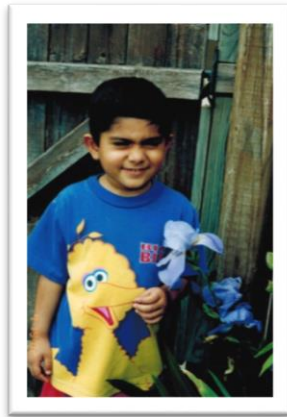




# So Long Ago, So Clear

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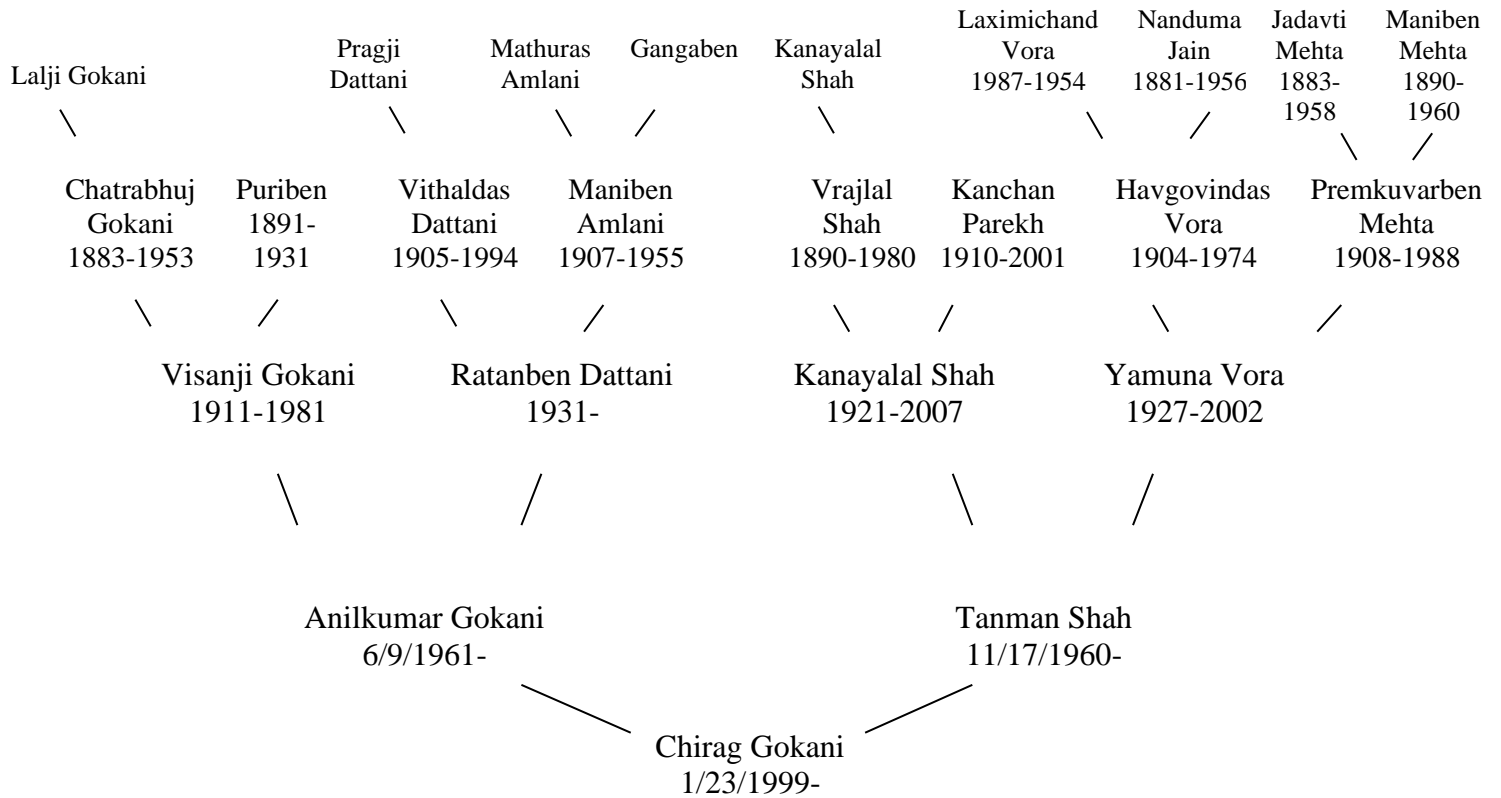
by Chirag Gokani



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## Family Tree



**Dedicated to:**

Mother	your dear emu loves you.
Tenzing Rex Northcut	the most creative scientist; his ideas fill me with awe and wonder; a natural seeker of all things tangible and intangible; an Isaac Newton.
Christopher D. Hicks	a musician; the only music teacher I've gotten along with.
Carl Sagan	the giver of a noble perspective; I am very much indebted.
Jaco Pastorius	"Jaco-Bird"; a fellow emu; a seeker of universal truth.
Paul Hoehn	a role model; a genius; I don't know how he taught us so much.
Raymond Jurcak	for all the time he spends with me; I hope we stay in touch.
J.T. Sutcliffe	I do not know anyone more similar.
Jerry Lacey	the Lace; Lefty-Bones; the artist of a teacher.
Parker McWatters	a great friend.
Tim Hicks	for everything he has done for me.
Vangelis	the giver of a noble perspective; a connection to the ancient times and the indeterminate future
Douglas Adams	for his wild creativity paired with wry rationality.
Eratosthenes	for his ingenuity and calculation I will never forget.

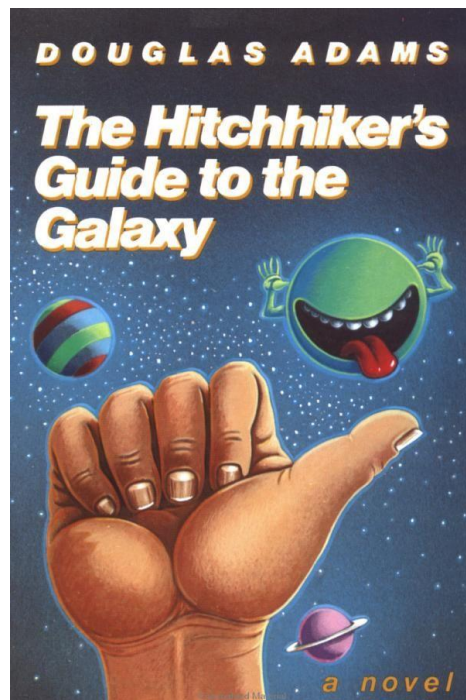
*"It's time: us musicians need to get to work; this is bullshit."*

Jaco Pastorius



*"Time blossomed, matter shrank away. The highest prime number coalesced quietly in a corner and hid itself away forever."*

Douglas Adams, *The Hitchhiker's Guide to the Galaxy*



## Introduction

The universe makes sense!

I occasionally find myself frozen in mortal terror when my eyes, by some terrible chance, happen to land on my family's statue of Nataraja, the cosmic dancer. The statue sits covered in dust in an unlikely corner of our living room. Although apparently neglected, it is this small statue, coupled with all my knowledge of everything I know, that compels me to declare the aforementioned statement.

Nataraja is a four-armed dancer who balances on one foot atop the demon of ignorance. The other leg remains extended in the air, and it is said that when Nataraja puts this leg down, time will stop. My study of rational functions and series in Ms. Sutcliffe's Algebra II class has led me to speculate that perhaps Nataraja will lower his leg towards the ground asymptotically, and that time in fact will never stop but rather diminish into near-nothingness as the universe becomes predominantly matter and the highest prime number, since the very beginning, asymptotically comes into focus.

Nataraja also carries a drum in his right hand whose beat marks the passage of time. I am reminded that if time has a definite, finite ending, the final beat of this drum will take form in the dimensional collapse of the universe at an infinitely high and low frequency that resonates in a medium not yet discovered, which very well may be no medium at all.

The fact that the vastness of the universe is represented as a human, a virtually infinitely small speck of dust on the universal scales of space and time, provides a horrible paradox in proportion but lets me realize that there exists a world of atoms as infinitesimal as the universe is infinite. The statue shows that we are lodged in between these two worlds, and that our existence is, to the denizens of a far larger world, as subatomic particles are to us.

Sometimes these thoughts induce nausea. They are repulsive and vile and they can become drab to consider. “So what? I don’t care about who we are on a universal level.”

It is during these dizzying moments when I am reminded of my mother. Although she has never said it explicitly, something about her perspective on life encourages me to turn to nature when I experience such times of confusion and find in it some sense of aesthetic beauty. I hope to one day pursue a field that attempts to explain the nature of our universe, and my mother’s value of remembering to admire the sheer beauties hidden in what I will study will help maintain my sanity.

One understanding I would like to further develop during the course of my life is the concept of continuum, a set of elements such that between any two of them, there exists a third element. It is in continuum that the double-ended infinity takes form. My mother’s tacit encouragement mirrors the attitude expressed in Jaco Pastorius’ *Continuum*, in which the bassist calls out to the aliens in contemplative curiosity but does not forget to appreciate the beauty in his own position, ending the solo work on a humbling yet infinitely meaningful low E. 🎧 Naima and Continuum

Here, in these few pages, I explain my horribly conceited view of Life, the Universe, and Everything. A reader’s understanding will entail prolonged (and possibly painful) use of a Babel fish in the ear. Do not forget to bring a towel. But most importantly, don’t panic.

**Where We Come From:**  
*The Passing of an Obligation*

I would say that about once a month when I'm listening to a song, my dad glares at me fiercely, almost threateningly. He does so at distinct points of the song, usually at the beginning of a phrase or in the middle of a lick during a solo.

Dad prances over to the computer and conducts a Google search. "Shut that off," he commands me. With his stubby, rubbery fingers, he delivers an obstinate, forceful click to the mouse, and the computer speakers begin to emit a shrill, scratchy recording of a song in a very foreign language. I don't even know the language myself, but the quality of the recording is so awful that I'm convinced it's got to be foreign even to him.

"Aha! You see? There it is," he jumps. He grasps the mouse firmly, and, squeezing it, he drags it back across the desk, rewinding the video. When the shrill squeals are emitted for a second time, I feel as if the frequency of my heartbeat matches the frequency at which my bones resonate, and I know exactly what he means. Moments like those bring me so close to the world around me, and although I live very far away from where my family comes from, these moments make me feel most interwoven with my past.

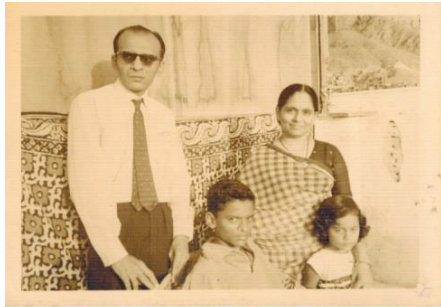
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"Pirate!" I frantically accuse. "You're a pirate!" I yell again at my mother. Although our family originates from Gujarat, the western-most province of India, my mother was born and initially raised in the port-city of Aden, which was, at that time, a British colony located in what was once the beautiful country of Yemen (Rothermund 159). (Pirates now overrun the country, explaining my playful criticism of my mom's location of birth.) Her father, who we call "Nana," held a job there as an accountant (Gokani T. 30 Dec. 2014).



“Hands up! High!” they barked. Turban-bearing armed revolutionaries stormed my grandfather’s office building, raiding it for money and resources to help oust the British from Aden. My grandfather’s manager willingly turned over a fair sum of money to the revolutionaries, and as an expression of approval, the men performed the Arabic ritual of rubbing the beards of the employees. Having had his clean-shaven chin stroked by a rioting Arab while the position of his own hands left him defenseless, Nana made the wise decision to leave Aden and return to Gujarat, where his wife and five children had already moved two years earlier in 1965 via ship. (Gokani T. 30 Dec. 2014).

My mother, the youngest of those five children, recalls a horrifying moment while on the ship in 1965. Five-year-old Tanman Shah, nicknamed “Tinu” by her siblings, suddenly realized that her parents, who had been traversing the deck alongside her, had dropped out of view. Warm blood rushed to her head as she spun around, her curly, springy hair following quickly after. Up and down the deserted, desolate deck she looked, but to no avail (Gokani T. 30



Tinu, ~5 years old, with her parents and brother

Dec. 2014).

Mom relates this feeling of panic and desolation to her first few weeks in the States. Stepping out into the Chicagoan, nippy air as a ninety pound immigrant on March 19, 1989, Tinu was not guaranteed the job for which she came to America for fifteen days. Staying with a host family during this first week of her arrival, Tinu received a letter in the mail from her mother, who we call “Nani.” Mom recalls “suppressing her tears” while reading the card, as it

reminded her of the scent of her old home, the warmth of her

home city, and the hugs she received from her older siblings (Gokani T. 30 Dec. 2014).

One evening in 1991, Tinu, overjoyed, opened the door to her Chicago apartment to greet Nani, who was visiting from Gujarat. That night, Nani sat down with Tinu in the compact, cozy living room and sang traditional Gujarati *bhajans*, which are ancient devotional Hindu songs,

some dating back to the first and second centuries (Thompson

“Rāga” 364).  Nani's Bhajans: 1991

Nani included the *Hanuman Chalisa*, a 40-verse-long *bhajan* by the 16th-century poet Tulsidas (Long 189). The session lasted for more than an hour. Mom

claims to have received her mother's blessings that night for the future (Gokani T. 30 Dec. 2014).



My mother's father, Nana, and mother, Nani, 1996

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Myself, May 2006. From an early age, I knew I loved music.

I got out of the car to hear the crunch of my shoes on the Barodan soil. Sleep enveloped me, but excitement overpowered it, the excitement of discovering where my maternal family's love for music stems. As a rising seventh grader, I knew I had inherited this trait that seems to run down my

mother's side.

Upon entering the light-pink walled home, my eyes immediately drew themselves to the corners of the living room (the entrance to most Gujarati homes leads directly to the living room) where there leaned against the walls a plethora of sitars, guitars, veenas, and instruments I didn't even recognize (Thompson "Sitar" 77). I walked closer to one of the corners and realized that each and every instrument had a broken string, a caved-in bridge, or rotten wood. "This is just a big heap of trash!" I exclaimed to myself. "Where must the real, functional instruments be?"

"Upstairs," an old, withered but warm voice that had read my mind told me, "you shall find our good instruments." It added gently, "You will also find our son there, your uncle, I think he would be to you." I whirled around on my heels and faced the source of the voice. I would later figure out the voice belonged to my great-uncle, but for now, I, shamelessly skipping any form of introduction, bounded up the marble staircase.

Upstairs, in the thin flicker of fluorescent light, I would meet the greatest musician I personally know. Jaymin Sanghavi has divine control over his fingers and mind, allowing him to produce any desired sound from any instrument in any genre. His knowledge and mastery of the



most complex harmonic structures finds its way into his playing. 🎧) Hanging out with Jaymin (personal recording)

"I dropped my job as a civil engineer to pursue what I knew is my true passion. It was

Jaymin totally worth it," Jaymin, would tell me.

This idea of "following your heart" and "doing what you truly love" has always intrigued me. So many of the artists I've talked to have provided this exact same string of advice. My parents, brother, friends, and friends' parents, on the other hand, have told me that I should

become well-educated to secure a job that I would not only enjoy but that would also provide me with a steady income.

Although my mother had a relatively easy way establishing herself in America, I still feel personally obliged to provide the next generation with an equal amount of opportunity, not just to perpetuate this spirit of hard work but mainly to ensure that my mother's decision to come to this country was worth her time and troubles.

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A few weeks ago, I arrived at a stunning realization.

"We have hour-long recordings of my grandmother's music. We even have recordings of Tinu, my mother, singing in 1964. She was four." 🎧 Tinu's Singing: 1964 (personal recording)

In the spirit of continuum, I sat down in my room to record myself playing the electric bass. 🎧 Chirag Gokani: 2015 (personal recording) Attempting to reach the aspect of devotion that my grandmother emphasized in her recording, I included John Newton's *Amazing Grace*. Although the languages and origins differ, the meanings are identical. Wanting to develop my grandmother's future-looking optimism for my mother in 1991, I then encapsulated this attitude in an original composition titled *For 2020*.

I often refer to my mother as a bird, like the one in Paul McCartney's composition, *Blackbird*, which appeared on the White Album. Upon her arrival to this country, she was forced to "take these broken wings and learn to fly, all your life." Thinking about it, she really did and succeeded, and is now helping her birdlings do the same.

I ended the recording with an attempt to render Jaco Pastorius's version of *America the Beautiful*. In contrast to Jaco's recording which rings with freedom and beauty, my recording rings with attempt and hard work. In the recording, you can hear the buzzes produced by the frets


as I incorrectly place my fingers. During the gossamer, harmonic-driven passages, you might catch an accidental strum of a string that doesn't at all fit in the chord. Yet if anything, somewhere within the attempt and effort audible in my version of the song sits my obligation to, through my hard work and effort, provide the future generations with opportunity, the same obligation my mother made to her mother by accepting her blessings on that Chicagoan night of 1991.

After I finished my recording, I sat back and listened to my grandmother's voice, my mother's voice, and my instrument.

I had made a second profound realization.

My track was the worse of them all.

•

My definition of jazz music describes the genre not as the music of a particular time or style but rather as a constantly evolving form of communication that knows no socio-political borders. Perhaps man's desire to present to his fellow beings with his own observations of the world is most organically and effortlessly done so through this genre. The Jaco Pastorius-Toots Thielemans exchange in their live in Germany recording of *Three Views of a Secret* compels me to ask how one can't like jazz.  *Three Views of a Secret*

Every now and then, I manage to convince my parents to sit down after dinner in front of the TV to watch a jazz concert with me. As Randy Brecker wails over *The Chicken*, a petulant, “fly-in-the-ear” complaint drowns out the trumpeter. “Turn in softer! I can't think.” my mother buzzes. What do you mean you “can't think”?! You're supposed to be thinking about the music, about the notes he's emphasizing, about how the rhythm section supports him, about what he's

trying to express! This is not that elevator music composed by idiots, written for morons; this is *real* jazz. When you hear this, you live and breathe it: there is no alternate thought.

“This music is nonsense,” my father joins in. “This guy has no idea what he is doing. He’s just going ‘tatatatata,’” and Father mocks a decently intoxicated trumpet player whose sluggish fingers are unable to fully close the imaginary valves. “I think this music is trash.” Bad timing, pops.

I storm over to the TV, slam the power button, and leave my parents, who are now able to think in the darkness of the living room.

In this way, I am alone in my pursuit to develop musical proficiency and a feeling of competence when I play jazz. I hope my future self recognizes my independence in this venture and isn’t too disappointed with the way I sound in that recording.

In the eighth grade, I was a quite pathetic student. I think I can blame my easy-going attitude for many of my failures. My transition into the ninth grade was one from academic mediocrity to excellence, and the solution to my problem was very simple: I had to work harder.

Yet, musical proficiency, something largely acquired by a certain intrinsic talent, is infinitely harder to develop than any skill that can be taught in the classroom. Simply putting more work into scales and exercises will not yield a degree of enhanced creativity for an aspiring musician. I still haven’t made the leap from musical mediocrity to excellence.

### **The Movers and Shakers:**

#### *From Academic Mediocrity to Excellence*

“BLEAH!”

The sound waves of this shriek of disgust bounced around the walls of my small, stuffy room. I wanted Michael Shaara’s head, and I thought this hideous cry would at least evoke a response from that horrible, wretched author’s grave. Instead, the only response I received was

from the air duct situated in the top-right corner of my room, buzzing in resonance with my own voice.

Ripping off its front cover, I flung *The Killer Angels* at the wall. I then systematically stomped the Civil War-based book under my heels, compressing the 3-inch-thick book to 2 inches.

“That’s how long this book should be,” I panted, tears streaming down my face. “This worthless piece of trash,” I spat. I had obviously given up on reading about Chamberlain and Pickett and Lee for whom my friends and I had created several derogatory nicknames.

As an 8th grader, I got low B’s and high C’s on the majority of my humanities assignments. Unlike many academically-challenged kids, however, I would still “beat myself up” over a bad grade.

That May, our Humanities 8 teacher told us to drop by her office to pick up our final papers before we took our chemistry final exam. My friends and I went as a group to retrieve our papers. I was so confident I was going to make an “A” on that final paper.

“Here you go, Jonathan,” our teacher said gaily as she handed my friend his paper which proudly displayed an “A+” on the corner.

“Here you go, Parker.” I swear I saw her wink at Parker when she said that. A grin broke out on Parker’s face when we realized what grade he had received.

“Chiraaag....” she murmured dramatically as she flipped through the stack of papers. She paused suddenly, her eyebrows narrowing, her eyes freezing. “I might have left it in the classroom.” She scrambled off.

“Oh man!” Parker exclaimed in an 8th grader’s hoarse laugh as soon as she was out of earshot. “I just *killed* this paper. Man, I just *killed* it, and I knew it all along. I knew that woman

would have to give me an ‘A’. Hey, Jonathan, let’s head over to the Science Building. We’ll see you there, okay Chirag?”

Myself now left vulnerable, my teacher came back, hobbling along with what I guessed was my paper in her claws. She approach me with a “that’s-the-way-it-is” countenance, and, with a flick of her wrist, presented me my graded paper. Before I even glanced at the grade written on the cover page, I thanked my teacher for an “enlightening year of humanities.” It was not until I exited Centennial Hall and was outside until I looked at my grade.

“C+.” Bleah!


If you’re at all familiar with the “geography” of St. Mark’s, you might know of the great boulder that sits near the small pond behind the Science Building. Blinded by tears, I stumbled over to that boulder, and, crying my brains out, sunk into the soil behind the boulder where nobody could see me.

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My father has always told me that “when you decide to do something, follow through in whatever you have decided to do, even if it brings negative consequences” (Gokani A. 30 Dec. 2014). I often find this phrase to be a senseless piece of rhetoric that plays on the Atticus-like, civilian attraction to do what our gut tells us and to suffer greatly for taking the “manly” path. In my 8th grade experience, I found that piece of advice essentially worthless since it suggested that if I changed my decision to be complacent with my bad grades, something would be tremendously “unmanly” and despicable about it.

I think this piece of advice applies more to people of my dad’s current age. From my personal experience, I believe adolescence should be full of mistakes but an equal number of corrections, allowing for a teenager to, by empiricism, “travel a breadth of extremities” in hopes



to deduce a personal system for later in life by which he or she can “stick to some straighter line” (Mitchell).  Hejira Indeed, my mother’s 8th to 9th grade transition avers this prospect, as she felt compelled to rise from a level of academic mediocrity to one of excellence.

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Passing through the Lady Vissanji gates as a student



demanding the assumption that you would get less than seven hours of sleep every night. Bleah!

“Going to an all-girls school can be very daunting,”

Mother says, recalling her first day

of 9th grade (Gokani T. 24 Jan. 2015). As a well-educated

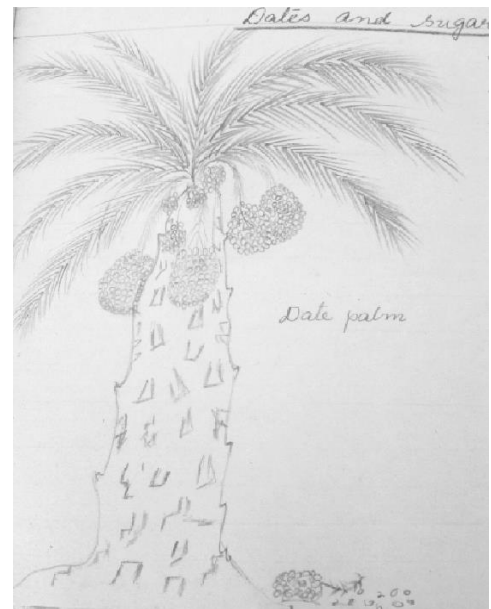
but also well-rested thirteen-year old, the culture of late-night studying, longer school days, and a demanding curriculum came as a shock to the system.

In addition to studying English and Gujarati, Tinu studied the challenging language of Marathi. Although she recalls crying over a few bad grades (as did I), Tinu overcame the challenge and graduated at a High Honors level (Gokani T. 24 Jan. 2015).

One assignment that best displays Tinu’s hard work was the handcrafting and writing of a book about the Sahara Desert and its people, the Bedouins. Between each line lies carefully drafted hand-written text that provides an in-depth



Cross-stitchings knit by Tinu in ~1972, whose beauty and symmetry reveal the hours spent on making them.



Detail from Tinu’s projects about the Sahara (above) and diamonds (left).

explanation of the significance of a particular Bedouin ritual or way of life. In regard to Tinu's artwork, the pages display a vibrancy of tint, saturation, and contrast (Gokani T. 24 Jan. 2015).

I cannot help but compare my mother's pieces of art to my own, both full of effort and hard work. To go further, my transition from the 8th to 9th grade mirrors Mom's, not only numerically but literally. We both made a decision based on previous failure, not worried whether these decisions matched what we previously assumed true about our individual natures.

Whenever I recall my Humanities 8 experience, I am reminded of two particular lines from John Lennon's *Remember*. 🎧 Remember He sings, "Don't you worry about what you've done. Don't feel sorry about the way it's gone" (Lennon). In Lennon's words, which generally reflect his own adolescence, I find comfort in that at this age, my previous, especially faulty decisions show little indication as to which direction I head.

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I was recently talking to a good friend who hates his family. I explained to him that in our Family History Paper, we were to write about our family's core values.

"My family doesn't have any values," Peter said. I paused for a moment, trying to get my mind around this claim. I asked,

"Ignoring monetary issues, if you had the chance to leave your family today and go off and live on your own, would you do it?"

"Absolutely, any day. Yeah."

I wonder who I would be and how I would live if I had been brought up by Peter's parents.

### **Family Values:**

#### *The Window of Gratitude*

"What if you had one day with your birdlings, one ideal day? How would you spend it?"

Mother bird tilted her head slightly, her beak angled upward, her eyes gazing at the ceiling. “Twenty-four hours?” Twenty-four hours.

“I would be dreaming of bunny rabbits on a lush, green field when I would wake up from a good, full rest. I would then prepare a yummy pot of home-cooked cinnamon oatmeal and another pot of ginger tea for my dear birdlings while Dad would pick up the newspaper from our front driveway, and we would sit at the dining table and read. After a while, our birdlings would join us.

“Then, while you and your brother do your homework, I would clean the home. I would dust everything, top to bottom, and put everything where it needs to be. I’d sit down for an hour-long yoga session, and after that, have some friends over for a small lunch. Before they’d leave, I’d show them my garden and give them some green tea leaves.

“In the evening, we all would sit down and watch a documentary, something like William Lishman’s *C’mon Geese* or Carl Sagan’s *Cosmos*, or anything, really, that made us more appreciative for the people around us and aware of a particular aspect of life on Earth. Then we’d all sit down for dinner, give our thanks, and, while we ate, we would talk about global issues and the future.

“Then you and I would sit down for some mother-son time. We would read certain articles from the newspaper, articles which I think you would find interesting, and we’d discuss them thoroughly. The points you’d bring up would make me very proud. Then we would retire to our beds and have a deep, wonderful sleep” (Gokani T. 7 Feb. 2015).

The simplicity of my mother’s answer reminded me of the day we read “The Thirteenth Tuesday: We Talk About the Perfect Day” from Mitch Albom’s book, *Tuesday’s With Morrie*, in Mr. Jerry Lacey’s seventh grade Humanities class. Mitch’s old college sociology teacher,

Morrie, suffers from ALS, and, during the final years of his life, develops a close, fatherly relationship with Mitch. Mitch asks his former teacher the same question I asked my mother and feels similarly stunned when Morrie claims his ideal day would be one of normality and simplicity:

It was so simple. So average. I was actually a little disappointed. I figured he'd fly to Italy or have lunch with the President or romp on the seashore or try every exotic thing he could think of. After all these months, lying there, unable to move a leg or a foot—how could he find perfection in such an average day? Then I realized this was the whole point. (Albom 176)

Although a tenet of modern culture states that vacationing is the best way to relax, my mother believes that this idea of escape only leads us to view our normal environment as boring and having nothing to offer. Finding meaning and beauty in our own environment, she claims, fundamentally boils down to our ability to be grateful. Additionally, she argues that following the concept of gratitude allows us to grasp other noble concepts.

\*\*\*

“You have got to start looking up at the sky,” Mr. Lacey professed. “Too many young people today are looking down into their hands at their cell-phones. I challenge you to develop a sense of gratitude for the natural world.”

Although I expressed gratitude as a seventh grader, it was only aimed towards my friendships, some form of a divine being, and my TI-84 calculator. Yet, I accepted Mr. Lacey's challenge and began observing cloud formations, sunsets, full moons, and constellations.

During one of my weekly observations of the moon from our front porch, I realized this time that the moon bore a strong, orange-brown tint. Recognizing that this change in color on the

moon was due to the linearity of the sun, Earth, and moon, I suddenly felt very connected to the solar system. How magnificent it felt to be in a  $180^\circ$  relationship with the two geocentrically largest celestial objects in the sky. Before I went back indoors, I additionally noted the backdrop of this entire scene, which consisted of stars and galaxies millions of light-years away. I felt very small and negligible as I realized that our solar system, something I considered very vast, was actually insignificant relative to the size of the universe. Carl Sagan's description of the human existence best encapsulates my realization: "We find that we live on an insignificant planet of a humdrum star lost in a galaxy tucked away in some forgotten corner of a universe in which there are far more galaxies than people" ("The Backbone"). That night, I had proven my mother's belief that gratitude allows us to grasp other noble concepts, like the humility of human existence.

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The perspective of humanity as an insignificant speck of dust in a vast, perhaps infinite cosmic arena has often been attributed to science. For instance, scientific research has shown that humanity fights an uphill battle, attempting to create order and derive universal truths in a universe that, statistically, constantly displays a gain of entropy, a quantitative value of chaos and randomness. Studies behind what drives evolution find that a large part of a population's ability to adapt to a life-threatening circumstance lies in the earth's constant bombardment by cosmic rays, high-powered, DNA-mutating electromagnetic radiation that originates in interstellar space. The fact that universal electromagnetic radiation has helped us evolve from the most basic strands of nucleotides to complex, perceiving, interpreting, and understanding human beings emphasizes that we are subject to the mighty forces of the universe and are therefore the mere results of its whims and follies.

My mother believes that we all need some form of spirituality to keep ourselves from abusing and taking advantage of the truths we find in science. Hitler's Nazi Germany, for example, exploited the principle of natural selection to benefit its own economy, killing eleven million people. Mom claims that "without spirituality, obsession with science can make an individual brazen, bold, and egoistic" (Gokani T. 7 Feb. 2015). For this exact reason, many people turn to religion to keep themselves grounded to the fundamental principles that everyone must live by to enjoy membership in society.

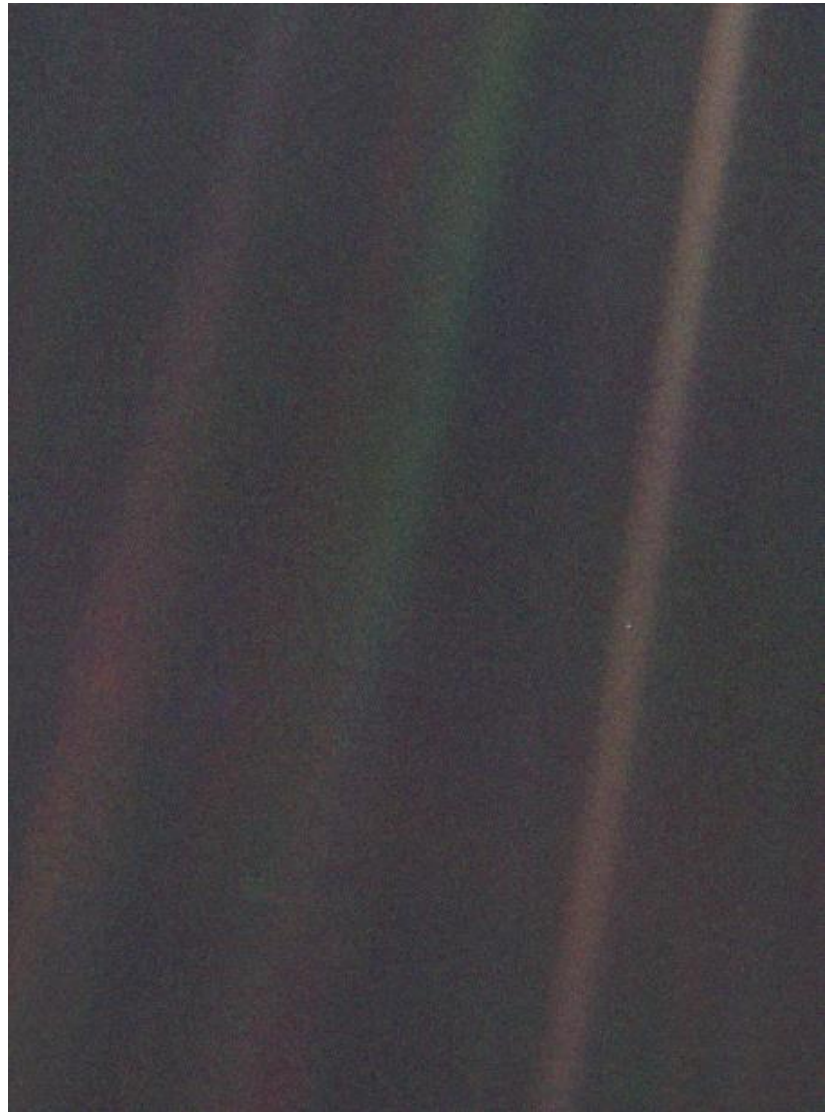
I personally find religions very beautiful but do not favor the superstition and blind belief that accompany them. Although I enjoy speculating a cosmos under the watchful eye of a divine being, I believe this idea often leads us to believe that the future of the universe matches human ambition. The truth is that we as a species will (unfortunately) perish in a relatively short time, and I would, as a future human being, find it very disappointing at the moment when the earth is being swallowed by the sun and no divine being has yet swooped out of the sky to save us. Even on a less literal level, I would feel bad to realize that the god who so consciously created us is now destroying us, what we consider his most significant manifestation, with an equal and opposite degree of fury.

Additionally, while the geocentric "God-made-us-in-His-image" view lets us see our fellow humans as noble, pure hearted, and superior beings, following this belief in a period of contact with an extraterrestrial civilization would lead to a human identity crisis. After millennia of believing we are the pinnacle of a god's work, we would probably find it hard to accept a different (and possibly more advanced) civilization as our equals (or possibly superiors) while they believe in an entirely different god (or no god at all).

Due to these issues, I have instead turned towards the acentric “earth-as-a-small-speck-of-dust” view. The perspective emphasizes our loneliness and accentuates our duty to act morally, thereby preserving our beautiful, contemplative position on Mother Earth.

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In February of 1990, the Voyager 1 space probe, on astrophysicist Carl Sagan’s request, turned around its cameras one last time towards the Earth as it made its way past Pluto and into interstellar space. The photograph it captured became known as the “Pale Blue Dot” (Voyager 1). Carl Sagan’s comment on the photograph successfully recognizes our true identity (an identity in relation to the vastness of the universe) while still expressing, through his voice of a poet, “our



responsibility to deal more kindly with one another, and [our need] to preserve and cherish the pale blue dot, the only home we've ever known” (“Who Speaks”). Vangelis’ *Heaven and Hell*



best accompanies a reading of Sagan's comment on the "Pale Blue Dot." 🗣️ Heaven and Hell

(Papathanassiou)

"Look again at that dot. That's here. That's home. That's us. On it everyone you love, everyone you know, everyone you ever heard of, every human being who ever was, lived out their lives. The aggregate of our joy and suffering, thousands of confident religions, ideologies, and economic doctrines, every hunter and forager, every hero and coward, every creator and destroyer of civilization, every king and peasant, every young couple in love, every mother and father, hopeful child, inventor and explorer, every teacher of morals, every corrupt politician, every "superstar," every "supreme leader," every saint and sinner in the history of our species lived there—on a mote of dust suspended in a sunbeam."

Carl Sagan



Our family's singing bowl, brought back from the southern Himalayan range by my parents. Something about the note it produces reminds me of the vastness of the universe. 🗣️ Singing bowl The note is a half of a semitone below an E natural, the note on which Jaco Pastorius ends his bass solo "Slang." 🗣️ Slang Jaco juxtaposes a melody from *The Sound of Music*, a melody that seems to cry, directly behind two cold, cosmic notes (Pastorius). These notes, by pitch and length, are so similar to that of our singing bowl, and I believe they carry similar implications.



## My Brief Photographic History

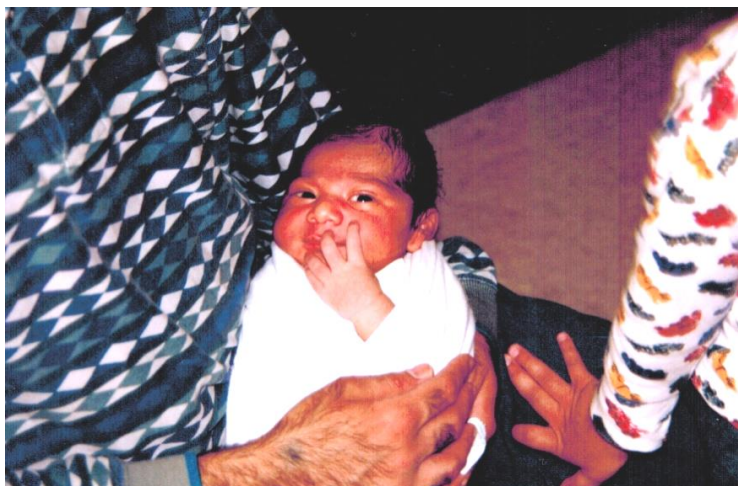


January 23, 1999, in the wings of the first person I ever knew, my mother.

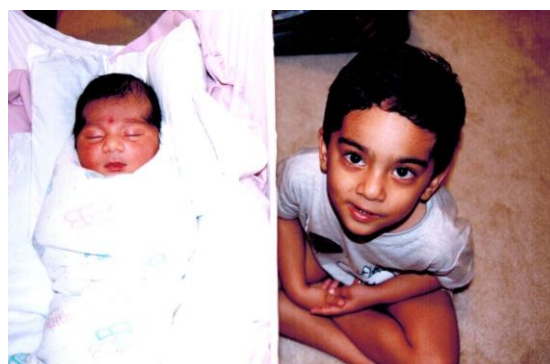
Just like a newly-hatched emu, here I rest, unable to open my eyes. Beside me is a teddy bear that my brother, Vishal, presented to me.



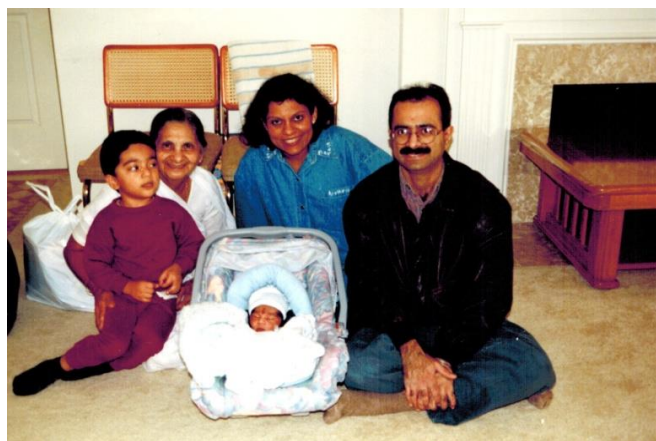
My father's mother, whom we call Ba. Here, she feeds me sugar-water hours after my birth.



In my father's arms.



Vishal, age 3, eager to play with me.



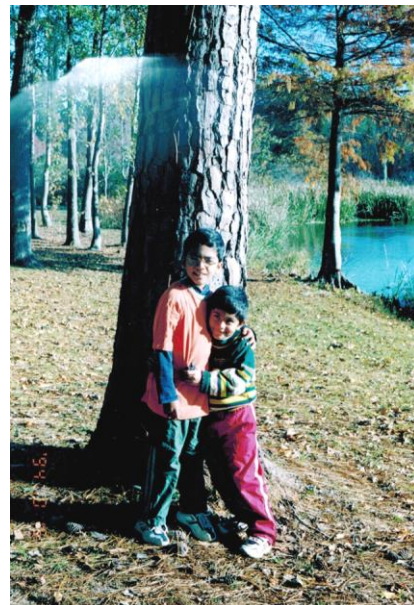
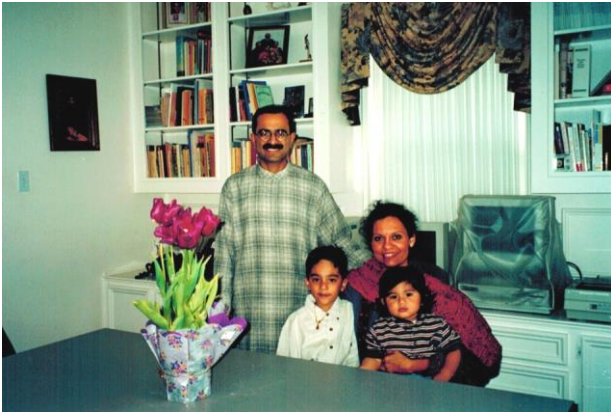
The newest (and best) member of the family.



My naming ceremony.



Vishal's naming ceremony, June 1995.



Vishal and myself, 2002.





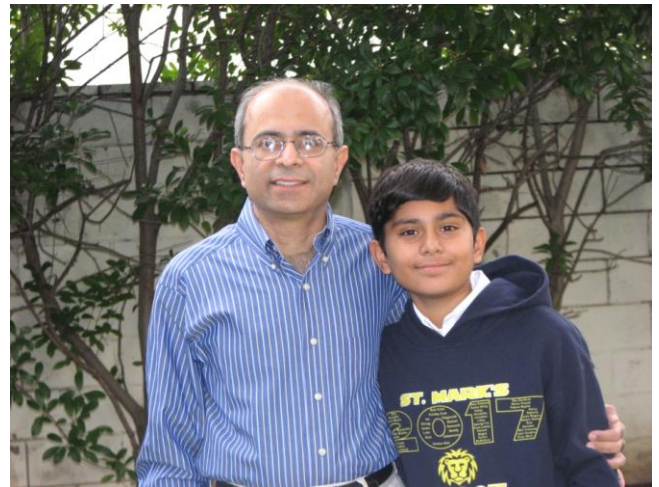
At my third birthday party, 2001.



Unwrapping gifts with my dear mother.



At a mother-son violin recital, May 19, 2002.



With my father, 2007.

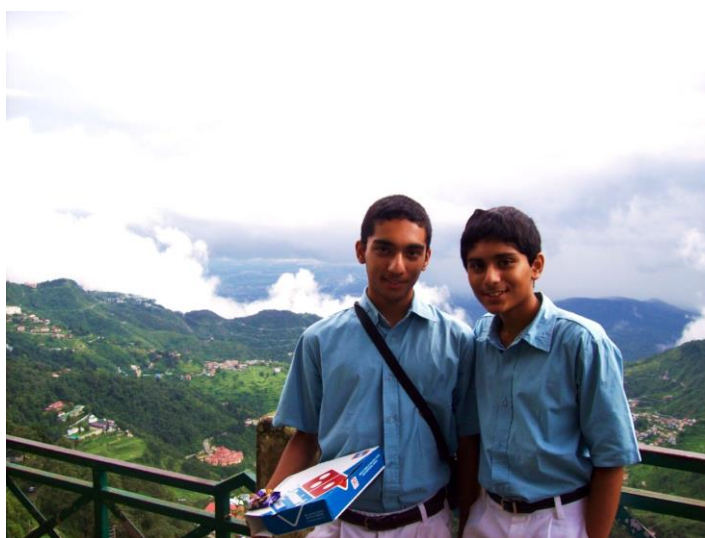


Snowshoeing in New Mexico, 2007.



With my great aunt, Nani's sister, 2011.

On an excursion with the Doon School in northern India, where my brother and I spent three weeks on an exchange student program, 2011. I was a rising sevvv.



A proud eighth grader, having figured out the notorious yet intriguing Mill's mess juggling pattern, April 2013.





At our eighth grade graduation with Rex Northcut, May 24, 2013. Rex is carrying the atom-themed clock he built in Industrial Arts.

Meeting with my first grade senior buddy, Tommy Perkins, at the Class of 2014's Blue Shirt Day, May 31, 2013. Tommy's younger brother, Harrison, was Vishal's classmate and friend.



Juggling clubs with my brother in our cousin's Houston backyard. June 2013

Playing jazz with the great tenor saxman Nick Buckenham '15, August 2013. Nick plays an alto horn in this photograph.

In this recording, Nick and I participate in the All State 2015 Jazz Band along with Chris Carter '15 and Rahul Maganti '17. 🎧) Blues for the Cup



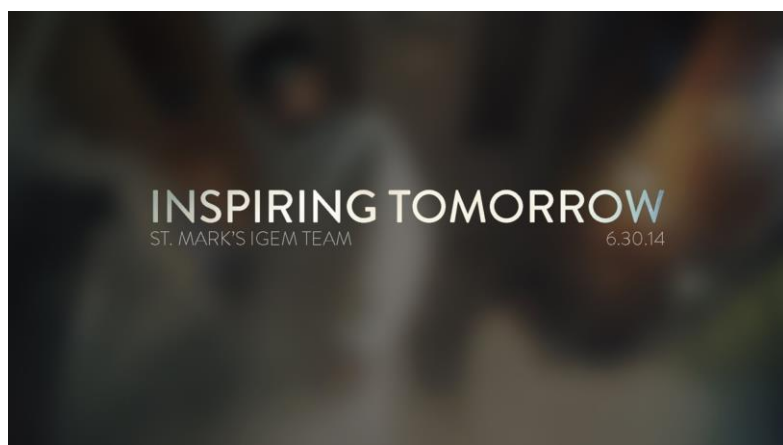
Noodling around on the sitar-like veena at a family-friend's home, December, 2013.



With the legendary pianist Roderick Demmings '12 and amazing drummer Chris Hicks '13, after having played bass guitar with the St. Mark's Gospel Choir at Northpark, December, 2013.



Vishal, receiving the School Flag at Commencement  
from Mr. Ferrell, May 20, 2014.



The title frame to a twenty-minute documentary made by the St. Mark's Biology team during the summer of 2014. The documentary was put together in four days. What a story. Under the direction of Halbert Bai '14, our crew composed of Kunal Dixit '15, Rohin Maganti '14, Vishal and I came to school at 8:00 a.m. and left at 3:45 p.m. for three consecutive days. I wrote an original score on using GarageBand and a standard "ASDF" typing keyboard in close-to-perfect-synchronization with Kunal's editing process. I soon fell horribly sick due to the lack of sleep during those three days. At one point, a security guard came in at 12:30 a.m. and almost kicked us out; however, we got Mr. Ken Owens on the phone with the guard, and KRO convinced the guy to let us stay. I'm going to go to hell for employing Pachelbel's notorious chords. 🗣️

Inspiring Tomorrow Theme

With Vishal at a traditional Indian wedding,  
December 2014.



After having played with the rock-and-roll legend Steve Miller, March 2015. (From left to right: Walter Johnson '15 on mandolin and fiddle, Will Clark '15 on rhythm guitar, Steve Miller, Umer Nadir '15 on drums, myself on bass guitar, and Nick Buckenham '15 on tenor sax and keyboards.)



From left to right: myself, Steve Miller, Nick Buckenham.

## Who I Am and Who I Will Be

This is a very hard topic for me to confront.

From day to day, I often feel like I'm a different person, undermining any attempt to locate one constant factor that could help define who I am.

My interests also tend to fluctuate widely. One minute, I feel as if the intricacies of nature can be explained by empiricism and mathematics; the next minute, I find myself cursing the authors of my Algebra-II book for their irrationality and fruitless hope that some future generation will one day be able to model the universe by a series of equations.

A few weeks ago, I suffered a particularly bad day in jazz band. The tone of my instrument was so low-defined, and playing it felt like someone had taped my fingers together into one collective "paw." Bleah! The following period, I learned that I had received a "D" on my Algebra-II test.

Normally, I can handle receiving a bad grade. It still feels lousy, and I still feel disappointed with myself. But coupling a bad academic day with a bad music day is torture. The degree at which my bad playing depresses me suggests that being a proficient musician will continue to be a necessary factor for the entirety of my life. However, I must emphasize that it is the *combination* of a bad academic and music day that makes me feel the worst, showing that I also depend on academic study for self-fulfillment, particularly the study of space. My interests in astronomy and music somewhat mirrors the career choice of my uncle, Jaymin, but more importantly reflects a crucial value of our family: finding beauty in nature.

\*\*\*

Many astronomers have conceded that if a relatively intelligent extraterrestrial civilization attempted to contact other relatively intelligent civilizations, they would do so using



that we indeed have extraterrestrial company humbles me and lets me see the beauty of our insignificance in the universe. My interests, therefore, bring me closer to our family value of finding beauty in nature.

\*\*\*

My brother often states that if I were given a spaceship and the choice of whether to stay on Earth or explore the cosmos, I would, without hesitation, pick the latter.

We must make the following assumptions for the previous statement to be true.

- I am still given the ability to communicate with people on our planet.
- I can travel past the speed of light, therefore actually letting me go somewhere.
- The theory of relativity does not hold true, as I would hate returning to a planet that has long been swallowed by its sun.

It is not likely that any of these assumptions would ever be met, and I thus deem my brother's claim as nonsense. The truth is that although the stars fascinate me, the perspective they offer primarily emphasizes "our responsibility to deal more kindly with one another...and [our need] to preserve and cherish the pale blue dot, the only home we've ever known" (Sagan). Gazing at the stars offers a way for me to better appreciate humanity: I am certainly an earth-bound individual.

\*\*\*

I often fantasize about traveling the world with my musical instrument, meeting and playing with musicians of other cultures, and maybe even making a documentary about it. Perhaps this far-fetched dream stems from my rebellious nature and innate desire to counter my mother and father's move to America. America is an excellent country, but the fact that it was founded on the ideals of the Western Enlightenment leads me to believe that I am missing what it

feels like to live in areas where the acquisition natural human necessities, like food, shelter, and family, shape leadership roles in society. Through my personal study of history, I have learned that such cultures tend to display deeper piety, humility, and stronger social adhesion. Ironically enough, these characteristics are not conducive to impartiality, which is necessary in fields like astronomy (one of my foremost interests). However, I believe exposure to more “quintessential” human beings will let me understand why these people have such different values, helping me develop true citizenship of the world.

I recently discovered a Pakistani acoustic band named “Khumariyaan.” Last October, the Asia Society invited the band to New York to play a concert and discuss its views about the future of the Middle East-American relationship. Khumariyaan’s original song “Bela” rings with ethnicity as *rubab* player Farhan Bogra implants the sounds of Islam, and it beats with depth as percussionist Shiraz Khan palms his djembe-like instrument. 🎧 Bela Although I come from an open-minded family, a residual bitterness towards imperial Britain and fanatical Islam still lingers. The world-feel of the song has inspired me to accept every culture’s ideas, no matter how provoking, in a neutral manner.

\*\*\*

In a small clearing in the midst of a cloudy, central-African jungle sits a small, tin-walled café. The tables are under the metallic roof, which is pinging and ponging under the current downpour, but are outside the doors to the kitchen. At one of the tables sits a man, jotting down some observations he just made in the jungles, waiting to be served. 🎧 I Ka Barra (Koité)

Somewhere in the magnificent Himalayas flies a lonely ultralight, buzzing along gently, swerving between the snow-covered mountains. It soon lines up to land on a small, worn down runway lodged in a narrow valley. 🎧 Himalaya (Papathanassiou)



Crept up near the crackling hearth sits a man hunched over his bass guitar, matching the frequencies of the distant thunder on the instrument, mimicking the pattering of the rain with staggered harmonics. 🎧) The Three Ravens (Leonard)

•



A pillow handcrafted by my mother in 1967. I interpret its message as a token of luck for the future.

•

## For Keeps

“For Keeps” is a collection of songs that can be found on the attached device. They are meaningful works of art worth listening to in the future. 🎧) Tracks 20-33

20     *So Long Ago, So Clear*

Jon & Vangelis

in reference to both the star-lit and local past: my personal experience

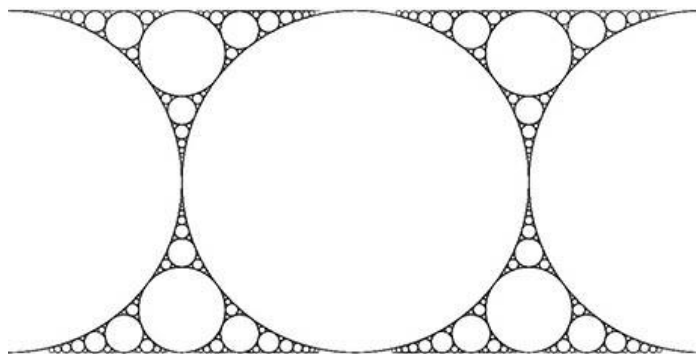
21	<i>Don't Panic</i>	Coldplay	the foremost caveat to the universal hitchhiker
22	<i>Ballad</i>	Vangelis	
23	<i>Jamming</i>	Bob Marley	
24	<i>Blue in Green</i>	Miles Davis	
25	<i>Indiscipline</i>	King Crimson	how I feel about certain mathematical concepts
26	<i>Goodbye Pork Pie Hat</i>	Joni Mitchell	
27	<i>The Escapist</i>	Coldplay	
28	<i>Egmont, Op. 84</i>	Beethoven	
29	<i>Sun King</i>	Lennon/McCartney	
30	<i>Discipline</i>	King Crimson	Although we attempt so hard to gain this feeling when we approach the outer confines of our knowledge, it is simply inhuman.
31	<i>John and Mary</i>	Jaco Pastorius	
32	<i>Ask the Mountains</i>	Vangelis & Stina Nordenstam	
33	<i>Portrait of Tracy</i>	Jaco Pastorius	the meaning of life
34	<i>Intergalactic Radio Station</i>	Vangelis	the future



35 *Continuum*

Jaco Pastorius

This is it; we simply swept down into an endless spectrum of endless colors in which we spent time infinitely short yet infinitely long. Although you leave this inconceivable microtude in which dwells immense macrotude, you close this book to join another continuum, one that is, in relation to this one, a non-tessellation. While that continuum might as well be a stark opposite of any particular faction of this one, it might as well be the same.



(Athreya, Vandehey, Hempstead, Hou, & Sun).

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