Rainbows End by Vernor Vinge (New York: Tom Doherty Association, 2006).

Chapter 06: "So Much Technology, So Little Talent."

The year: 2025 Characters:

Ms. Chumlig: The teacher of the class in "Creative Composition" Robert Gu: A man in his 70s who, with the aid of new medical procedures has returned from a 20 year hiatus during which he had Alzheimer's and was near death. His physical health and appearance have been restored to that of a 17 year old. But his brain has missed 20 years of progress. So, he is back in high school as one of other Adult Ed students among regular high school students. Robert used to be a world-famous poet and insufferably vain; so being in high school, and being not all that good at negotiating the technological world of 2025, is a very challenging experience for him.

Xiang: One of the other Adult Ed students, a one-time world class engineer.

Winston Blount: Another of the other Adult Ed students, a onetime Dean of Arts and Sciences, a guy who prided himself in resisting the new technology, and a "failed" poet who in the previous century could not compete with Robert Gu.

Juan Orozco: A sort of average high school student, maybe even a poor student. Not particularly literate, but adept with $21^{\rm st}$ century technology.

Other bits:

Pyramid Hill: Sort of a high tech amusement park.

06

SO MUCH TECHNOLOGY, SO LITTLE TALENT

Latin the low point of Robert Gu's first week at Fairmont High. Robert remembered his own high-school years very well. In 1965, school had been easy, except for math and science, which he didn't care about anyway. Basically, he never did homework in anything. But the poems he wrote, almost without conscious

effort, were already in a different world from what his poor teachers normally encountered. They considered themselves blessed to be in his presence—and rightly so.

But in this brave new world he could see only a fraction of the "compositions" the students allegedly created, and he had no doubt they could appreciate very little about his work.

Robert sat at the edge of the class, doodling on his view-page. As usual, the children were on the left side of the room, and the Adult Ed students were on the right. Losers. He had learned a few names, even talked to the Xiang woman. She said she was going to have to drop Chumlig's composition class. She just didn't have the courage to perform in front of others. The only talent she had was in obsolete engineering, but at least she was smart enough to know she was a loser. Not like Winston Blount, the biggest loser of all. Occasionally he caught Winnie looking his way, and Robert would smile to himself.

At the front of the class, Ms. Chumlig was coaxing today's first performer. "I know you've been practicing, Juan. Show us what you can do."

"Juan" stood and walked to center stage. This was the kid who had been chatting up the Adult Ed students in shop class. Robert remembered his earnest sales-rep behavior. At a guess, the boy was on the low side of average, the kind that high schools of Robert's time graduated pro forma. But here, in the twenty-first century, incompetence was no excuse: Chumlig seemed to have serious expectations. The boy hesitated and then began waving his arms. Without any visible effect. "I don' know, Ms. Chumlig, it's still not, um, fully ready."

Ms. Chumlig just nodded patiently, and gestured for him to continue.

"Okay." The boy squinted his eyes and his armwaving became even more chaotic. It wasn't dance, and the boy wasn't speaking. But Chumlig leaned back against her desk, and nodded. Much of the class watched the random mime with similar attention, and Robert noticed that they were nodding their heads as if in time to music.

Crap. More invisible nonsense. Robert looked down at his magic foolscap and played with the local browser selections. Internet Explorer was much as he remembered, but there were

dropdowns that allowed him to "Select View." Yes, the fantasy overlays. He tapped on "Juan Orozco Performs." The first overlay looked like graffiti, rude commentary on Juan's performance. It was the sort of thing you might see on a note passed furtively from child to child. He tapped the second view selection. Ah. Here the boy stood on a concert stage. The classroom windows behind him opened onto a vast city as seen from a high tower. Robert held his hand along the margin of the page, and there was sound. It was tinny and faint compared with the room audio back in the house, but . . . yes, it was music. It was almost Wagner, but then it rambled off into something that might have been a marching song. In the window on Robert's view-page, rainbows formed around the boy's image. Fluffy white—ferrets?—hopped into existence at every jerk of his hands. Now all the other kids were laughing. Juan was laughing too, but his handwaving became desperate. Ferrets covered the floor, shoulder-to-shoulder, and the music was frenetic. The creatures misted together into snow and lifted on miniature tornadoes. The boy slowed his rhythm, and the sound became something like lullaby music. The snow glistened, sublimating into invisibility as the music faded. And now Robert's browser window showed the same unmagical child who stood in reality at the front of the room.

Juan's peers applauded politely. One or two yawned.

"Very good, Juan!" said Ms. Chumlig.

It was as impressive as any advertising video that Robert had seen in the twentieth century. At the same time it was essentially incoherent, a garbage dump of special effects. So much technology, so little talent.

Chumlig talked the class through the components of Orozco's effort, gently asking the boy where he was going to take his work, suggesting that he collaborate (collaborate!) with other students in putting words to the composition.

Robert looked surreptitiously about the room. The windows were opened onto the brown and sere hillsides of North County autumn. Out there, sunlight was everywhere, and a slow breeze brought in the smell of honeysuckle. He could hear kids playing on the far side of the lawn. Inside, the classroom was a cheap plastic construction, utterly without esthetic sensibility. Yes, school was easy, but it could also be mind-numbingly boring; he'd have to reread his own poems about that. The forced confinement. The endless days of sitting still and listening to witless talk, while the whole world waited outside.

Most of the students were actually looking in Chumlig's general direction. Was that just an artful scam? But when the woman asked a random child a snap question, she got relevant—if halting—answers.

And then, much sooner than he had imagined:

"... quitting early today, so we have time for only one more presentation," said Ms. Chumlig. What has she been saying? Damn. Chumlig was looking directly at him now. "Please show us your composition, Professor Gu."

JUAN SLUNK BACK to his seat, barely listening to Chumlig's analysis. She was always gentle in these public critiques, but the bad news was obvious all around him. Only the Radner twins had posted something nice. Someone who looked like a rabbit was grinning at him from the peanut gallery. Who was that? He turned and plunked himself down in his chair.

"... so we have time for only one more presentation," finished Ms. Chumlig. "Please show us your composition, Professor Gu."

Juan looked back at where Gu was sitting. What sort of presentation could he make?

Robert Gu seemed to wonder the same thing: "I really don't have anything that the class would . . . appreciate. I don't do audiovisuals."

Chumlig smiled brightly. When she smiled like that at Juan, he knew his excuses would count for nothing. "Nonsense, Professor Gu. You were—you are a poet."

"Indeed."

"And I made an assignment."

Gu looked young, but when he cocked his head and eyed Ms. Chumlig, there was such power in his gaze. Jeez, if only I could look like that when Chumlig has me on the hot seat. The youngold man was silent for a second, and then he said calmly. "I have written a short piece, but as I said it has none of—" his gaze swept the class, nailing Juan for an instant "—the pictures and sound that seem expected."

Ms. Chumlig gestured him forward. "Your words will do splendidly today. Please. Come down."

After a second, Gu stood and came down the steps. He moved fast, with kind of a spastic lurch. Gossipy notes flew back and forth. For the moment, the class's attention was focused like Ms. Chumlig always wanted.

Chumlig stepped out of his way, and Robert Gu turned to face the class. Of course, he couldn't call a up word display. But he didn't look at his view-page either. He just looked at the class and said, "A poem. Three hundred words. I tell you about the land of North County as it really is, here and beyond." His arm twitched outward, toward the open windows.

Then he just . . . talked. No special effects, no words scrolling through the air. And it couldn't really be a poem since his voice didn't get all singsong. Robert Gu just talked about the lawn that circled the school, the tiny mowers that circled and circled across it. The smell of the grass, and how it squeezed down moist in the morning. How the slope of the hills took running feet to the creek brush that edged the property. It was what you saw here every day—at least when you weren't using overlays to see somewhere else.

And then Juan wasn't really aware of the words anymore. He was seeing; he was there. His mind floated above the little valley, scooted up the creek bed, had almost reached the foot of Pyramid Hill... when suddenly Robert Gu stopped talking, and Juan was dumped back into the reality of his place at the rear end of Ms. Chumlig's composition class. He sat for a few seconds, dazed. Words. That's all they were. But what they did was more than visuals. It was more than haptics. There had even been the smell of the dry reeds along the creek bed.

For a moment no one said anything. Ms. Chumlig looked glassy-eyed. Either she was very impressed or she was surfing.

But then a classic Pompous Bird flew up from the old farts' side of the room. It swooped across the room to drop a huge

load of wet birdshit on Robert Gu. Fred and Jer burst out laughing, and after a moment the whole class responded.

Of course, Robert Gu couldn't see the special effects. For a second he looked puzzled, and then he glared at the Radners.

"Class!" Ms. Chumlig sounded truly pissed. The laughter choked off and everyone applauded politely. Chumlig held them to it for a moment, then lowered her own hands. Juan could see she was scanning them all. Normally she ignored graffiti. This time she was searching for someone to crucify. Her gaze ended up in the old farts' section, and she looked a little surprised.

"Very well. Thank you, Robert. That is all we have time for today. Class, your next assignment is to collaborate and improve on what you have already done. It's up to you to find local partners for this step. Send me the teamings and your game plan before we meet next time." The Ignominious Details would be in the mail by the time they got home.

Then the class bell—triggered by Chumlig, in fact—rang out. By the time Juan got himself out of his chair, he was in the tail end of the mad rush for the door. It didn't matter. He was a little dazed by the strange form of *virtual* virtual reality that Robert Gu had created.

Behind him he could see that Gu had finally figured out the class was over. He would be outside with the rest of them in a few seconds. My chance to enlist him for the Lizard. And maybe something else. He thought on the old man's magic words. Maybe, maybe, they could collaborate. Everybody had laughed at Robert Gu. But before the Pompous Bird had been launched, before they had laughed, Juan Orozco had felt the awed silence. And he did that with words alone. . . .

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WHEN ROBERT WALKED to the front of the class, he was more irritated than nervous. He had wowed students for thirty years. He could wow them with the bit of verse he had composed for today. He turned, and looked out the class. "A poem," he said. "Three hundred words. I tell you about the land of North County as it really is, here and beyond." The poem was a pas-

toral cliché, composed last night and based on his memories of San Diego and what he saw on the drive to Fairmont. But for a few moments, his words held them, just as in the old days.

When he was done there was a moment of absolute silence. What impressionable children. He looked over at the Adult Ed people, saw the jagged, hostile smile on Winston Blount's face. Envious as ever, eh, Winnie?

Then a pair of oafs near the front started laughing. That precipitated scattered giggles.

"Class!" Chumlig stepped forward and everyone applauded, even Blount.

Chumlig said a few more words. Then the class bell rang and the students were all rushing for the door. He started after them.

"Ah, Robert," said Ms. Chumlig. "Please stay a moment. That bell 'did not toll for you.'" She smiled, no doubt pleased by her command of literary allusion. "Your poem was so beautiful. I want to apologize to you, for the class. They had no right to put the—" She gestured at the air above his head.

"What?"

"Never mind. This is not a truly talented class, I fear." She look at him guizzically. "It's hard to believe you're seventy-five years old; modern medicine is working miracles. I've had a number of senior students. I understand your problems."

"Ah, you do."

"Anything you do in this class will be a favor for the others here. I hope you'll stay, help them. Rework your poem with some student's visuals. They can learn from you—and you can learn the skills that will make the world a more comfortable place for you."

Robert gave her a little smile. There would always be cretins like Louise Chumlig. Fortunately, she found something else to focus on: "Oh! Look at the time! I've got to start Remote Studies. Please excuse me." Chumlig turned and walked to the center of the classroom. She jabbed a hand toward the top row of seats. "Welcome, class. Sandi, stop playing with the unicoms!"

Robert stared at the empty room, and the woman talking to herself. So much technology . . .

OUTSIDE, THE STUDENTS had dispersed. Robert was left to ponder his reencounter with "academia." It could have been worse. His little poem had been more than good enough for these people. Even Winnie Blount had applauded. To impress someone even when he hates you—that was always a kind of

triumph. "Mr. Gu?" The voice was tentative. Robert gave a start. It was the Orozco kid, lurking by the classroom door.

"Hello," he said, and gave the boy a generous smile.

Maybe too generous. Orozco came out of the shadows and walked along with him. "I-I thought your poem was wonderful." "You're too kind."

The boy waved at the sunlit lawn. "It made me feel like I was actually out here, running in the sunlight. And all without haptics or contacts or my wearable." His gaze came up to Robert's face and then flickered away. It was a look of awe that might have really meant something if the speaker had been anyone worthwhile. "I'll bet you're as good as any of the top game advertisers."

"I'll bet."

The boy dithered for an inarticulate moment. "I notice you're not wearing. I could help you with that. Maybe, maybe we could team up. You know, you could help me with the words." Another glance at Robert, and then the rest of the kid's speech came out in a rush. "We could help each other, and then there's another deal I can get you in on. It could be a lot of money. Your friend Mr. Blount has already come on board."

They walked in silence for a dozen paces.

"So, Professor Gu, what do you think?"

Robert gave Juan a kindly smile, and just as the kid brightened, he said, "Well, young man, I think it will be a cold day in hell before I team with an old fool like Winston Blount-or a young fool such as yourself."

Zing. The boy stumbled back almost as if Robert had punched him in the face. Robert walked on, smiling. It was a small thing, but like the poem, it was a start.