

The Engagement of PHRENICEA

(A 21st-Century Prophecy)

By John Herman

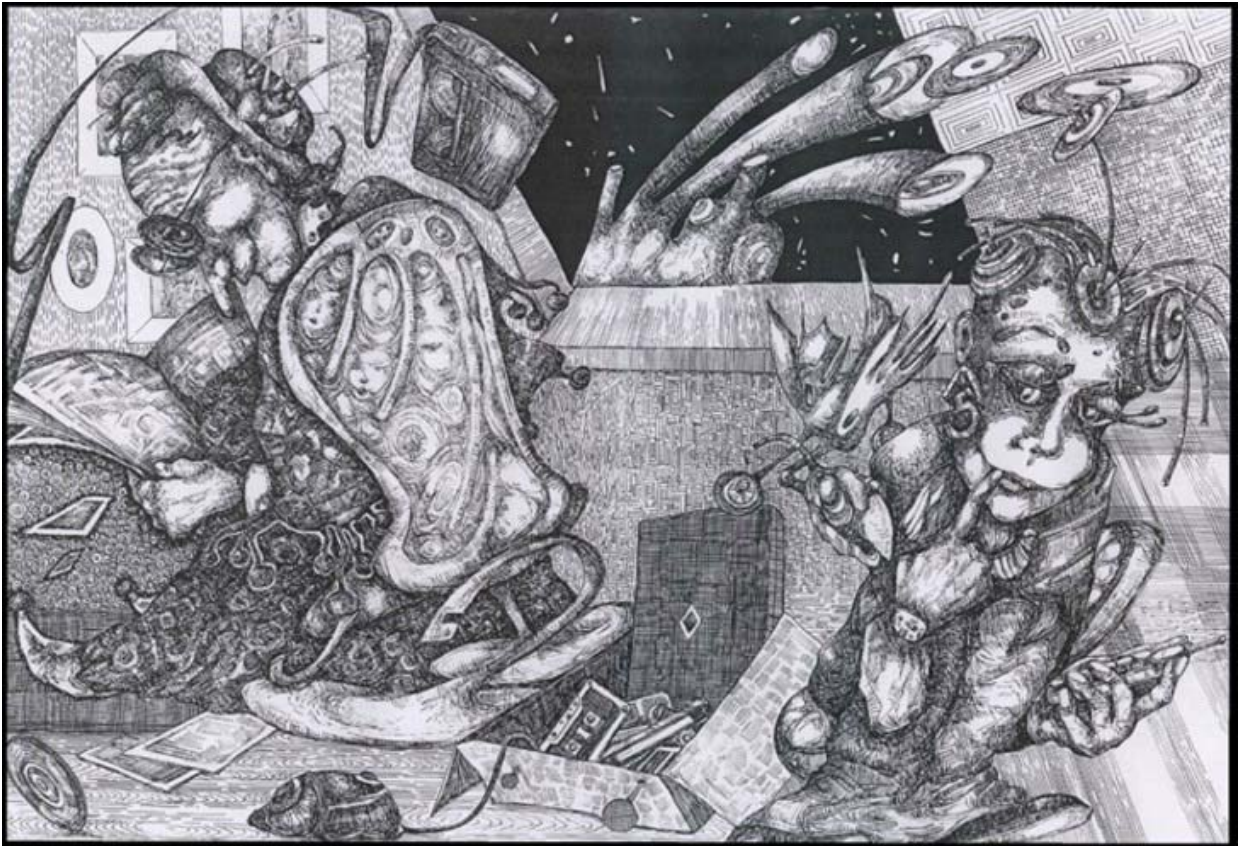


Illustration by Yuri Bobrikov

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“What’s this Grandma? ‘The Powell Family’s 20th-Century Time Capsule’ is written on it. Look, see the writing here?”

“Oh my gosh Ticara! Where did you find that old box?” Grandma Nancy asked her granddaughter, with whom she’s keeping company on this beautiful, crystal clear day – one of many that have graced New York’s Long Island this spring of 2058. Ticara’s mother Nicole, Grandma Nancy’s only daughter, is taking care of some business on behalf of her mother at the Huntington Town Hall, in western Suffolk County.

“Well, I know I wasn’t supposed to,” the nine-year-old Ticara said, “but I was up in the attic and found a dusty bag with stuff in it, like this box. Oh, and I didn’t hurt my head on the points when I stood up like last time.”

“Those are nails dear,” Grandma Nancy said. “They were used years ago to fasten shingles to the roof. Didn’t I ask you not to go up there?”

Grandma Nancy was especially fond of Ticara, who was more than a grandchild – at least from an early 2000s’ perspective. You see, Ticara is a gene-twin (or g-twin) of her grandmother. She is what was referred to way back in the 1990s as a “clone,” which became too pejorative a term once the possible became commonplace. Ticara was “initiated” by Nicole, and according to mid-21st-century law, that makes her Ticara’s mother. Initiation involves nothing more than agreeing to the obligatory legal guidelines, providing the funding to establish the new human being, and choosing a genetic progenitor – whether it is the initiator herself (or himself!) or another person.

“I think I remember now what’s in this box,” Grandma announces as she positions it on her lap; proud that her memory of 97 years is still “sharp as a tack,” as she’s often told.

“What are shingles?” a now distracted Ticara interrupts, trying to remember what she was told two years earlier, when she stood up in that attic and pierced her scalp on a protruding nail.

“In the ‘olden days,’ long before we all had the shiny black solar roofs and when we had to *buy* our electricity from a big company, shingles covered the roof.”

“Why?” the inquisitive child asked.

“They were used mainly to keep the rain from coming in. The old saying ‘a roof over your head’ means so much more than shelter today, like it did when I was your age. The roof now generates electricity to run this house, plus it provides me with extra money each month!”

It’s ironic, but after 2030 most of the major electric companies began to *draw* and *pay* for excess electricity generated from the now ubiquitous residential solar energy. A power utility’s main function in this very different century is to concentrate and funnel accumulated energy to Phrenicea (pronounced feh-NIH-shee-uh).

“So what’s in the box, Grandma?” Ticara asked, changing her focus again.

“Your Grandpa Doug packed this away on New Year’s Eve, 1999. See the date on the corner here? So, let’s open ‘er up.”

As Grandma Nancy raised the cardboard cover, it made a funny noise from the vacuum induced suction, making Ticara giggle. Then something fell out onto the floor, which Ticara quickly picked up.

“What’s this Grandma?”

“Looks like a VCR cassette, dear”

“What’s a VC..., what?”

“A VCR cassette tape. It was used with our TV, I mean television, that we watched for entertainment.”

“Is that like Phrenicea?” Ticara asked.

“Well,” Grandma paused, thinking of how to explain this now primitive technology. “In a very narrow way, dear. Things have changed so much; it’s difficult to explain to you how it used to be, with Phrenicea being so much a part of your life. We used to sit and watch the TV. It was shaped like a box. The images were displayed on a flat screen, not in your mind like with Phrenicea. And the sound came through speakers that you actually had to hear with your ears.”

“What happened to the TV, Grandma?” Ticara asked.

“It was replaced with Phrenicea once most everyone could engage with it dear,” Grandma replied sullenly, thinking back to what now seemed like the good old days. “We watched VCR tapes and programs that came to us from the cable company.”

“Oh,” Ticara interrupted, trying hard to comprehend but not really understanding all of this new “old” information.

Long Island’s cable company back in 2014 was one of the founding members of Phrenicea – the name derived from “phrenic” (of the mind) and “panacea” (cure-all). The capabilities spawned by Phrenicea gradually rendered TV and all of its peripherals moot. The company, along with several hundred other companies, completely morphed its mission to become a major player in the Phrenicea consortium, while keeping its “cable” oriented name mostly for nostalgic reasons.

Grandma continued, “With the TV and a VCR player, we watched video tapes like the one you’re holding. We recorded them with a camera, or we bought and rented them – usually to watch movies. See the tape wound up inside?” Grandma opened the hinged edge to show her the shiny tape. “The tape has images and sound recorded on it. This one has activities that your grandpa and me did in 1999 and our thoughts of how things might be in the 21st century. Your mother was just a baby then. Ah, too bad we can’t watch it. My goodness, we haven’t had TV or a VCR for many years.” Refocusing on the present, she continued, “So, let’s see what else is in this box. Sheesh, here’s an old ‘78’ record from grandpa’s mother! Here’s a ‘45’ single from when I was about your age! Here’s an LP album, an 8-track tape, audio cassettes, a laser disc, a music CD, and a DVD movie! And here’s a list of web sites! Oh, I remember that it was once ‘dot com’ this and that. And what’s this? An ATM and credit card! A cell phone! A palm-sized computer! A mouse! I totally forgot about all these things.”

“A mouse?”

“That’s what it was called, Ticara. We used it with a computer – a personal computer. Yup, a PC.”

“A computer? You sure had a lot of stuff in the old days, Grandma.”

“Yes! A big challenge in those days was finding room to keep all the stuff, and trying to find it when you needed it! Unfortunately, I can’t show you how any of these gadgets work, honey. I bet Grandpa Doug suspected as much and that’s why he packed away this box. But I can show you some old photographs of how it was for us in those times.”

“Photographs?” Ticara asked.

“Oh, look—on the bottom here!” Grandma excitedly said, totally engrossed now.

“It’s some newspapers predicting what would happen in the 21st century! Ah, good ol’ newspapers.”

“Newspapers?”

“Yes, Ticara. They were printed on paper and had stories about the day’s events. They would be fun to read now, at least for me. I don’t think they envisioned anything like Phrenicea back then!”

“So, the stuff in this box isn’t like Phrenicea?” a bewildered Ticara asked.

Grandma Nancy sighed with the challenge to explain, “With Phrenicea you use your mind and it’s always there for you whenever you want or need it. That’s why you don’t need any of the things like what’s in this box. When you engage Phrenicea, the images come from Phrenicea and are received by the Intrachip inside your wrist, right here.” Grandma Nancy positioned Ticara’s index finger over the tiny protrusion on her skin. “Then the information is fed to your brain.” Ticara kept touching her wrist to feel the tiny Intrachip.

“Let me feel *your* Intrachip, Grandma.”

“I don’t have one, Ticara. I was too set in my ways to adapt. I could not discipline my thoughts to keep mentally engaged long enough to hold a session. I can engage only by wearing a special bracelet for my daily medical checkup, but that’s it for me.”

To sustain a typical Phrenicea session, a certain mental discipline has to be learned to avoid being overwhelmed with sensory input or linking incoherently to disjointed information. When Phrenicea was first put into use, many people could not adapt to it. And many were not allowed to! For the children growing up with it from infancy however, it’s second nature.

Phrenicea evolved from the Internet phenomenon that blossomed in the late 1990s. Its adoption grew dramatically in the third decade of the 21st century. It is a consortium of international corporations providing content, technology and support. It’s monitored stringently by most of the world’s governments, as well as Phrenicea’s employees who are paid substantial bonuses for uncovering potential problems or misuse. Not only TV and VCRs – but home and mobile PCs, cell phones, telephones, pagers, fax machines and the Internet eventually were replaced with the capabilities of Phrenicea. Even traditional forms of money – coin, currency as well as electronic funds – was supplanted with what’s commonly called “soma-cash” or “tissue-issue.” Almost everyone’s financial assets and liabilities became part of his physical body, accessible to Phrenicea via engagement to effect transactions for the transfer “DiNAs,” the DNA-based unit of wealth. Self

worth became more than a subjective appraisal! And of course there were humorous references to what was, in effect, a new interpretation of chattel, such as “heart of gold,” “tender loin,” and “ass-ets”!

Conscious thought is enough to engage a link-up and begin a session with Phrenicea. For example, to compute the sum of a string of numbers or obtain the date and time, the associated thought triggers a session, if only for a fleeting moment. The information is returned instantaneously as if it was conjured up knowledge of the mind. Answers to any academic question can be provided similarly. For topics involving subjective thought or interpretation, Phrenicea provides multiple sources of information allowing the engager to analyze, evaluate and form an opinion – often with epiphanic delight.

As Phrenicea’s capabilities expanded, it became possible to participate in preauthorized virtual gatherings of people such as business meetings, school classes and labs, religious ceremonies, parties, etc. Consequently, by 2040 most schools, universities, places of worship and entertainment facilities were boarded up. Preauthorization to attend an event via Phrenicea is foolproof, utilizing a person’s inherited DNA pattern (i.e., genome) as identification. All an organizer need do is mentally draft a member or guest list. Phrenicea associates the thought of a person with their unique DNA “fingerprint” on its database. The individual’s genome is also a component of the transmission between Phrenicea and their Intrachip, ensuring security and protection from unauthorized engagements. Unbelievable too, to a potential observer from the turn of the century, is that every session is permanently recorded and can be recalled at any time by any of the participants, as easily as recalling a memory resident within the brain.

The tiny Intrachip – organically constructed – is a vital component that implants itself under the host’s skin. It triggers a biological interface by splicing artificial genes into the host’s DNA that produce proteins and nerve tissue to connect with it. The genes also produce hormonal parameters and switches – in simplistic terms – that could be set or reset by Phrenicea to control or monitor behavior “officially” defined as antisocial, criminal, etc. Phrenicea has the potential to simultaneously monitor every individual on the planet! The Intrachip and artificial DNA are colloquially referred to as the “brainerama.” For long sessions with Phrenicea, special headsets are worn to help filter sensory input from the immediate environment.

“Mom just engaged me,” Ticara announced. “Her meeting at the town is over and she’s leaving to come home...., uh..., I mean here.”

“Well dear, this will soon be your home too,” Grandma Nancy reminded her.

The large, colonial style house has become too much for Nancy to inhabit alone. Her husband Douglas died in 2024 and she didn’t want to sell then – or now, it being their first house built in 1990. So many fond memories of early struggling and raising Nicole were with this house.

“Mom is now on her way,” Ticara said, engaged again by Nicole. The “engage” sensation, facilitated by Phrenicea, can only be described as analogous to a spontaneous thought popping into the mind.

Grandma Nancy, seeing Ticara’s energy and love of life, began to reflect that as a child she probably was a lot like her, being genetically identical. It’s considered a great honor to be chosen as the “GP,” or genetic progenitor of a g-twin. This became popular at about 2035, when the entire *in vivo* human developmental process was duplicated in the lab. *Both* men and women have the option to singularly produce offspring in this way, or to choose the “old fashioned” method of jointly having a child through sexual means. And because of the convenience and safety of laboratory gestation with either option – traditional female pregnancy, carrying to term and labor all but disappeared.

Regardless of whether g-twinning or mating is chosen, each individual overall is limited to producing just one child to not increase stress on the environment, and to not add to the problems of global population and unemployment. (With Phrenicea, the need for material goods and services is drastically reduced, along with jobs.) Because world population exceeded projections and reached 13.5 billion, there is a worldwide, government-sponsored, life-long monetary incentive for not having children at all. Phrenicea keeps count of every individual’s offspring and prevents initiation or fertilization after one child by way of brainerama parameters controlling the reproductive functions. This is reversible should a child not live to reach maturity. The latest statistics indicate “g-twinning is winning” over copulation, which is not

surprising. The reasons are significant: “child-bearing” years can be pushed well beyond biological limitations, the predominant Phrenicea-facilitated relationships minimize male/female physical contact, and each g-twin is “owned” as property by its initiator. Ownership avoids litigation upon divorce or dissolution of a relationship, the incidence of which has unfortunately reached 100%.

“Grandma, I think I hear Mom!” Ticara shouted as she ran to the window. She could faintly hear the ringing bell of the electric jitney as it pulled away from the corner stop after dropping off Nicole. It was most likely headed for one of the many the Long Island Railroad stations. (Solar electric trains became the island’s premier form of transportation, with tracks laid upon what was the Long Island Expressway and Robert Moses’ famous bucolic parkways.) She watched as her mom turned into grandma’s old driveway in her electric runabout, a vehicle very similar to the golf cart from generation’s past. The large driveway was moot now, since petroleum-powered cars were banned worldwide in 2040 to help halt global warming. This was a redundant edict however. Most of the Middle East’s oil refineries were already destroyed through military conflict before Phrenicea could assuage warlike tendencies. The resulting exorbitant price of oil was a prime factor in Phrenicea’s cultural infiltration.

“Hi Mom!” Ticara shouted, greeting Nicole with a big smile.

“Hi sweetie. Did you have fun with Grandma?”

“Yes, she told me all about TV and VCR tapes.”

“VCR tapes! How did you get onto that subject of ancient history?”

“Well I was up in the attic...”

“I thought you were told...”

“It’s okay dear,” said Grandma Nancy. “We had a good time – me especially – talking about the good ol’days. And to think, at the time we thought we were state-of-the-art!”

“Mom, before I engage my school session, can I let out Tweetie?” Ticara asked.

“Okay, but just for a little while,” Nicole replied. “And remember your religious class will engage you later this afternoon.”

“Thank you, Mom,” Ticara said, as she bolted up the stairs, her voice fading as she happily cried out, “Hello Tweetie! It’s time to spread your tiny wings!”

Tweetie is Grandma Nancy's bird that she has kept for almost 30 years. Tweetie is a "mattie," or automaton; a "robotic" bird in early 2000s' terminology. All live pets were banned in 2030 to alleviate the environmental impact of biological waste. Artificial pets, the most popular being dogs and cats, are equivalent to the real thing in all other respects. They provide much love and companionship, as well as tactile experiences so necessary with the advent of near-virtual living. Tweetie is a special marvel, able to fly with precision that's indistinguishable from a living bird.

"So, how did the meeting go with the Town of Huntington, Nicole?" Nancy asked her daughter.

"Very well. We're all set to convert the yard to a 'cell farm.' You were very smart Mom, to hold on to your acre of property and not sell it after the one-acre zoning changed to one-quarter in 2027. Land is so scarce now across the island, and extremely valuable since it can generate substantial income."

Although the land is still very valuable for additional housing, it is even more so in the long term for cell farming, which is becoming popular nationwide and particularly across densely populated Long Island now that zoning laws are accommodating the arrangement. Basically, a homeowner's land is loaned to growers for a considerable fee for them to plant fruit and vegetables for distribution to local exchanges, frequented mainly by the very wealthy and the buyers for restaurants that cater to them. And as is usually the case with a limited supply, there is a significant underground market. The plant strains are genetically engineered to endure drought, but since water is priced at about one dollar per gallon (from an early 2000s' perspective), the cost for what little is needed quickly adds up. Homeowners are also free to go it alone, even on a small scale where their grassy lawns used to grow before being banned in 2035. But the years of wanton disregard for Long Island's precious aquifers grossly polluted most of the ground water. The cost factor requires the do-it-yourselfer to have the greenest of thumbs for it to be worthwhile.

"I'll be speaking ITF with a grower next week. You know Mom," Nicole continued, "I'm glad I met ITF with the town too, regardless of the fact that I had to wait an extra two months to schedule it."

Nicole knew that it helped to meet “in the flesh,” or “ITF,” in such matters involving negotiation, even though Phrenicea can simulate live meetings down to the handshake. People tend to be more accommodating in person, perhaps because it *is* so uncommon now with most business being conducted via Phrenicea. And since it is not much different on a personal level, there is little reason or opportunity to leave one’s house.

Nicole continued, trying to hide her ambivalence towards Phrenicea, “And it was great to finally get out of the house after almost a month. Don’t get me wrong Mom, I’m not knocking Phrenicea. I couldn’t visit dad without it.”

Nicole’s father died years ago in an automobile accident. Investigation revealed it to be caused by “driving while engaged” with Phrenicea. In its earlier years this was not uncommon, since it took time for people to adjust to its capabilities and temptations. As of 2022, a deceased Phrenicea user’s “humanness” could be retrieved and translated into an essence for virtual encounters. Unfortunately, only memories after their first Phrenicea engagement could be captured, although general personality traits could be fabricated accurately.

“You know Mom, I really have to get out more, perhaps by joining a comm,” Nicole promised herself once more.

“It would be good for you, dear,” Nancy consoled.

Just as people had begun to join gyms in the 20th century to take up physical exercise, the mid-21st-century “couch potatoes” were joining “comms” – derived from the word “commune” – to practice interacting with real, live human beings. It should be pointed out though that humdrum indoor virtual living does have advantages: infectious diseases – ever more pernicious – do not have much opportunity to spread, exposure to the lethally potent UV rays of sunlight are minimized, and the need to endure the now cumbersome transportation system is drastically reduced. However, the basic skills for human interaction suffer and are manifested in self-conscious and shy behavior. Face-to-face human discourse taken for granted for centuries now became a planned and conscious effort; analogous to those structured physical exercise programs compensating for the sedentary life brought on by labor-saving machines and appliances.

“Mom, Jayum is engaging me,” Nicole said abruptly.

“Okay dear, go ahead. I think I’ll engage my medical checkup anyway. That pain is bothering me again,” Nancy said. “Then I think I’ll take another look at these old newspapers,” she said to herself.

“How about a nice dinner for your lunch today, Nicole?” Jayum asked.

“Sounds great!” she replied.

Nicole “met” Jayum during a Phrenicea “interest session” five years ago, the topic being the cleanup of the world’s fresh water supply, a mutual concern. On call to Phrenicea as a Long Island sector troubleshooter, but not having to work that often, Nicole participates in many interest sessions. Her objective is to not only expand her sphere of awareness, but to try to feel needed in a society where there is not much opportunity for an individual to utilize his or her intellectual ability, which for her is considerable. She is pursuing her fifth Ph.D. during sleep time via what’s wittily referred to as Phrenicea’s “Night School Program at Somnam U.”

Ironically, the most prestigious jobs in the mid-21st century are non-virtual, requiring physical strength, manual dexterity and coordination – skills that are becoming more and more rare in a virtual world. Jayum is a very successful free-lance plumber currently working in China. He travels the world, albeit with all the speed of a 19th-century tradesman, maintaining and replacing the existing infrastructure. His is one of the highest paid of any profession.

“So, where would you like to dine, sweetie? I’m buying!” Jayum flirtingly joked. “The *Four Seasons* in New York – circa 1990? Or how about *Hofbräuhaus* in Munich? Are you in the mood for German food?”

“I could go for that,” Nicole answered.

She is speaking with her voice but it’s actually redundant – and a bit bizarre looking to the uninitiated. Phrenicea is utilizing their thought patterns for the interface. She then walks to the kitchen, sets a place at the table, opens a bottle of water and serving of Polynutrimint custard and dons her Phrenicea headset.

Polynutrimint is consumed during most mealtimes, is inexpensive and is manufactured and distributed by Phrenicea. Its formula is tailored before consumption to each individual's unique dietary needs. Science finally gained an intrinsic knowledge of what is required by the human body for optimum health, beyond what was attained through empirical studies. Combined with gene therapy, Polynutrimint eliminates the need for boring exercise in an attempt to maintain peak physical health. The only caveat is that for most people it can *only* be consumed while engaged with Phrenicea. Without the simulated perception of a delicious food, the custard would almost induce one to vomit. Except for the wealthy and the few not mentally fit to engage Phrenicea, eating fresh food is a rare treat, and very expensive – reserved for very special occasions. Industrial farming of poultry, beef, and pork has been banned due to the massive polluting effects of fecal waste, and exorbitant transportation costs limit interstate and international shipping of what is produced on a small scale.

Meanwhile, Jayum makes the same preparations at his makeshift table that he set up at his work site. Phrenicea maintains the mind-to-mind connection and provides the brain stimuli to simulate the sensory illusions associated with the restaurant; the sights, sounds, and wonderful aromas of food and drink. The technology to effect this is mind-boggling, as is the stored data that is beyond comprehension of just two generations past.

“This is great,” Jayum said, “but I’m really looking forward to seeing you ITF in a couple of months.”

“Me too,” Nicole agreed.

Both are looking forward to their next ITF. It will be their third corporeal encounter. As their festive dinner experience comes to an end, their craving for German cuisine satisfied and their hunger satiated with Polynutrimint, they say their good-byes and mentally disconnect.

“I’ll buy next time,” Nicole laughingly promises.

Today’s dinner can be revisited by either of them, from a first- or third-person perspective, at any time. It is permanently stored on Phrenicea for their access only. If the opportunity arises during their next engagement, then perhaps they will share more intimate expressions of their feelings for each other. Generations past had no idea how prescient the old saying “love is all in your mind” would be!

“Oh my gosh, Mom! Why are you crying?” Nicole asked with foreboding. “Oh, no! Was it your checkup? Was it that pain? What’s wrong?” she continued.

“No, no dear. I’m fine; perfect health – for almost a centurion, or centenarian or whatever the heck I’ll be called.”

“Then why are you crying?”

“It’s these old newspapers I just read. I’d forgotten how alive we were then, before that damn Phrenicea took over everything. We had real lives. We really lived. There was news to print and to read! It wasn’t a mirage.”

“Phrenicea is not a mirage, Mom.”

“Yes it is. But I’m not crying for me. I’m crying for you and especially for Ticara. You don’t even know what you’re missing. I mean, back then we were concerned – we lamented – we thought we were decaying socially and culturally. And now I can truly say those were the good old days. My God! What if *these* are the good old days for you! How much more will things change?”

“Hi Mom, hi Grandma!” Ticara shouted, bouncing into the room. “I engaged my school lesson and my religious class. I’m d-o-n-e! Where are we eating tonight, Mom? I’ll set the table with our Polynutrimint!” as she bolted into the kitchen.

“Go ahead, Nicole,” a maudlin Nancy whispered. “I don’t want to spoil her visit, especially since I’ll be seeing a lot of you two very soon. I don’t want to start our living together on a sour note.”

“Okay, Mom,” Nicole said. “But you’re probably right. For us, these *will* be the good old days.”

“I love you both,” Grandma Nancy said, as she blotted away her tears. ■

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