and the riders' skillsets are totally different in all race types.

I was trained in circuit racing, which uses what is categorized as 'sport', or 'racing' type bikes. Bikes that are good for circuit racing need to be superfast in both straights and curves. So, most racing bikes need to be customized and modified a lot, so vary a lot from the original bikes that were sold for road use. This is what they call a '**standard bike strip down'.** All motorbikes are manufactured to legal requirements for the road and include parts which aren't needed in racing, such as mirrors, lights, heavy exhaust systems and so on. These all add weight when

racing, and if the bike falls or crashes, it will need to be replaced if you want to convert it back to road use, so these additional add-ons have to be removed from racing bikes.

After that, it is about the '**engine adjustments**', such as converting the Electronic Control Unit (ECU), the exhaust systems, suspension and brakes, and the rider's adjustment to improve performance.

Riders' skills in racing and street riding also have some slight differences. For example, in racing, all conditions are set, with no obstacles or interference, and the track is designed for racing, with the sides that are grass or have barriers. There are no other types of vehicle and there's no opposing traffic. So, riders can speed, lean bikes low when cornering, or enter their own racing lines and apex as they want to, without worrying about oncoming traffic. In street riding, there are many uncontrollable factors. Riders' skills are needed to control the motorbike, along with others on the road, especially in traffic jam situations, and to obey traffic rules.

6. **For your sport, you have to keep in good shape, yet you also like to take the occasional beer. How important is it to keep a good balance of strictly healthy living, along with enjoying aspects that give you pleasure?**

I always believe in one aspect of Buddhist teaching - "the middle way", which refers to the understanding of practical life, avoiding the extremes of self-denial and self-indulgence, and I utilize a lot of this belief in my daily life. Considering myself not a professional bodybuilder, nor a motor-GP racer, nor am I making any money out of any of these, I still enjoy other pleasures in life, just like other people. Even though pushing things to the limits is what makes improvements, going to the extreme may not be the optimal way since there are always trade-offs. After all, human life is not within a single dimension, adding to something means taking from something else, most of the time. Investing more time to achieve results means more stress and means less time to spend on the relaxing parts of life.

7. **To quite a high level, you have pursued lines of study and hobbies that are often associated with men. So, particularly on International Women's Day, how conscious have you been of doing what are, perhaps lamentably, perceived as male-oriented activities?**

If you mean engineering, weightlifting, and motorbike racing, I think the perception of dividing these into male or female-oriented activities (or study) is awry, and maybe it is just because a smaller number of women participate in these activities. However, I do not see that they are limited due to the abilities of women; it is just a matter of choices and interests. Please allow me to share the motorbike racing as an example of my statement. A motorbike seems to most people like a man's toy. In fact, it is just a vehicle like a bicycle or a car. However, I do understand how most women think and feel about it. Women tend to take fewer risks than men, and tend to overthink situations, and in fact motorbiking contains an element of freedom and danger in it. Some people thought that I do weightlifting to grow bigger biceps to ride bigger bikes. Actually, motorbikes are just like cars: you don't need men's strength to move them. All motorsports are a male dominated sport, but as I confirmed earlier that fitness doesn't have anything to do with it, nor mental capability, it is just a social perception. These days I see women have won national level competitions and race extreme enduro events. I see more women are starting to ride, and that is truly amazing. Motorcycling is all about feeling the breeze, and freedom, and it really should be open to anyone, of either sex, that is willing to give it a try. So, women out there, if you hear me, don't be scared, get yourself some gear, take a safety course, and have fun! I would love to see more female riders in the future.

8. **More traditionally, you worked for an airline. Did your evident passion for travelling and exploring stem from that, or was it already an aspect of your being before you joined that profession**?

Since starting my business, I was frequently travelling in Southeast Asia, Asia, and the USA for business purposes. My decision to join the airline company back then, was because there was an opening in management, which also matched my desire to learn more in this field with a bigger scale organization. Besides, the airline company offered a very nice salary. On top of that, there are flight benefits offered to airline staff which makes travelling easier and cheaper for me. I have been working in the airline for a while, and gain massive new, exciting experience in service industry, which is different from the engineering field.

9. **I also see that you visit monks and give things that demonstrate respect and help. From whom, or what, does this desire and consideration come from?**

I was born into a Buddhist family, and growing up with Thai culture, so I have been influenced with the mixture of these two aspects to life. Since my childhood, I was taught to have the quality of being humble and respectful. We learn to have a kind heart, be nice, help others, make donations and observe other ways. In Buddhism,

we learn to prepare for inevitable events and learn the skill of living with courage and letting go of fear. I try to set myself to be disciplined and visit monks and temples when I have time, every week, to pray, give offerings to the monks and donation to temples. The temple is a place of calmness, a place to remind myself to have the right view and the right understanding (Sammàdiññhi 8 in Buddhist teaching), which leads to being a good person, and to practicing good deeds in everyday life.

10. Finally, what do you see yourself achieving during the next few years?

Professionally, I would like to see myself moving forward to a higher position in my career such as a VP or a CEO in a larger corporation with my extensive knowledge and experience. I like challenges and enjoy learning new things, developing myself, and I still enjoy working with people.

Personally, it is my dream to be riding motorbikes on racing tracks in different countries. I plan to start next year by riding motorbikes at Sepang International Racing Circuit in Malaysia, which is the closest international racing circuit from Thailand. Then I wish to try racing circuits in the US or in Europe. I will also continue to train and join races in the next few years.

Well, I wish you the best in your endeavours, Sirilak. Thank you for your time.

The following pages have the answers to the puzzles from Editions 27 & 28.

PUZZLE ANSWER PAGES

By Graham Powell

The Paul Smith Wordoku

H	U	T	S	P	A	L	M	I
S	L	I	U	M	T	H	A	P
A	M	P	H	L	I	S	U	T
L	I	M	P	A	U	T	H	S
U	P	S	T	H	L	M	I	A
T	H	A	M	I	S	P	L	U
I	S	L	A	T	H	U	P	M
M	T	H	I	U	P	A	S	L
P	A	U	L	S	M	I	T	H

AHTSMPULI

CROSSWORD ANSWERS

The Fun General Knowledge Puzzle

(From the previous Phenomenon magazine)

C¹	H²	A³	R⁴	L	E	S		A⁵	C⁶	R⁷	E⁸
H		B⁹	A		L		C¹⁰	L	A	M	S
A¹¹	L	U	M	N	I		A		P¹²	S	T
D		S		Z¹³	A¹⁴	R	A				A
	C¹⁵	E	L¹⁶	L¹⁷	A	R		E¹⁸	A¹⁹	T	
B²⁰		D²¹	O	U	B	T	E²²	R²³		M²⁴	E
E²⁵	L²⁶		B²⁷	E	E	H	I	V	E²⁸	S	
S²⁹	O	W		T³⁰	R	U	M	A	N		
E		S³¹	O³²	H	O		R			L³³	
E³⁴	E³⁵	L³⁶		F		P³⁷	I	N³⁸	C	H	U
C³⁹	L	I	F⁴⁰	F		O		O⁴¹	U		N
H⁴²	O	M	E		A⁴³	D	A	S	T	R	A

1. An award-winning poet
2. "Our Misinformed Planet"
3. "Divisibility by 3 of the elements of a particular numerical sequence."
4. "Nietzsche's Call for a Transvaluation of Values"
5. "Ex-Communication"
6. AWAKENING poem
7. Louis XIII Hunting in Versailles
8. Page 25
9. "The descent"
10. Yes

'The 20-Year Anniversary Crossword' Answer Grid

The Editors hope you enjoyed the magazine.